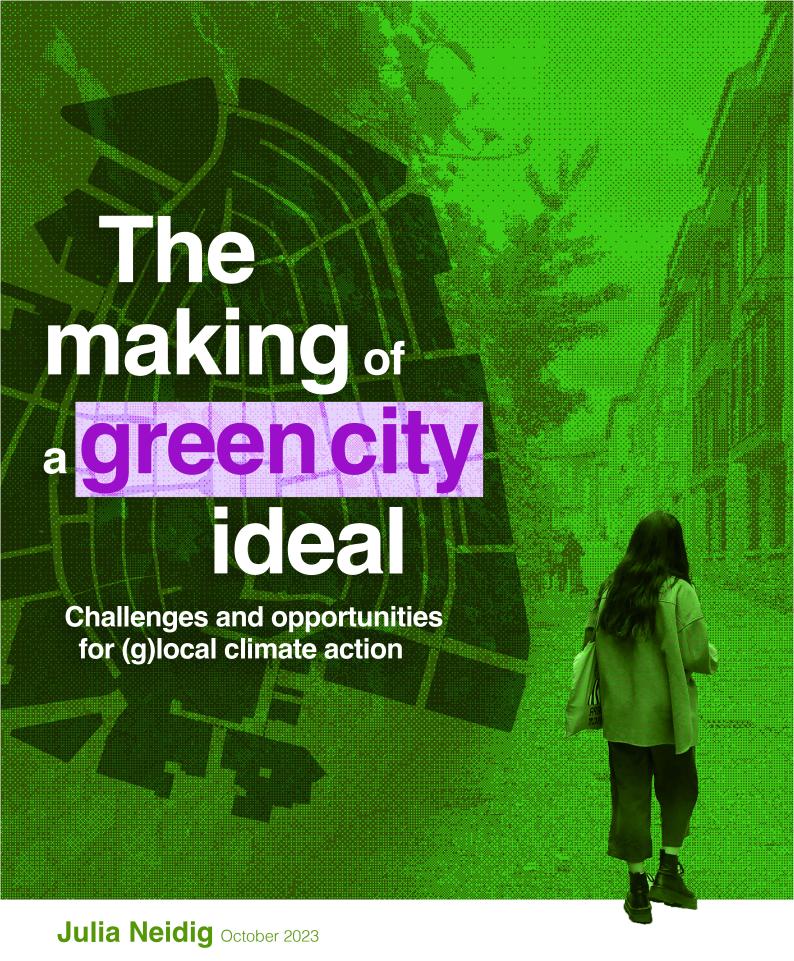


ADVERTIMENT. L'accés als continguts d'aquesta tesi doctoral i la seva utilització ha de respectar els drets de la persona autora. Pot ser utilitzada per a consulta o estudi personal, així com en activitats o materials d'investigació i docència en els termes establerts a l'art. 32 del Text Refós de la Llei de Propietat Intel·lectual (RDL 1/1996). Per altres utilitzacions es requereix l'autorització prèvia i expressa de la persona autora. En qualsevol cas, en la utilització dels seus continguts caldrà indicar de forma clara el nom i cognoms de la persona autora i el títol de la tesi doctoral. No s'autoritza la seva reproducció o altres formes d'explotació efectuades amb finalitats de lucre ni la seva comunicació pública des d'un lloc aliè al servei TDX. Tampoc s'autoritza la presentació del seu contingut en una finestra o marc aliè a TDX (framing). Aquesta reserva de drets afecta tant als continguts de la tesi com als seus resums i índexs.

ADVERTENCIA. El acceso a los contenidos de esta tesis doctoral y su utilización debe respetar los derechos de la persona autora. Puede ser utilizada para consulta o estudio personal, así como en actividades o materiales de investigación y docencia en los términos establecidos en el art. 32 del Texto Refundido de la Ley de Propiedad Intelectual (RDL 1/1996). Para otros usos se requiere la autorización previa y expresa de la persona autora. En cualquier caso, en la utilización de sus contenidos se deberá indicar de forma clara el nombre y apellidos de la persona autora y el título de la tesis doctoral. No se autoriza su reproducción u otras formas de explotación efectuadas con fines lucrativos ni su comunicación pública desde un sitio ajeno al servicio TDR. Tampoco se autoriza la presentación de su contenido en una ventana o marco ajeno a TDR (framing). Esta reserva de derechos afecta tanto al contenido de la tesis como a sus resúmenes e índices.

WARNING. The access to the contents of this doctoral thesis and its use must respect the rights of the author. It can be used for reference or private study, as well as research and learning activities or materials in the terms established by the 32nd article of the Spanish Consolidated Copyright Act (RDL 1/1996). Express and previous authorization of the author is required for any other uses. In any case, when using its content, full name of the author and title of the thesis must be clearly indicated. Reproduction or other forms of for profit use or public communication from outside TDX service is not allowed. Presentation of its content in a window or frame external to TDX (framing) is not authorized either. These rights affect both the content of the thesis and its abstracts and indexes.



Ph.D. Dissertation submitted for the Program in Environmental Science and Technology Institut de Ciència i Tecnologia Ambientals (ICTA), Universitat Autònoma de Barcelona (UAB)

Supervisors Prof. Unai Pascual · Prof. Isabelle Anguelovski · Dr. Aitor Albaina **Tutor** Prof. Isabelle Anguelovski









The making of a green city ideal: Challenges and opportunities for (g)local climate action

Julia Neidig

Ph.D. Dissertation

October 2023

Ph.D. Program in Environmental Science and Technology Institut de Ciència i Tecnologia Ambientals (ICTA), Universitat Autònoma de Barcelona (UAB)

Basque Center for Climate Change

Supervisors: Prof. Unai Pascual Prof. Isabelle Anguelovski Dr. Aitor Albaina

Academic tutor: Prof. Isabelle Anguelovski









Julia Neidig (julianeidig@web.de) (2023)

Institute of Environmental Science and Technology, Univesitat Autònoma de Barcelona; Barcelona, Spain and Basque Center for Climate Change, Leioa, Spain

Suggested citation: Neidig, J. 2023. The making of a green city ideal: Challenges and opportunities for (g)local climate action. Ph.D. dissertation. Universitat Autònoma de Barcelona.



This work © 2023 by Julia Neidig is licensed under CC BY-NC-ND 4.0. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/4.0/

Affiliations of Ph.D. supervisors and academic tutor:

Prof. Unai Pascual: Basque Centre for Climate Change, Leioa, Spain; Ikerbasque, Basque Foundation for Science, Bilbao, Spain

Prof. Isabelle Anguelovski: Institute of Environmental Science and Technology, Univesitat Autònoma de Barcelona, Barcelona, Spain; IMIM Hospital del Mar Medical Research Institute, Barcelona, Spain; Institució Catalana de Recerca i Estudis Avançats, Barcelona, Spain

Dr. Aitor Albaina: Department of Zoology and Animal Cell Biology, Faculty of Science and Technology, Universidad del País Vasco, , Leioa, Spain

Cover design: Nacho G. Carreiro

Note: U.S. spelling is used in this work



Table of Contents

Acknowledgments	i
Summary	iii
List of Figures	V
List of Tables	vi
Glossary	vii
Chapter I. Introduction and Research Objective	1
1.1. Background and Motivation	1
1.2. Conceptual framework and theoretical approach	4
1.2.1. What constitutes the contemporary green city ideal?	
1.2.2. Where and how is the ideal of the green city being made?	8
1.2.3. Re-imagining "nature" in the green city	
1.2.4. Towards a new green city that promotes democratic urban governance	12
1.3. Research Objectives, Gaps, and Overarching Research Design	15
1.3.1. Research objective	15
1.3.2. Research gaps	
1.3.3. Research design	18
1.4. References	21
Chapter II. "We are the Green Capital": Navigating the political and sustainability fix narrat	ives of
urban greening	26
2.1. Introduction	27
2.2. The sustainability fix in the urban greening narrative	29
2.2.1. The multi-scalar process of grounding the local sustainability fix	30
2.2.2. The sustainability fix and shifting socio-environmental burdens	31
2.3. Methods	32
2.3.1. Data collection and analysis	32
2.3.2. Context: Vitoria-Gasteiz: from a rural identity to an industrialized urban center _	
2.4. Analysis	35
2.4.1. Anchoring environment & sustainability in urban planning: the political fix (19	
2.4.1.1. Green as a symbol of good leadership; from a material to a discursive change	ie 36

2.	4.1.2. Green as consensus-making for wellbeing and social cohesion in conflict times	_36
2.4.2	2. From a social-environmental good to a green asset. Creating a sustainability fix (19)99-
07)	41	
2.	4.2.1. The counter-sustainable turn	_41
2.	4.2.2. Keeping up with selective Green(ing): how the sustainability fix came alive	_42
2.4.3. The green capital: creating, furthering, and renewing a green brand (2007)		_43
2.4.4	After the Green Capital: and now what? (2015–2021)	_4
2.5.	Discussion: the evolution from the political to the sustainability fix	_48
2.6.	Concluding remarks	_50
2.7.	References	_5
Chapter III	I. Pluralizing environmental values for urban planning: How to uncover the diversit	ty o
imaginarie	es about socio-natures from Vitoria-Gasteiz (Basque Country, Spain)	_ 56
3.1.	Introduction	57
3.1.1		_ 58
3.1.2	2. Just positive (urban) socio-natures?	59
3.1.3		_6
3.2.	Contextualizing Vitoria-Gasteiz' urban trajectory and greening ambitions	_6
3.3.	Methodology: Q-method	63
3.3.1	Research design	64
3.	3.1.1. The Q-concourse	64
3.	3.1.2. The Q- set	66
3.	3.1.3. Participants	_70
3.3.2	2. Data collection	_7′
3.3.3	B. Data analysis	_72
3.4.	Results	_74
3.4.1		_74
3.4.2	2. Commonalities and patterns across the four perspectives	78
3.5.	Towards place- and community-based framings of urban nature in planning	_79
3.6.	Conclusion	_8
3.7.	References	_84
3.8.	Appendices	_89
Chapter IV	/. Multi-level finance impacts on local participation, inclusion, and equity: The cas	e o
the NextG	enerationEU funds for urban renaturing programs	_ 92
4.1.	Introduction	93
		_ ` `

4.2.	Advancing urban climate action through multi-level governance and finance	94
4.2	.1. Multi-level climate finance and the issue of achieving urban equity.	94
4.2	.2. NextGenerationEU funds in the context of multi-level governance and finance	96
4.3.	Data and methods	97
4.3	.1. Data collection and analysis	97
4.3	.2. Case study context	97
4.4.	The Dilemmas of multi-level governance for local democratic climate action	98
4.4 em	.1. The challenge of civic-participation, inclusion, and equity in multi-level ergency funds	ad-hoc
	1.4.1.1. Case 1. Naturalization of Los Herrán Street	100
2	4.4.1.2. Case 2: Naturalization of the Old Town	103
4.4	.2. The poisoned gift of receiving multi-level ad-hoc emergency funds for local der	nocratic
gov	vernance?	107
4.5.	Discussion	109
4.6.	Conclusion	112
4.7.	References	114
Chapter '	V. Discussion and conclusion	117
5.1.	Key results of individual studies	118
5.2.	Cross-cutting results and contributions	121
5.2		
5.2	.2. The construction of the green city ideal and its multi-level dimension and int	luences
5.2	.3. Socio-natures, values, and the city	126
5.3.	Limitations and reflections on my research practice	127
5.4.	Further Research	128
5.5.	Implication for urban policy and planning/ policy recommendation	129
5.6.	Concluding remarks	131
5.7.	References	 133

Acknowledgments

When I embarked on this PhD adventure in January 2020, no one could have foreseen what was about to happen only a few weeks later globally. I am forever grateful for the people that helped me navigate this rather difficult settling in Bilbao and in this PhD journey in a context of lock-downs, home confinements and social restrictions strongly marking the first two years of this research project. Without the uncountable calls with friends and family and the new friendships made either while keeping two meters distance or virtually on zoom, I would have never able to get through this intellectual and very emotional ride.

ESKERRIK ASKO to my three supervisors, Unai, Isabelle, and Aitor, for your mentorship, support, and care - intellectual, professional, and emotional - throughout the development of this thesis. Your passion for science is so inspiring!

Very crucial to this project is my close-hearted BC3 community sharing rants, laughter, struggles (and maybe a few too many marianitos): Celine, DANKE for the continuous support, care, and empowerment and the always open ear (beyond work)! Sean, it looks like we have climbed that mountain without falling too often back to its bottom, physically and metaphorically! María, a billion times thanks for helping me landing in Bilbao, for your generosity and openness for everything and everyone! Leti, you have been strongly missed here in Bilbao these past few months! I also want to express my deepest gratitude to Esther and Laila, for our heated (but cared) debates about God, the world, science, and Brussels politics; to Manu and Guille, for being the best office mates including many laughs; and to Marta, Bosco, Layna and the amazing participatory-care-(rebel)-group, thanks for making this whole adventure much brighter and enjoyable. Thanks to the whole BC3 admin team and your incredible work!

Doing a PhD across two research institutes means double as much bureaucratic requirements, but it also means having access to a much bigger community. Moltes gràcies, Austin, for the many zoom and slack conversations, your comfy couch, and a shared crush for a certain urban sociologist; Amalia, especially for helping me navigate these last few weeks of this project; and the whole BCNUEJ team, you all are the prove that an academia based on care and community is existing and can work just fine. Cristina D., for your patience in guiding me through this chaos of bureaucracy.

I'm also very lucky to count on some very wonderful friendships, for your continuous care over distance, especially: my dearest Münster crew Maria, Rasmus, and Theresa – you are being missed --, Mareike, Chantale, and Leire, my first Bilbao friend!

Unendlichen Dank to my dearest parents for raising me to find my own path and for supporting me on this intellectual journey (I know I caused you some sleepless nights) and to the best older brother, Manu!

Lastly, Nacho: you are the best! Solving magically every IT and transcription problem, feeding me, and keeping me more or less sane these last few months, and most and foremost for making Bilbao a home. I don't know what I would have done without you!

Summary

Under the paradigms of sustainability and climate urbanism, an ideal of a contemporary green city has been formulated globally that builds upon smart, low-carbon, and nature-based infrastructures aiming to increase its residents' resilience to the multiple threats posed by an accelerating climate emergency. As this current ideal is being operationalized through multilevel and technocratic governance processes and funded by private climate finance, questions arise to what extent local actors can develop alternative locally situated visions of a green city ideal that foster equity, inclusivity, and participation in urban governance processes.

This Ph.D. dissertation is hence examining the challenges derived from a contemporary green city ideal on municipalities in a Global North context to formulate and materialize locally situated socio-natures in local governance. I trace in three empirical stand-alone articles the plural notions of a green city as understood or/and operationalized by urban residents, social collectives, planners, and decision-makers by examining past and current green policies, initiatives, discourses, and broader forms of locally situated socio-natures. My analysis draws on a single case study of a city considered a European and international leader in the arena of green and sustainable policies and that is deeply embedded in cross-scale and multi-level governance dynamics: Vitoria-Gasteiz, 2012 European Green Capital, a mid-sized city of 250.000 residents in the Basque Country of Spain.

In Chapter I, I lay out the background, theoretical approach and the overall objective and research design, drawing on the broad body of literature of critical urban studies, urban political ecology, urban geography, and ecological economics. I show the various ramifications of mainstream urban green planning on local governance by summarizing the literature on, first, the origins and current form of a contemporary narrative of the green city ideal, second, the multi-scalar processes that condition its local governance, and third, the advances in the conceptualizations around the meanings and values of nature, before I turn to a discussion on pathways to move towards an approach of democratic urban governance.

Chapter II then zooms in into four decades of environmental planning to understand how local greening discourses are shaped over time and in the context of shifting multi-scalar politics. Based on a critical discourse analysis, I show through an historic lens how Vitoria-Gasteiz' urban green identity was first shaped by local meanings and knowledge about environmental issues while serving as a political fix in a politically and culturally very conflicted context. With increasing interwovenness of the local urban governance with the national and global scale, local framings of green turned into a sustainability fix narrative, and with that into an economic asset of the local urban agenda.

Chapter III explores through the application of the semi-quantitative Q-methodology locally prevalent meanings of nature through eliciting four situated perspectives of how urban residents value urban greenery and the broader concept of nature. I find here that local understandings move beyond the institutional discourse of urban nature's benefits, as residents connect in multiple and plural ways with the idea of nature and conclude with the importance of acknowledging these plural meanings of nature in local green governance to enhance inclusivity and equity locally.

Chapter IV then discusses the impact of multi-lateral funding schemes on local values of governance through two concrete renaturalization projects that are currently being implemented under the Next Generation EU emergency budget. Following a grounded theory approach, I focus here on the contradictions between, on the one hand, the opportunities that arise from accessing multi-lateral funds of huge volume and within strict and short timelines, and on the other hand, the multi-level operationalization with impacts on local values of democratic governance.

Lastly, this thesis concludes in Chapter V with a discussion of the key results with a focus on their implication for urban policy and planning. I discuss limits and strength of the overall research design and point to future research. Overall, this thesis offers new insights into the challenges especially mid-sized cities in the Global North are facing as being in need to find their specific economic niche yet responding to local and situated needs and perspectives of its diverse residents.

List of Figures

Figure 2.i	Spatial growth of Vitoria-Gasteiz from 1927 to 2020, source: CEA			
Figure 2.ii	From the Political Fix to the Sustainability Fix, own elaboration			
Figure 2.iii	Green Infrastructure Network by 2021, Source: CEA			
Figure 2.iv	Salburua park and neighborhood. The wetlands of Salburua with a high biodiversity contrasting the cityscape of the Salburua neighborhood marked by low density and high-rise buildings, photos by the author, 2021			
Figure 2.v	The European Green Capital. The symbol of the European Green Capital in the city center, photo by the author, 2021	45		
Figure 3.i	Map of urban, peri-urban, and rural green infrastructure network of the municipality of Vitoria-Gasteiz. Source: CEA	62		
Figure 3.ii	Synthesis of the research process, including research design, data collection, and data analysis using Q-methodology	64		
Figure 3.iii Figure 3.iv	Q-sort and sorting scheme, example photo from fieldwork, March 2022 Factor arrays for each factor A, B, C, and D	72 77		
Figure 4.i	left: informatory stand presenting the project in the Los Herrán Street, right: the campos negros, (eng: black fields) with their current use as basketball fields, to be transformed (photos by the authors, May 2023)	101		
Figure 4.ii	left and middle: project visualizations and branding of the Old Town project by the CEA and architects (from CEA & Paisaje Trasversal, 2022); right: one of the narrow Old Town streets as possible space for small-scale greening interventions (photo by the author, June 2022)	104		
Marketing campaign of Vitoria-Gasteiz' city-hall announcing the city as "European Supercity" in Spanish and Euskera (photo by the authors, June 2023)		109		

List of Tables

Table 1	Summary of research questions (RQ), study focus, and methods and data informing each of the three sub-studies implemented in the case city of Vitoria-Gasteiz.		
Table 2	Key planning documents	33	
Table 3i	Types of statement sources consulted for creating the Q-concourse of 284 statements.	65	
Table 3ii	Q-set and statement descriptions	68-70	
Table 3iii	Statistical results of the Q-sorts. Values marked by one asterisk (*) indicate distinguishing statements for each factor, statements marked by two asterisks (**) indicate consensus statements across all four factors.	73-74	
Table 3iv	Original statements in Spanish	89-90	
Table 3v	e 3v Factor loadings for each Q-sort and factor.		
Table 4i	Summary of projects' multi-level operationalization		

Glossary

CEA Centre of Environmental Studies

IPBES Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems

MAEF multi-level ad-hoc emergency funds

NCP Nature's contribution to people

NGEU NextGenerationEU

RRP Recovery and Resilience Plan

SF Sustainability Fix

UGI urban greening interventions

UGIP Urban Green Infrastructure Proposal

Chapter I. Introduction and Research Objective

1.1. Background and Motivation

During my fieldwork for this Ph.D. dissertation in the summer of 2022 - I was doing participant observations at one of the public participatory sessions the city hall of Vitoria-Gasteiz is organizing throughout the year, with the objective to have a space to discuss topics relevant to citizens – the debate got very heated. The session's topic was concerning one of the city's newest stellar urban redevelopment projects, the naturalization of one of the main traffic axes in the urban core. What I did not expect was the hostile environment, already visible by the large spatial distance between the different participants, seated across the room; on the one side, the technical staff and respective councilor, and on the other side the few residents that were joining this meeting, most of them presidents of the city's multiple neighborhood associations, mainly men in retirement age.

The feeling of distance between the two groups was then further reinforced by what I consider a very violent communication, showing the depth of distrust for each other. On the one side, residents formulated accusations and complaints regarding a perceived lack of commitment of the city hall to include the local communities in the project design and regarding the perceived neglect of specific and more urgent needs of residents, such as an improved access to health care across working-class neighborhoods. As response, planners reacted with an expression of a seemingly insufficient knowledge and expertise by citizens of what is necessary to provide a good and well-working city, especially in the context of climate change adaptation and mitigation, trying to excuse the lack of participatory processes.

This feeling of a deep divide between institutional actors and citizens carried through the many interactions I had throughout my research, ranging from random encounters with individuals in parks, both long-term residents or recent newcomers from faraway places, to social movements and urban activists to the technical staff of the city hall and political decisionmakers. As a recent newcomer to the Basque Country, I quickly noticed that these conflicting identities and hardened fronts between institutional and non-institutional actors were deeply rooted in the local history, one where the question of a Basque identity – mostly but not fully – shapes politics, its strong civil contestations, and the locally deeply embedded culture of social activism. What became clear to me in the many conversations throughout my Ph.D. was that what makes a good city, a city acknowledging the plural perspectives of its residents is not a straightforward answer (I know, little surprising!). It is a process of many identities and bodies, negotiating and contesting notions of what they deem necessary to live

a good life, here in an urban environment which, apparently, is one where a shared, common identity and commitment exists towards a livable, green, and healthy urban environment. Who participates in these processes is also not a straightforward answer, as the aspirational idea of achieving total plurality and inclusivity across intersectional identities in decision-making processes encounters many obstacles along the way, often driven by deeply rooted power dynamics, such as in that participatory session described above where power relations and lack of diversity were crystal-clear the moment, I entered that room.

When I started this research project, I followed the very loose question of what makes a green city, that is, green not only understood as having as much of visibly green elements in the urban fabric and in its institutional marketing campaigns, but as having a deeply rooted understanding of a city that puts the environment and society at the core of its planning based on ideas of inclusivity, equity, and democratic values (Houston et al., 2018; Keil, 2020a; Anguelovski et al. 2019; Calderón-Argelich et al. 2023). This vision of the green city is anchored in its entangled local histories (Angelo, 2019a), a plurality of ways of how to understands one's position in society and in relation to the natural environment (Pascual et al. 2021), and the many complex values, connections, and interactions that start from the local lived context across scales in a globalized world (Bulkeley, 2005).

Inspired by Erik Swyngedouw's (1996) concept of socio-natures that describes the complex and historic interdependencies, entanglements, and constellations of society and nature, I was interested in researching the possibilities of a green city that creates alternative forms of socionatures. Applying the concept of socio-natures, the green city may thus be understood as a hybrid of human and more-than-human elements that puts forward a meaning of nature not only framed as a means to, but as being reciprocal to political decision-making processes, forms of governance and strong interdependencies with society (Keil, 2020b).

That a green city can have a huge positive impact on residents' well-being and quality of life has been scientifically proven many times, as urban nature contributes, among many other benefits, to an improved mental and physical health, to enhance social cohesion across diverse residents, to create positive memories and emotions, and to help provide better air, soil, and water quality (see for example, Baró et al., 2014; Lovell & Taylor, 2013, Peters, 2010, Ribeiro et al., 2021; Triguero-Mas et al., 2015). Especially considering a global pandemic and increasing extreme weather events with significant impacts on the day-to-day routines of many residents, green and healthy urban environments will be significantly determining the well-being of those usually most vulnerable to global socio-environmental threats (Calderón-Argelich et al. forthcoming; Shokry et al., 2022).

Yet, despite this "common sense" of urban nature's benefits, the idea of the green city also meets its contestations. Residents I met along this research shared their perceptions of the green city, where flora and fauna within urban habitats are partly perceived as dirty and unhygienic, trees bring unwanted shade to their houses, and renaturing projects of urban public space contribute to endless construction work, noise, and dust – what for, where do I park my car now, and what about the neglected healthcare services, aren't they more important than planting a tree, those urban residents asked. Such negative perceptions are being further fueled by controversies of the green city in the media and public opinion, in Spain exemplified by Madrid's conservative mayor offering a plant on every private balcony as sufficient solution for climate change adaptation while otherwise halting many larger-scale necessary renaturing initiatives¹, by Bilbao's city hall's massive cutting of perfectly healthy trees providing cooling shade in the midst of the many extreme heatwaves during the summer 2023², or by Barcelona's city hall facing court cases to reverse a renaturalization and traffic calming project to its previous environmentally and socially hostile state prioritizing individual car use over community public spaces³.

The following chapters of this Ph.D. dissertation are thus driven by a desire to understand those clashing challenges, dilemmas and the opportunities that exist to create an urban vision that puts forward alternative narratives of the green city and its multiple forms of socio-natures. I use as a starting point the broad body of literature that shows the various ramifications of a contemporary urban green planning paradigm with its dominantly neoliberal and utilitarian embodiment which materialize in what I call here a *contemporary green city ideal*. I interrogate how discourse and governance approaches resulting from this ideal condition values of local democratic governance. I examine these approaches with a focus on understanding their impacts on achieving inclusivity and equity of highly diverse urban residents and their multiple identities that shape their needs and embodied experiences in relation to what constitutes the green city.

In this dissertation, I trace these plural, sometimes contradicting, notions of a green city as understood or/and operationalized by urban residents, social collectives, planners, and decision-makers. Based on an empiric approach, I examine the complexities of formulating alternative visions of a green city ideal through an in-depth analysis of past and current green policies, initiatives, discourses, and broader forms of locally situated socio-natures. My

_

https://www.eldiario.es/sociedad/plantas-ayuso-balcon-medida-frivola-evidencia-cientifica-frente-crisis-climatica 1 10213506.html, last accessed 18 Oct 2023

https://www.eldiario.es/euskadi/vecinos-bilbao-denuncian-tala-indiscriminada-arboles-deusto-sombra-calle-sera-insoportable_1_10527584.html, last accessed 18 Oct 2023

https://www.lavanguardia.com/politica/20230907/9212453/barcelona-recurrira-sentencia-supermanzana-consell-cent.html, last accessed 18 Oct 2023

analysis draws on a single case study of a city considered a European and international leader in the arena of green and sustainable policies and that is deeply embedded in multi-level governance dynamics: Vitoria-Gasteiz, 2012 European Green Capital, a mid-sized city of 250.000 residents in the Basque Country of Spain. Through this analysis, I dive into the historic, cultural, and social context that shapes the intricacies of the construction of a local green city ideal and the related formulation of place-based socio-natures in urban climate action.

In the remainder of this introductory chapter, I first lay out the theoretical and conceptual foundations that the empirical contributions are embedded in. I focus here on tracing previous literature that critically examines the dilemmas and contradictions of urban governance advancing the *green city ideal* and its underlying conceptualization of nature. I then turn to a description of research gaps, objectives, and the overarching research design and its three empirical studies presented in Chapters II, III, and IV.

1.2. Conceptual framework and theoretical approach

To interrogate notions and contestations of a *green city ideal* I draw on previous work in urban geography, critical urban studies, urban political ecology, and ecological economics that help conceptualize the multiple forms of society-nature relations that impact and determine both forms of governance and policymaking and civic perceptions and contestations of the "green" city. In the following, I introduce the interdisciplinary literature that lays out, first, the origins and the current form of a contemporary narrative of the green city ideal, second, the multiscalar processes that condition its local governance, and third, the advances in the conceptualizations around the meanings and values of nature, before I turn to a discussion on pathways to move towards an approach of democratic urban governance.

1.2.1. What constitutes the contemporary green city ideal?

The contemporary green city ideal and its various conceptualizations are path dependent on broader historically shaped socio-natural meanings of the notion of the city. For instance, its current form in the context of multi-scalar climate politics is strongly influenced and conditioned by past imaginaries of the environment and nature in relation to the city and/or society. Urban sociologist Hillary Angelo (2019b, 2021), focusing on conceptualizing nature in relation to build environments and their hinterlands in the Global North, identifies three processes in modern times that have altered the socially shared meanings of urban green: the industrialization in the early 20th century, the post-war deindustrialization, and the neoliberalization of many city-making processes from the 1970s onwards.

According to this analysis, nature in the context of the industrialization of cities served as a form of subsistence good for the poorer industrial work force. That is, urban gardens played a significant contribution to sustain the livelihood of the working class. With increasing deindustrialization, meanings of urban nature shifted from being a material subsistence good into a symbolic recreational and aesthetic good for the urban wealthy, e.g., in the form of urban parks and plazas. This shifting narrative enabled a social imaginary in which urban nature was put forward as a solution to many of the problems industrialization was creating in urban areas. including environmental pollution and social segregation. Urban nature hence turned into a morally desirable "good" solution (Angelo, 2019b). Under processes of neoliberalisation, understandings of urban nature as the material and visible integration of green into the urban fabric was then further expanded towards including broader socio-technical interventions under the logic of sustainability and climate resilience, also with the goal of creating a more competitive and entrepreneurial city (Angelo and Wachsmuth, 2020; Martin et al., 2019). Under this logic, urban nature nowadays embodies an indispensable part of a contemporary planning orthodoxy in which green is being materialized as "large-scale, high profile and socially homogenous spaces" across diverse urban contexts (Connolly, 2019).

In this thesis, I am especially interested in the more recent imaginary of the green city ideal as put forward under the global science-policy concepts of urban sustainability and resilience, embedded in an increasing neoliberalization of urban governance processes. 'Sustainability' and 'resilience' have been widely discussed as umbrella concepts and discourses whose (a)political framings on the international scale mainly influenced logics and justifications for the materialization of a green city ideal on the ground – with its multiple ramifications on achieving social inclusive goals, that touch on deeper concepts such as environmental justice and equity (see e.g., Haase and Schmidt, 2024, Agyeman, 2013; Bigger and Webber, 2021; Kaika, 2017).

With the appearance of sustainable development as concept and umbrella goal in international environmental policymaking, e.g. in the 1987 Brundtland report, the 1992 Earth Summit or the 1994 European Aalborg Charter for Sustainable Cities and Towns, it quickly became glued to the international urban development agendas especially in the Global North but already paving the way to enter into the main urban development challenges faced in the Global South, e.g. by massive rural-urban migration, health, or securitization (Bulkeley and Betsill, 2005; Castán Broto, 2017). Embedded into this framework of sustainability, understandings of the industrial city as the problem turned into framings of the post-industrial green city as the solution by, for instance, emphasizing the need for restoring degraded environments and contaminated land as a generally valid solution to achieving sustainability goals. This allowed to push forward

and embed into local institutions the imaginary of urban green and broader sustainability as moral good in both global and local urban discourses (Angelo and Wachsmuth, 2020).

In this context, the green city ideal became the metaphor for killing two birds with one stone, that is, implementing and materializing sustainability goals hence were told to help both to increase economic growth via increased competitiveness and social prosperity, while also diminishing risks posed by an increasingly perceived environmental crisis connected to climate change. This has been mostly circumscribed in the critical urban planning literature as a "sustainability fix" (While et al., 2004). Under a sustainability fix, local planners and decisionmakers hence deploy an entrepreneurial strategy, in which those environmental goals become integrated in local agendas that are compatible with the cross-scale objective of economic growth through capitalist accumulation (Temenos and McCann, 2012).

With the sustainability fix becoming the most common planning paradigm in Global North urban agglomerations, the vision of cities being appropriate scale with sufficient autonomy to develop technical and engineering solutions for responding to pressing environmental challenges manifested itself in global urbanism (Hodson and Marvin, 2010). That is, as the focus of addressing climate change shifted from the international to the local scale, the idea of the sustainable city turned into a globally homogenous vision with common goals across diverse geographical contexts, leaving aside the multiple historic, social, or cultural differences between cities (Castán Broto, 2017). On the long run, this generated and deepened urban injustices as Global North urban public and private actors gained increasing power in defining sustainable urbanism agendas and related measures under the increasingly dominant logic of economic growth and securitization (Castán Broto and Robin, 2021). Consequently, urban sustainability as concept, discourse, and narrative became detached from any political notion, and inevitably this has opened the way for post-politicalizing sustainability and a resulting top-down and technocratic urban governance approach (Miller and Mössner, 2020; Beal, 2012).

More recently, this framing of the green city ideal under the already classical banner of the three-dimensional economic, ecological, and social benefits has taken a new discursive turn emphasizing the crisis moment in light of the climate crisis. That is, global urbanism has shifted the emphasis from a more general sustainability ideal to connect to the climate context and discourses about climate mitigation (mostly via energy) and adaptation (Hodson and Marvin, 2017; Long and Rice, 2019). So-called climate urbanism describes imaginaries of cities and related governance processes under the increasingly shared perception by society of living under a climate emergency (Castán Broto and Robin, 2021). Its underlying green city ideal is now framed around goals of (low-)carbon management and of securitizing necessary institutions and climate infrastructures (e.g., of water, mobility, or energy) by prioritizing low-

carbon measures that are easily quantifiable and marketable, such as carbon inventory reporting of implemented interventions (Cohen, 2020). This focus on carbon management and infrastructures follows two main goals, first, the support of local economic growth and second, to implement visible and physical projects of climate change adaptation, mitigation, and resilience goals which puts an even stronger emphasis on the local scale to realize necessary climate action (Long and Rice, 2019). However, it also increasingly distracts from the need for more urgent and deeper societal transformations of underlying systemic structures and governance processes (Pascual et al., 2022).

Like the notion of urban sustainability, which has undergone a process of post-politization, and turned it into an empty signifier concept, urban resilience risks being a similarly broad-enough concept to mean everything and nothing (Weichselgartner and Kelman, 2015; Meerow and Newell, 2019). The sustainability fix narrative was framed around the win-win for economy and the environment; the new framing of resilience applies a similar logic in which issues of social justice, most and foremost by the consideration of social inequities, racial segregation, and marginalization, is still often only being touched upon at the margin (Ranganathan and Bratman, 2021; Kaika, 2017). This echoes recent discourses in favor of the green economy which mostly focus on promoting green growth, e.g., through technological developments and economic incentives, while only sparingly addressing the idea of social inclusion (e.g. in the distribution of the benefits and costs of growth or participation in decision making; in urban governance exemplified by processes of gentrification and displacements and a focus on consensus politics) (Shokry et al., 2022, Shokry et al., 2023).

Under the climate urbanism paradigm, that emphasis is shifting to the urgency of greening the cities to spur such green growth while addressing climate action in the context of a climate emergency, as a new niche market. (Long and Rice, 2019). Long (2021) calls this the resilience-admits-crisis narrative that determines the logic and justification of quick and top-down governance processes through the prioritization of accumulating private capital and favoring technocratic approaches. The embodiment of this narrative can be seen in the both in science and practice prominent and dominant concept of nature-based solutions. The term refers broadly to those nature-inspired and -supported interventions used to restore and preserve ecosystems that are highly praised for the multiple benefits to enhance economic, social, and ecological resilience (European Commission, 2015). The framing of nature as a solution follows hence a utilitarian logic which enabled the co-optation of its meaning by distinct political and neoliberal agendas (Kotsila et al., 2021). Moreover, the implementation of nature-based solutions under a neoliberal logic has been shown to risk being an enabler of

dispossession and exclusion of marginalized communities (Anguelovski and Corbera, 2022; Melanidis and Hagerman, 2022).

In sum, what I call here the contemporary *green city ideal* circumscribes a city that materializes global discursive imaginaries of sustainability and climate urbanism (Long and Rice, 2019), under which urban nature is being put forward as a form of moral and inherently beneficial good for all residents (Angelo, 2019a) under a trickle-down effect logic. Sustained by the provision of smart, low-carbon, and nature-based infrastructures, this ideal is aiming to increase its residents' resilience to the multiple threats posed by an accelerating climate emergency. The green city, however, is portrayed as a dichotomy, a binary, a contradiction of and solution for the urban (i.e., humans and their built environments with a high density of buildings and other infrastructures) and what is considered nature in its simplest form in response (i.e., green and blue elements in form of plants, trees, insects, and small animals that inhabit urban human-built environments) (Gandy, 2018). It further contains the notion that it can only be materialized locally through access to (private) capital markets for climate finance and through technocratic and multi-level governance approaches that ensure adequate technical and expert solutions. In sum, it reimagines what Hilbrandt and Grafe (2022) name the city of Groy, namely the urban manifestation of a green growth narrative.

1.2.2. Where and how is the ideal of the green city being made?

What has become apparent in the description of what constitutes the green city ideal, and its origins is that its narrative is not shaped in a single place nor at a single moment in time. Its forms, shapes, and related social processes by institutions and broader governance networks ought to be analyzed across scales and by its historical path dependencies. Therefore, I apply a multi-scalar reading of how the idea and discourse around the green city ideal is being constructed globally and is then contested and negotiated locally.

In order to understand the multi-scalar dynamics that shape the contemporary green city ideal, I draw on Swyngedouw's (2004) concept of *glocalization* that describes the de- and reterritorialization of institutional power in decision- and policy-making processes to both supra, trans-national and global scales, but also towards the local scale over the last few decades. As scales are not fixed, but change as new actors, networks, and constellations appear on the international policymaking arena, power dynamics are constantly re-shuffled (ibid.). The contemporary green city ideal can thus be understood as an outcome of the glocalized notions of sustainability and climate urbanism.

To look at this connection between global discourses and localized action, geographers have drawn on the concept of *spatial imaginaries*, defined by Watkins (2015) as collective "stories"

and ways of talking about places and spaces that transcend language as embodied performances by people in the material world" (p.509). They describe three categories of spatial imaginaries, first, places (such as specific cities), second, idealized spaces (such as the green city), and last, spatial transformations (referring to processes such as of globalization or gentrification) (ibid.). Spatial Imaginaries hence help envision desired futures of places, yet across scales. This framing as related to the contemporary green city ideal conditions the formulation and prioritization of specific policies goals, such as the carbonneutral city whose vision founds on the implementation of nature-based and smart solutions (Tozer and Klenk, 2018; Pan et al., 2023).

The process of materializing and operationalizing the green city locally -- within restricted spatial urban boundaries – is thus strongly intertwined with cross-territorial processes and shaped by diverse public and private actors (Pierre, 2019). Those new constellations of actors include for example transnational interurban city networks, alliances, and organizations (e.g., C40, Covenant of Mayors, ICLEI), but also private actors, such as philanthropies and financial investors (e.g., Rockefeller, Bloomberg, or Ford). This has shifted so-called multi-level governance, referring to cross-scale decision-making processes, from being a merely vertical and top-down approach towards more horizontal and nested models (Bulkeley, 2005; Nielsen and Papin, 2021; Papin and Beauregard, 2023).

Initially, this more nested structure of governance processes has been praised for seemingly attributing a higher degree of agency to cities to realize transformative local climate action (Castán Broto, 2017). Moreover, newly created transnational public and private city networks are already offering platforms for exchanging and learning from urban best cases and hence enabling the mobility of policies, i.e., the import and export of best practices and policy models across cities (Kennedy, 2016; McCann, 2013). Yet, these relationships have also allowed for a governance approach in which local planners and elected officials increasingly monetize and compete for investment and resources through becoming the "greenest" city and the urban brand created around it. Greening hence turned into a policy booster (McCann, 2013; Rosol et al., 2017; Garcia-Lamarca et al. 2019).

However, despite their overall appraisal, these new modes of multi-level governance have significantly shifted cross-scale power dynamics; with increasing impact now being attributed to capital markets. That is, the implementation of projects labelled as "green" and/or as advancing resilience in a crisis comes now as a seemingly win-win by achieving both necessary climate goals and financial returns for mostly private investors (Jones et al., 2020). Climate action hence experiences a new narrative of being a financial asset in which nature's value has been financially captured through e.g., carbon emission trading, payments for

ecosystem services, or the monetization of resilience towards climate-induced risks such as droughts or floodings by e.g., insurance companies (Bracking, 2019). With the financialization of climate action, (credit-worthy) municipalities are becoming increasingly dependent on private climate finance to implement, often cost-intensive, urban climate projects to realize low-carbon, smart, or green-labelled projects (Hilbrandt and Grafe, 2023).

The turn to private capital actors, moreover, has been shown to be direct driver of gentrification and displacement processes as private investors are taking advantage of rising property values adjacent to implemented climate action projects. This in turn decreases affordability; lower socio-economic groups are thus increasingly being forced to move to less green areas that often tend to be more vulnerable to climate-induced risks (Anguelovski et al., 2022; Garcia-Lamarca et al., 2022a, Garcia-Lamarca et al. 2022b). As power is being shifting to transnational private actors, the contemporary green city ideal under a neoliberal framing becomes further fortified while challenging real transformative action that can help advance to the aspirational vision of achieving equity and inclusivity in urban governance (Robin, 2022; Bracking and Leffel, 2021; Knuth and Krishnan, 2021).

1.2.3. Re-imagining "nature" in the green city

To advance to alternative visions of the green city ideal that rests on more holistic understanding of socio-natures, society-nature-relations and the specifics meanings attached to nature have to be reimagined. The contemporary green city ideal with its economic growth narrative of sustainability and resilience applies an anthropocentric reading of nature (Keil, 2020a). In this reading, the ideal tends to foster the imaginary of (urban) nature both as a technical nature-based solutions to the climate challenges and as an economic opportunity or asset (Babí Almenar et al., 2021; García-Lamarca et al., 2022). This win-win framing is founded on a conceptualization of nature as a utilitarian (and mainly instrumental and commodifiable) contribution to humans (Kotsila et al., 2021). This often leads to a humannature relation being framed in terms of a worldview where humans are "naturally" superior viz-a-viz the "wild", which is also creating justification for practices of environmental extraction and pollution (Muradian and Pascual, 2018). This understanding further reiterates an antagonist conceptualization of nature and society which, however, does not do justice to the complex forms of socio-natures, or the human and more-than-human relations (Angelo, 2017; Hinchliffe and Whatmore, 2006; Swyngedouw, 2006). Consequently, post-human scholars increasingly call for new imaginaries of urban socio-natures that include multi-species thinking as integral part of urban environmental practice and governance (Houston et al., 2018; Wiesel et al., 2020).

Until now, urban green policies of nature restoration, preservation, or "come back" have dominantly used an instrumental framing of society-nature relationships. Those refer to measurable contributions of nature (e.g., ecosystem services including carbon sequestration) and can even attach an economic monetary value to specific services, e.g., through payments for ecosystems services (Schröter et al., 2014; Bracking, 2019). However, framing urban nature's contributions to people only instrumentally builds strongly upon hegemonic and Western framings of society-nature relations, that is, it gives little space to develop decolonial, relational, and intersectional approaches to environmental governance, or to bringing environmental justice at the center of green planning (Anguelovski et al., 2020). In this context, there are increasingly calls to reformulate nature's contributions to people in a way that consider plural, inclusive, and nature-positive values attached to nature in environmental policymaking and governance processes taking into account the need to bridge plural values which are often incommensurable (IPBES, 2022; Pascual et al 2023). In this context, the 2022 Values Assessment report of the international science-policy platform for ecosystems and biodiversity (IPBES) has been considered a milestone as it puts forward a plural values framework for environmental policies and assessments, that builds upon the notions of instrumental, intrinsic, and relational values (IPBES, 2022; Pascual et al 2023).

Here, the integration of *relational values* about nature in policymaking is a promising approach to advance transformative change that is more inclusive of diverse and intersecting needs. First, relational values refer to both individual relations of humans with nature expressed through e.g., individual practices of care and stewardship, and collective expression of nature, i.e., nature is seen as integral element of creating and maintaining a socio-natural community, through shared practices, memories, and histories (Chan et al., 2016; Chan et al., 2018). Second, the conceptualization of relational values helps to overcome the nature-society dichotomy by emphasizing the emotional, cultural, spiritual, or historic connections one holds with specific places in nature or with nature as a broader place-detached concept (Calcgani et al. 2019). This integration of an understanding of nature being integral part and enabler of socio-natural cohesion makes the notion of relational values indeed a powerful analytical and practical approach that can help advance thinking of urban socio-natures and governance processes that mirror local and situated connections, needs, and knowledge in respect to the multiple notions of what nature means individually and collectively (Pineda-Pinto et al., 2022; Buijs et al., 2022). Following Tozer et al. (2020), urban nature has then to be seen as a heterogenous vision of nature's plural meanings; shifting from the integration of dominant views of those actors and social groups most advantaged towards including perspectives of traditionally marginalized groups and forms of knowledge.

To move towards the integration of plural values about nature into governance processes, valuation methods as forms of "technology of participation" (Tadaki et al., 2017) are indispensable to involve political, technical, and civic actors' values of nature in decisionmaking processes and ecosystem assessments (Arias-Arévalo et al., 2018). Especially the IPBES values assessment argues that an uptake of valuation methods in policy-design and implementation is key to assure more transparency and inclusivity (IPBES, 2022). Despite the increasing use of diverse valuation methodologies in policy and science, critical voices have highlighted the possible pitfalls of applying valuation methodologies without considering their normative aspects. In a review of 1163 valuation studies that informed the IPBES values assessment (IPBES, 2022), only very few studies were identified that considered environmental justice criteria and overall gave insights into how, why and with whom valuation methodologies were implemented (Schaafsma et al., 2023). Moreover, often rather technical valuation assessments, despite their promise of allowing for plural and inclusive framings of society-nature relations, often fail to shed light on underlying power dynamics, especially in relation to the exclusion of specific actors and perspectives in the elicitation process of different values (Jacobs et al., 2023).

1.2.4. Towards a new green city that promotes democratic urban governance

Advancing the green city ideal towards an ideal that integrates more holistic forms of socionatures, including notions of justice, practitioners need also to take into account possible negative values and meanings attached to its vision. In this sense, urban governance needs to acknowledge that meanings attached to the green city ideal may not always follow purely beneficial framings. Instead, they can contain – highly diverse -- negative connotations across very different actors. Those negative framings may be driven by the so-called extinction of experience hypothesis (Miller, 2005; Soga and Gaston, 2016), that attests that urban environments are a core driver of an increasing disconnection from nature. By providing less opportunities for meaningful experiences with nature, urban residents may increasingly experience an emotional, physical, spiritual, or intellectual alienation from nature, which on the long run risks weakening environmental stewardship and challenges nature-positive protective attitudes and behaviors (Soga et al., 2020).

Concretely, research has found that a negative perception of the contemporary green city ideal may surprisingly be formulated by conservative groups, that, while supporting a growth narrative, may paradoxically contest its current "green" component. That is, there are increasingly ultra-liberal groups arguing for economic growth decoupled from its "green" component which becomes for instance exemplified in movements that oppose initiatives to create car-free cities. Scanu et al. (2021) for example found in their analysis of urban mobility

movements in Quebec, Canada, strong resistance to municipal plans prioritizing public over private means of transportation of those wealthier residents living in suburban areas. That is, urban governance prioritizing the materialization of the contemporary green city ideal with a justice component, e.g., through improving public transit mobility, may encounter contestation by those powerful actors demanding liberal choices, such as being able to drive their car in urban centers.

Last, a very different negative perception attached to the materialization of the green city ideal has been found in studies that examined progressive activist groups and marginalized communities' reactions to the implementation of different greening initiatives. Here, contestation may be framed by communities impacted by gentrification and displacement processes driven by those greening initiatives. The contemporary green city ideal may thus exemplify a form of GreenLULUs (green locally unwanted land uses) for residents that may face displacement and hence argue against an "environmental improvement" of their neighborhoods with the fear of being pushed out (Anguelosvki, 2016, Anguelovksi et al., 2018). Oscilowicz et al., (2023) found that, in order to fight possible so-called green or climate gentrification, local communities organize and build together bottom-up community infrastructures around housing, food, and health. That is, civic negative perceptions of the green city are becoming actionized in the building of alternative bottom-up counter-ideals.

These diverse negative perceptions and contestations of the contemporary green city ideal from very diverse social groups hence show that notions of the green city are highly political (Kotsila et al., 2021), and hence demand more inclusive processes to be able to carefully negotiate alternative and locally grounded imaginaries of the green city (Anguelovski et al., 2020). A green city ideal reimagining the meaning of nature hence needs to move away from a single, universal, inherently beneficial framing of "good" urban nature towards seeing nature as heterogenous, debated, and deeply relational (Armstrong et al., 2022). To elicit these multiple, maybe contradicting, meanings of nature, intersectional and participatory approaches of a democratic urban governance are needed that play close attention to issues of power and exclusion and that shed light on the underlying social-ecological trade-offs (Haase et al., 2017).

Here, I refer to local democratic governance by drawing on Cameron McAuliffe and Dallas Rogers' (2018, 2019, 2020) definition of an agonistic planning practice that includes community engagement and participatory processes. These authors advocate for an agonistic politics in which plural perspectives are considered, heard, and most importantly, negotiated, in order to move beyond the predominant paradigm of consensus politics. As consensus politics aim for achieving an elusive "rational agreement over the outcomes of urban

development" (2018, p.223) while reducing conflict across all social groups partaking in the city making process, they are often driven by a process of post-politization. This implies to prioritize mainstream positions and in turn, may overrun marginalized perspectives as they replicate already existing power dynamics. An agonistic planning paradigm can hence be helpful in conceptualizing the green city ideal moving away from its universally applied imaginary described above to one that includes plural and locally shaped imaginaries. Following McAuliffe and Rogers (2020), paying specific attention to the plural values that underpin and inform one's decisions and actions can then help to understand why and how communities and individuals enact and contest certain notions of urban politics, and specifically of the green city ideal. Moving towards an agonistic governance approach may thus help to counteract the challenges posed by a contemporary green city ideal on achieving equity, participation, and inclusivity in local democratic governance. Kaika (2017) hence envisions a focus on "where, how, why, and by whom conflict and disagreement are generated" (p.94).

An agonistic planning approach can thus be helpful to overcome the challenges imposed by the contemporary green city ideal on achieving equity, participation, and inclusivity in urban governance. The technocratic and multi-level governance approach to ensure adequate technical and expert solutions may endanger democratic processes that include the participation of lay people and civic collectives in the conceptualization, operationalization, and deployment of the green city on the ground (Rosol et al., 2017, Ormerod and MacLeod, 2019). The cross-scale top-down nature of the green city's governance may hence enable the formulation of a place-detached green imaginary and further post-political processes of the green city making, including de-politized valuations methodologies that prioritize powerful voices and perspectives. There are many instances in which municipal green city agendas demolish informal community gardens to replace them with polished, aesthetized green spaces such as greenways or green avenues (Anguelovski and Connolly 2021). More so, a green city ideal built upon a homogenous imaginary of urban nature does not reflect the multiple and intersecting (local) meanings of and needs in relation to nature. In response, counter-imaginaries may thus emerge to highlight local histories, traumas, and cultures attached to specific places and contesting naturalized "common sense" cross-scale imaginaries (Matheney et al., forthcoming; Oscilowicz et al., 2023).

1.3. Research Objectives, Gaps, and Overarching Research Design

1.3.1. Research objective

In the following, I will present the research objective and questions that guided the overarching research design and each empirical chapter. I will then turn to a detailed description of research gaps and the overall design of this Ph.D. dissertation, which has been summarized in table 1.

Based on the literature reviewed in the previous section that depicts the different notions of a contemporary green city ideal, the **overarching objective** of this thesis is to interrogate the challenges and opportunities for formulating and embedding an alternative green city ideal in local governance. More concretely, I ask: how are socio-natures formed and articulated in multi-scale urban green and climate policy strategies and practices and by urban residents? To address this objective, my research was guided by the following three sub-questions:

Research question 1: How do green and related sustainability policies become grounded in municipal efforts to create urban branding? What underlying processes do facilitate and condition the landing of greening as an urban development strategy? (Chapter II)

Research question 2: What are the plural values (instrumental, intrinsic, or relational) urban residents hold in regard to urban greenery and the broader idea of nature? Do urban nature's contributions to people tend to be perceived as a positive impact on well-being or may aspects of nature also be negatively valued by urban residents? How do plural, partly diverging, values about nature impact urban policymaking processes? (Chapter III)

Research question 3: To what extent do multi-level ad-hoc emergency funds allow for civic participation, inclusion, and equity in urban climate action? (Chapter IV)

I explore each of these three research questions in three standalone empirical chapters in the context of local green governance of the case city of Vitoria-Gasteiz. I focus on a single case city to be able to closely trace the cultural, political, and historical context in which local governance dynamics and conflicts are deeply rooted and that shape meanings of (urban) socio-natures. The choice of the city of Vitoria-Gasteiz is due to its leadership role in environmental policymaking in a European context, being a repeated winner city for international sustainability awards and known member of several prestigious international city networks. Despite its frontrunner role in the international policy arena, Vitoria-Gasteiz faces challenges in the context of international market forces that drive the need for creating a strong urban economic profile in order to advance a green city making for its 250.000 residents. Thus,

the intent to embed a common local vision of the green city is challenged by the multiple meanings and needs local resident formulate surrounding their own understanding of urban nature and priorities of urban planning. That is, while highly celebrated internationally for its renaturing programs, the local materialization of green also encounters civic contestation locally, where residents question the municipal prioritization of international economic and environmental goals over social needs and perspectives of residents. These dynamics make Vitoria-Gasteiz an appropriate case study (Priya, 2021; Yin, 2009) to advance scientific knowledge about the challenges Global North mid-sized cities are facing in the context of global sustainability and climate urbanism under a socio-ecological crisis.

1.3.2. Research gaps

Based on the body of literature described in Section 1.2, I identify four main research gaps that informed the single case study design and the three research questions guiding this Ph.D. dissertation.

First, for the formulation of research question 1, I follow calls by Angelo (2019a, 2019b), Angelo & Wachsmuth (2020), and Long (2016) to pay closer attention to the historic emergence and shifts of green narratives that conditioned and shaped local green governance towards its contemporary narrative of "green is good" (Angelo, 2019a) and its resulting orthodoxy of greening as universal urban planning paradigm (Connolly, 2019). So far, only little attention is paid to the underlying questions of how, why, and in which socio-cultural context the green city ideal has been put forward and what conditions and context allowed it to emerge and take root. In this sense, a deep understanding of the situated historic context is needed that allows for conceptualizing the green city ideal through a focus on the multi-scalar and temporal processes of city-making as units of analysis instead of focusing on spatial analysis within urban boundaries (Angelo, 2019b). Chapter II offers a contribution to this gap by tracing the historic evolution of a green city discourse over a period of four decades.

Second, research question 2 results from an increasing body of scholarship across disciplines that is testifying how conceptualization of nature both in theory and practice are being increasingly associated with an economic growth narrative building upon hierarchical and utilitarian society-nature relations (Pascual et al., 2017). These conceptualizations of nature are thereby reinforcing hegemonic, colonial, and extractivist practices of greening, as they build upon Western epistemologies and leave little space for alternative visions of socionatural entanglements (see e.g., Anguelovski & Corbera, 2022; Maller, 2021; Tozer et al., 2020). In this context, the IPBES calls for a nature-positive policymaking and for appropriate valuation methodologies that are more inclusive of the plural ontologies and epistemologies

emphasizing a plurality of values prevalent in the specific context (IPBES, 2022; Pascual et al., 2023). In this respect, Chapter III will contribute to filling this research gap by applying Q-methodology to elicit locally existing society-nature relationships and hence offers both a methodological and conceptual approach to advance the urban socio-natures thinking towards the integration of intersectional, place-based, and more inclusive notions by drawing on a plural values framework.

Third, research question 3 contributes to the literature that explores the emergence of new global urbanism paradigms, modes of governance and new actor constellations at the center of urban greening and the resulting novel ways of multi-level climate finance. These news modes of finance have started to shape how green projects get funded, materialize, and integrate residents. Local governance is thereby increasingly dependent on the narrative pushed forward beyond the spatial limits of the municipal territory and areas of competencies (Bracking and Leffel, 2021; Castán Broto, 2017; Long, 2021). In Europe, this is exemplified by multi-lateral financial emergency instruments, such as the Next Generation EU funds released by European Commission to allow for a quick economic recovery from the Covid-19 pandemic. While those emergency instruments deliver funds of a never seen scale and volume with the potential to accelerate urban transformations towards new ideals of the green city, their impact on democratic local governance remains highly understudied (De Gregorio Hurtado, 2021). Chapter IV will address this gap by offering a first analysis of ad-hoc emergency funds' impacts on achieving equity, inclusion, and participation in urban governance.

Overall, there is a focus in the broader urban studies literature on larger metropolises or post-industrial cities with a strong economic profile in the Global North (Garcia-Lamarca et al., 2021; Kern, 2019). Still, in a European context, the majority of urban dwellers lives in mid-sized cities (EC, 2023). Those cities are competing with larger metropoles and strong economic urban areas for funding and international recognition. There is hence a need to shed light on how those mid-sized cities navigate the complexities of implementing situated and context-specific green governance while being exposed to increasing interwovenness and competitiveness of the global with the local, and a multiplicity of new actors influencing local action on the ground. The overall focus on one single case city throughout this Ph.D. dissertation will offer an indepth empirical contribution to more closely disentangle the challenges that are specific to European mid-sized cities. The following section will lay out the concrete methodological approach applied in each of the studies in order to respond to the here formulated research questions and gaps in the previous literature.

1.3.3. Research design

I mobilize a multi-method and grounded theory approach to interrogate empirically the multiple ways socio-natures are formed and articulated in multi-scale urban green(ing) policy strategies and practices, focusing on different scalar and time units of analysis. Each of the three empirical questions thereby responds to one of the above-formulated research questions (RQ):

Chapter II (RQ1) serves as an introduction into the political and cultural historic context of environmental policymaking in Vitoria-Gasteiz, situating the city's local narratives of green in the multi-scalar dynamics across four decades. Drawing on the conceptual framework of a Sustainability Fix, I embed the case of Vitoria-Gasteiz in the broader context of international green urbanism, in which especially recent urban green policies build upon a growth-oriented framing of a win-win for both economy and environment. I used a qualitative approach through critical discourse analysis of archival data ranging four decades as well as twelve semi-structured interviews with key planners and decision-makers. This data collection and analysis allowed for a close examination of the socio-political context, local environmental policymaking, and the broader green(ing) trajectory of Vitoria-Gasteiz as Europe's 2012 Green Capital.

<u>Chapter III (RQ2)</u> zooms into individual meanings of nature to explore the plurality of socio-natures among the residents of Vitoria-Gasteiz. Following calls for alternative green imaginaries I bring the recent framework of plural values about nature into conversation with urban planning in order to, first, elicit plural and context-specific values about nature held by urban residents that can, second, inform decision-making and implementation of urban greening interventions that includes locally situated and residents' diverse meanings of nature. For this end, I use the semi-quantitative Q-methodology to cluster the individual notions of socio-natures derived from 29 Q-sorts of urban residents into social discourses of four locally embedded perspectives about the meaning of (urban) nature.

<u>Chapter IV (RQ3)</u> jumps back to a multi-scalar analysis to understand the obstacles to implementing more holistic and local notions of greening. In this chapter, I examine a very recent and exceptional funding scheme that, given its sheer volume and timing, can have major impact on transformative climate action: the case of the NextGenerationEU funds. I draw on two concrete renaturalization projects co-financed through this multi-level ad-hoc emergency fund and their implications for local transformative and democratic greening practice on the neighborhood scale. I analyze

here multiple qualitative data sources, including participant observations at public events, 14 semi-structured interviews with planners, decision-makers and neighborhood collectives, and document analysis of relevant policy documents on the city, regional, national, and European scale.

I close this Ph.D. dissertation with a discussion of the key results of each of these chapters and cross findings. I will lay out limitations of the research design and discuss further research avenues. Lastly, I point to concrete implications for urban planners and decisionmakers.

Table 1. Summary of thesis output: research questions (RQ), study focus, and methods and data informing each of the three sub-studies implemented in the case city of Vitoria-Gasteiz.

Output	RQ	Study focus/objective	Methods & Data
Chapter II (Article published in Cities (2022))	How do green and related sustainability policies become grounded in municipal efforts to create urban branding? What underlying processes do facilitate and condition the landing of greening as an urban development strategy?	A focus on the historic evolution of an urban greening discourse: to understand the path-dependency of urban green and sustainability narratives and multi-scalar society-policy relations through an historic lens.	Qualitative: Critical discourse analysis of archival data of four decades regarding the socio-political context and green(ing) trajectory and twelve semistructured interviews with key planners and decision-makers in the context of urban environmental planning of Vitoria-Gasteiz
Chapter III (Article published in People & Nature (2023))	What are the plural values (instrumental, intrinsic, or relational) urban residents hold in regard to urban greenery and the broader idea of nature? Do urban NCP tend to be perceived as a positive impact on well-being or may aspects of nature also be negatively valued by urban residents? How do plural, partly diverging, values about nature impact urban policymaking processes?	A focus on the plurality of socio-natures among urban residents: to elicit plural and context-specific values about nature held by urban residents. to inform decision-making and implementation of urban greening interventions that includes situated and diverse meanings of nature.	Semi-quantitative: Q-methodology with 29 urban residents of Vitoria-Gasteiz to elicit four context-specific perspectives of (urban) nature
Chapter IV (Article submitted to Environmental Science and Policy)	To what extent does multi-level green financing funds allow for the democratization and equity-focus of urban climate action?	A focus on challenges derived by multi-scalar interactions and dependencies on local governance: to understand how multi-lateral funding schemes impact local transformative greening practice through two urban renaturalization projects.	Qualitative: Grounded Theory approach based on participant observation at public events, 14 semi-structured interviews with planners, decision-makers and neighborhood collectives, and document analysis of relevant policy documents on the city, regional, national, and European scale
Dissemination video <u>"Revalue</u> <u>Cities"</u>		ientific audience summarizing on Neidig, visualized by Grigorenk	cross-cutting results of Chapter II

1.4. References

- Agyeman, J. 2013. Introducing Just Sustainabilities: Policy, Planning and Practice. Zed Books Ltd.. New York
- Angelo, H., 2017. From the city lens toward urbanisation as a way of seeing: Country/city binaries on an urbanising planet. Urban Stud. 54, 158–178. https://doi.org/10.1177/0042098016629312
- Angelo, H., 2019a. Added value? Denaturalizing the "good" of urban greening. Geogr. Compass 13, 1–14. https://doi.org/10.1111/gec3.12459
- Angelo, H., 2019b. The greening imaginary: urbanized nature in Germany's Ruhr region. Theory Soc. 48, 645–669. https://doi.org/10.1007/s11186-019-09361-5
- Angelo, H. 2021. How green became good. Urbanized Nature and the Making of Cities and Citizens. Chicago university press.
- Angelo, H., Wachsmuth, D., 2020. Why does everyone think cities can save the planet? Urban Stud. 57, 2201–2221. https://doi.org/10.1177/0042098020919081
- Anguelovski, I. 2016. From Toxic Sites to Parks as (Green) LULUs? New Challenges of Inequity, Privilege, Gentrification, and Exclusion for Urban Environmental Justice. Journal of Planning Literature, 31(1), 23-36. https://doi.org/10.1177/0885412215610491
- Anguelovski, I., Brand, A.L., Connolly, J.J.T., Corbera, E, et al. 2020. Expanding the Boundaries of Justice in Urban Greening Scholarship: Toward an Emancipatory, Antisubordination, Intersectional, and Relational Approach. Ann. Am. Assoc. Geogr. 4452, 1–27. https://doi.org/10.1080/24694452.2020.1740579
- Anguelovski, I., Connolly, J. 2021. The Green City and Social Injustice. 21 Tales from North America and Europe, Routledge, New York
- Anguelovski, I., Connolly, J. and Brand, A. 2018. From landscapes of utopia to the margins of the green urban life, City, 22:3, 417-436, DOI: 10.1080/13604813.2018.1473126
- Anguelovski, I., Connolly, J.J.T., García-Lamarca, M., Cole, H., Pearsall, H., 2019. New scholarly pathways on green gentrification: What does the urban 'green turn' mean and where is it going? Prog. Hum. Geogr. 43, 1064–1086. https://doi.org/10.1177/0309132518803799
- Anguelovski, I., Connolly, J.J.T., Cole, H., Garcia-Lamarca, M., Triguero-Mas, M., Baró, F., Martin, N., Conesa, D., Shokry, G., del Pulgar, C.P., Ramos, L.A., Matheney, A., Gallez, E., Oscilowicz, E., Máñez, J.L., Sarzo, B., Beltrán, M.A., Minaya, J.M., 2022. Green gentrification in European and North American cities. Nat. Commun. 13, 3816. https://doi.org/10.1038/s41467-022-31572-1
- Anguelovski, I., Corbera, E., 2022. Integrating justice in Nature-Based Solutions to avoid nature-enabled dispossession. Ambio. https://doi.org/10.1007/s13280-022-01771-7
- Arias-Arévalo, P., Gómez-Baggethun, E., Martín-López, B., Pérez-Rincón, M., 2018. Widening the evaluative space for ecosystem services: A taxonomy of plural values and valuation methods. Environ. Values 27, 29–53. https://doi.org/10.3197/096327118X15144698637513
- Armstrong, A., Bulkeley, H., Tozer, L., Kotsila, P., Armstrong, A., Bulkeley, H., Tozer, L., Kotsila, P., Armstrong, A., 2022. Border troubles: urban nature and the remaking of public / private divides. Urban Geogr. 1–21. https://doi.org/10.1080/02723638.2022.2125669
- Babí Almenar, J., Elliot, T., Rugani, B., Philippe, B., Navarrete Gutierrez, T., Sonnemann, G., Geneletti, D., 2021. Nexus between nature-based solutions, ecosystem services and urban challenges. Land use policy 100, 104898. https://doi.org/10.1016/j.landusepol.2020.104898
- Baró, F., Chaparro, L., Gómez-Baggethun, E., et al. (2014). Contribution of ecosystem services to air quality and climate change mitigation policies: The case of urban forests in Barcelona, Spain. Ambio, 43, 466–479. https://doi.org/10.1007/s13280-014-0507-x
- Bracking, S., 2019. Financialisation, Climate Finance, and the Calculative Challenges of Managing Environmental Change 51, 709–729. https://doi.org/10.1111/anti.12510
- Bracking, S., Leffel, B., 2021. Climate finance governance: Fit for purpose ? 1–18. https://doi.org/10.1002/wcc.709
- Buijs, A., Kamphorst, D., Mattijssen, T., van Dam, R., Kuindersma, W., Bouwma, I., 2022. Policy discourses for reconnecting nature with society: The search for societal engagement in Dutch nature conservation policies. Land use policy 114, 105965. https://doi.org/10.1016/j.landusepol.2021.105965
- Bulkeley, H., 2005. Reconfiguring environmental governance: Towards a politics of scales and networks. Polit. Geogr. 24, 875–902. https://doi.org/10.1016/j.polgeo.2005.07.002

- Bulkeley, H., Betsill, M.M., 2005. Rethinking sustainable cities: Multilevel governance and the "urban" politics of climate change. Env. Polit. 14, 42–63. https://doi.org/10.1080/0964401042000310178
- Calderón-Árgelich, A., Anguelovski, I., Connolly, J.J.T., Baró, F., 2023. Greening plans as (re)presentation of the city: Toward an inclusive and gender-sensitive approach to urban greenspaces. Urban For. Urban Green. 86. https://doi.org/10.1016/j.ufug.2023.127984
- Calderón-Argelich, A., Anguelovski, I., Valeria-Carolin Cuenca, Helen V.S.Cole, Margarita Triguero-Mas, Blanca Valdivia, & Baró, F. (forthcoming). Gendered use and perceptions of public green and blue spaces in gentrifying neighborhoods during the COVID-19 pandemic.
- Calderón-Argelich, A., Benetti, S., Anguelovski, I., Connolly, J.J.T., Langemeyer, J., Baró, F., 2021.

 Tracing and building up environmental justice considerations in the urban ecosystem service literature: A systematic review. Landsc. Urban Plan. 214. https://doi.org/10.1016/j.landurbplan.2021.104130
- Calcagni, F., Amorim Maia, A.T., Connolly, J.J.T., Langemeyer, J., 2019. Digital co-construction of relational values: understanding the role of social media for sustainability. Sustain. Sci. 14, 1309–1321. https://doi.org/10.1007/s11625-019-00672-1
- Castán Broto, V., 2017. Urban Governance and the Politics of Climate change. World Dev. 93, 1–15. https://doi.org/10.1016/j.worlddev.2016.12.031
- Castán Broto, V., Robin, E., 2021. Climate urbanism as critical urban theory. Urban Geogr. 42, 715—720. https://doi.org/10.1080/02723638.2020.1850617
- Chan, K.M.A., Balvanera, P., Benessaiah, K., Chapman, M., Díaz, S., Gómez-Baggethun, E., Gould, R., Hannahs, N., Jax, K., Klain, S., Luck, G.W., Martín-López, B., Muraca, B., Norton, B., Ott, K., Pascual, U., Satterfield, T., Tadaki, M., Taggart, J., Turner, N., 2016. Why protect nature? Rethinking values and the environment. Proc. Natl. Acad. Sci. U. S. A. 113, 1462–1465. https://doi.org/10.1073/pnas.1525002113
- Chan, K.M., Gould, R.K., Pascual, U., 2018. Editorial overview: Relational values: what are they, and what's the fuss about? Curr. Opin. Environ. Sustain. 35, A1–A7. https://doi.org/10.1016/j.cosust.2018.11.003
- Cohen, D.A., 2020. Confronting the urban climate emergency: Critical urban studies in the age of a green new deal. City 24, 52–64. https://doi.org/10.1080/13604813.2020.1739435
- Connolly, J.J.T., 2019. From Jacobs to the Just City: A foundation for challenging the green planning orthodoxy. Cities 91, 64–70. https://doi.org/10.1016/j.cities.2018.05.011
- Dooling, S., 2009. Ecological gentrification: A Research agenda exploring justice in the city. Int. J. Urban Reg. Res. 33, 621–639. https://doi.org/10.1111/j.1468-2427.2009.00860.x
- European Commission. 2015 Towards an EU Research and Innovation Policy Agenda for Nature-based Solutions & Re-naturing Cities: Final Report of the Horizon 2020 Expert Group on 'Nature-based Solutions and Re-naturing Cities'. Publications Office of the European Union.
- Garcia-Lamarca, M., Anguelovski, I., Cole, H., Connolly, J.J.T., Argüelles, L., Baró, F., Loveless, S., Pérez del Pulgar Frowein, C., Shokry, G., 2021. Urban green boosterism and city affordability: For whom is the 'branded' green city? Urban Stud. 58, 90–112. https://doi.org/10.1177/0042098019885330
- García-Lamarca, M., Anguelovski, I., Venner, K., 2022a. Challenging the financial capture of urban greening. Nat. Commun. 1–4. https://doi.org/10.1038/s41467-022-34942-x
- García-Lamarca, M., Anguelovski, I., Cole, H.V.S., Connolly, J.J.T., Pérez-del-Pulgar, C., Shokry, G., Triguero-Mas, M., 2022b. Urban green grabbing: Residential real estate developers discourse and practice in gentrifying Global North neighborhoods. Geoforum 128, 1–10. https://doi.org/10.1016/j.geoforum.2021.11.016
- Haase, A., Schmidt, A. (2024) Impulse für eine kritische Debatte zur resilienten Stadtentwicklung am Beispiel der grünen Gentrifizierung. In: S. Kabisch et al. (Hrsg.), Die Resiliente Stadt. Konzepte, Konflikte, Lösungen. Helmholtz-Zentrum für Umweltforschung UFZ 2024 https://doi.org/10.1007/978-3-662-66916-7 3
- Haase, D., Kabisch, S., Haase, A., Andersson, E., Banzhaf, E., Baró, F., Brenck, M., Fischer, L.K., Frantzeskaki, N., Kabisch, N., Krellenberg, K., Kremer, P., Kronenberg, J., Larondelle, N., Mathey, J., Pauleit, S., Ring, I., Rink, D., Schwarz, N., Wolff, M., 2017. Greening cities To be socially inclusive? About the alleged paradox of society and ecology in cities. Habitat Int. 64, 41–48. https://doi.org/10.1016/j.habitatint.2017.04.005
- Hilbrandt, H., Grafe, F., 2022. URBAN VISIONS OF GLOBAL CLIMATE FINANCE: Dispossessive Mechanisms of Futuring in the Making of Groy 896–905. https://doi.org/10.1111/1468-2427.13106

- Hilbrandt, H., Grafe, F., 2023. Thinking topologically about urban climate finance: geographical inequalities and Mexico's urban landscapes of infrastructure investment infrastructure investment. Urban Geogr. 1–20. https://doi.org/10.1080/02723638.2023.2176599
- Hinchliffe, S., Whatmore, S., 2006. Living cities: Towards a politics of conviviality. Sci. Cult. (Lond). 15, 123–138. https://doi.org/10.1080/09505430600707988
- Hodson, M., Marvin, S., 2010. Urbanism in the anthropocene: Ecological urbanism or premium ecological enclaves? City 14, 298–313. https://doi.org/10.1080/13604813.2010.482277
- Hodson, M., Marvin, S., 2017. Intensifying or transforming sustainable cities? Fragmented logics of urban environmentalism. Local Environ. 22, 8–22. https://doi.org/10.1080/13549839.2017.1306498
- Houston, D., Hillier, J., MacCallum, D., Steele, W., Byrne, J., 2018. Make kin, not cities! Multispecies entanglements and 'becoming-world' in planning theory. Plan. Theory 17, 190–212. https://doi.org/10.1177/1473095216688042
- IPBES, 2022. Summary for policymakers of the methodological assessment report on the diverse values and valuation of nature of the intergovernmental science- policy platform on biodiversity and ecosystem services. (U. Pascual, P. Balvanera, M. Christie, B. Baptiste, D. González- Jiménez, C. B. Anderson, S. Athayde, R. Chaplin- Kramer, S. Jacobs, E. Kelemen, R. Kumar, E. Lazos, A. Martin, T. H. Mwampamba, B. Nakangu, P. O'Farrell, C. M. Raymond, S. M. Subramanian, M. Termansen, ... A. Vatn, Eds.). https://doi.org/10.5281/zenodo.6522392
- Jacobs, S., Kelemen, E., O'Farrell, P., et al (2023). The pitfalls of plural valuation, Current Opinion in Environmental Sustainability, Volume 64, https://doi.org/10.1016/j.cosust.2023.101345.
- Kaika, M., 2017. 'Don't call me resilient again!': the New Urban Agenda as immunology ... or ... what happens when communities refuse to be vaccinated with 'smart cities' and indicators. Environ. Urban. 29, 89–102. https://doi.org/10.1177/0956247816684763
- Keil, R., 2020a. An urban political ecology for a world of cities. Urban Stud. 57, 2357–2370. https://doi.org/10.1177/0042098020919086
- Keil, R., 2020b. The spatialized political ecology of the city: Situated peripheries and the capitalocenic limits of urban affairs. J. Urban Aff. 42, 1125–1140. https://doi.org/10.1080/07352166.2020.1785305
- Kennedy, S.M., 2016. Urban policy mobilities, argumentation and the case of the model city. Urban Geogr. 37, 96–116. https://doi.org/10.1080/02723638.2015.1055932
- Kern, K., 2019. Cities as leaders in EU multilevel climate governance: embedded upscaling of local experiments in Europe. Env. Polit. 28, 125–145. https://doi.org/10.1080/09644016.2019.1521979
- Knuth, S., Krishnan, A., 2021. Climate Finance for Cities and Urban Governments.
- Kotsila, P., Anguelovski, I., Baró, F., Langemeyer, J., Sekulova, F., JT Connolly, J., 2021. Nature-based solutions as discursive tools and contested practices in urban nature's neoliberalisation processes. Environ. Plan. E Nat. Sp. 4, 252–274. https://doi.org/10.1177/2514848620901437
- Long, J., 2016. Constructing the narrative of the sustainability fix: Sustainability, social justice and representation in Austin, TX. Urban Stud. 53, 149–172. https://doi.org/10.1177/0042098014560501
- Long, J., 2021. Crisis Capitalism and Climate Finance: The Framing, Monetizing, and Orchestration of Resilience-Amidst-Crisis 9, 51–63. https://doi.org/10.17645/pag.v9i2.3739
- Long, J., Rice, J.L., 2019. From sustainable urbanism to climate urbanism. Urban Stud. 56, 992–1008. https://doi.org/10.1177/0042098018770846
- Lovell, S. T., & Taylor, J. R. (2013). Supplying urban ecosystem services through multifunctional green infrastructure in the United States. *Landscape Ecology*, 28, 1447–1463. https://doi.org/10.1007/s10980-013-9912-y
- Matheney, A., Anguelovski, I., Kotsila, P. et al. (forthcoming) Illuminating Radical Spatial Imaginaries: Counter-mapping urban environmental justice struggles for the city yet to come.
- Maller, C., 2021. Re-orienting nature-based solutions with more-than-human thinking. Cities 113, 103155. https://doi.org/10.1016/j.cities.2021.103155
- Martin, C., Evans, J., Karvonen, A., Paskaleva, K., Yang, D., Linjordet, T., 2019. Smart-sustainability: A new urban fix? Sustain. Cities Soc. 45, 640–648. https://doi.org/10.1016/j.scs.2018.11.028
- McAuliffe, C., Rogers, D., 2020. Value pluralism in urban planning. Plan. Theory 19, 242–248. https://doi.org/10.1177/1473095219900350
- McAuliffe, C., Rogers, D., 2019. The politics of value in urban development: Valuing conflict in agonistic pluralism. Plan. Theory 18, 300–318. https://doi.org/10.1177/1473095219831381

- McAuliffe, C., Rogers, D., 2018. Tracing resident antagonisms in urban development: agonistic pluralism and participatory planning. Geogr. Res. 56, 219–229. https://doi.org/10.1111/1745-5871.12283
- McCann, E., 2013. Policy boosterism, policy mobilities, and the extrospective city. Urban Geogr. 34, 5–29. https://doi.org/10.1080/02723638.2013.778627
- Melanidis, M.S., Hagerman, S., 2022. Competing narratives of nature-based solutions: Leveraging the power of nature or dangerous distraction? Environ. Sci. Policy 132, 273–281. https://doi.org/10.1016/j.envsci.2022.02.028
- Meerow, S. and Newell, J. 2019, Urban resilience for whom, what, when, where, and why?, Urban Geography, 40:3, 309-329, DOI: 10.1080/02723638.2016.1206395
- Miller, B., Mössner, S., 2020. Urban sustainability and counter-sustainability: Spatial contradictions and conflicts in policy and governance in the Freiburg and Calgary metropolitan regions. Urban Stud. 57, 2241–2262. https://doi.org/10.1177/0042098020919280
- Miller, J.R., 2005. Biodiversity conservation and the extinction of experience. Trends Ecol. Evol. 20, 430–434. https://doi.org/10.1016/j.tree.2005.05.013
- Muradian, R., Pascual, U., 2018. A typology of elementary forms of human-nature relations: a contribution to the valuation debate. Curr. Opin. Environ. Sustain. 35, 8–14. https://doi.org/10.1016/j.cosust.2018.10.014
- Nielsen, A.B., Papin, M., 2021. The hybrid governance of environmental transnational municipal networks: Lessons from 100 Resilient Cities. Environ. Plan. C Polit. Sp. 39, 667–685. https://doi.org/10.1177/2399654420945332
- Ormerod, E., MacLeod, G., 2019. Beyond consensus and conflict in housing governance: Returning to the local state. Plan. Theory 18, 319–338. https://doi.org/10.1177/1473095218790988
- Oscilowicz, E., Anguelovski, I., García-lamarca, M., Helen, V.S., Shokry, G., Perez-del-pulgar, C., Argüelles, L., James, J.T., Oscilowicz, E., Anguelovski, I., García-lamarca, M., Cole, V.S., Shokry, G., Perez-del-pulgar, C., Argüelles, L., Connolly, J.J.T., 2023. Grassroots mobilization for a just, green urban future: Building community infrastructure against green gentrification and displacement. J. Urban Aff. 00, 1–34. https://doi.org/10.1080/07352166.2023.2180381
- Pan, H., Page, J., Shi, R. et al. Contribution of prioritized urban nature-based solutions allocation to carbon neutrality. Nat. Clim. Chang. 13, 862–870 (2023). https://doi.org/10.1038/s41558-023-01737-x
- Papin, M., Beauregard, P., 2023. Can't buy me love: billionaire entrepreneurs' legitimation strategies in transnational climate governance. Env. Polit. 00, 1–22. https://doi.org/10.1080/09644016.2023.2180909
- Pascual, U., Adams, W.M., Díaz, S., Lele, S., Mace, G.M., Turnhout, E., 2021. Biodiversity and the challenge of pluralism. Nat. Sustain. https://doi.org/10.1038/s41893-021-00694-7
- Pascual, U., Balvanera, P., Anderson, C.B., Chaplin-Kramer, R., et al., 2023. Diverse values of nature for sustainability. Nature 620. https://doi.org/10.1038/s41586-023-06406-9
- Pascual, U., Balvanera, P., Díaz, S., Pataki, G., et al., 2017. Valuing nature's contributions to people: the IPBES approach. Curr. Opin. Environ. Sustain. 26–27, 7–16. https://doi.org/10.1016/j.cosust.2016.12.006
- Pascual, U., McElwee, P., Diamond, S., et al. 2022. Governing for Transformative Change across the Biodiversity–Climate–Society Nexus, BioScience, Volume 72, Issue 7, July 2022, Pages 684–704, https://doi.org/10.1093/biosci/biac031
- Peters, K., 2010. Being together in urban parks: Connecting public space, leisure, and diversity. Leisure Sciences, 32(5), 418–433. https://doi.org/10.1080/ 01490400.2010.510987
- Pineda-Pinto, M., Frantzeskaki, N., Nygaard, C.A., 2022. The potential of nature-based solutions to deliver ecologically just cities: Lessons for research and urban planning from a systematic literature review. Ambio 51, 167–182. https://doi.org/10.1007/s13280-021-01553-7
- Priya, A., 2021. Case Study Methodology of Qualitative Research: Key Attributes and Navigating the Conundrums in Its Application. Sociol. Bull. 70, 94–110. https://doi.org/10.1177/0038022920970318
- Ranganathan, M., Bratman, E., 2021. From Urban Resilience to Abolitionist Climate Justice in Washington, DC. Antipode 53, 115–137. https://doi.org/10.1111/anti.12555
- Ribeiro, A. I., Triguero-Mas, M., & Jardim Santos, C., 2021. Exposure to nature and mental health outcomes during COVID-19 lockdown. A comparison between Portugal and Spain. *Environment International*, 154, Article 106664. https://doi.org/ 10.1016/j.envint.2021.106664

- Rosol, M., Béal, V., Mössner, S., 2017. Greenest cities? The (post-)politics of new urban environmental regimes. Environ. Plan. A 49, 1710–1718. https://doi.org/10.1177/0308518X17714843
- Scanu, E., Cloutier, G., Trudelle, C., 2021. Contesting the greening of the urban growth machine: Ecological modernization and the promethean counter-discourse. Environ. Plan. E Nat. Sp. 4, 1369–1388. https://doi.org/10.1177/2514848620952326
- Schaafsma, M. S Ahn, AJ Castro, N Dendoncker, et al., 2023. Whose values count? A review of the nature valuation studies with a focus on justice, Current Opinion in Environmental Sustainability, Volume 64, https://doi.org/10.1016/j.cosust.2023.101350.
- Schröter, M., van der Zanden, E.H., van Oudenhoven, A.P.E., Remme, R.P., Serna-Chavez, H.M., de Groot, R.S. and Opdam, P. 2014. Ecosystem Services as a Contested Concept: a Synthesis of Critique and Counter-Arguments. Conservation Letters, 7: 514-523. https://doi.org/10.1111/conl.12091
- Shokry, G., Anguelovski, I., Connolly, J.J.T., Maroko, A., Pearsall, H., 2022. "They Didn't See It Coming": Green Resilience Planning and Vulnerability to Future Climate Gentrification. Hous. Policy Debate 32, 211–245. https://doi.org/10.1080/10511482.2021.1944269
- Shokry, G, Anguelovski, I & Connolly, J., 2023. (Mis-)belonging to the climate-resilient city: Making place in multi-risk communities of racialized urban America, Journal of Urban Affairs, DOI: 10.1080/07352166.2022.2160339
- Soga, M., Evans, M.J., Yamanoi, T., Fukano, Y., Tsuchiya, K., Koyanagi, T.F., Kanai, T., 2020. How can we mitigate against increasing biophobia among children during the extinction of experience? Biol. Conserv. 242, 108420. https://doi.org/10.1016/j.biocon.2020.108420
- Soga, M., Gaston, K.J., 2016. Extinction of experience: The loss of human-nature interactions. Front. Ecol. Environ. 14, 94–101. https://doi.org/10.1002/fee.1225
- Swyngedouw, E., 1996. The city as a hybrid: On nature, society and cyborg urbanization. *Capitalism, Nature, Socialism*, 7(2), 65–80. https://doi.org/10.1080/10455 75960 9358679
- Swyngedouw, E., 2004. Globalisation or 'glocalisation'? Networks, territories and rescaling. Cambridge Rev. Int. Aff. 17, 25–48. https://doi.org/10.1080/0955757042000203632
- Tadaki, M., Sinner, J., Chan, K.M.A., 2017. Making sense of environmental values: A typology of concepts. Ecol. Soc. 22. https://doi.org/10.5751/ES-08999-220107
- Temenos, C., McCann, E., 2012. The local politics of policy mobility: Learning, persuasion, and the production of a municipal sustainability fix. Environ. Plan. A 44, 1389–1406. https://doi.org/10.1068/a44314
- Triguero-Mas, M., Dadvand, P., Cirach, M., et al. 2015. Natural outdoor environments and mental and physical health: Relationships and mechanisms. *Environment International*, 77, 35–41. https://doi.org/10.1016/i.envint.2015.01.012
- Tozer, L., Hörschelmann, K., Anguelovski, I., Bulkeley, H., Lazova, Y., 2020. Whose city? Whose nature? Towards inclusive nature-based solution governance. Cities 107, 102892. https://doi.org/10.1016/j.cities.2020.102892
- Tozer, L., Klenk, N., 2018. Discourses of carbon neutrality and imaginaries of urban futures. Energy Res. Soc. Sci. 35, 174–181. https://doi.org/10.1016/j.erss.2017.10.017
- Watkins, J., 2015. Spatial Imaginaries Research in Geography: Synergies, Tensions, and New Directions. Geogr. Compass 9, 508–522. https://doi.org/10.1111/gec3.12228
- Weichselgartner, J., & Kelman, I. 2015. Geographies of resilience: Challenges and opportunities of a descriptive concept. Progress in Human Geography, 39(3), 249-267. https://doi.org/10.1177/0309132513518834
- While, A., Jonas, A.E.G., Gibbs, D., 2004. The environment and the enterpreneurial city: Searching for the urban "sustainability fix" in Manchester and Leeds. Int. J. Urban Reg. Res. 28, 549–569. https://doi.org/10.1111/j.0309-1317.2004.00535.x
- Wiesel, I., Steele, W., Houston, D., 2020. Cities of care: Introduction to a special issue. Cities 105. https://doi.org/10.1016/j.cities.2020.102844
- Yin, R.K., 2009. Case Study h Researc Design and Methods, Applied Social Research Methods Seiries.

Chapter II. "We are the Green Capital": Navigating the political and sustainability fix narratives of urban greening.

Abstract:

With increasing attention on green(ing) cities, urban nature is used to increase livability, to create new sectors such as tourism, and to boost international investment. What counts as desirable green intervention generally follows internationally accepted practices as cities aim for international recognition. Here, we examine the historic production of a green identity and the ways in which urban leaders have navigated local politics to enact greening. We focus on the mid-sized city Vitoria-Gasteiz (Basque Country, Spain), the 2012 European Green Capital. Based on a critical discourse analysis of archival data and in-depth interviews, we explore the production of a green city-identity over a period of forty years and determine four key processes: (i) early good leadership with a social city being core objective of urban planning, (ii) the need for building shared goals in a context of a violent political conflict in the Basque Country, (iii) policy mobilities and thriving for becoming a green pioneer internationally, and (iv) de-politization of green and sustainability discourses. We argue that the initially perceived social green amenity - an outcome of early progressive urban democratic experimentation - that served as a unifying project across polarized political fractions turned into an economic cultural asset for economic growth, shifting from a political to a sustainability fix.

Keywords:

Urban green branding, Sustainable urban development, Vitoria-Gasteiz, Sustainability fix, Mid-sized cities, Policy mobilities

This chapter corresponds to the following published article:

Neidig, J., Anguelovski, I., Albaina, A., & Pascual, U. (2022). "We are the Green Capital": Navigating the political and sustainability fix narratives of urban greening. Cities, 131(September), 103999. https://doi.org/10.1016/j.cities.2022.103999

2.1. Introduction

"Somos la Capital Verde", we are the Green Capital – a huge bill-board welcomes visitors entering the city of Vitoria-Gasteiz. This slogan appears on nearly every advertising sign, from bus stops to building walls, highlighting the city's intent to raise awareness and remind residents of the commitment to prioritize nature in local planning. Vitoria-Gasteiz, a mid-sized 250.000-resident city and the administrative capital of the autonomous region of the Basque Country was awarded as 2012 European Green Capital. This prize is part of a campaign created by the European Union to annually acknowledge and promote urban green and sustainability policies based on the assumption that cities, while high contributors to environmental challenges, may also hold the potential to enact innovative and smart solutions (European Commission, 2022). Since then, Vitoria-Gasteiz has become an international reference on environmental policies, green infrastructure, and sustainable mobility planning.

While the cityscape of Vitoria-Gasteiz is marked by visual reminders about its projected green identity, residents have not all positively embraced the political green discourse. Walking from the historic city center towards the peri-urban green belt, it is easy to eavesdrop on conversations between residents ranging from "[this is] luxury living in a green capital with nature everywhere" to "In a green capital, this should not happen". These remarks reflect that while residents seem to have internalized Vitoria-Gasteiz' green place branding, municipal policy making does also encounter some pushback. That is, despite Vitoria-Gasteiz being a green forerunner in Europe, this identity is not exempt of tensions and contradictions about the politics and practice of green city planning.

Research in critical urban planning, urban political ecology, and urban geography has already identified how the rhetoric of "cities saving the planet common sense" travels around the world (Angelo & Wachsmuth, 2020; Kaika, 2017; Keil, 2020a) and is associated with the building of an urban green brand (Garcia-Lamarca et al., 2022). This rhetoric is sustained by environmental technological 'smart' innovations that may foster national or global urban competition and economic growth under the tenet of counteracting diverse environmental challenges – a dynamic often described as a techno-fix (Connolly, 2019; Martin et al., 2019; Swyngedouw & Kaika, 2014). It is also further pushed through international recognition and awards beyond municipal borders (Affolderbach et al., 2019; McCann, 2011, 2013). Put differently, debates about how to build cities with a deep sustainability development ethos risk getting replaced by shallower consensual, yet reformist solutions (Grossmann et al., 2021). Cities' technocratic approaches to solve wicked socio-ecological challenges may lead to what some see as a depoliticization of the green discourse (Rosol et al., 2017; Swyngedouw, 2013).

Here, we examine a rather unexplored dynamic in the anchoring of a green rhetoric in urban planning: The historic production of a green identity and the ways in which urban leaders have navigated local politics to enact and brand greening. We focus on the historic evolution of the greening discourse for two reasons. First, we aim to understand how urban "smart" sustainability and "green growth"-oriented narratives are largely determined in a path-dependent way. Second, we interrogate how society-policy relations under an increasingly felt global environmental crisis have helped (re-)shape urban green visions.

This focus responds to Long's (2016) and Angelo's (2019) call for deep analyses of the production of local narratives in green planning. The choice of Vitoria-Gasteiz as empirical case study allows us to bring a focus on small to medium-sized cities in the Global North, moving away from much existing scholarly attention on larger urban metropoles (Garcia-Lamarca et al., 2021). We ask: How do green and related sustainability policies become grounded in municipal efforts to create urban branding? What underlying processes do facilitate and condition the landing of greening as an urban development strategy?

We first begin with laying out the theoretical framework applied in this paper. We draw on the idea of "sustainability fix" (henceforth SF) (e.g., Long, 2016; Temenos & McCann, 2012; While et al., 2004). This concept is particularly useful to depict how the selective integration of environmental goals in urban planning tends to follow the rationale of neoliberal city-making. We then present an in-depth historic analysis of environmental policies in Vitoria-Gasteiz which has favored long-term urban development around an early notion of sustainability since the first democratic municipal elections in 1979 after the Francoist dictatorship. We argue that progressive and ambitious greening discourses and interventions served first as a political fix in a polarized social context amid the Basque conflict and in a broader context of democratic experimentation. With the international diffusion of sustainability as concept and increasing interurban competition illustrated by the growth of award schemes, local economic agendas became intertwined with selective environmental goals, paving the way for a de-politized and uncontested meaning of green, environment or nature. We discuss our findings in relation to the shifting of the green discourse from a political fix to a SF, the pressures for small and midsized cities to participate in interurban competition and import policies from other places, the complex structure of involved actors and networks that shift with increasing influence of the international scale, and the resulting de-politized local understanding of green. We further call for research on citizen participation to recenter greening as an area of political contestation and democratic participation.

2.2. The sustainability fix in the urban greening narrative

With the global unfolding of the climate change crisis, there is an increasing turn to cities to look for adequate solutions and policies (Angelo & Wachsmuth, 2020; Anguelovski et al., 2020; Miller & Mössner, 2020). Often following an eco-modernist approach (Hagbert et al., 2020), green infrastructure development has become a clear anchor of planning solutions to mitigate and adapt to climate change while also pushing for a renewed urban economic agenda (Keil, 2020a; Tzaninis et al., 2020). Greening, associated with technological interventions and sustainability indicators, has helped create a branding strategy for achieving greater international visibility and investment. Yet, this dominant practice in much of the Global North may also contribute to an increasingly depoliticized narrative of sustainability as it turns into an "empty signifier" (Rosol et al., 2017). Sustainability serves as a vague umbrella concept for diverse or even contradictory (urban) interventions by private or international actors (Hodson & Marvin, 2010; Rosol et al., 2017).

These tensions have been described as a "Sustainability Fix". The concept depicts the selective integration of sustainability goals into local planning schemes wherein decisionmakers focus on only those environmental goals that are compatible with entrepreneurial and economic growth strategies (While et al., 2004). Instead of implementing reformist, more radical policies favoring the early transformist claims of the sustainability concept, planners and elected officials present urban sustainability-driven programs as a winwin panacea for the economy and the environment. Policies implemented under a SF may lead to changes both in discourses related to environmental planning as well as in the spatial and material structure of the city; yet they contribute to the depoliticization of environmental discourses with nature being removed from the arena of political contestation and negotiation (Long, 2016; Martin et al., 2019).

Under the banner of a SF, greening as a process of integrating nature into its antagonistic human-made city is often presented as inherently good and apolitical, legitimizing decision-making without public debate. Green may help enhance interurban competition (Walker, 2016), including award-seeking best-case practices (Gulsrud et al., 2017; McCann, 2013), public-private partnerships (Bulkeley & Castan Broto, 2012; Viitanen & Kingston, 2014;), or real-estate developments (Garcia-Lamarca et al., 2022). Yet, as greening becomes integrated into urban neoliberal agendas underpinned by economic growth, it risks undermining the social dimensions of sustainability from the point of view of equity and inclusivity (Affolderbach & Schulz, 2017; Agyeman, 2013; Kotsila et al., 2021; Steele et al., 2020).

Studies across Northern America and Europe – from the large metropolis to medium-sized or even declining cities – show the many ways in which the SF has taken ground. Vancouver, with the implementation of the Greenest City Action Plan in 2011, became a pioneer in green leadership, learning and competing with international vanguard cities, such as Copenhagen or Oslo (McCann, 2013). Based on a deliberative and participatory involvement of citizens and a strong marketing campaign. Vancouver successfully branded itself into a livable and sustainable global place-to-be (Affolderbach & Schulz, 2017). Other SF have been identified in diverse cultural, geographic, and economic contexts like Portland, Oregon (Mahmoudi et al., 2020), Nottingham, UK (Winter & Le, 2019), Manchester and Leeds, UK (While et al., 2004), Whistler, British Colombia (Temenos & McCann, 2012), or Tampere, Finland (Jokinen et al., 2018). In these examples, interventions on the ground include the provision of urban green infrastructure (Walker, 2016), long-term city development and revival strategies (Long, 2016), (peri)-urban agricultural practices (Pirro & Anguelovski, 2017), or carbon-neutrality strategies (Kenis & Lievens, 2017). Most projects involve, next to political and technical decision-makers, experts or pioneers in their fields, entrepreneurs in form of public-private partnerships, or the academic sector (Montgomery, 2015).

2.2.1. The multi-scalar process of grounding the local sustainability fix

We identify in the literature three processes across scales which condition the grounding of a SF as dominant narrative of urban environmental discourses. First, local governments build on the trans-local diffusion and importation of tools already successfully implemented elsewhere and seen as universal best-practices (Freytag et al., 2014; Temenos & McCann, 2012). With policies being scaled up and transferred across places, they become de-localized from their original context. This process, described as 'policy mobilities', has been critically examined as the travelling of specific policies contains a power-loaden process wherein dominant ideologies determine the new "universal" framing of imported policies (Kennedy, 2016; McCann, 2011; McCann, 2013). What counts as desirable outcome of greening practices is thereby not decided by local communities, but tends to follow criteria set by high-level networks, semi-public agencies, and urban elites (Affolderbach et al., 2019; Gulsrud et al., 2017). It is thus driven by international awards and rankings such as the Covenant of Mayors, the European Green Capital Award, or The Economist's selection of the "Most Livable City" (Affolderbach & Schulz, 2016).

Second, a SF builds upon local alliances with support of multiple stakeholders, such as decisionmakers, the business sector, media, or even the broader local citizenry (Long, 2016), yet (elite) private and institutional actors are often dominating the chosen green strategy (Wijaya, 2021). With the implementation of policies framed around the SF, alternative and

more transformative proposals of local, yet less powerful actors become undermined by an entrepreneurial business-oriented strategy (Nciri & Levenda, 2020). Here, decision-making becomes detached from processes of political contestation and struggle hindering the overcoming of structural injustices resulting from growth-oriented perspectives. Instead, it tends to be driven by eco-technological and managerial approaches with weak democratic legitimization (Rosol et al., 2017).

Third, narratives and storylines – locally created and accepted by seemingly diverse actors – allow the SF to be anchored in local ideologies surrounding sustainability and greening (Temenos & McCann, 2012). Those narratives may change over time as interventions under the SF get implemented and the material fabric of the city changes. As greening gains acceptance from diverse political fractions, it reaches a status of becoming "common sense" (Angelo & Wachsmuth, 2020) and "naturalized" for its positive contribution to the local economy (e.g., jobs and investments) and the broader range of social benefits associated with it. Thus, greening develops into a planning paradigm applied in distinct social, geographic, and cultural contexts (Scanu et al., 2021).

The "naturalizing" of environmental planning has allowed for two understandings of the urban environment to become dominant globally: Green and gray urban nature (Wachsmuth & Angelo, 2018). The former describes the representation of nature in the form of trees, plants, gardens; the latter refers to urban space as technological and social that ultimately and inherently is part of urban sustainability. Two contradictory ideologies thus become two strings of contemporary green planning. First, green and gray urban natures lead to the belief that the greener a city (i.e., the more trees, plants, birds, and gardens), the better; Second, urban greening requires technological interventions and technocratic processes (Wachsmuth & Angelo, 2018).

2.2.2. The sustainability fix and shifting socio-environmental burdens

This critique of a de-politized and universalized notion of urban nature does not mean that greening and urban re-renaturing programs are undesirable, as multiple studies across the globe demonstrate the many environmental and health merits, including improved air and water quality (Baró et al., 2014; Lovell & Taylor, 2013), recreational use, and social cohesion (Gilmore, 2017; Peters, 2010), or higher physical and mental well-being (Ribeiro et al., 2021; Triguero-Mas et al., 2015). But, if not carefully designed and implemented, urban greening projects in the context of SF may exacerbate inequalities and socio-environmental injustices (Connolly & Anguelovski, 2021), through (green) gentrification and green privilege

(Anguelovski et al., 2022; Dooling, 2009; Immergluck & Balan, 2018;) and through real estate speculation and urban green grabbing (Anguelovski et al., 2021; Garcia- Lamarca et al., 2022).

Few cities place equity at the center of green planning and are able to prioritize social inclusion and justice when implementing green projects (Anguelovski & Connolly, 2021). Even if planners and decisionmakers consider equity and justice in planning processes, their strategies often prove to be insufficient. Recent studies on local climate change adaption have found that urban greening fails to reduce socio-ecological vulnerabilities and increase resilience towards climate-induced threats (Olazabal & Ruiz de Gopegui, 2021; Shokry et al., 2022). Exceptions include equity-centered municipalities such as Nantes or Vienna which have an ambitious green and sustainability agenda underpinned by the provision of secure affordable housing and by strict social housing regulations imposed to real estate developers (Anguelovski & Connolly, 2021).

In the following, we examine how these multi-scalar dynamics of a SF unfold through different relationships and influences taking ground and shifting over time. In asking how green and related sustainability policies became grounded in municipal efforts in Vitoria-Gasteiz, we show that the creation of a green urban identity is not a unidirectional process, and that understandings and forms of urban green shift as socio-environmental and economic challenges expand over time.

2.3. Methods

2.3.1. Data collection and analysis

We selected Vitoria-Gasteiz as a critical single case study of a city with a long-term recognized trajectory of sustainability policies in Europe. Given its early commitment to greening in the mid-1980s and the later broad international recognition for its environmental policymaking, Vitoria-Gasteiz allows us to understand how and why the narrative of urban greening evolved and further became a core component of urban identity making over nearly four decades. To analyze the greening trajectory of Vitoria-Gasteiz, we initially conducted a review of archival data published since 1980, i.e., planning documents, media articles and city hall publications (Table 2.i), following an analytical grounded theory approach using the software Nvivo. This initial analysis allowed us to disentangle changes and meanings of the discourses surrounding greening and sustainability in the context of Vitoria-Gasteiz.

Following this first stage, we created an interview guide to further explore ideas around framings of green and sustainability, the role of city branding, social and power dynamics in the planning process, and changes of the political context during the construction of the city's

green identity. We conducted 12 semi-structured in-depth interviews in Spanish with city planners, decision-makers, and local experts of a duration of about 1,5 h, between March and June 2021. Respondents were identified though snowball sampling technique, starting with key planners and political figures mentioned in the archival documents. This interview data was analyzed through iterative coding that helped identify emerging patterns regarding the evolution of greening and sustainability narratives in Vitoria-Gasteiz. The main codes that emerged and on which we built the following analysis were Green as consensus-making, as rent-seeking, as a technocratic process, as a multi-scalar process and to gain international reputation.

Table 2: Key planning documents

Year	Archival Data
1990	General Urban Development Plan (revision 1990)
1996/97	Strategies and Actions towards Sustainability
1998 – 2020	Agenda 21 (annual report on Sustainability indicators)
2000	General Urban Development Plan (revision 2000)
2002	First Environmental Action Plan 2002-07
2006	GEO Vitoria-Gasteiz: Diagnostic report on the state of sustainability and the
	environment in the municipality of Vitoria-Gasteiz
2007	Sustainable Mobility and Public Space Plan
2008	Citizen participation master plan 2008-11
2009	GEO Vitoria-Gasteiz: Environmental and sustainability diagnosis report
2010	Second Local Action Plan of Agenda 21 (2010-14)
2010	Vitoria-Gasteiz Urban Sustainability Indicator Plan 2010
2010	Plan against Climate Change 2010-2020
2010	Vitoria-Gasteiz: Carbon neutral city Scenario 2020-50
2011	Vitoria-Gasteiz 2012 European Green Capital Final Report
2014	The urban green infrastructure of Vitoria-Gasteiz. A proposal document
2018	VITORIA-GASTEIZ + GREEN City-nature living network 2018-2030 Plan
2019	Revision of the Sustainable Mobility and Public Space Plan
2020	Vitoria-Gasteiz Green Capital: A human-scale city
2021	Action Plan: PATEI 2030: Integrated Energy Transition of Vitoria-Gasteiz

2.3.2. Context: Vitoria-Gasteiz: from a rural identity to an industrialized urban center

During the latter part of Francisco Franco's dictatorial regime, Vitoria-Gasteiz' urban development can be described as a centralized, planned growth trajectory marked by a shift in the 1950s from a small 40.000 resident town driven by the agricultural sector towards an industrialized city (Fig. 2.i). Its geostrategic position as transport node connecting Madrid (the centralized political and economic engine of Spain) with France, its geographically easily

accessible and flat terrain, and – in contrast to its Basque urban counter-parts Bilbao and San Sebastián – a rather supportive economic and religious elite towards the Franco regime helped the city receive subsidies and tax incentives from the Franco administration to push an industrial transition forward. By the 1960s this transition became completed as many factories, especially from the automotive sector, had moved their production from other parts of the Basque Country to Vitoria-Gasteiz (González de Langarica Mendizábal, 2007). The new economic sector encouraged labor immigration from rural Spain, with primarily rural farmers moving North looking for better living conditions. In only two decades, the city's population nearly quadrupled, and by 1960 almost 60 % of workers were employed in the industries, compared to only a third a decade earlier (Pérez-Álvarez, 2020).

This rapid industrialization demanded a quick top-down planning response to meet new demands for housing, mobility, and social life of the working class. While the wealthy districts in Vitoria-Gasteiz' south remained untouched, new districts were rapidly created in the 1960–1970s that connected the city center with industrial polygons in the North. These new residential areas were characterized by high density and relatively affordable but low-quality housing close to the new factories (and polluted areas). This rapid urban and industrial growth favored the encroachment of vacant land, triggered extensive land pollution in peripheral areas, and shifted the focus from an agricultural and nature-connected society towards one driven by its industrial labor force (Ruiz Urrestarazu and Areitio, 2004). By the end of the Francoist dictatorship in the mid-1970s, the city had grown to 190.000 residents. It is in this broader development context that Vitoria-Gasteiz undertook its green transformation.

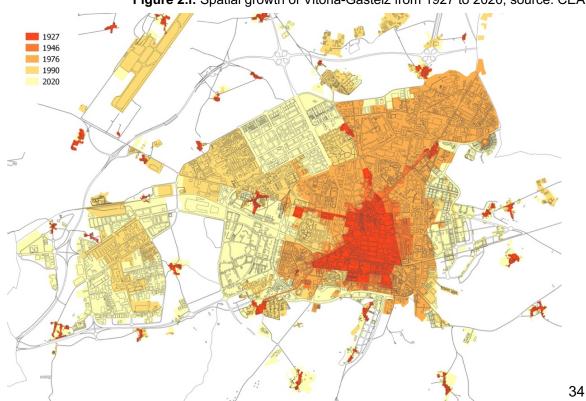
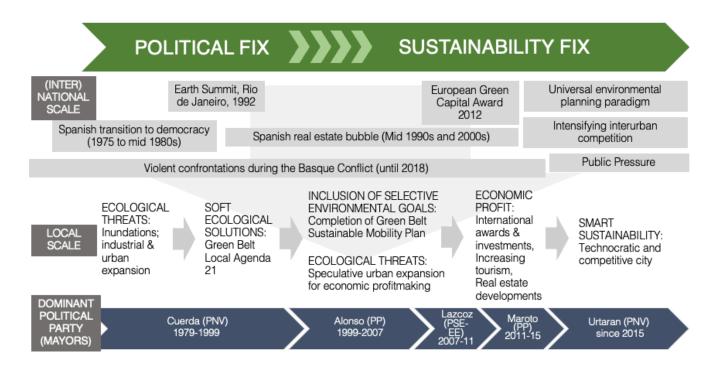


Figure 2.i: Spatial growth of Vitoria-Gasteiz from 1927 to 2020, source: CEA

2.4. Analysis

We present our analysis of the greening and sustainability trajectory and related shifting narratives in Vitoria-Gasteiz. We start by laying out the early beginnings of the greening project in the 1980s – an innovative response from technical and political leaders to local environmental problems. We then examine the first successful greening interventions, which, while providing residents multiple social, ecological, and economic benefits, had a reconciliating effect on a polarized and fragmented municipal political structure. Next, we analyze the role of the international sustainability discourse and the pressures arising from interurban competition and broader neoliberal urbanization processes. We show how a deep reformist green thinking has slowly been replaced by shallower meanings of nature, pushed by increasing political fluctuations in the city council and the implementation of contradictory (counter-)sustainable initiatives. Finally, we analyze how the international recognition of the city's sustainability efforts through the European Green Capital Award reinforced the rhetoric of compatible economic and environmental goals in the city's green identity, and thus the SF (Fig. 2.ii).

Figure 1.ii: From the Political Fix to the Sustainability Fix, own elaboration



2.4.1. Anchoring environment & sustainability in urban planning: the political fix (1979–99)

2.4.1.1. Green as a symbol of good leadership: from a material to a discursive change

The city's long-term commitment to greening policies began with its in 1979 first democratically elected mayor José Ángel Cuerda, then a member of the conservative Basque Nationalist Party (PNV). His progressive urban proposal was based on two pillars: first, civic centers were constructed in many neighborhoods in the mid-1980s, offering cultural, educational, sports and other services to citizens and further facilitating cross-neighborhood democratic participation (Sampedro & Altuna, 1999; Verdaguer Viana-Cárdenas, 2006). Second, Cuerda understood the integration of nature into the urban network as a vital part of the city, both for its environmental and social value. This prioritization of nature led to the creation of the Centre of Environmental Studies (CEA, Spanish acronym) in 1986, at first a training center for unemployed youth that soon turned into an influential municipality-led environmental think tank. As one interviewee states,

"[T]he CEA (...) is a luxury that our Mayor Cuerda chose to afford for this city, because we cities have very tight budgets. (...) He had the vision to say: 'I want to have a team of people to only think how to incorporate nature in the city' and so it clearly turned into something that is intrinsic to all his policies (...). He decided to put resources for something that could not be profitable the next day, but instead had to be thought as a long-term commitment." (Interview 8, 2021, Member of the city council)

The mayoral vision for bringing nature back into the city involved the regeneration of fragile, yet previously industrialized or contaminated land. The urban and industrial expansions from the 1950s onwards were built upon a natural aquifer system which caused several flooding episodes. In the 1980s, the government of the province of Araba proposed a hard infrastructural solution to end flooding through the canalization of the river Zadorra. With the support of Cuerda, the CEA and its director Luis Andres Orive proposed instead a soft solution, including the restoration of the Salburua park, a previously drained wetland in the city's eastern periphery (Orive & Dios Lema, 2012).

These land parcels became part of many debates around the city's urban development, where ideas of urban growth through hard infrastructural interventions clashed with the goals of nature conservation and restoration. Opposing several development proposals, including the construction of a highway, a golf course, and a theme park, in 1992 the CEA received the city council permission to carry out the restoration of the Salburua wetlands.

"This project could not have happened without Cuerda. He was a visionary at the state level, for both environmental and social challenges. In this city, a series of social policies that were very progressive for that time, allowed us to do the things we did. (...) [W]e realized soon that in addition to recovering the ecological processes and natural landscapes, we have a fantastic space for leisure, for recreation." (Interview 1, 2021, CEA)

By the mid-1990s, the recovery of the Salburua wetlands turned into a success: first, the newly recovered land helped reduce the flooding and therefore guaranteed the political support from the city council towards future soft environmental interventions. Second, given its high ecological value, the wetlands became home to a high diversity of flora and fauna, later recognized as Ramsar and Natura 2000 site. Third, what had previously been used as an illegal landfill with a rather uninviting landscape soon turned into a peri-urban park for social and recreational use enjoyed by citizens (Aguado et al., 2013).

CEA's ecological restoration of different land stretches at the urban fringes soon became a connected network of green spaces and corridors around the city. Over two decades, this project developed into the nearly completed landmark green infrastructure project, a 35 km Green Belt around the city (Fig. 2.iii). The Green Belt further counted as a spatial limit to proposed industrial and urban expansion projects during the Spanish real estate boom in the 1990s and early 2000s that were posing threats to the surrounding agricultural land and the natural mountain system that together make up around 80 % of the municipality's land (Orive & Dios Lema, 2012).

These important changes coincided with the establishment of an environmental discourse around sustainability that gained momentum on a global scale after the 1992 Rio Earth Summit and that also permeated local politics and planning priorities in Vitoria-Gasteiz. The CEA, which by then had informally taken over of the responsibilities of a municipal Department of Environment, including the green infrastructure planning, identified sustainability as a priority of urban politics:

"What happened is that in Spain in the 1990s almost no municipality paid attention to all of this. Well, in Vitoria-Gasteiz they did pay attention. (...) Vitoria-Gasteiz was one of the very few cities that in those years took seriously what had been done and put it on the table and said, well, we are going to do something." (Interview 9, 2021, technical adviser city council)

In 1995, Vitoria-Gasteiz became the first Spanish city signing on to the Aarlborg Charter of European Sustainable Cities and Towns. A year later, it drafted a proposal to define sustainability strategies, and in 1998, the CEA started publishing a yearly report around the city's environmental indicators in accordance with the European Agenda 21. This work was

further accompanied by broader campaigns to educate the citizens on these new ideas (Ayuntamiento de Vitoria-Gasteiz, 2002).

Cuerda, after being reelected five consecutive times, left office in 1999. As a charismatic leader, he had laid the ground for Vitoria-Gasteiz' greening trajectory by embedding this consolidating social and environmental infrastructure in different departments of the city council. In many conversations about expectations towards decision-makers in Vitoria-Gasteiz, we came across the term "el padre ayuntamiento" (in English: "the father city council"), which shows a paternalistic, but still trustworthy relationship between citizens and their formal governance structure. This can be traced back to Cuerda, his policies and commitments to residents, supported by citizens across different ideologies.

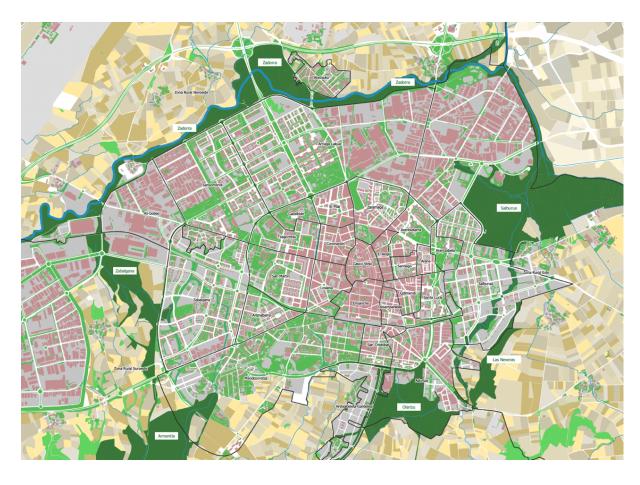


Figure 2.iii: Green Infrastructure Network by 2021, Source: CEA

2.4.1.2. Green as consensus-making for wellbeing and social cohesion in conflict times

The material and discursive changes described above were only possible because of the broader local and regional socio-political context. First, the early beginnings of these policies happened during the restructuring of the Spanish political system after Franco's death in 1975, which opened a long transition phase from dictatorship to formal democracy. On the one hand, this transition encouraged democratic participation and urban experimentation on the local scale (Martí-Costa & Tomás, 2017). On the other hand, many remaining open wounds from the dictatorship in the Basque Country were left unresolved and permeated regional and municipal politics. The political and civil confrontations related to the Basque political movement reached their most violent peak between 1977 and 1981 (Mees, 2001). Identity politics of the so-called "Basque question" determined discourses in every area of the political, cultural, and social life, making it impossible to debate (urban) politics without polarizing the public opinion along a Basque versus Spanish identity controversy (Bollens, 2007; Molina, 2010). Yet, an exception was the municipal environmental domain:

"Instead of a debate about what you really want to do, a polarized debate is generated, like if you support this, you are one of those. And if you support that, you are one of the others, right? And then there is a tremendous polarization. Which is not good, and in the 1990s with the environment there wasn't any [polarization]. There was not. I think that, because it was seen as a soft policy, as more neutral. Everybody agreed on it, everybody was on board." (Interview 8, 2021, Member of the city council)

Embedded in this conflictual context, urban environmental concerns became one of the centerpieces of urban reconfiguration in Vitoria-Gasteiz. Here, we argue that the early progressive urban green interventions served as a political fix as a form of the lowest common denominator and consensus building outcome across the political spectrum of all local parties. Due to its easy implementation with relatively few costs compared to other urban flagship projects, such as Bilbao's post-industrial transformation and its conflicted Guggenheim Museum (Franklin, 2016; Plaza & Haarich, 2015), urban greening allowed parties and politicians of all spectrums to gain broad support, visibility, investment, and network, and it allowed residents to experience "easy" livability benefits. Our interviewee further continues,

"We were put in the same room with representatives of political parties that defended violence and were debating, reaching consensus with those who were protected by security guards against the friends of the others in the room. (...) In the end, we managed to reach consensus. It was like a place where, well, in the environmental policies, the tension was lowered; the weapons were put down. We talked a little bit in terms of improving spaces, improving the city, improving citizen life and that came very naturally,

and we could achieve consensus. But I tell you, everything was approved unanimously, everything." (Interview 8, 2021, Member of the city council)

Second, contrary to many Basque municipalities and the Basque Autonomous Community with the PNV being in power for decades (Barbera & Barrio, 2017), Vitoria-Gasteiz' political structure has generally been very fragmented. Since the first elections in 1979 during the transition period to democracy, nearly all political coalitions had the chance to put a mayor into a minority government. This led to a culture or rather a need of compromise and consensus-finding in urban politics. In the realm of environmental policies, this process was led by the perceived politically impartial and charismatic director of the CEA, Dr. Orive.

"[Orive] has been able to generate agreements, to look for common points, to turn sustainable development into a non-conflict issue. (...) So, this was accepted by all the groups and (...) the environment was not discussed in Vitoria-Gasteiz. It was a common point that they had among all of them. It is also true (...) that there was a lot of political fragmentation. If you want to work, if you want to get things done, if you want to move things forward, you have no choice but to reach agreements with the other party. I think that this culture of political agreement has been very good for us." (Interview 10, 2021, technical staff)

The capacity of the democratically elected leader Cuerda and the technical CEA director Dr. Orive to successfully reach consensus around soft environmental solutions generated trust from decision-makers, across representative political parties, as well as the public at large. By the late 1990s, green infrastructure planning and the discourse of sustainability turned into an integral part of the narrative of future urban development. The idea of a deeply green and sustainable city had been grounded in the local urban identity as it both helped to lower extremely high political tensions of the "Basque Question" and thus promised increased livability for the citizens through new social, economic, and environmental benefits. After having been divided across different municipal entities with no clearly marked responsibilities, environmental planning became legally embedded into the institutional structure with the creation of an official municipal Department of Environment in 1999. Parts of the CEA staff were relocated to the new department which led to a seamless continuation of projects previously initiated.

2.4.2. From a social-environmental good to a green asset. Creating a sustainability fix (1999–07)

2.4.2.1. The counter-sustainable turn

In 1999, the city council experienced a political shift with Alfonso Alonso, member of the Spanish conservative People's Party (PP), taking over as mayor of Vitoria-Gasteiz. With this political change, Vitoria-Gasteiz' urban project experienced a turn from social and small-scale interventions to visions of a large metropolis, common with many other Spanish cities during the real estate boom of the early 2000s. Municipal land was offered at very cheap prices to the real estate and construction sector for quick development in line with many of the PP's priorities across Spain (De las Rivas Sanz & Fernández-Maroto, 2019; Esteban & Altuzarra, 2016). As a result, the approval of the new general urban development plan in 2000 allowed for land re-urbanization benefiting real estate development for nearly 100.000 new inhabitants.

Contrary to the city's commitments to a local sustainability agenda, the proposed pace and scale of urban development went far beyond the actual demand. Vitoria-Gasteiz, with its 215.000 residents at the time, had a predicted population growth of only 0.5–1 % annually (Verdaguer Viana-Cárdenas, 2006). This newly approved plan conditioned the construction of two large new neighborhoods (Salburua and Zabalgana in the Eastern and Western outskirts, respectively) (Figure 2.iv). Breaking with Cuerda's long-term vision of a city of proximity with strong neighborhood cohesion and accessible public services, the new developments had very low density and poor transport connection (Alcala Juarez and Vicente, 2016). Blind to previous urbanistic "errors", the new constructions followed the same design as that of the 1980s new neighborhood Lakua that proved to be both socially and ecologically unsustainable (Fernández de Betoño, 2011; Marañón, 2020). Despite many critics from the environmental movement, and especially the CEA, the city went along with the new development plans.

Figure 2.iv: Salbura park and neighborhood. The wetlands of Salburua with a high biodiversity contrasting the cityscape of the Salburua neighborhood marked by low density and high-rise buildings, Photos by the authors, 2021





2.4.2.2. Keeping up with selective Green(ing): how the sustainability fix came alive

At the same time as counter-sustainable developments emerged, selective environmental goals were incorporated into urban planning. At first, Alonso continued his predecessor's Green Belt project through the creation of the Botanical Garden. This project was pushed by a citizenry increasingly aware of the ample benefits of the newly created recreational green spaces. In addition, the technical team started reaching out to other cities and interurban networks which built greater legitimacy and broader (inter)national awareness for Vitoria-Gasteiz' greening work.

"What we did try to do was to get visibility outside of our own city. (...) We made it known and from time to time you got a prize. Since you received awards, since the citizens were delighted, and since this did not generate great conflicts (...) and the first mayor lasted a lot of years, all this was consolidated. And then the second mayor arrived, Alfonso Alonso, who was from the PP (...). So, he said, let's see, I am not going to touch what works well. Not only did he continue, but he promoted even more things. (...) The botanical garden, all this is thanks to the PP. He expropriated all this land to make the park work. It is an intervention that one would expect to be more of a left-wing party. Well, it belonged to the PP." (Interview 10, 2021, technical staff)

The continuation of Cuerda's pro-social green vision became an easy win-win situation for the new municipal government. This meant that supporting green interventions turned into tangible revenues and became a form of local asset, either through votes in future elections or through awards and international funding to carry out further interventions. In addition, the annually released local Agenda 21 reports proved that the city was stagnating in many sustainability indicators except green infrastructure planning (Etxebarria Miguel & Aguado Moralejo, 2002). In response, the CEA started to work on a sustainable mobility strategy, later becoming one of the city's landmark sustainability policies, through importing "successful" practices in form of policy mobilities from other urban forerunners, such as the city of Barcelona. Policies implemented elsewhere where thereby promoted and marketed by local experts and planners (McCann, 2011).

Inspired by Barcelona's superblock model, Vitoria-Gasteiz in collaboration with Salvador Rueda, the intellectual thinker behind Barcelona's success story, developed a Sustainable Mobility and Public Space Plan (Rueda, 2019). This plan proposed a holistic city-wide framework of restructuring public space, including a shift from individual automotive use towards the prioritization of bike, pedestrian, and public transport, and recreational space (Rueda Palenzuela, 2021). The plan was approved by the city council in 2006 following a rather comprehensive participatory citizen consultation (Muñoz López & Rondinella, 2017).

This plan was also the beginning of integrating deliberative and participatory forums into the city's policymaking. The different participatory committees, open to the public but organized by the technical personnel of the respective department, are either related to specific neighborhoods or are structured across topics, such as culture, environment, equality, or sustainable development. These sessions initially faced public enthusiasm, yet more recently were criticized, especially by pro-environmental citizen groups, for their lack of impact and transparency and their top-down and technocratic character. Contrary to their initial idea to increase broad citizen participation, they are mostly attended by the same residents, who either have time and resources to get involved or are representative of specific interests. If not explicitly challenging the underlying power dynamics, these sessions risk replicating often invisible power structures and fail to consider and acknowledge the needs of more vulnerable and marginalized groups. These shortcomings have also been confirmed in several of our interviews with the municipal personnel:

"The tools [for participation] are on the table. (...) But those proposed projects will pass through a very strong technical filter. There is a big barrier at the technical level. Then, there is also an important barrier for those who present these projects. (...) [I]migrated people, for example, of low income and so on, no, no, they do not actively participate in these projects. Those who have the time and dedication to present a participatory project are from middle class." (Interview 9, 2021, technical adviser city council)

2.4.3. The green capital: creating, furthering, and renewing a green brand (2007–2015)

In 2007, Alonso was followed by mayor Patxi Lazcoz, member of the Basque Country center-left party (PSE-EE, Spanish acronym). Contrary to his predecessors and despite being from a more self-defined environmentally sensitive party, Lazcoz slowed down the initiatives surrounding the newly approved Sustainable Mobility and Public Space Plan and instead supported further development and growth strategies of the new neighborhoods of Zabalgana and Salburua. This discontinuation of environmental policies triggered local governance conflicts and led to the resignation of the CEA and Department of Environment technical directors, who so far had been the driving force behind several key environmental initiatives, including the application for the European Green Capital Award. Yet, this new international attention (and prize) meant that Lazcoz had no choice but to consolidate Vitoria-Gasteiz green work:

"The fact is that with Lazcoz the trajectory could have cracked a little. But what happened? In 2011, Vitoria-Gasteiz was declared European Green Capital 2012. Since Lazcoz was in power, he had the ceremony to receive the award. Then, of course, he had no choice but

to keep on supporting these things. In the end he received the prize for what all the previous ones had done, as it happens many times in politics, life. But it was useful, the award helped him to focus on these [environmental] issues. (...) And well, he did not come up with anything special, nor did he destroy what has been created before. (Interview 10, 2021, technical staff)

Vitoria-Gasteiz was the third city to win the European Green Capital Award in 2012, following Stockholm (2010) and Hamburg (2011). According to the award's selection criteria, the winner must show consistency in achieving past high environmental standards and strong future commitments to sustainable development. The city should further demonstrate a potential for being a role model for other cities and offering support in implementing best practices (European Commission, 2022). The award does not involve any direct monetary bonus, but benefits are economically rewarding, as stated by the European Commission and previous winners:

"Increase in tourism; Positive international media coverage worth millions of euros; Increase in international profile, networking, and new alliances; New jobs – a Green Capital is more attractive to foreign investors; More emphasis on environmental projects through sponsorship and grants; Pride among citizens; Momentum to continue improving environmental sustainability." (European Commission, 2022).

In Vitoria-Gasteiz, the promotion of the award followed the rationale of a SF narrative, as the incorporation of specific environmental goals became presented as an economic motor for local development. After winning the award, Vitoria-Gasteiz' newly elected mayor Javier Maroto (PP), turned sustainability policies into a green branding campaign seeking short-term economic returns. This in turn contributed to a commodification of green where nature became an inherent element of the local economic growth strategy. Green interventions evolved into a "common-sense" planning priority across the whole political spectrum. As their deployment translated into technocratic design and implementation, greening practices became associated with increasingly depoliticized rationales.

"Of course, when Europe puts the stamp on you like that, you already have your brand.
(...) [W]ith the PP, when Maroto came in, all the potential that we could have had as Green Capital, was channeled into propaganda, advertising, and marketing. It was a missed opportunity in the sense that all that attention that we had put especially in the environmental community hasn't been used. Lay people who are not involved in green movements didn't even know that the award existed." (Interview 9, 2021, technical adviser city council)

Figure 2.v: The European Green Capital. The symbol of the European Green Capital in the city center, Photo by the authors, 2021



The post 2012 award period was rather unambitious in terms of new green projects: besides some tactical and small-scale green interventions and the re-designation of Dr. Orive as the CEA's director, strategic green thinking stagnated. Maroto's main greening contribution consisted in the remodeling of the Gasteiz Avenue, one of the city's main transport nodes, through re-naturalization and other nature-based solutions, and the re-structuring of mobility space prioritizing sustainable modes of transport (CEA, 2012a). However, the mayor saw potential in building up the brand around the Green Capital using the slogan of "Somos la Capital Verde" as a visual reminder across the cityscape (Figure 2.v). Further, the city increased public marketing to boost the presence of tourists attracted by Vitoria-Gasteiz' green and sustainability commitment and by other awards such as the 2014 Spanish gastronomic Capital award.

2.4.4. After the Green Capital: and now what? (2015–2021)

After the 2015 municipal elections, several local parties formed a minority coalition led by Gorka Urtaran (PNV) to prevent the winner, Maroto, from re-entering office as he faced a lawsuit for racist comments. Since the green infrastructure strategy, including the Green Belt,

is nearly completed, the city is now defining new areas of work to further its green trajectory. The city is, inter alia, elaborating a Sustainable Energy and Climate Action Plan and a Green Deal with a specific focus on energy transition. Both plans are elaborated in collaboration with the broader citizenry. Priority is given to carbon neutrality projects, with planning decisions needing to avoid off-stage-burdens that re-locate urban emissions elsewhere. As of early 2022, the city is planning to increase local food production, which risks putting increasing pressure on proximate rural hinterlands. Last, new smart-technological projects, such as the controversial and cost-intensive smart electric bus system, are being pushed forward. Those involve the use of material resources and high production-driven emissions often shifted to other places. In short, future visions for the green city follow the narrative of the inclusive, smart, and competitive city:

"An innovative city (...) has to propose transforming projects, we cannot remain stagnant and paralyzed in what we are now. For this we must promote projects such as the electric bus. (...) Moreover, climate neutrality is going to be a competitive factor; the more neutral you are in terms of greenhouse gas emissions, the less you will have to pay and the more competitive you will be." (Print interview with Gorka Urtaran, 19.09.21, Noticias de Alava⁴)

This new planning trajectory is supported by interurban networks, such as the Covenant of Mayors and the European mission of 100 climate-neutral cities by 2030, and by public-private partnerships with the technological sector to further the pioneering role in smart sustainable local innovations. The importance of being acknowledged through international networks and policymakers was mentioned in nearly every interview and is common narrative in the city council publications. This extrospective orientation strengthened the creation and definition of a local place-based identity, centered around a loose idea of urban green and where the own understanding of a rural-oriented character is proudly perceived as an international urban best-case example:

"In 2010, Vitoria-Gasteiz joined the Covenant of Mayors, promoted by the European Commission. This initiative seeks to bring together cities that are committed to achieving emission reductions that are more ambitious than those established by the European Commission itself. (...) It is true that many of these initiatives you are even more forced to join if you are already a Green Capital. Why else would you put yourself to the challenge to show evidence every year in front of the citizens that we are fulfilling – or not – the

46

⁴ https://www.noticiasdealava.eus/araba/2021/09/19/ciudad-innovadora-impulsa-proyectos/1127008.html (last accessed: 10/02/22)

ambitious objectives? Well, participating in this type of net- works and being a Green Capital, it does help to strengthen those levels of commitment. It did help us to achieve greater visibility in the international context, to work in a network with many other cities of the Green Capital family, like Copenhagen, Stockholm, Hamburg, or Lisbon." (Interview 2, 2021, CEA)

As environmental indicators designed and decided on the international level dictate increasingly local action, greening and its local contestation has been prone to a process of de-politization, leaning now towards a shallow green discourse. Green and gray urban nature, as described by Wachsmuth and Angelo (2018), have become the leading understanding of local sustainability. Campaigns such as the "Roots of tomorrow" initiative in 2012 (CEA, 2012b), involving the participatory planting of 250.000 trees (as many trees as residents), emphasize the role of greening through visible and tangible nature into the urban fabric. With the creation of a (smart) mobility planning, this notion is being accompanied by smart sustainability priorities and technological solutions to environmental challenges, so-called gray urban nature.

"As long as the trees flourish, we are ticking all the green boxes, we are fulfilling all the green indicators. But we are way behind, e.g., in energy planning. We have made almost no progress in the last 10 years. The people in the street do not perceive and know this, because in the end they will always associate green with trees, parks, ducks. (...) But I think we have entered a new phase in which we are not only talking about the tree, the park, the duck. We are talking about climate change, energy, air pollution. (Interview 9, 2021, technical adviser city council).

The shift to a shallower understanding of sustainability is underlined by an increasing institutionalization of environmental planning through the creation of new departments in the city council. Through decentralization of responsibilities across municipal departments, environmental planning became prone to institutional inertias and increasing bureaucratic processes. As a result, the CEA as the intellectual force has lost some influence as regards planning for green infrastructure, mobility, (green) public space and energy. However, as the long-term green commitment and transitions initiated in the 1980s prove to be economically profitable, the city's changing governments cannot but support these greening initiatives in their own legislatives' periods. With the diffusion of an international green orthodoxy (Connolly, 2019) and its recent 2019 UNESCO Global Green City award, Vitoria-Gasteiz is likely to bring new embodiments and (globalizing) dimensions to its green planning agenda.

2.5. Discussion: the evolution from the political to the sustainability fix

As global discourses shifted the green city imaginary from a local project in the 1980s to an international mainstream orthodoxy pushed by a sustainable or smart growth narrative, they also contributed to the de-politization and post-political practice of urban environmental planning (Béal, 2012; Connolly, 2019; Rosol et al., 2017). Our analysis of the historic production of an urban green identity in the European mid-sized city of Vitoria-Gasteiz shows how greening at first became materialized through an early good leadership with a social city being core objective of urban planning. Over time, environmental goals became increasingly aligned with a consensus-focused political agenda in conflict times and later mediated by an increasingly neoliberal urban development agenda pushed by the vision to become a green pioneer internationally. The evolution of the urban green identity was based on a changing rationale for greening where progressive environmental innovation became embedded in a shift from a political fix to a sustainability fix. We uniquely identify three multiscalar processes that enabled this shift.

First, our findings highlight the role of technical and political actors replicating universal "best solutions" on the local ground and facilitating technocratic and expert-driven processes. In Vitoria-Gasteiz, the early greening discourse in the 1980s–90s was initiated by local politicians, planners, and environmental groups as a response to local and regional challenges. Municipal environmental planning at that time turned into an uncontested area of urban politics, detached from the political left versus right and Basque versus Spanish ideologies and identities. Later, the increasingly global and local interwovenness of environmental policymaking, pushed through events such as the Earth Summit 1992, the real estate bubble in the early 2000s, and the 2012 European Green Capital Award, brought global discourses, networks, and financial pressures at the center of greening practice in Vitoria-Gasteiz. This also shifted power in decision-making, as high-level networks, semi-public or private agencies, and urban elites became increasingly influential (Grossmann et al., 2021; Gulsrud et al., 2017).

Second, we saw that mid-sized cities such as Vitoria-Gasteiz may be particularly pushed to respond to international pressures as they seek a niche amidst increasing interurban competition. Both the importing of policies and the striving for international recognition may serve as a leverage for increased international visibility and hence attract further investments. While this urban extrospective across the multiple scales of policymaking may bear the potential to put pressure on local politicians to commit to higher environmental standards, it also risks reinforcing shallow framings around sustainability and "urban green". In the case of Vitoria-Gasteiz, the European Green Capital award helped create the "greenest city" brand

(Rosol et al., 2017) which has been used as a policy booster (McCann, 2013; Garcia-Lamarca et al., 2021). Nature turned into an urban flagship project and core component of city branding and identity making with the potential to deliver significant economic returns. This branding approach helped aligning a neoliberal agenda of green profiteering with selective reformist environmental goals while grounding the narrative of the sustainability fix in Vitoria-Gasteiz.

Last, the case of Vitoria-Gasteiz highlights how a sustainability fix is underpinned by a widely accepted understanding of greening, whereby specific narratives become common-sense across diverse social, cultural, and political urban contexts (Angelo & Wachsmuth, 2020). As it reaches this status of unquestioned urban development strategy, contestation of or around greening becomes increasingly challenging, and even perceived as illegitimate. This process may consolidate already existing asymmetric power relations in the governance of urban greening and further comfort the dominant institutional structures surrounding the depoliticized governance of urban nature (Grossmann et al., 2021; Rosol et al., 2017). In Vitoria-Gasteiz, environmental policies in form of a political fix helped anchor an urban green identity shaped by ideologically diverse local politicians and planners who appropriated place-specific dynamics of greening. With the production of the "We are the Green Capital" narrative, the local definition of green underwent a process of de-politization that may endanger democratic participation in decision-making. In consequence, the city's green ambition blunted from an initially deep green rationale into a shallower sustainability discourse which saw greening as an asset.

The most recent local green narrative tends to adopt an eco-modernist discourse. This new narrative does encounter local contestation by residents who question the necessity and legitimacy of new techno-fixes, including expensive projects such as the smart-electric transport system. This indicates a need to re-center green(ing) as a planning strategy in the public debate wherein a specific focus should be put on avoiding the re-location of off-stage environmental burdens and the increasingly growing gap in the global distribution of environmental pollution (Pascual et al., 2017). The transitioning of cities towards a post-industrial urban society may increase pressure on both peri-urban fringes and rural hinterlands, e.g., through local energy and agricultural production projects (Bartels et al., 2020; Jonas et al., 2011), and on more distant places as cities need extract valuable resources for smart-technological developments while moving heavily polluting industrial activity outside their own spatial boundaries (Kenis & Lievens, 2017). Sustainability narratives further these spatially shifting environmental burdens as they help complete a SF by achieving higher scores on locally measurable indicators focused on inner-urban boundaries, such as carbon emissions, or air and water quality, yet externalize environmental pollution (Rice, 2014).

Although greening in Vitoria-Gasteiz has been practiced from the very beginning as a top-down, rather technocratic process, the city created a comprehensive framework for citizen participation that includes deliberative and participatory processes led by technical experts. Today, however, participatory processes often miss the capacity to propel transformative change as they tend to overlook social dynamics and power imbalances among relevant local actors. Previous studies identified shortcomings in those processes, such as a lack of transparency, a bias towards supportive opinions of the urban elite, a blindness to the needs of the more vulnerable and marginalized groups (Garcia-Lamarca et al., 2022; Anguelovski et al., 2021; Kehler & Birchall, 2021), and poorly deliberative and participatory processes (Béal, 2012; Kenis et al., 2016; Montgomery, 2015).

2.6. Concluding remarks

In this paper, we examine the multi-scalar and entwined nature of the sustainability fix. With a shifting green narrative in Vitoria-Gasteiz, environmental planning evolved from a social-environmental good into a commodified green asset resulting from increasing dependencies and pressures from the international arena that challenge and commodify localized meanings of green. Through our analysis, we contribute to the critical urban greening and sustainability literature by offering an original historic analysis of how and by whom multiple meanings of green are produced and (re)shaped as a political fix evolves into a sustainability fix. Such a perspective is necessary to better understand and counteract the weak and depoliticized discourses of green cities that serve as best-cases and pioneers in new (global) urban developments (Angelo, 2019; Long, 2016).

Even though Vitoria-Gasteiz is a medium-size city compared to many global(izing) cities, its long-term commitment to environmental planning and the production of a green urban identity propelled its efforts on the international policy stage. Its green infrastructure planning around the Green Belt and the early integration of sustainability in urban development help reveal how global green practices and discourse become adopted at the local level and are influenced by non-environmental political dynamics, how green identities are made and shift over time, and what meanings of nature become embedded in municipal policies. To conclude, if "Nature is the city. Nature is the urban" (Keil, 2020b, p.2360), Vitoria Gasteiz' green trajectory shows that it must be a collaborative and inclusive process of deciding the narrative and future vision of what it means to be a Green Capital.

2.7. References

- Affolderbach, J., O'Neill, K., & Preller, B. (2019). Global-local tensions in urban green neighborhoods: A policy mobilities approach to discursive change in Freiburg, Vancouver, and Luxembourg. Geografiska Annaler Series B: Human Geography, 101(4), 271–290. https://doi.org/10.1080/04353684.2019.1681286
- Affolderbach, J., & Schulz, C. (2016). Mobile transitions: Exploring synergies for urban sustainability research. *Urban Studies*, 53(9), 1942–1957, 10.1177/0042098015583784.
- Affolderbach, J., & Schulz, C. (2017). Positioning Vancouver through urban sustainability strategies? The Greenest City 2020 action plan. *Journal of Cleaner Production*, 164, 676–685. https://doi.org/10.1016/j.jclepro.2017.06.234
- Aguado, I., Barrutia, J. M., & Echebarria, C. (2013). The green belt of Vitoria-Gasteiz. A successful practice for sustainable urban planning. *Boletin de La Asociacion de Geografos Espanoles*, 61, 181–194. I.S.S.N.: 0212-9426.
- Agyeman, J. (2013). Introducing just sustainabilities: Policy, planning, and practice. London: Zed Books.
- Alcala Juarez, A., & Vicente, M. G. S. (2016). Analisis de preferencias del paisaje urbano entre barrios compactos y barrios postindustriales en Vitoria-Gasteiz. Implicaciones en la planificaci´on Urbana. *Anales de Geografia de La Universidad Complutense*, 36(1), 11–29. https://doi.org/10.5209/rev_AGUC.2016.v36.n1.52711
- Angelo, H. (2019). Added value? Denaturalizing the "good" of urban greening. *Geography Compass*, 13(8), 1–14. https://doi.org/10.1111/gec3.12459
- Angelo, H., & Wachsmuth, D. (2020). Why does everyone think cities can save the planet? *Urban Studies*, 57(11), 2201–2221. https://doi.org/10.1177/2F0042098020919081
- Anguelovski, I., Brand, A. L., Connolly, J. J. T., et al. (2020). Expanding the boundaries of justice in urban greening scholarship: Toward an emancipatory, antisubordination, intersectional, and relational approach. *Annals of the American Association of Geographers*, 4452, 1–27, 10.1080/24694452.2020.1740579.
- Anguelovski, I., Cole, H. S. V., O'Neill, E., et al. (2021). Gentrification pathways and their health impacts on historically marginalized residents in Europe and North America: Global qualitative evidence from 14 cities. *Health and Place*, 72, Article 102698. https://doi.org/10.1016/j.healthplace.2021.102698
- Anguelovski, I., & Connolly, J. J. T. (2021). The green city and social injustice. 21 tales from North America and Europe. London: Routlegde.
- Anguelovski, I., Connolly, J. J. T., Cole, H., et al. (2022). Green gentrification in european and north american cities. *Nature Communications*, 13(1), 3816. https://doi.org/10.1038/s41467-022-31572-1
- Ayuntamiento de Vitoria-Gasteiz. (2002). Plan de Acción Ambiental de la Agenda 21: 2002- 2007. Vitoria-Gasteiz: Publicación of the Área de Medio Ambiente.
- Barbera, O., & Barrio, A. (2017). Moderate regionalist parties in Spain: Convergencia i Unió and Partido Nacionalista Vasco. In O. Mazzoleni, & S. Mueller (Eds.), Regionalist parties in Western Europe: Dimensions of success (pp. 61–85). New York: Routledge.
- Baró, F., Chaparro, L., Gómez-Baggethun, E., et al. (2014). Contribution of ecosystem services to air quality and climate change mitigation policies: The case of urban forests in Barcelona, Spain. Ambio, 43, 466–479. https://doi.org/10.1007/s13280-014-0507-x
- Bartels, L. E., Bruns, A., & Simon, D. (2020). Towards situated analyses of uneven peri- urbanisation: An (Urban) political ecology perspective. *Antipode*, 52(5), 1237–1258. https://doi.org/10.1111/anti.12632
- Béal, V. (2012). Urban governance, sustainability and environmental movements: Post-democracy in french and british cities. European Urban and Regional Studies, 19(4), 404–419. https://doi.org/10.1177/2F0969776411428562
- Bollens, S. A. (2007). Cities, nationalism, and democratization. New York: Routledge. Bulkeley, H., & Castan Broto, V. (2012). Government by experiment? Global cities and the governing of climate change. *Transactions of the Institute of British Geographers*, 38 (3), 361–375, 10.1111/j.1475-5661.2012.00535.x.
- CEA. (2012). El anillo verde interior: Hacia una Infraestructura Verde Urbana en Vitoria-Gasteiz. March. Vitoria-Gasteiz: Centro de Estudios Ambientales.
- CEA. (2012). 250.000 árboles y arbustos para el anillo verde. Tejiendo la Infraestructura Verde de Vitoria-Gasteiz. December. Vitoria-Gasteiz: Centro de Estudios Ambientales.

- Connolly, J. J. T. (2019). From Jacobs to the just City: A foundation for challenging the green planning orthodoxy. *Cities*, 91, 64–70. https://doi.org/10.1016/j. cities.2018.05.011
- Connolly, J. J. T., & Anguelovski, I. (2021). Three histories of greening and whiteness in American cities. *Frontiers in Ecology and Evolution*, 9, Article 621783. https://doi.org/10.3389/fevo.2021.621783
- De las Rivas Sanz, J. L., & Fernández-Maroto, M. (2019). Planning strategies for a resilient urban fringe in three medium-sized Spanish cities. *Planning Perspectives*, 34 (4), 725–735. https://doi.org/10.1080/02665433.2019.1588154
- Dooling, S. (2009). Ecological gentrification: A research agenda exploring justice in the City. *International Journal of Urban and Regional Research*, 3(3), 621–639. https://doi.org/10.1111/j.1468-2427.2009.00860.x
- Esteban, M., & Altuzarra, A. (2016). Local political power and housing bubble in Spain. *Investigaciones Regionales*, 2016(35), 107–127.
- Etxebarria Miguel, C., & Aguado Moralejo, I. (2002). La gestión territorial local desde la perspectiva medioambiental: la ciudad de Vitoria-Gasteiz. *Ciudad y Territorio: Estudios Territoriales*, 132, 325–344.
- European Commission. (2022). The European Green Capital Award. Available at https://ec.europa.eu/environment/europeangreencapital/about-the-award/policy-guidanc e/. (Accessed 23 February 2022).
- Fernández de Betoño, U. (2011). El supuesto error urbanístico de Vitoria-Gasteiz. In Conference: I Jornada sobre Urbanismo Español Contemporáneo Urbanismo en el Norte de España, June 2011. Pamplona: Universidad de Navarra.
- Franklin, A. (2016). Journeys to the guggenheim museum Bilbao: Towards a revised Bilbao effect. Annals of Tourism Research, 59, 79–92. https://doi.org/10.1016/j.annals.2016.04.001
- Freytag, T., Gössling, S., & Mössner, S. (2014). Living the green city: Freiburg's solarsiedlung between narratives and practices of sustainable urban development. *Local Environment*, 19(6), 644–659, 10.1080/13549839.2013.868872.
- García-Lamarca, M., Anguelovski, I., Cole, H., et al. (2021). Urban green boosterism and city affordability: For whom is the 'branded' green city? *Urban Studies*, 58(1), 90–112. https://doi.org/10.1177/2F0042098019885330
- García-Lamarca, M., Anguelovski, I., Cole, H. V. S., et al. (2022). Urban green grabbing: Residential real estate developers' discourse and practice in gentrifying global north neighborhoods. *Geoforum*, 128, 1–10. https://doi.org/10.1016/j. geoforum.2021.11.016
- Gilmore, A. (2017). The park and the commons: Vernacular spaces for everyday participation and cultural value. *Cultural Trends*, 26(1), 34–46. https://doi.org/ 10.1080/09548963.2017.1274358
- González de Langarica Mendizábal, A. (2007). La ciudad revolucionada: Industrialización, inmigración, urbanización (Vitoria, 1946-1965). Vitoria-Gasteiz: Ayuntamiento de Vitoria-Gasteiz.
- Grossmann, K., Connolly, J. J. T., Dereniowska, M., et al. (2021). From sustainable development to social-ecological justice: Addressing taboos and naturalizations in order to shift perspective. *Environment and Planning E: Nature and Space*, Epub ahead of print July 2021. https://doi.org/10.1177/25148486211029427
- Gulsrud, N. M., Faehnle, M., & Krajter Ostojic, S. (2017). Challenges to governing urban green infrastructure in Europe The Case of the European Green Capital Award. In D. Pearlmutter, C. Calfapietra, & R. Samson (Eds.), *The urban forest: Cultivating green infrastructure for people and the environment.* Springer.
- Hagbert, P., Wangel, J., & Broms, L. (2020). Exploring the potential for just urban transformations in light of eco-modernist imaginaries of sustainability. *Urban Planning*, 5(4), 204–216. https://doi.org/10.17645/up.v5i4.3302
- Hodson, M., & Marvin, S. (2010). Urbanism in the anthropocene: Ecological urbanism or premium ecological enclaves? *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*, 14(3), 298–313. https://doi.org/10.1080/13604813.2010.482277
- Immergluck, D., & Balan, T. (2018). Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta beltline. *Urban Geography*, 39(4), 546–562. https://doi.org/10.1080/02723638.2017.1360041
- Jokinen, A., Leino, H., Bäcklund, P., et al. (2018). Strategic planning harnessing urban policy mobilities: The gradual development of local sustainability fix. *Journal of Environmental Policy* & *Planning*, 20(5), 551–563. https://doi.org/10.1080/ 1523908X.2018.1454828

- Jonas, A. E. G., Gibbs, D., & While, A. (2011). The new urban politics as a politics of carbon control. *Urban Studies*, 48(12), 2537–2554. https://doi.org/10.1177/ 2F0042098011411951
- Kaika, M. (2017). 'Don't call me resilient again!': The new urban agenda as immunology ... or ... what happens when communities refuse to be vaccinated with 'smart cities' and indicators. *Environment and Urbanization*, 29(1), 89–102, 10.1177/ 0956247816684763.
- Kehler, S., & Birchall, S. J. (2021). Social vulnerability and climate change adaptation: The critical importance of moving beyond technocratic policy approaches. *Environmental Science and Policy*, 124(June), 471–477. https://doi.org/10.1016/j. envsci.2021.07.025
- Keil, R. (2020a). The spatialized political ecology of the city: Situated peripheries and the capitalocenic limits of urban affairs. *Journal of Urban Affairs*, 42(8), 1125–1140, 10.1080/07352166.2020.1785305.
- Keil, R. (2020b). An urban political ecology for a world of cities. *Urban Studies*, 57(11), 2357–2370, 10.1177/2F0042098020919086.
- Kenis, A., Bono, F., & Mathijs, E. (2016). Unravelling the (post-)political in transition management: Interrogating pathways towards sustainable change. *Journal of Environmental Policy and Planning*, 18(5), 568–584. https://doi.org/10.1080/1523908X.2016.1141672
- Kenis, A., & Lievens, M. (2017). Imagining the carbon neutral city: The (post)politics of time and space. *Environment and Planning A*, 49(8), 1762–1778. https://doi.org/10.1177/2F0308518X16680617
- Kennedy, S. M. (2016). Urban policy mobilities, argumentation and the case of the model city. *Urban Geography*, 37(1), 96–116, 10.1080/02723638.2015.1055932.
- Kotsila, P., Anguelovski, I., Baró, F., et al. (2021). Nature-based solutions as discursive tools and contested practices in urban nature's neoliberalisation processes. *Environment and Planning E: Nature and Space*, 4(2), 252–274. https://doi.org/ 10.1177/2F2514848620901437
- Long, J. (2016). Constructing the narrative of the sustainability fix: Sustainability, social justice and representation in Austin, TX. *Urban Studies*, 53(1), 149–172. https://doi.org/10.1177/2F0042098014560501
- Lovell, S. T., & Taylor, J. R. (2013). Supplying urban ecosystem services through multifunctional green infrastructure in the United States. *Landscape Ecology*, 28, 1447–1463. https://doi.org/10.1007/s10980-013-9912-y
- Mahmoudi, D., Lubitow, A., & Christensen, M. A. (2020). Reproducing spatial inequality? The sustainability fix and barriers to urban mobility in Portland, Oregon. *Urban Geography*, 41(6), 801–822. https://doi.org/10.1080/02723638.2019.1698865
- Marañón, B. (2020). Vitoria-Gasteiz Green Capital: A human-scale city. Sustainable development and urban green infrastructure. Vitoria-Gasteiz City Council: Centro de Estudios Ambientales.
- Martí-Costa, M., & Tomás, M. (2017). Urban governance in Spain: From democratic transition to austerity policies. *Urban Studies*, 54(9), 2107–2122. https://doi.org/10.1177/2F0042098016669452
- Martin, C., Evans, J., Karvonen, A., et al. (2019). Smart-sustainability: A new urban fix? Sustainable Cities and Society, 45, 640–648. https://doi.org/10.1016/j. scs.2018.11.028
- McCann, E. (2011). Urban policy mobilities and global circuits of knowledge: Toward a research agenda. *Annals of the Association of American Geographers*, 101(1), 107–130. https://doi.org/10.1080/00045608.2010.520219
- McCann, E. (2013). Policy boosterism, policy mobilities, and the extrospective city. *Urban Geography*, 34(1), 5–29, 10.1080/02723638.2013.778627.
- Mees, L. (2001). Between votes and bullets. Conflicting ethnic identities in the Basque Country. *Ethnic and Racial Studies*, 24(5), 798–827, 10.1080/01419870120063981.
- Miller, B., & Mössner, S. (2020). Urban sustainability and counter-sustainability: Spatial contradictions and conflicts in policy and governance in the Freiburg and Calgary metropolitan regions. *Urban Studies*, 57(11), 2241–2262. https://doi.org/10.1177/ 2F0042098020919280
- Molina, F. (2010). The historical dynamics of ethnic conflicts: Confrontational nationalisms, democracy and the basques in contemporary Spain. *Nations and Nationalism*, 16(2), 240–260.
- Montgomery, A. F. (2015). Different futures for different neighbourhoods: The sustainability fix in Detroit. *Ethnography*, 16(4), 523–555. https://doi.org/10.1177/2F1466138115570460
- Muñoz López, B., & Rondinella, G. (2017). Informe de Evaluación del Plan de Movilidad Sostenible y Espacio Público y del Plan Director de Movilidad Ciclista de Vitoria-Gasteiz. Report,4 April, Ayuntamiento de Vitoria-Gasteiz.

- Nciri, A., & Levenda, A. (2020). Urban policy (im)mobilities and refractory policy lessons: Experimenting with the sustainability fix. *Urban Geography*, 41(9), 1158–1178, 10.1080/02723638.2019.1575154.
- Olazabal, M., & Ruiz de Gopegui, M. (2021). Adaptation planning in large cities is unlikely to be effective. *Landscape and Urban Planning*, 206(February), Article 103974. https://doi.org/10.1016/j.landurbplan.2020.103974
- Orive, L. A., & Dios Lema, R. (2012). From urban greenbelt to regional green infrastructure. In T. Beatly (Ed.), *Green cities of Europe: Global lessons on green urbanism*. Washington DC: Island Press.
- Pascual, U., Palomo, I., Adams, W. M., et al. (2017). Off-stage ecosystem service burdens: A blind spot for global sustainability. *Environmental Research Letters*, 12, Article 075001. https://doi.org/10.1088/1748-9326/aa7392
- Pérez-Álvarez, G. (2020). Historias de vidas obreras en el polo industrial de Vitoria (País Vasco): del "milagro español" a la caída del franquismo (1959–1976). *Izquierdas*, 49, 892–909. https://doi.org/10.4067/s0718-50492020000100247
- Peters, K. (2010). Being together in urban parks: Connecting public space, leisure, and diversity. Leisure Sciences, 32(5), 418–433. https://doi.org/10.1080/01490400.2010.510987
- Pirro, C., & Anguelovski, I. (2017). Farming the urban fringes of Barcelona: Competing visions of nature and the contestation of a partial sustainability fix. *Geoforum*, 82 (April), 53–65. https://doi.org/10.1016/j.geoforum.2017.03.023
- Plaza, B., & Haarich, S. N. (2015). The guggenheim museum Bilbao: Between regional embeddedness and global networking. *European Planning Studies*, 23(8), 1456–1475, 10.1080/09654313.2013.817543.
- Ribeiro, A. I., Triguero-Mas, M., & Jardim Santos, C. (2021). Exposure to nature and mental health outcomes during COVID-19 lockdown. A comparison between Portugal and Spain. *Environment International*, 154, Article 106664. https://doi.org/ 10.1016/j.envint.2021.106664
- Rice, J. L. (2014). An urban political ecology of climate change governance. *Geography Compass*, 8/6, 381–394. https://doi.org/10.1111/gec3.12134
- Rosol, M., Béal, V., & Mössner, S. (2017). Greenest cities? The (post-)politics of new urban environmental regimes. *Environment and Planning A,* 49(8), 1710–1718. https://doi.org/10.1177/2F0308518X17714843
- Rueda, S. (2019). Superblocks for the design of new cities and renovation of existing ones:

 Barcelona's case. In M. Nieuwenhuijsen, & H. Khreis (Eds.), *Integrating human health into urban and transport planning*. Cham: Springer.
- Rueda Palenzuela, S. (2021). Vitoria-Gasteiz: La implementación del Modelo de supermanzanas. Revista de Obras Públicas Num., 3626(Ene/Feb), 67–73.
- Ruiz Urrestarazu, E., & Areitio, C. (2004). The sustainability of publicly owned lands: Processes of transformation in the Municipality of Vitoria-Gasteiz (The Basque Country, Spain). In E. Makhanya, & C. Bryant (Eds.), *Managing the environment for rural sustainability*. South Africa: University of Zululand.
- Sampedro, N., & Altuna, A. (1999). Los centros cívicos Como utopía integradora de la ciudad: El Caso de Vitoria-Gasteiz. *Estudios Alaveses Sancho el Sabio*, 11, 161–192.
- Scanu, E., Cloutier, G., & Trudelle, C. (2021). Contesting the greening of the urban growth machine: Ecological modernization and the promethean counter-discourse. *Environment and Planning E: Nature and Space*, 4(4), 1369–1388. https://doi.org/ 10.1177/2F2514848620952326
- Shokry, G., Anguelovski, I., Connolly, J. J. T., et al. (2022). "They Didn't see it Coming": Green resilience planning and vulnerability to future climate gentrification. *Housing Policy Debate*, 32(1), 211–245, 10.1080/10511482.2021.1944269.
- Steele, W., Davison, A., & Reed, A. (2020). Imagining the dirty Green City. *Australian Geographer*, 51(2), 239–256, 10.1080/00049182.2020.1727127.
- Swyngedouw, E. (2013). The non-political politics of climate change. *ACME: An International E-Journal for Critical Geographies*, 12(1), 1–8.
- Swyngedouw, E., & Kaika, M. (2014). Urban political ecology. Great promises, Deadlock... and new beginnings? *Documents d'Anàlisis Geogràfica*, 60(3), 459–481, 10.5565/rev/dag.155.
- Temenos, C., & McCann, E. (2012). The local politics of policy mobility: Learning, persuasion, and the production of a municipal sustainability fix. *Environment and Planning A*, 44(6), 1389–1406. https://doi.org/10.1068/2Fa44314
- Triguero-Mas, M., Dadvand, P., Cirach, M., et al. (2015). Natural outdoor environments and mental and physical health: Relationships and mechanisms. *Environment International*, 77, 35–41. https://doi.org/10.1016/j.envint.2015.01.012

- Tzaninis, Y., Mandler, T., Kaika, M., & Keil, R. (2020). Moving urban political ecology beyond the 'urbanization of nature'. *Progress in Human Geography*, 45(2), 229–252. https://doi.org/10.1177/2F0309132520903350
- Verdaguer Viana-C'ardenas, C. (2006). GEO VITORIA-GASTEIZ: informe diagn'ostico sobre el estado de la sostenibilidad y el medio ambiente en el municipio de Vitoria Gasteiz. Report, gea21 Vitoria-Gasteiz.
- Viitanen, J., & Kingston, R. (2014). Smart cities and green growth: Outsourcing democratic and environmental resilience to the global technology sector. *Environment and Planning A*, 46(4), 803–819. https://doi.org/10.1068/2Fa46242
- Wachsmuth, D., & Angelo, H. (2018). Green and gray: New ideologies of nature in urban sustainability policy. *Annals of the American Association of Geographers*, 108(4), 1038–1056, 10.1080/24694452.2017.1417819.
- Walker, S. (2016). Urban agriculture and the sustainability fix in Vancouver and Detroit. *Urban Geography*, 37(2), 163–182, 10.1080/02723638.2015.1056606.
- While, A., Jonas, A. E. G., & Gibbs, D. (2004). The environment and the entrepreneurial city: Searching for the urban "sustainability fix" in Manchester and Leeds. *International Journal of Urban and Regional Research*, 28(3), 549–569. https://doi. org/10.1111/j.0309-1317.2004.00535.x
- Wijaya, T. (2021). Conditioning a stable sustainability fix of 'ungreen' infrastructure in Indonesia: Transnational alliances, compromise, and state's strategic selectivity. *The Pacific Review*. https://doi.org/10.1080/09512748.2021.1884123
- Winter, A. K., & Le, H. (2019). Nottingham's urban sustainability fix as creative environmental commercialization. *Urban Geography*, 41(5), 760–776, 10.1080/ 02723638.2019.1664253.

Pluralizing environmental values for urban planning: How to uncover the diversity of imaginaries about socionatures from Vitoria-Gasteiz (Basque Country, Spain)

Chapter III. Pluralizing environmental values for urban planning: How to uncover the diversity of imaginaries about socionatures from Vitoria-Gasteiz (Basque Country, Spain)

Abstract:

- Cities have pushed forward re-naturing initiatives in local planning agendas.
 Discourses and rationales for such interventions tend to follow instrumental framings
 often narrowed down to the economic, health and ecological benefits of nature's
 contributions to people (NCP). Yet, diverse urban residents often connect to other
 socio-nature framings that are associated with a plurality of values held for nature,
 including relational, intrinsic, and instrumental values.
- 2. Focusing mostly on urban NCP, we used Q-methodology to explore the perspectives and expressions of urban residents' diversity of values for urban greenery and broader human-nature relationships. We explore the role of both instrumental and relational values, as well as certain potential disvalues of urban NCP. In light of the recent IPBES values assessment (IPBES, 2022) we follow a call for empirical studies and methodologies to explore, elicit and visibilize plural values about nature.
- 3. We base our study in the Basque city of Vitoria-Gasteiz, Spain (2012 European Green Capital) where we identify four distinct perspectives, all of which relate to a diversity of values about urban nature. Urban residents mostly perceive positive values for NCP as directly connected to their wellbeing. Yet, NCP that impact social bonds within their social community, expressed for instance through community-related values, are perceived differently across the four perspectives.
- 4. We conclude that planners and decision-makers should pay scrutiny to include the four, partly differing, perspectives about the plural values of (urban) NCP in policymaking processes to assure just and inclusive outcomes. Here, intersectional and participatory approaches are needed beyond dominating framings of NCPs and related values, especially those that can take into account the needs and preferences of marginalized social groups. Special emphasis should be put on integrating relational values as nourishing such values through planning can play an important role in creating place-rooted connections with local urban landscapes and the community.

Keywords:

inclusive greening, plural values about nature, Q-method, relational values, socio-natures, urban environmental planning, Vitoria-Gasteiz

This chapter corresponds to the following published article:

Neidig, J., Anguelovski, I., Lliso, B., & Pascual, U. (2023). Pluralizing environmental values for urban planning: How to uncover the diversity of imaginaries about socio-natures from Vitoria-Gasteiz (Basque Country, Spain). People and Nature, May, 1–22. https://doi.org/10.1002/pan3.10506

Pluralizing environmental values for urban planning: How to uncover the diversity of imaginaries about socionatures from Vitoria-Gasteiz (Basque Country, Spain)

3.1. Introduction

As cities are facing a socio-environmental crisis, urban greening interventions (UGI) are increasingly presented in urban planning theory and practice as win-win solutions to multiple challenges affecting human well-being (Melanidis & Hagerman, 2022). With mainstreaming of UGI in day-to-day planning practice, nature has turned into a core element of a contemporary green planning orthodoxy (Connolly, 2019). Thereby, UGI are dominantly presented through their multifunctionality and the multiple social, economic, and environmental benefits they add to urban habitats (Angelo, 2019a; Pineda- Pinto et al., 2022).

Despite the diverse benefits of UGI, their framings and justifications in policy-making processes often follow a universally applied yet simplified definition of nature's contributions that in reality support a process of commodification of urban greening (Anguelovski & Corbera, 2022; García-Lamarca, Anguelovski, & Venner, 2022; Neidig et al., 2022). UGI are increasingly presented as part of a universal social imaginary portraying urban nature as a hegemonic "one-size-fits-all" approach with purely positive impacts across diverse geographical, cultural, and economic urban contexts (Angelo, 2019b; Tozer et al., 2020; Wachsmuth & Angelo, 2018). The potential benefits of UGI thereby tend to be narrowed down to their (often market related) instrumental contributions to people, including the increased competitiveness of cities by improving their air, water and soil quality (Baró et al., 2019; Haase et al., 2014); fostering a growing tourism and real estate sector (García-Lamarca, Anguelovski, Cole, et al., 2022); or their impact on mental and physical health while reducing healthcare expenditures (Berdejo-Espinola et al., 2021; Capaldi et al., 2015; Labib et al., 2022).

Yet, focusing on nature's utility to humans expressed through only instrumental framings reduces the more complex society-nature relationships, including those in cities, to unidirectional and uniform relations (Muradian & Pascual, 2018). Recent discourses and imaginaries around nature's integration into urban environments show a tendency to become co-opted by a neoliberal rationale (Anguelovski & Corbera, 2022; Kotsila et al., 2021; Tozer et al., 2020; Tzoulas et al., 2021). For instance, critical research on the concepts of ecosystem services and nature-based solutions, both widely permeated urban planning theory and practice, exhibits the often market-driven logic for implementing UGI (see e.g., Babí Almenar et al., 2021; Chan et al., 2012; Kiss et al., 2021; Langemeyer & Connolly, 2020). These narrow instrumental framings of urban nature's benefits may hence accelerate an increasing rift between the often antagonistically portrayed concepts of society and nature (Gandy, 2018) and more concretely to an amplification of the city-nature binary (Angelo, 2017).

To overcome this conceptional antagonism of society and nature, in his seminal essay "The city as a hybrid", Swyngedouw (1996) proposed the concept of "socio-natures" to shift urban theory towards acknowledging cities as socio-ecological systems. He described the chaotic entanglements of society and nature, wherein (humans' relationships with and valuations of) nature is the outcome of social practices and processes. He writes:

"Social relations operate in and through metabolizing the "natural" environment through which both society and nature are transformed, changed, or altered and new socio-natural forms are produced. While nature provides the foundation, the dynamics of social relations produce nature's and society's history." (ibid, p. 68)

Since then, there are increasingly calls for including more-than-human thinking in urban planning theory and practice to move beyond the intellectual divide of society and nature (Armstrong et al., 2022; Maller, 2021; Pineda- Pinto et al., 2022). For instance, Hinchliffe and Whatmore (2006) argued for shifting conceptualizations of the city that depict (human-)built environments as opposite to the "wild", "country", "non-human" (ibid, p. 124) towards visions of living cities. Human and non-human elements are thus convivial, co-existing, and co-dependent in diverse kinds of socio-natures. Houston et al. (2018) and Wiesel et al. (2020) go even further in advocating for a post-human planning theory and practice. Here, more-than-human thinking should be a core component of designing and building cities prioritizing intimate society-nature relationships and practices of responsibility and care for nature.

Using these calls for alternative imaginaries about urban socio-natures as our starting point, our objective here is to explore different imaginaries and perspectives surrounding nature hold by urban residents. We show different forms of socio-natures in the case study of the city of Vitoria-Gasteiz, the 2012 European Green Capital located in the Basque Country, Spain. We hereby draw on a framework of plural values about nature that integrates the concept of relational values and hence supports conceptualizing nature's added value to urban areas beyond instrumental and positive framings of nature's benefits (IPBES, 2022).

3.1.1. The notion of relational values for urban planning

As a core component of the Values Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES, 2022), the notion of relational values has gained prominence recently. It helps expand the understanding of nature's benefits by means of the more encompassing concept of nature's contributions to people (NCP; Díaz et al., 2018; Pascual et al., 2017); that is, a more nuanced description of society-nature-

relationships, including multiple positive and negative values of nature affecting humans' quality of life (Díaz et al., 2018; Kadykalo et al., 2019; Lliso et al., 2022; Pascual et al., 2017).

So far, in western cultures values of nature have traditionally been conceptualized dichotomously: as being either instrumental or intrinsic. Instrumental values typically emphasize nature's social and economic value through an anthropocentric lens, prioritizing ideas such as natural capital and ecosystem services with specific NCP being largely or partially substitutable (Deplazes-Zemp & Chapman, 2021; Himes & Muraca, 2018; Tadaki et al., 2017). By contrast, intrinsic values derive from biocentric worldviews and generally refer to the inherent worth of nature for its own sake (Deplazes-Zemp & Chapman, 2021; O'Connor & Kenter, 2019; Piccolo, 2017). They thus express the notion that nature has rights to exist and thrive irrespective of whether it is (instrumentally) useful to humans; its protection is associated with moral obligations. These values can be found in early nature conservation thinking, such as Arne Naess' deep ecology (Naess, 2008). However, intrinsic values are receiving relatively little attention in today's environmental (human-centered) policies given their as abstract and philosophical perceived conceptualization of nature (O'Connor & Kenter, 2019).

Relational values count as a pragmatic approach to overcome the instrumental-relational values dichotomy and its critique of being an oversimplification of complex symbiotic multidirectional relationships between society and nature (Britto dos Santos & Gould, 2018; Kleespies & Dierkes, 2020; Pineda-Pinto et al., 2022). They concern notions of a good life, that is eudemonia, and more concretely refer to "preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms." (Chan et al., 2016, p. 1462). Relational values offer different ontological and counter-hegemonic ways to describe meaningful society-nature relationships (IPBES, 2022; Jacobs et al., 2020) articulated both collectively and individually through for example, notions of care, justice, kinship, sense of place, reciprocity, or individual and collective identity (Calcagni et al., 2019; Chan et al., 2018; Himes & Muraca, 2018). Firmly linked to local landscapes (Stenseke, 2018) and local knowledge systems (Díaz et al., 2018), they help strengthening a sense of place and belonging to the local community and natural environments, thus creating multiple forms of socio-natures.

3.1.2. Just positive (urban) socio-natures?

The consideration of value plurality, specifically through integrating relational values, bears a lot of potential for achieving more equitable urban planning processes. Yet, current dominant framings of nature's values as universally positive held by urban planners may risk

undermining the possible negative impacts of UGI, specifically on marginalized and vulnerable communities (Birch et al., 2020; Rishbeth & Birch, 2020) or the conflicting perceptions residents might express about nature. A growing body of literature in critical urban planning research shows how certain UGI contribute to increasing social inequality and socio-cultural exclusion, exemplified for instance through green gentrification and displacement of vulnerable groups (Anguelovski et al., 2022; Gould & Lewis, 2017; Rigolon & Németh, 2019). That is, despite the tendency to depict nature's contributions as merely beneficial to humans (Hoelle et al., 2022), urban re-naturing programs may not always be welcomed positively.

A more holistic view on urban nature must also consider its "dis-values" (Lliso et al., 2022) or "trade-offs" (Haase et al., 2017). For example, UGI may translate into displacement because of rising property prices, real estate speculation and tourism-centered developments (García-Lamarca, Anguelovski, Cole, et al., 2022; García-Lamarca, Anguelovski, & Venner, 2022). This in turn typically results in both an economic loss, that is, instrumental disvalue, for those being priced-out of their neighborhoods and a diminishing sense of community and loss of place-specific culture and local traditions, that is, relational disvalues (Lliso et al., 2022). It is therefore essential to not only consider positive but also potential negative values in planning processes for new nature-centered programs to better capture the complex scope of urban society-nature relationships.

Plural values approaches can serve as a "technology of participation" (Tadaki et al., 2017) when planning UGI. If correctly implemented, they may leverage urban planning processes towards achieving equity and inclusivity by acknowledging, eliciting, and including throughout the different planning phases a diversity of, sometimes diverging, values about nature held by multiple stakeholders (Mansur et al., 2022). Carefully implemented plural valuation approaches can also shed light on power dynamics that underpin socio-environmental conflicts as they allow for decolonialized interpretations of NCP based on different worldviews and knowledge systems (Díaz et al., 2018; IPBES, 2022; Jacobs et al., 2020; Tozer et al., 2020). For example, UGI have been shown to accelerate or produce environmental injustices in material practices and immaterial discourses around greening through the exclusion of marginalized voices (with their own associated values and needs; Anguelovski et al., 2020; Kabisch & Haase, 2014; Pérez del Pulgar et al., 2020; Triguero-Mas et al., 2021). In contrast, a decolonized reading of NCP opens space for a careful consideration of those oftenoverlooked values that may be affected by UGI (Anguelovski et al., 2020; Langemeyer & Connolly, 2020; Tozer et al. 2020).

3.1.3. The aim of the study

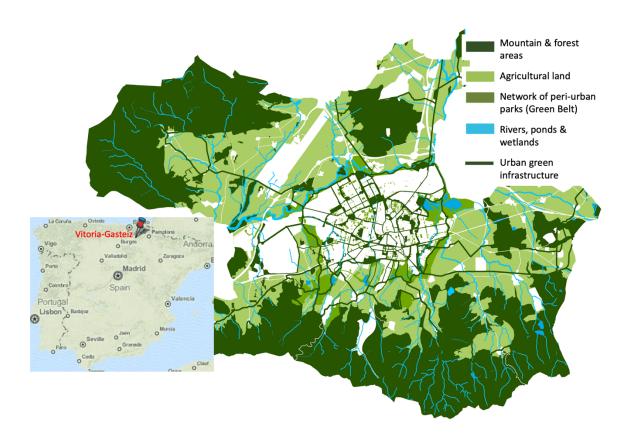
Since the call to shift towards pluralizing valuations of nature is still recent (IPBES, 2022), empirical studies offering methodological tools to explore plural values, specifically in urban areas, are relatively few (Termansen et al., 2022). We draw on empirical data from our case study of Vitoria-Gasteiz, a former European Green Capital, which has been praised for the ambition of its greening mission and projects (Neidig et al., 2022), with a twofold objective: first, to elicit plural and context-specific values about nature held by urban residents in the case study context using a Q-methodology approach. Second, to inform decision-making and implementation of UGI, drawing on a place-specific understanding of nature's values and recognizing the diversity of urban dwellers' perspectives about UGI. We therefore ask: (a) What are the plural values (instrumental, intrinsic, or relational) urban residents hold in regard to urban greenery and the broader idea of nature? (b) Do urban NCP tend to be perceived as a positive impact on well-being or may aspects of nature also be negatively valued by urban residents? and (c) How do plural, partly diverging, values about nature impact urban policymaking processes?

In the following, we introduce the context of our case city Vitoria-Gasteiz. We then turn to a detailed description of the Q-methodological approach used to identify collective patterns of how urban residents respond to, rank and/or compare a mixture of relational, instrumental, and intrinsic values about urban greening. This will be followed by the description of the results, focusing on four elicited, distinct, perspectives on the values of nature we found in the urban context of Vitoria-Gasteiz, and on additional qualitative findings. Lastly, we discuss the implications of the findings for planning UGI more generally.

3.2. Contextualizing Vitoria-Gasteiz' urban trajectory and greening ambitions

We base our study in Vitoria-Gasteiz, Basque Country, Spain, a 250.000 resident mid-sized city that grew rapidly during the industrialization period from the 1950s to 1970s with a fivefold increase of the population (from 40.000 to 190.000 residents), attracting people from rural and deprived areas of Spain. In Vitoria-Gasteiz, this shifted the urban identity and workforce from the agricultural sector with strong connections to local landscapes to an industrial production centered around the automotive sector (Gonzaléz de Langarica Mendizábal, 2007; Pérez-Álvarez, 2020). As of 2021, only around half of the city's residents were born in Vitoria-Gasteiz with an additional 11% born in the Basque Country, while 23% came from the rest of Spain and 14% immigrated from other countries (most of whom from Colombia, Morocco, and Algeria; Ayuntamiento de Vitoria-Gasteiz, 2021).

Figure 3.i. Map of urban, peri-urban, and rural green infrastructure network of the municipality of Vitoria-Gasteiz. Source: Centro de Estudios Ambientales de Vitoria-Gasteiz, 2023



Through the 2010s, Vitoria-Gasteiz has received broad international recognition for its long-term political commitment to greening and sustainability and has, inter alia, been awarded as the 2012 European Green Capital and the 2019 UNESCO Global Green City for its urban greening efforts. The city's green trans-formation started in the early 1990s with an ecological and social rationale to redevelop contaminated brownfields to recreational green amenities. As global narratives of green policies changed over time, environmental projects became the embodiment of de-politicized discourses dominated by ecomodernist and economist framings (Neidig et al., 2022).

In terms of its natural environment, the city counts on diverse types of urban and peri-urban landscapes ranging from green corridors, parks, gardens, wetlands, riversides, to forests. These spaces are connected through a holistic green infrastructure network mostly known for its emblematic peri-urban 35 km Green Belt (Aznarez et al., 2022). This belt sets a spatial limit to prevent further urban and industrial expansion and separates the city from its sur- rounding agricultural land (40% of the municipality's surface). In addition, two mountain ranges in the west and south of the city, zones of special environmental protections, make up another 40% of the city-owned land (Orive & Dios Lema, 2012; Figure 3.i).

In sum, the city's urban development history, including the long-term green and sustainability trajectory with shifting rationales for greening, and the access to diverse types of urban and peri-urban natural landscapes make Vitoria-Gasteiz an emblematic case to study diverse types of plural values about nature and its different embodiments in the city.

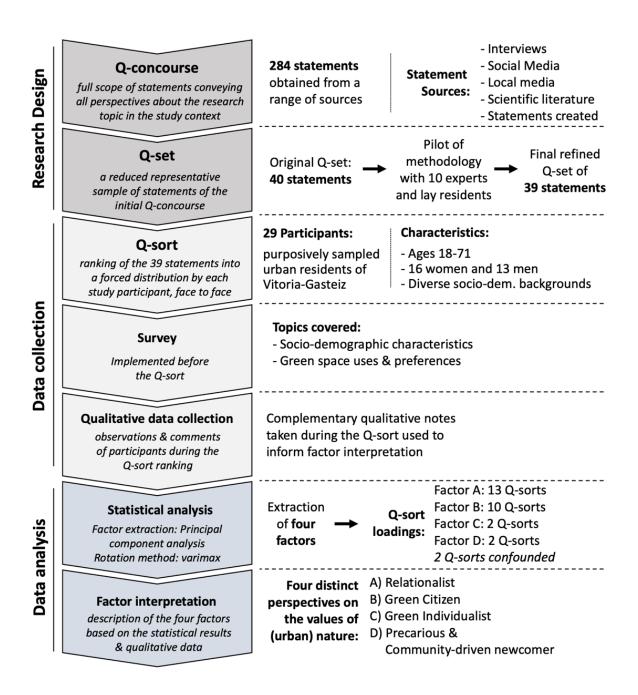
3.3. Methodology: Q-method

We used Q-method, a semi-quantitative methodological approach to investigate a diversity of perspectives on specific, often conflicted, topics (Sneegas et al., 2021). Originating from psychology, Q-method has been used to shed light on opinions and perspectives by experts and policymakers or lay people around a specific environmental topic that then can be integrated in the policy design and implementation (Barry & Proops, 1999; Watts & Stenner, 2012; Zabala et al., 2018). The strength of this approach lies in clustering individual responses and opinions into social discourses, that is, understand time- and context-specific patterns in the way people relate to the discussed research question by examining nuanced differences and communalities between perspectives on the conflicted discourse (Maniatakou et al., 2020). Unlike other quantitative (positivist) methodologies, Q-method follows an explicit normative approach (Nielsen et al., 2019), as the researcher is urged to take an interpretative and reflective role at every step of the iterative phases of research design, data collection and data analysis (Zabala et al., 2018).

Until now, only few studies used Q-method to elicit local plural values about nature through statement- or image-based valuations building upon the categorization of NCP through instrumental, relational, and intrinsic values (IPBES, 2022). For example, Maniatakou et al. (2020) studied the perceived importance of wetland-based ecosystem services through these three different value dimensions; Inglis and Pascual (2021) focused on the role of languages in the valuation of forest benefits, including a series of relational values linked to Euskara (Basque language) and relationships to forests in the Basque Country; and Holmes et al. (2022) used image-based Q methodology to better grasp contested relational discourses around rural landscape changes.

In the following, we describe in greater detail the research design based on the Q-method, particularly the creation of the Q-concourse and the Q-set and the selection of participants. We then turn to a description of the data collection and analysis (for a summary for the research process, see Figure 3.ii).

Figure 3.ii. Synthesis of the research process, including research design, data collection, and data analysis using Q-methodology.



3.3.1. Research design

3.3.1.1. The Q-concourse

The Q-concourse describes the set of statements that convey the full scope of perspectives about the research topic in the study context (Robbins & Krueger, 2000). In this paper, it describes the diversity of perceptions and values about (urban) NCP in the cultural, linguistic and place-specific context of Vitoria-Gasteiz. For this end, we consulted diverse types of

statement sources, that is, eight structured interviews with residents, posts on social media, local media articles and previous scientific studies. This was further complemented by statements purposively created by the authors referring to themes not covered by any of the above statement sources (for a detailed description of each of these statement sources, consult Table 3.i). From these sources, we retrieved the Q-concourse used in this study, a total of 284 statements that described the different perspectives and values associated with NCP, referring to both urban greenery, either with links to specific places in Vitoria-Gasteiz or with emphasis on urban-specific NCP, and to nature as a broader socially constructed concept.

Table 3.i. Types of statement sources consulted for creating the Q-concourse of 284 statements.

Types of statement sources for the Q-concourse	Rationale (objectives) of using different sources of the statements
Interviews with residents	To include statements that express individual values about nature prevalent in the case-study context: We conducted eight structured interviews in November 2020 of 45-60 minutes in Spanish around individuals' understandings of the term 'nature' and related associations. These included questions about uses of urban greenery, the perceived impacts on physical and mental well-being, and practices of care with nature. Interviewees were purposively selected through snowball sampling and resided in Vitoria-Gasteiz for at least one year with different socio-demographic backgrounds (i.e., age, gender, place of origin).
Social media posts	To include statements that express individual values about nature prevalent in the case-study context: We searched for posts on the social media platforms Twitter and Instagram that were posted under the hashtags "Green Belt", "Nature", "Vitoria-Gasteiz" and "Green Capital" combined with geotags of specific urban parks in Vitoria-Gasteiz (e.g., "Olarizu", "Armentia", or "Salburua").
Local media articles	To include statements that expressed the local public discourses about nature: We reviewed articles from local newspapers and local online media outlets. These were, e.g., articles referring to specific parks or urban green initiatives, to the importance of public green spaces especially during the COVID-19 pandemic, or articles that dealt with broader environmental topics.
Previous scientific literature	To include statements expressing notions of society-nature relationships building on the state of art of the scientific literature: We reviewed previous empirical statement-based studies, focusing on, e.g., (cultural) ecosystem services, humans' connection to nature, the new environmental paradigm, and relational and plural values.
Statements purposively created	To include statements expressing notions of disvalues about nature, detachment from nature, or urban-specific understandings of nature: We created and added statements that we could not find in any of the above sources yet considered relevant for the guiding research questions.

3.3.1.2. The Q- set

From the Q-concourse we selected a representative sample of statements, the so-called Q-set, that was then used during the ranking of statements, that is the Q- sort (see Section 3.2). The selection process of those representative statements consisted of an iterative coding process where each statement of the Q-concourse was labelled as either associated with relational, instrumental, and intrinsic values, or broader human-nature relational models (as in Muradian & Pascual, 2018). Next, each statement received a tag that expressed an associated notion of nature's value, related to for example health, sense of community, care, fear of nature, economic benefits, boredom or detachment. Throughout six iteratives rounds of coding, we reduced the Q-concourse to a Q-set of 40 statements representing the heterogeneity of perspectives about values of nature in the study context (Sneegas, 2020).

After a pilot study with 10 experts and lay residents from Vitoria-Gasteiz to test the statements for clarity and comprehensibility, we reduced the final Q-set to 39 statements that expressed a diverse and nuanced notion of the plural values of urban nature applicable in the context of Vitoria-Gasteiz (for the full list of statements, see Table 3.ii).

Of this final Q-set, a relatively large number of statements (#1– #13) express positive notions of nature's relational values. These statements refer to NCP expressing a positive relational bond between individuals and nature necessary for a good life, for example, through eudaimonia (#1), care (#4), reciprocity (#5), or harmony (#7) or between humans within their social communities through nature, expressed for instance by their sense of community (#8), collective identity (#9), or care for present (#12) or future (#13) generations.

Statements #14–#20 are associated with relational disvalues (i.e., negative relational values). They refer to a negative relational, often emotional, bond between individuals and nature hindering achieving a "good life", for example, through the dislike of specific features of (urban) nature such as insects, rats, or pigeons (#15) or the emotion of fear of nature (#16). They can also describe negative relational bonds between humans within their social communities through nature, such as perceptions of insecurity in parks (#19) or the dislike of having to share urban greenery with people different to oneself (#20).

Other statements (#21– #29) express positive framings of the instrumental value of NCP. Nature is perceived as a means to achieve a higher quality of life. It is not the relationship with nature per se that is valued but nature as the means to deliver tangible benefits for well-being, that is, revenues through green tourism (#21), local food production (#22), a place for recreation (#25 and #29), or access to better air quality (#27).

Statements that reflect instrumental disvalues (#30– #34) describe individuals' preferences or prioritization of other (non-green-based) experiences over experiences in nature or associated with specific NCP. Urban residents may therefore prefer substituting urban greenery and its related NCPs for, for example, going to the cinema (#34). This may also lead to a preference of fewer public funds for UGI (#31) and instead dedicated to other urban planning priorities, such as housing (#33). The instrumental disvalue may also be reflected in framings that describe a unidirectional negative impact on people's wellbeing, such as negative impacts on recreation of a park perceived dirty and full of mosquitos (#30).

The original Q-concourse showed a dominantly anthropocentric framing of society-nature relationships with only few statements expressing an eco-centric perspective on the values of nature. We therefore included mainly statements referring to relational and instrumental aspects of NCP into the final Q-set; only statement #35 ("I do not think that the main function of nature is to serve for humans.") and #36 ("Animals deserve to have rights of their own.") express some form of intrinsic value of nature held by people.

Lastly, based on the "extinction of experience" hypothesis referring to a lack of direct and meaningful experiences with nature, especially in urban environments, that may lead to an emotional, physical, spiritual, or intellectual alienation from nature (Miller, 2005; Soga & Gaston, 2016), the final Q-set also contains statements expressing ideas of human separation from nature. Here, we used Muradian and Pascual's (2018) typology of human-nature relational models, specifically those models relevant in an urban environment furthering anti-environmental behavior: utilization of nature (#37), domination of nature (#38) and detachment from nature (#39).

Throughout the full set of 39 statements, we paid attention to include both place-based statements, that is, with reference to city-wide or specific UGI of Vitoria-Gasteiz and statements referring to nature beyond urban boundaries. For example, while statement #4 links to the value of collective urban identity through the city's urban parks, statement #12 refers to nature beyond the specific urban context as a broader socially constructed concept.

Table 3.ii. Q-set and statement descriptions

Note: The original statements in Spanish can be found in the appendix Table 3.iv. *PLACE-SPECIFIC? YES: statements refer to aspects of urban nature specific to Vitoria-Gasteiz. NO: statements express notions of nature as a social or biophysical entity beyond urban boundaries. **STATEMENT SOURCE: indicates the source the statements were retrieved from, i.e., interviews, social media, local media, (previous scientific) literature, (statements) purposively created (for description of each statement source, see Table 1)

STATE MENT NO.	STATEMENT (ENGLISH TRANSLATION)	STATEMENT TAG	*PLACE- SPECIFIC?	**STATEMENT SOURCE
positive	relationship between individuals and nature (Relation	nal Value)		
#1	When I connect with the nature of Vitoria-Gasteiz I have a sense of tranquillity, I am happier. It helps me to live a fulfilled and good life.	Eudaimonia	YES	Interview
#2	The green spaces of Vitoria-Gasteiz, such as the Green Belt, are important for my mental health.	Mental health	YES	Interview
#3	I feel that the nature and landscapes of Vitoria-Gasteiz are an important part of my identity, of who I am as a person.	Personal identity	YES	Interview
#4	Caring for nature helps me lead a more fulfilled life.	Care	NO	Literature
#5	Nature gives me so much more than I can give her. If I treat her well, she returns it to me.	Reciprocity	NO	Interview
#6	I think that nature is the origin of humankind, where we came from. Nature is like our big house.	Kinship	NO	Interview
#7	There are places in nature that give me a sensation of harmony.	Harmony	NO	Interview
positive	relationship between humans within their social comr	munities through r	nature (Relatic	onal Value)
#8	The green spaces of Vitoria-Gasteiz are contributing to a stronger sense of community.	Sense of Community	YES	Local media
#9	Nature is part of our collective identity as the city of Vitoria-Gasteiz.	Collective identity	YES	Interview
#10	The parks of Vitoria-Gasteiz are places where I can share experiences with people who are very different from me.	Community diversity	YES	purposively created
#11	If nature is well, we are well too. The health of our community depends on the state of nature.	Health of community	NO	Interview
#12	We are responsible for the impacts we have on the environment because they can harm other people.	Care for present generations	NO	Interview
#13	We have an obligation to take care of nature for future generations.	Care for future generations	NO	Literature
negative	relationship between individuals and nature (Relation	onal disvalue)		
#14	Many of us humans are losing our connection with nature.	Disconnection	NO	Interview
#15	Natural spaces in cities are attracting dirt, insects, rats, and pigeons. I do not like that.	Dislike of non- human Others	NO	Purposively created

#16	There are aspects of nature that scare me.	Fear of nature	NO	Purposively created
#17	I do not need to spend time in nature to feel good.	Anti- Eudaimonia	NO	Purposively created
negative	relational bond between humans within their social co	ommunities throug	gh nature (Rel	ational disvalue)
#18	Now that the green spaces in Vitoria-Gasteiz are	Lack of	YES	Interview
	more crowded because of the pandemic, you have	solitude		
	to go further away to be alone. This is not good.			
#19	At night I don't usually walk in the parks of Vitoria-	Perceived	YES	Interview
	Gasteiz. I try to avoid them because I don't feel	insecurity		
	very safe.			
#20	I don't go to some parks in Vitoria-Gasteiz because	Dislike of	YES	Interview
	they are usually full of people I don't like.	human Others		
positive	framing of the instrumental value of NCP (Instrumen	tal value)		
#21	The Green Belt contributes to generating tourism	Economic	YES	Local media
	and economic benefits for the city.	benefit		
		(tourism)		
#22	The neighbourhood gardens and urban agriculture	Natural	YES	Purposively
	of Vitoria-Gasteiz are important places to	Resources		created
	produce healthy and local food.	(food)		
#23	The protection of nature in Vitoria-Gasteiz is	Quality of Life	YES	Social media
	symbolic of the quality of life for the citizens of this			
	city.			
#24	The urban and peri-urban parks of Vitoria-Gasteiz	Physical	YES	Interview
	are contributing to a healthy environment. They	health		
	have a positive impact on our physical health.			
#25	The parks of Vitoria-Gasteiz are spaces where I	Recreation	YES	Literature
	can go for a run, take the bike, or skate. They make	(physical)		
	me feel very active.			
#26	Protecting nature will help us prevent future	Economic	NO	Local media
	economic crises caused by species loss and	benefit (health)		
407	climate change.	N	NO	
#27	Nature makes a significant contribution to	Natural	NO	Local media
	improving air quality.	Resources		
400	Dueto ting got up will bely up and up the sigh of	(air) Public Health	NO	Land madia
#28	Protecting nature will help us reduce the risk of new pandemics and other public health	Public Health	NO	Local media
	new pandemics and other public health emergencies.			
#29	I like natural spaces to relax. They are spaces	Recreation	NO	Purposively
#23	where I can spend many hours.	(mental)	NO	created
negative	e framing of instrumental values of NCP (Instrumenta	, ,		Greated
#30	I do not like the Green Belt because I think its parks	Unpleasant	YES	Interview
1100	are dirty and full of mosquitos.	nature	120	Interview
#31	I think Vitoria-Gasteiz spends too much public	Wasted	YES	Literature
	money on nature conservation programs.	expenses		
#32	I think the parks in the city and its surroundings are	Boredom	YES	Interview
	very boring. They don't have much value for me.			
#33	I think that parts of the Green Belt should be used	Trade-offs	YES	Purposively
	to build new cheap housing for the residents of			created
	Vitoria-Gasteiz.			
	l .	1		1

#34	I usually prefer to watch a movie with a good friend than take a walk in nature with that same friend.	Disinterest	NO	Purposively created
intrinsi	c value of nature			
#35	I do not think that the main function of nature is to "serve for humans". Nature has value in itself.	Intrinsic worth	NO	Interview
#26	"	Intrincia riabta	NO	Litoroturo
#36	Animals deserve to have rights of their own.	Intrinsic rights	NO	Literature
human	nature relational models			
#37	It's okay if we lose forests and wetlands, as long as we keep enough for humans.	Utilization	NO	Literature
#38	We human beings have the right to use nature the way we want.	Domination	NO	Literature
#39	I prefer living in an urban environment to a rural environment.	Detachment	NO	Purposively created

3.3.1.3. Participants

The Q-method is designed to capture the broadest range of perspectives on the studied topic, unlike quantitative (survey) designs that aim to be representative of the study population. Hence, securing heterogeneity of respondents is key and allows for using relatively small sample sizes by carefully selecting respondents with the rule of thumb of having a lower number of participants than statements (Watts & Stenner, 2012). We aimed to explore urban residents' patterns of valuing nature and strategically selected the study participants with diverse socio-demographic and cultural backgrounds and without a-priory expectation that participants would have any specific knowledge on environmental issues or urban challenges connected to Vitoria-Gasteiz. A snowball sampling technique was used to recruit participants, we further approached people in public parks and neighborhood centers. This helped control for gender representation, diverse age groups and to assure a fair representation of residents' diverse places of origin.

In total 29 urban residents, 16 women and 13 men, were interviewed, ranging from 18 to 71 years old. Nine persons were born in Vitoria-Gasteiz, 13 came from other parts of Spain, three respondents were from Colombia, and one from Argentina, Senegal, China and Morocco. We selected participants who had been residing in Vitoria-Gasteiz for at least 1 year in order to secure they could have developed some sense of place for different (peri-)urban green spaces and some level of belonging based on city identity. Four of the 29 participants had been interviewed previously during the creation of the Q-concourse (see Table 3.i, "Interviews with residents").

3.3.2. Data collection

The data collection was completed face-to-face between November 2021 and June 2022 and has been approved by the Basque Centre for Climate Change Advisory Board and Ethics Committee. Each respondent was interviewed individually in a green space, in a neighborhood center or public space of their choice. Each interview lasted between 30- and 60-minutes.

Data collection started with an introduction of the study and the signing of the Informed Consent. Then, study participants responded to a survey about socio-demographic characteristics and their preferences and uses of green spaces in the city. This was followed by the Q-sort - the process in which respondents were asked to rank the 39 statements into a forced distribution from most disagree to most agree according to their own perspectives (Figure 3.iii). Place-specific statements were printed on yellow cards, place-detached statements on purple cards (see Table 3.ii, "Place-specific?"). We asked the participants to sort the statements into three piles: statements they agreed with, statements they disagreed with and statements they felt neutral about.

This was followed by each participant ranking the statements according to the given Q-sorting scheme (Figure 3.iii). Starting with the "agree" pile, participants were asked to place the two statements they most strongly agreed with on the "+4"- labelled column on the right. They continued filling up the right-hand side of the Q-sorting scheme with all the "agree" statements moving towards the more neutral center of the scheme, according to their level of agreement. The same procedure was repeated with the "disagree"-piled statements on the left- hand side of the scheme. Then, the remaining empty fields at the center were filled with statements initially sorted as "neutral", until all 39 statement cards had been placed on the Q-sorting scheme. Lastly, participants were invited to take a final look and change location of statements if needed. The sorting process was completed with a closing conversation, so participants could explain their choices or raise any doubts on statements they found interesting. Participants' comments on specific statements throughout the sorting process together with remarks from closing conversations were noted down in the researcher's field diary. This process helped to capture qualitative insights on how participants made sense of their Q-sorts in order to complement and enrich the quantitative Q-sort-data.



Figure 3.iii: Q-sort and sorting scheme (example photo from fieldwork, March 2022)

3.3.3. Data analysis

Data was analyzed with the Q-method-package in the R software (Zabala, 2014), using Pearson coefficient for the initial correlation, principal components analysis and varimax rotation. To decide how many factors to extract, we applied the Kaiser-Guttmann Criterion (factor's Eigenvalue >1), the Humphrey Rule (the cross product of the two highest factor loadings exceeds the standard error) and with at least two significantly loading sorts on each factor (Brown, 1980; Watts & Stenner, 2012). Based on these criteria, two to four factors could have been extracted. After considering the qualitative information obtained during data collection, we opted for the four-factor solution⁵. The four factors explained 73.63% of the total variance. Thirteen Q-sorts loaded significantly on Factor A, 10 Q-sorts on Factor B, and two Q-sorts on each Factor C and D. Two Q-sorts loaded significantly on more than one factor. These so-called confounded Q-sorts were excluded from the subsequent analysis (Sneegas et al., 2021).⁶

Each of the four factors represents a distinct perspective on patterns of how residents of Vitoria-Gasteiz relate to and value urban nature. These perspectives also show various

⁵ This is also in line with Watts and Stenner's (2012) rule of thumb of extracting one factor for every six to eight Q-sorts.

⁶ Factors loadings of each Q-sort can be found in the appendix, table 3.v. Those loadings express the association of each Q-sort with each of the four extracted factors.

commonalities as some statements are considered consensus statements, that is, they have been ranked similarly across all four factors. In interpreting each factor or perspective about the values of urban nature we focused on the distinguishing statements that differentiate one or several perspectives from the other perspectives (Table 3.iii). We further used the additional data collected during the 29 interviews, that is, survey results and qualitative information, namely participants' comments throughout the Q- sorting process and information derived from the closing conversation, to build rich descriptions of the four identified perspectives.

Table 3.iii: Statistical results of the Q-sorts. Values marked by one asterisk (*) indicate distinguishing statements for each factor, statements marked by two asterisks (**) indicate consensus statements across all four factors.

STATEMENT	STATEMENT TAG	Exact Factor Scores in Z-Score Units			
NO.		Factor	Factor	Factor	Factor
		A	В	С	D
#1	Eudaimonia	0,55	0,53	-0,26*	1,2
#2	Mental health	-0,05	0,65	-0,53	1,08
#3	Personal identity	-0,03	0,99	0,82	0,1
#4	Care	0,69*	0,07	-0,54	1,49*
#5	Reciprocity	1,56*	-0,01	-0,28	0
#6	Kinship	1,68*	0,19	0,01	-0,1
#7	Harmony	1,09	0,46	1,12	-0,79*
#8	Sense of Community	-0,29*	0,87	-1,39*	0,6
#9	Collective identity	0,01	1,4	0	1
#10	Community diversity	-0,44	0,68*	-0,56	-0,31
#11	Health of community	1,36	0,3	0,29	1,89
#12	Care for present generations	1,26*	0,8*	-0,3	-0,39
#13	Care for future generations	1,34	1,4	1,97	0,5*
#14	Disconnection	-0,28	-0,61	1,13*	-0,5
#15	**Dislike of non-human Others	-1,29	-1,45	-1,41	-1
#16	Fear of nature	-1,08	0	-0,57	-1,39
#17	Anti-Eudaimonia	-1,22	-1,05	-1,12	0,89*
#18	Lack of solitude	-0,93	-1,21	0,55*	-1,49
#19	Perceived insecurity	-0,66	-0,77	0,86*	-1,89*
#20	Dislike of human Others	-1,1	-0,96	-0,01*	-1,6
#21	Economic benefit (tourism)	0,19*	0,70*	-0,83	-0,68
#22	**Natural Resources (food)	-0,1	0,22	0,29	0,5
#23	Quality of Life	0,45	1,23*	0,28	-0,19
#24	Physical health	0,41	0,64	0,26	-0,48
#25	Recreation (physical)	0,38	1,25*	-1,11*	0,31

#26	Economic benefit (health)	1,16	0,54	0,83	0,39
#27	Natural Resources (air)	1,27	1,81	1,68	1,68
#28	Public Health	0,66*	0,16*	1,97	1,6
#29	**Recreation (mental)	0,52	0,93	1,12	0,6
#30	**Unpleasant nature	-1,12	-1,24	-1,13	-1,6
#31	Wasted expenses	-0,92	-1,13	-1,41	-1,68
#32	Boredom	-1,01*	-1,45	-1,97	-0,21*
#33	Trade-offs	-1,17	-1,47	-0,87	-0,6
#34	Disinterest	-0,93*	-1,39*	0,28	0,48
#35	Intrinsic worth	0,98	0,24	1,39	-0,1
#36	Intrinsic rights	1,14	0,52	0,86	-0,39*
#37	Utilization	-1,77	-1,54	-1,13	1,18*
#38	Domination	-1,78	-1,80	0,3	0,29
#39	**Detachment	-0,52	-0,51	0,57	-0,39

3.4. Results

3.4.1. Four distinct perspectives on the values of (urban) nature

We identified four different perspectives of valuations of (urban) NCP by urban residents, which we labelled as the *Relationalist* (representing Factor A), the *Green Citizen* (Factor B), the *Green Individualist* (Factor C), and the *Precarious and Community-Driven Newcomer* (Factor D; see Figure 3.iv). Across the four perspectives, there is agreement with positive expressions of nature's values that refer to direct links between NCP and individual well-being, yet the four perspectives can be distinguished by a unique combination of different values that range from more utilitarian and community- detached understandings of nature's benefits to deeper relational bonds with nature and the social community through nature. Before turning to a broader discussion of implications of such a diversity of perspectives for urban planning, we briefly describe each perspective.

a) The Relationalist perspective

For the *Relationalist*, nature significantly impacts what constitutes their sense of a "good life". They feel deeply connected to a broader, place-detached, notion of nature; thus, values connecting to place- specific NCP or the local community in Vitoria-Gasteiz play a secondary role. Of significance to the *Relationalist* are those statements expressing positive relational

values, such as kinship $(\#6, +4)^7$, reciprocity (#5, +4), care for present (#12, +3) and for future generations (#13, +3), and nature's intrinsic worth (#35, +2) and intrinsic rights (#36, +2). As nature is considered an enriching and necessary contribution to people's well-being, the *Relationalist* typically rejects any framing of nature's disvalue that may describe nature as something to be afraid of (#16, -2) or something boring (32, -2). Especially ideas expressing a human domination over nature (#38, -4) and nature's main role to be utilized by humans (#37, -4) face strong disagreement. The *Relationalist's* deep connection with nature also became apparent in the accompanying conversations with respondents loading on this perspective who stressed the importance of engaging in stewardship activities in a community or private garden or going for long walks in nature.

b) The Green Citizen perspective

The Green Citizen values a mixture of instrumental and relational aspects of urban NCP. Of importance in this perspective are especially those relational values that express a relationship within their social communities through nature. Respondents loading onto this perspective expressed a strong sense of place and reflected a discourse of pride attached to the green achievements of "their city" as several respondents explicitly mentioned "the luxury of living in a European Green Capital", which is considered a core component of a perceived high quality of life offered by Vitoria-Gasteiz (#23, +3). For the Green Citizen, both enjoying the shared experiences with other people different to them (#10, +1) and the core role that the local landscapes play in developing a personal identity (#1, +3) and collective identity (#9, +4) are key values of urban nature. The Green Citizen highly values instrumental NCP such as access to clean air (#27, +4), options for recreation (#25, +3) and various economic benefits due to UGI (#21, +2). They also show a relational sentiment of care for the present (#12, +2) and future generations beyond local urban boundaries (#13, +3); sentiments that become even stronger through rejecting statements describing relational models that emphasize human domination (#38, -4) and utilization (#37, -4) of nature, a commonality they share with the Relationalist perspective.

c) The Green Individualist perspective

The *Green Individualist* expresses a general positive sentiment towards urban greening but shares a distinct response regarding statements expressing negative relational bonds

_

⁷ The numbers in the brackets indicate the statement number and the score it would receive in an archetypical Q- sort that would load 100% on the respective perspective. For example, for perspective A, statement #6 received a score of +4. The archetypical types of Q-sorts for each perspective can be found in Figure 3.iv.

between humans within their social communities through nature. For example, the perspective is associated with statements referring to negative perceptions of the local community, such as a perceived insecurity during night time (#19, +2), or the dislike of having to share urban nature with other people (#18, +1) and especially with people of diverse socio-demographic backgrounds (#20, 0). Hence, people within this perspective strongly disagree with urban nature contributing to a sense of community (#8, -3). Despite this distinguished response towards understandings of nature as a connector for the local community, the Green Individualist values nature as an important contribution to their individual well-being. This is expressed through a mixture of relational and instrumental values, both inside and beyond urban boundaries. The *Green Individualist* for instance appreciates urban greenery (#32, -4) and hence considers it important to allocate public funds for urban nature conservation (#31, -4). That is because nature is perceived as a contribution to hu-man's quality of life through delivering natural resources (#27, +3) or a sense of harmony (#7, +3). Although lacking strong ties to the local community, the Green Individualist still cares deeply for nature for the sake of future generations (#13, +4), which also connects to their strong concern about an increasing disconnection of humanity from nature (#14, +3).

d) The Precarious and Community-Driven Newcomer perspective

Respondents loading onto the fourth perspective, namely the Precarious and Communitydriven Newcomer's perspective, tended to find themselves in a socially and economically precarious situation, as they recently immigrated to the city as members of vulnerable communities, waiting for their residence permit being approved. For respondents within this perspective, green parks are helping them to create a sense of belonging, as a space that allows them to forge a collective identity (#9, +2) and develop a sense of community (#8, +2). That is, the Precarious and Community-Driven Newcomer highly rejects framings of negative relational bonds within the local community, such as perceived insecurity through community members (#19, -4), the rejection of (over-)crowded parks (#18, -3), or feeling negatively towards other park users different to them (#20, -3). Contrary to the other three main perspectives, this perspective understands human's connection with nature as less relational, and instead more instrumental and unidirectional. This becomes exemplified through agreement with the statement expressing a utilization of nature mostly for humans' benefit (#37, +3). That is, nature is valued for its instrumental contributions, such as delivering natural resources (#27, +4) and mainly through its positive impacts on public health (#28, +3); less importance is given to the intrinsic value of nature (#36, -1).

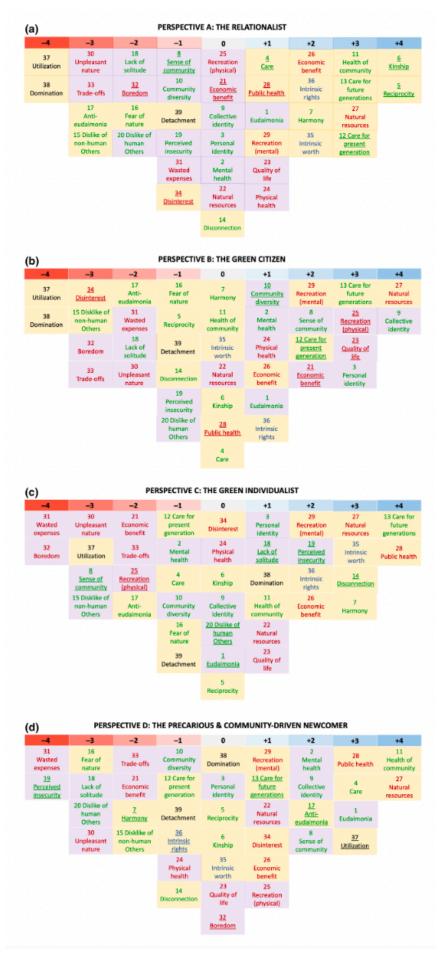


Figure 3.iv: Factor arrays for each factor A, B, C, and D.

Note: The factor array exemplifies for each perspective the "archetypical" Q-sort, that is the sort that would load 100% on the specific factor/ perspective, i.e. shows the (a) archetypical Q-sort for the perspective of the (b) Relationalist, the Green Citizen, (c) the Green Individualist, and (d) the Precarious and Community-driven Newcomer.

Blue letters indicate intrinsic values, red instrumental values, green relational values, black and broader human-nature relational models. Cards in purple contain place-specific notions, and cards in yellow refer to nature as a broader concept. underlined Statements show the distinguishing statements for each factor.

3.4.2. Commonalities and patterns across the four perspectives

We identified patterns across the four perspectives based on the consensus statements and the additional qualitative data gathered during the Q-sort process. These patterns pinpoint to notions of urban nature having been perceived differently given diverse socio- demographic background, such as differences between gender and places of origin but also show commonalities across all four perspectives, for instance, regarding a general positive reception of NCP concerning direct links between individuals and nature.

First, we noted a clear gendered dimension in how participants responded verbally to statement #19, expressing a perceived insecurity in urban parks during night. Although most male respondents sorted statement #19 at the center or disagreement side, several of these respondents explicitly mentioned during the sorting of statements that they would feel differently about this statement if they were female. For instance, one male respondent expressed that "while I am not afraid of passing through a park during night, I tell my teenage daughter not to. I tell her always go on the street with lights." Another female respondent noted that "my parents always told me to not spend time in the urban parks when it is dark. This sentence still sticks with me, I avoid them at night."

Second, respondents who immigrated from other countries emphasized the role of urban parks for creating a sense of place and of belonging, and for maintaining relationships with their countries of origin. For example, three male respondents that more recently arrived in the city from Senegal, Morocco, and Argentina, shared how the social component of urban parks as meeting places helped them navigate their financial and bureaucratic insecurities, to exchange with peers, and to have a space for recreation accessible to them as members of vulnerable communities in Vitoria-Gasteiz. Similarly, two female respondents from Colombia exemplified how nature can serve as a vehicle to emotionally re- connect with their community in their home country. Here, practices of care for nature through participating in a community garden project helped bringing childhood memories and cultural practices from their country of origin to their new home. Further, the habit of daily visiting a neighborhood park turned into a routine of video-calling friends and family at home and maintaining bonds across far- away places.

Third, a closer look at the consensus statements across the four perspectives further shows that respondents dominantly reject negative framings of (urban) NCP emphasizing direct links between individuals and the natural environment. Both statement #15, expressing a general aversion to specific elements of urban nature, such as perceived dirt, insects, rats, and pigeons, and #30 pointing to a dislike of green areas in Vitoria-Gasteiz because of seemingly

unpleasant elements of nature are consensus statements across all four perspectives, being scored either -2 or -3. Statement #16, fear of nature, was consistently mentioned throughout the sorting process and the closing conversations with a sentiment of surprise and laughter. One respondent for instance asked: "Why would I be afraid of nature? Especially here in Vitoria-Gasteiz, where there are neither dangerous animals nor earthquakes?"

3.5. Towards place- and community-based framings of urban nature in planning

The findings of this study show that society- nature relationships of urban residents in Vitoria-Gasteiz can range from a deep relational bond with all living-beings towards more instrumental perceptions of the value of NCPs. The four different perspectives thus illustrate that NCPs are rarely perceived as either purely instrumental or relational, or purely positive or negative contributions, but rather through multidirectional and nuanced tapestry of socio- natural relationships. This complexity of socio- natures hence demands an assessment of values about nature through a cultural lens, that is, what constitutes a positively or negatively perceived NCP is culturally driven, contrary to many perspectives on cultural ecosystem services typically used in the literature (Díaz et al., 2018). We now turn to a discussion of the implications of this plurality of value perspectives for urban planning. We focus here on the, partly conflicting, values and perceptions present in the different forms of urban socio- natures and their need for being explicitly acknowledged in planning responses.

Overall, there is a general rejection of framings that describe direct negative impacts of nature on humans as those NCPs refer- ring to a direct link between humans and nature are received positively across the four perspectives. This may be explained by the study context of the mid-sized city Vitoria-Gasteiz and its green city branding campaigns that regularly remind its residents on the multiple, mostly instrumental, benefits of nature (Neidig et al., 2022). Further, the close proximity to natural landscapes and a holistic net- work of (peri-) urban green infrastructure enables a relatively easy access across neighborhoods to different forms of (urban) NCP. In general, Vitoria-Gasteiz exhibits little green gentrification and inequalities, unlike other cities in Spain and beyond (Anguelovski et al., 2022), thus inviting less controversy around the speculative nature of urban greening policies.

Despite this overall positive reception of NCP, each perspective exhibits certain traits that distinguish them from the other perspectives and hence requires distinct responses from planners and decisionmakers. The *Relationalist* perspective is associated with a deep relational bond with nature that is mostly understood as a social or biophysical entity beyond urban boundaries necessary for living a "good life". Humans and Nature are two deeply

interconnected elements; relational practices, such as spending time in and caring for nature, thus play a core role in the *Relationalists'* identity, well-being and practices in and with nature. This perspective shows similarities with a universal social imaginary depicting nature as an inherently beneficial and providing positive contributions to people in diverse urban contexts (Angelo, 2019a; Hoelle et al., 2022). But this dominantly instrumental framing of nature's benefits of current urban policies does not account for the strong connection the *Relationalists* holds towards nature given their expressions of nature's intrinsic worth and the multiple relational values. Here, municipal discourses and planning surrounding UGI need to more deliberately account for the depth of the *Relationalist's* connection with nature by including values emphasizing the co- and interdependency of humans and nature and supporting civic and stewardship practices that enable this connection.

People within the *Green Citizen* perspective show similarities with the *Relationalist* as they respond to merely positive framings of NCPs. What differentiates them, is their emphasis on place-based connotations of urban nature that becomes explicit through the strong ties to the local community but also through expressing a certain pride of the institutional achievements of their local decision-makers. Respondents loading on this perspective for instance repeatedly referred to the municipal slogan of "We are the Green Capital" which we identified in a previous study as crucial in institutionally nurturing place- making that then turned into an urban brand (Neidig et al., 2022). We argue that this perspective is mirroring the local prevalent political discourse drawing on dominantly instrumental and a few community-related relational framings of UGI by replicating the official green branding of the city and highlighting their strong connection to local institutional UGI, such as the European Green Capital award. Here, green planners have strong supporters of their green legacy and should continue building on it for funding and deploying future green projects.

Contrary to the *Green Citizen*, the *Green Individualist* perspective indicates a lack of sense of belonging towards the local community through nature. Respondents loading on this perspective expressed a certain mistrust towards other residents and community members, especially strangers and foreigners, which in return may hinder their engagement in local UGI. Urban planners may thus need to further examine the reasons why people within this perspective disconnect from the local community and how different forms of engagement or participation in UGI may help creating new bonds with local people, both long-term residents and newcomers. Here, participatory processes surrounding renaturing-type UGI may be needed to as- sure a process of trust building between diverse community members. Appealing to those relational values prevalent in the *Green Individualist's* perspective, such

as a feeling of sense of harmony in nature, may be a starting point to create place-specific connections to urban landscapes and the local community.

Out of the four perspectives, only the Precarious and Community-driven Newcomer shows a more utilitarian approach to urban greenery that is especially valued for the opportunity of its use as a social meeting and community-building asset. This perspective gives insights into how historically marginalized residents in the city, such as recent immigrants, appreciate urban nature, in particular accessible urban public parks, as a substitute for the lack of other meeting spaces. Urban greenery may hence turn into a vehicle to create a localized sense of place and of belonging to the new community. This perspective mirrors findings from previous studies (see e.g. Birch et al., 2020; Ono et al., 2021; Rishbeth & Birch, 2020) that describe urban nature as important socializing places that can help newcomers and migrants to build a connection and adapt to the new cultural and social context, they find themselves in. Further, as highlighted in prior studies on gardening and collective efficacy (Teig et al., 2009) and gardening and place building (Anguelovski, 2014; Hartwig & Mason, 2016; Truong et al., 2022), urban green spaces offer newcomers and immigrants spaces for practices of care and stewardship, that, while re-connecting to memories to their home country, also help develop and strengthen place-based relational values. In this regard, green planners should keep funding and building greenspaces that can support such social activities in nature and sustain the positive links different groups form with each other and with greenspaces.

We argue that especially the Green Individualist and the Precarious and Community-driven Newcomers' perspectives about (urban) NCP may require special attention in planning renaturing initiatives and UGI. The diverse perspectives about community-related values in connection to urban nature suggest that the contribution of UGI to human-human relationships within the local community may be perceived as disvalues (Lliso et al., 2022) by some residents - contrary to the inherently beneficial assumptions that permeate dominating political green(ing) discourses (Angelo, 2019a). Urban residents' needs and perceptions thus differ in relation to both the material green space and the intangible relational bonds between culturally diverse residents that may affect members of the community negatively. Formulating a social imaginary of urban nature that can be more inclusive of the multiple (place-specific) forms of urban socio-natures requires urban planners to pay closer attention to why and how those disvalues arise and manifest. We here call for an intersectional planning approach, for example, in the form of carefully implemented participatory processes, that emphasizes these differences based on the multiples identities and bodies that perceive (urban) NCP and their integration through nature within different social communities (Anguelovski et al., 2020). Understanding and embracing residents' plurality in regard to design, maintenance, and use

of urban green spaces is therefore key to support residents in safely negotiating and contesting dominant prevalent values associated with UGI.

The *Relationalists'* and *Green Citizens'* perspectives on the value of urban NCPs are more in tune with dominating urban greening dis- courses as they regard NCP as a purely positive contribution to human well- being. Especially the *Relationalist's* perspective shows a much more nuanced and localized understanding of (urban) NCP consisting of plural positive values about nature as it could have been found in Vitoria-Gasteiz' early local environmental political discourses in the 1980s/1990s that drew upon an intrinsic ecological conservation rationale. Over time, nature became presented as a win- win strategy for both the environment and the local economy (Temenos & McCann, 2012; While et al., 2004), a framing that mirrors recent international urban discourses around the Green(est) City (Rosol et al., 2017). With that, the social imaginary replicated in Vitoria-Gasteiz' environmental political discourse shifted towards ecomodernist understandings that envision a smart carbon- neutral city and that depicts nature's benefit through a dominantly utilitarian, instrumental framing (Neidig et al., 2022).

Especially since the recent IPBES Values Assessment Report (IPBES, 2022), the conceptualization of plural valuation approaches is gaining visibility in high-level policymaking. Yet so far, only few policy-making processes actually use valuation approaches to consider diverse perceptions of nature in environmental planning (IPBES, 2022). To implement and apply them in local decision-making, an operationalizing of relational values is needed which could serve as a tool to "integrate issues of justice into assessments of multifunctionality" (Pineda-Pinto et al., 2022). This could further steer urban environmental planning towards understanding socio- ecological systems through multiple forms of socionatures (Swyngedouw, 1996). Our study has drawn on Q-methodology to elicit, formulate, and visibilize the multiplicity of values about nature held by diverse residents which has allowed us to identify diverse socio-nature in the urban context. Q-methodology shows promise as an exploratory approach within a multi-method approach to meaningfully integrate plural values of nature throughout the policy-making process, especially of those urban residents who remain most invisible or excluded in policy and planning. The research design phase, and more specifically conveying the full range of the local discourses, is a rather time-intensive process since the Q-concourse should mirror comprehensive place-specific notions about nature. However, the methodology's main advantages lie, first, in the relatively small sample size needed as it can already allow deriving key insights into the full depths of purposively sampled perspectives present in any given local context, including those often overlooked and marginalized. Second, the Q-sorting process contains a playfulness in its set-up that

respondents expressly enjoyed. We consider it a useful first step to define the starting base of a longer iterative and participatory plural valuation approach.

3.6. Conclusion

Our research on eliciting and identifying plural values about nature that urban residents hold towards (urban) NCP in the case context of the mid-sized city Vitoria-Gasteiz showed that people hold diverse, partly contradicting, forms of socio- natures that can be neither reduced to instrumental nor relational framings of NCP. The integration of a plurality of values throughout decision- making processes hence requires a careful examination of prevalent values and specifically those undermined by dominating institutional discourses. Attention should be paid to understanding whose values are being put forward, what is the underlying rationale for emphasizing specific values over others, and how can those valuation approaches target specifically socially vulnerable groups whose needs and perceptions regarding urban nature may differ from mainstream political framings. Future research will have to dissect how people with differing values contest and negotiate their needs and necessities in a day-to-day basis to be able to better adapt urban planning processes towards their existing and often conflicting identities (Oscilowicz et al., 2023). This will require an intersectional approach to put emphasis on the plurality of needs that differ across intersecting groups, such as women, immigrants, children, or elderly residents.

3.7. References

- Angelo, H. (2017). From the city lens toward urbanisation as a way of seeing: Country/city binaries on an urbanising planet. *Urban Studies*, 54(1), 158–178. https://doi.org/10.1177/0042098016629312
- Angelo, H. (2019a). Added value? Denaturalizing the "good" of urban greening. *Geography Compass*, 13(8), 1–14. https://doi.org/10.1111/ gec3.12459
- Angelo, H. (2019b). The greening imaginary: Urbanized nature in Germany's Ruhr region. *Theory and Society*, 48(5), 645–669. https://doi.org/10.1007/s1118 6-019-09361-5
- Anguelovski, I. (2014). Neighborhood as refuge: Community reconstruction, place remaking, and environmental justice in the City. MIT Press.
- Anguelovski, I., Brand, A. L., Connolly, J. J. T., Corbera, E., Kotsila, P., Steil, J., Garcia- Lamarca, M., Triguero- Mas, M., Cole, H., Baró, F., Langemeyer, J., del Pulgar, C. P., Shokry, G., Sekulova, F., & Argüelles Ramos, L. (2020). Expanding the boundaries of jus- tice in urban greening scholarship: Toward an emancipatory, Antisubordination, intersectional, and relational approach. *Annals of the American Association of Geographers*, 4452, 1–27. https://doi. org/10.1080/24694 452.2020.1740579
- Anguelovski, I., Connolly, J. J. T., Cole, H., Garcia- Lamarca, M., Triguero- Mas, M., Baró, F., Martin, N., Conesa, D., Shokry, G., del Pulgar, C. P., Ramos, L. A., Matheney, A., Gallez, E., Oscilowicz, E., Máñez, J. L., Sarzo, B., Beltrán, M. A., & Minaya, J. M. (2022). Green gentrification in European and North American cities. *Nature Communications*, 13(1), 3816. https://doi.org/10.1038/s4146 7- 022- 31572 1
- Anguelovski, I., & Corbera, E. (2022). Integrating justice in nature- based solutions to avoid nature-enabled dispossession. *Ambio*, 52, 45–53. https://doi.org/10.1007/s1328 0- 022- 01771 7
- Armstrong, A., Bulkeley, H., Tozer, L., & Kotsila, P. (2022). Border trou- bles: Urban nature and the remaking of public/private divides. *Urban Geography*, 1–21, 1–21. https://doi.org/10.1080/02723 638.2022.2125669
- Ayuntamiento de Vitoria- Gasteiz. (2021). Informe de poblacion de Vitoria- Gasteiz 2021. Fuente: Padrón Municipal de habitantes, Vitoria- Gasteiz Gabinete de Estudios.
- Aznarez, C., Svenning, J.- C., Taveira, G., Baró, F., & Pascual, U. (2022). Wildness and habitat quality drive spatial patterns of urban biodiversity. *Landscape and Urban Planning*, 228(April), 104570. https://doi.org/10.1016/j.landu rbplan.2022.104570
- Babí Almenar, J., Elliot, T., Rugani, B., Philippe, B., Navarrete Gutierrez, T., Sonnemann, G., & Geneletti, D. (2021). Nexus between nature- based solutions, ecosystem services and urban challenges. *Land Use Policy*, 100, 104898. https://doi.org/10.1016/j.landu sepol.2020.104898
- Baró, F., Calderón- Argelich, A., Langemeyer, J., & Connolly, J. T. T. (2019). Under one canopy? Assessing the distributional environmental jus- tice implications of street tree benefits in Barcelona. *Environmental Science & Policy*, 102(1), 54–64. https://doi.org/10.1016/j. envsci.2019.08.016
- Barry, J., & Proops, J. (1999). Seeking sustainability discourses with Q methodology. *Ecological Economics*, 28(3), 337–345. https://doi. org/10.1016/S0921 8009(98)00053 6
- Berdejo- Espinola, V., Suárez- Castro, A. F., Amano, T., Fielding, K. S., Oh, R. R. Y., & Fuller, R. A. (2021). Urban green space use during a time of stress: A case study during the COVID- 19 pandemic in 18 | *People and Nature*, 3(3), 597–609. https://doi. org/10.1002/pan3.10218
- Birch, J., Rishbeth, C., & Payne, S. R. (2020). Nature doesn't judge you— How urban nature supports young people's mental health and well- being in a diverse UK city. *Health and Place*, 62(February), 102296. https://doi.org/10.1016/j.healthplace.2020.102296
- Britto dos Santos, N., & Gould, R. K. (2018). Can relational values be devel- oped and changed? Investigating relational values in the environmental education literature. *Current Opinion in Environmental Sustainability*, 35, 124–131. https://doi.org/10.1016/j.cosust.2018.10.019
- Brown, S. (1980). Political subjectivity: Applications of Q methodology in political science. Yale University Press.
- Calcagni, F., Amorim Maia, A. T., Connolly, J. J. T., & Langemeyer, J. (2019). Digital co-construction of relational values: Understanding the role of social media for sustainability. *Science*, 14(5), 1309–1321. https://doi.org/10.1007/s1162 5- 019- 00672 1
- Capaldi, C., Passmore, H.- A., Nisbet, E., Zelenski, J., & Dopko, R. (2015). Flourishing in nature: A review of the benefits of connecting with nature and its application as a wellbeing intervention. *International Journal of Wellbeing*, 5(4), 1–16. https://doi.org/10.5502/ijw.v5i4.449

- Chan, K. M., Gould, R. K., & Pascual, U. (2018). Editorial overview: Relational values: What are they, and what's the fuss about? *Current Opinion in Environmental Sustainability*, 35, A1– A7. https://doi.org/10.1016/j.cosust.2018.11.003
- Chan, K. M. A., Balvanera, P., Benessaiah, K., Chapman, M., Díaz, S., Gómez-Baggethun, E., Gould, R., Hannahs, N., Jax, K., Klain, S., Luck, G. W., Martín-López, B., Muraca, B., Norton, B., Ott, K., Pascual, U., Satterfield, T., Tadaki, M., Taggart, J., & Turner, N. (2016). Why protect nature? Rethinking values and the environment. *Proceedings of the National Academy of Sciences of the United States of America*, 113(6), 1462–1465. https://doi.org/10.1073/pnas.15250 02113
- Chan, K. M. A., Satterfield, T., & Goldstein, J. (2012). Rethinking eco- system services to better address and navigate cultural values. *Ecological Economics*, 74, 8–18. https://doi.org/10.1016/j.ecole con.2011.11.011
- Connolly, J. J. T. (2019). From Jacobs to the just City: A foundation for challenging the green planning orthodoxy. *Cities*, 91, 64–70. https://doi.org/10.1016/j.cities.2018.05.011
- Deplazes-Zemp, A., & Chapman, M. (2021). The ABCs of relational val- ues: Environmental values that include aspects of both intrinsic and instrumental valuing. *Environmental Values*, 30(6), 669–693. https://doi.org/10.3197/09632 7120X 15973 37980 3726
- Díaz, S., Pascual, U., Stenseke, M., Martín- López, B., Watson, R. T., Molnár, Z., Hill, R., Chan, K. M. A., Baste, I. A., Brauman, K. A., Polasky, S., Church, A., Lonsdale, M., Larigauderie, A., Leadley, P. W., van Oudenhoven, A. P. E., van der Plaat, F., Schröter, M., Lavorel, S., ... Shirayama, Y. (2018). Assessing nature's contributions to people. *Science*, 359(6373), 270–272. https://doi.org/10.1126/scien ce.aap8826
- Gandy, M. (2018). Cities in deep time: Biodiversity, metabolic rift, and the urban question. *City*, 22(1), 96–105. https://doi.org/10.1080/13604 813.2018.1434289
- García- Lamarca, M., Anguelovski, I., Cole, H. V. S., Connolly, J. J. T., Pérez- del- Pulgar, C., Shokry, G., & Triguero- Mas, M. (2022). Urban green grabbing: Residential real estate developers discourse and practice in gentrifying global north neighborhoods. *Geoforum*, 128, 1–10. https://doi.org/10.1016/j.geofo rum.2021.11.016
- García- Lamarca, M., Anguelovski, I., & Venner, K. (2022). Challenging the financial capture of urban greening. *Nature Communications*, 13, 7132. https://doi.org/10.1038/s4146 7- 022- 34942 x
- Gonzaléz de Langarica Mendizábal, A. (2007). La ciudad revolucionada: Industrialización, inmigración, urbanización (Vitoria, 1946–1965). Ayuntamiento de Vitoria- Gasteiz.
- Gould, K., & Lewis, T. (2017). Green gentrification: Urban sustainability and the struggle for environmental justice (1st ed.). Routledge. https://doi.org/10.4324/97813 15687322
- Haase, D., Kabisch, S., Haase, A., Andersson, E., Banzhaf, E., Baró, F., Brenck, M., Fischer, L. K., Frantzeskaki, N., Kabisch, N., Krellenberg, K., Kremer, P., Kronenberg, J., Larondelle, N., Mathey, J., Pauleit, S., Ring, I., Rink, D., Schwarz, N., & Wolff, M. (2017). Greening cit- ies—To be socially inclusive? About the alleged paradox of society and ecology in cities? *Habitat International*, 64, 41–48. https://doi. org/10.1016/j.habit atint.2017.04.005
- Haase, D., Larondelle, N., Andersson, E., Artmann, M., Borgström, S., Breuste, J., Gomez-Baggethun, E., Gren, Å., Hamstead, Z., Hansen, R., Kabisch, N., Kremer, P., Langemeyer, J., Rall, E. L., McPhearson, T., Pauleit, S., Qureshi, S., Schwarz, N., Voigt, A., ... Elmqvist, T. (2014). A quantitative review of urban ecosystem service assessments: Concepts, models, and implementation. *Ambio*, 43(4), 413–433. https://doi.org/10.1007/s1328 0-014-0504-0
- Hartwig, K. A., & Mason, M. (2016). (2016). Community gardens for refugee and immigrant communities as a means of health promotion. *Journal of Community Health*, 41(6), 1153–1159. https://doi. org/10.1007/s1090 0- 016- 0195- 5
- Himes, A., & Muraca, B. (2018). Relational values: The key to pluralistic valuation of ecosystem services. *Current Opinion in Environmental Sustainability*, 35, 1–7. https://doi.org/10.1016/j.cosust.2018.09.005
- Hinchliffe, S., & Whatmore, S. (2006). Living cities: Towards a politics of conviviality. Science as Culture, 15(2), 123–138. https://doi. org/10.1080/09505 43060 0707988
- Hoelle, J., Gould, R. K., & Tauro, A. (2022). Beyond 'desirable' values: Expanding relational values research to reflect the diversity of human–nature relationships. *People and Nature*, 1–12. https://doi. org/10.1002/pan3.10316
- Holmes, G., Clemoes, J., Marriot, K., & Wynne-Jones, S. (2022). The politics of the rural and relational values: Contested discourses of rural change and landscape futures in west Wales. *Geoforum*, 133(May), 153–164. https://doi.org/10.1016/j.geofo rum.2022.05.014

- Houston, D., Hillier, J., MacCallum, D., Steele, W., & Byrne, J. (2018). Make kin, not cities!

 Multispecies entanglements and 'becoming- world' in planning theory. *Planning Theory*, 17(2), 190–212. https://doi.org/10.1177/14730 95216 688042
- Inglis, D., & Pascual, U. (2021). On the links between nature's values and language. *People and Nature*, 5, 326–342. https://doi.org/10.1002/ pan3.10205
- IPBES. (2022). Summary for policymakers of the methodological assessment report on the diverse values and valuation of nature of the intergovernmental science- policy platform on biodiversity and ecosystem services. (U. Pascual, P. Balvanera, M. Christie, B. Baptiste, D. González- Jiménez, C. B. Anderson, S. Athayde, R. Chaplin- Kramer, S. Jacobs, E. Kelemen, R. Kumar, E. Lazos, A. Martin, T. H. Mwampamba, B. Nakangu, P. O'Farrell, C. M. Raymond, S. M. Subramanian, M. Termansen, ... A. Vatn, Eds.). https://doi.org/10.5281/zenodo.6522392
- Jacobs, S., Zafra- Calvo, N., Gonzalez- Jimenez, D., Guibrunet, L., Benessaiah, K., Berghöfer, A., Chaves- Chaparro, J., Díaz, S., Gomez- Baggethun, E., Lele, S., Martín- López, B., Masterson, V. A., Merçon, J., Moersberger, H., Muraca, B., Norström, A., O'Farrell, P., Ordonez, J. C., Prieur- Richard, A.- H., ... Balvanera, P. (2020). Use your power for good: Plural valuation of nature— The Oaxaca statement. *Global Sustainability*, 3(2020), e8. https://doi.org/10.1017/sus.2020.2
- Kabisch, N., & Haase, D. (2014). Green justice or just green? Provision of urban green spaces in Berlin. Germany. *Landscape and Urban Planning*, 122(2014), 129–139. https://doi.org/10.1016/j.landu rbplan.2013.11.016
- Kadykalo, A. N., López- Rodriguez, M. D., Ainscough, J., Droste, N., Ryu, H., Ávila- Flores, G., Le Clec'h, S., Muñoz, M. C., Nilsson, L., Rana, S., Sarkar, P., Sevecke, K. J., & Harmáčková, Z. V. (2019). Disentangling 'ecosystem services' and 'nature's contributions to people'. *Ecosystems and People*, 15(1), 269–287. https://doi.org/10.1080/26395 916.2019.1669713
- Kiss, B., Sekulova, F., Hörschelmann, K., Salk, C. F., Takahashi, W., & Wamsler, C. (2021). Citizen participation in the governance of nature- based solutions. *Environmental Policy and Governance*, 2022, 1–28. https://doi.org/10.1002/eet.1987
- Kleespies, M. W., & Dierkes, P. W. (2020). Exploring the construct of relational values: An empirical approach. *Frontiers in Psychology*, 11(March), 1– 14. https://doi.org/10.3389/fpsyq.2020.00209
- Kotsila, P., Anguelovski, I., Baró, F., Langemeyer, J., Sekulova, F., & Connolly, J. T. (2021). Nature-based solutions as discursive tools and contested practices in urban nature's neoliberalisation processes. *Environment and Planning E: Nature and Space*, 4(2), 252–274. https://doi.org/10.1177/25148 48620 901437
- Labib, S. M., Browning, M. H. E. M., Rigolon, A., Helbich, M., & James, P. (2022). Nature's contributions in coping with a pandemic in the 21st century: A narrative review of evidence during COVID- 19. *Science of the Total Environment*, 833(January), 155095. https://doi.org/10.1016/j.scito tenv.2022.155095
- Langemeyer, J., & Connolly, J. J. T. (2020). Weaving notions of justice into urban ecosystem services research and practice. *Environmental Science and Policy*, 109, 1–14. https://doi.org/10.1016/j.envsci.2020.03.021
- Lliso, B., Lenzi, D., Muraca, B., Chan, K. M., & Pascual, U. (2022). Nature's disvalues: What are they and why do they matter? *Current Opinion in Environmental Sustainability*, 56, 101173. https://doi.org/10.1016/j. cosust.2022.101173
- Maller, C. (2021). Re-orienting nature-based solutions with more-than- human thinking. *Cities*, 113(January), 103155. https://doi. org/10.1016/j.cities.2021.103155
- Maniatakou, S., Berg, H., Maneas, G., & Daw, T. M. (2020). Unravelling diverse values of ecosystem services: A socio- cultural valuation using Q methodology in Messenia. Greece. *Sustainability*, 12(24), 1–25. https://doi.org/10.3390/su122 410320
- Mansur, A. V., McDonald, R. I., Güneralp, B., Kim, H. J., de Oliveira, J. A. P., Callaghan, C. T., Hamel, P., Kuiper, J. J., Wolff, M., Liebelt, V., Martins, I. S., Elmqvist, T., & Pereira, H. M. (2022). Nature futures for the urban century: Integrating multiple values into urban management. *Environmental Science and Policy*, 131, 46–56. https://doi.org/10.1016/j.envsci.2022.01.013
- McKeown, B., & Thomas, D. (2013). Q methodology (2nd ed.). Sage Publications.
- Melanidis, M. S., & Hagerman, S. (2022). Competing narratives of nature-based solutions: Leveraging the power of nature or dangerous distraction? *Environmental Science and Policy*, 132, 273–281. https://doi.org/10.1016/j.envsci.2022.02.028

- Miller, J. R. (2005). Biodiversity conservation and the extinction of experience. *Trends in Ecology and Evolution*, 20(8), 430–434. https://doi.org/10.1016/j.tree.2005.05.013
- Muradian, R., & Pascual, U. (2018). A typology of elementary forms of human- nature relations: A contribution to the valuation debate. *Current Opinion in Environmental Sustainability*, 35, 8–14. https://doi. org/10.1016/j.cosust.2018.10.014
- Naess, A. (2008). Ecology of wisdom (A. Drengson & B. Devall, Eds.). Pinguin Random House UK. Neidig, J., Anguelovski, I., Albaina, A., & Pascual, U. (2022). "We are the green capital": Navigating the political and sustainability fix narratives of urban greening. *Cities*, 131, 103999. https://doi.org/10.1016/j.cities.2022.103999
- Neidig, J., Anguelovski, I., Lliso, B., & Pascual, U. (2023). Data from: Pluralizing environmental values for urban planning: How to un-cover the diversity of imaginaries about socio- natures from Vitoria- Gasteiz (Basque Country, Spain). *Dryad Digital Repository*. https://doi.org/10.5061/dryad.qnk98 sfnj
- Nielsen, J., de Bremond, A., Chowdury, R. R., Friss, C., Metternich, G., Meyfroidt, P., Murnoe, D., Pascual, U., & Thomson, A. (2019). Toward a normative land system science. *Current Opinion in Environmental Sustainability*, 38, 1–6.
- O'Connor, S., & Kenter, J. O. (2019). Making intrinsic values work; integrating intrinsic values of the more- than- human world through the life framework of values. *Sustainability Science*, 14(5), 1247–1265. https://doi.org/10.1007/s1162 5- 019- 00715 7
- Ono, A. J., Boyd, D. R., & Chan, K. M. A. (2021). Acculturation as an ecosystem service? Urban natural space supports evolving relational values and identity in new female migrants. *People and Nature*, 5, 313–325. https://doi.org/10.1002/pan3.10188
- Orive, L. A., & Dios Lema, R. (2012). From urban greenbelt to regional green infrastructure. In T. Beatly (Ed.), Green cities of Europe: Global lessons on green urbanism (pp. 1– 234). Island Press. https://doi. org/10.5822/978- 1- 61091 175- 7
- Oscilowicz, E., Anguelovski, I., Garcia Lamarca, M., Cole, H., Shokry, G., Perez de Pulgar, C., Arguelles Ramos, L., & Connolly, J. J. (2023). Grassroots mobilization for a just, green urban future: Building community infrastructure against green gentrification and displacement. *Journal of Urban Affairs*. https://doi.org/10.1080/07352 166.2023.2180381
- Pascual, U., Balvanera, P., Díaz, S., Pataki, G., Roth, E., Stenseke, M., Watson, R. T., Başak Dessane, E., Islar, M., Kelemen, E., Maris, V., Quaas, M., Subramanian, S. M., Wittmer, H., Adlan, A., Ahn, S. E., Al- Hafedh, Y. S., Amankwah, E., Asah, S. T., ... Yagi, N. (2017). Valuing nature's contributions to people: The IPBES approach. *Current Opinion in Environmental Sustainability*, 26–27, 7–16. https://doi.org/10.1016/j.cosust.2016.12.006
- Pérez del Pulgar, C., Anguelvoski, I., & Connolly, J. (2020). Toward a green and playful city: Understanding the social and political production of children's relational wellbeing in Barcelona. *Cities*, 96(2020), 102438. https://doi.org/10.1016/j.cities.2019.102438
- Pérez- Álvarez, G. (2020). Historias de vidas obreras en el polo industrial de Vitoria (País Vasco): del "milagro español" a la caída del franquismo (1959–1976). *Izquierdas*, 49, 892–909. https://doi. org/10.4067/s0718 50492 02000 0100247
- Piccolo, J. J. (2017). Intrinsic values in nature: Objective good or simply half of an unhelpful dichotomy? *Journal for Nature Conservation*, 37, 8–11. https://doi.org/10.1016/j.jnc.2017.02.007
- Pineda-Pinto, M., Frantzeskaki, N., & Nygaard, C. A. (2022). The potential of nature- based solutions to deliver ecologically just cities: Lessons for research and urban planning from a systematic literature re- view. *Ambio*, 51(1), 167–182. https://doi.org/10.1007/s1328 0- 021- 01553 7
- Rigolon, A., & Németh, J. (2019). Green gentrification or 'just green enough': Do park location, size and function affect whether a place gentrifies or not? *Urban Studies*, 57(2), 402–420. https://doi. org/10.1177/00420 98019 849380
- Rishbeth, C., & Birch, J. (2020). Urban nature and transnational lives. *Population, Space and Place*, 27, e2416. https://doi.org/10.1002/ psp.2416
- Robbins, P., & Krueger, R. (2000). Beyond bias? The promise and limits of Q method in human geography. *The Professional Geographer*, 52(4), 636–648. https://doi.org/10.1111/0033-0124.00252
- Rosol, M., Béal, V., & Mössner, S. (2017). Greenest cities? The (post-)politics of new urban environmental regimes. *Environment and Planning A,* 49(8), 1710–1718. https://doi.org/10.1177/03085 18X17 714843
- Sneegas, G. (2020). Making the case for critical Q methodology. *The Professional Geographer*, 72(1), 78–87. https://doi.org/10.1080/00330124.2019.1598271

- Sneegas, G., Beckner, S., Brannstrom, C., Jepson, W., Lee, K., & Seghezzo, L. (2021). Using Q-methodology in environmental sustainability research: A bibliometric analysis and systematic review. *Ecological Economics*, 180, 106864. https://doi.org/10.1016/j.ecolecon.2020.106864
- Soga, M., & Gaston, K. J. (2016). Extinction of experience: The loss of human- nature interactions. Frontiers in Ecology and the Environment, 14(2), 94–101. https://doi.org/10.1002/fee.1225
- Stenseke, M. (2018). Connecting 'relational values' and relational land- scape approaches. *Current Opinion in Environmental Sustainability*, 35, 82–88. https://doi.org/10.1016/j.cosust.2018.10.025
- Swyngedouw, E. (1996). The city as a hybrid: On nature, society and cyborg urbanization. *Capitalism, Nature, Socialism*, 7(2), 65–80. https://doi.org/10.1080/10455 75960 9358679
- Tadaki, M., Sinner, J., & Chan, K. M. A. (2017). Making sense of environ-mental values: A typology of concepts. *Ecology and Society*, 22(1):7. https://doi.org/10.5751/ES-08999 220107
- Teig, E., Amulya, J., Bardwell, L., Buchenau, M., Marshall, J. A., & Litt, J. S. (2009). Collective efficacy in Denver, Colorado: Strengthening neighborhoods and health through community gardens. *Health & Place*, 15(4), 1115–1122. https://doi.org/10.1016/j.healt hplace.2009.06.003
- Temenos, C., & McCann, E. (2012). The local politics of policy mobility: Learning, persuasion, and the production of a municipal sustainability fix. *Environment and Planning A*, 44(6), 1389–1406. https://doi. org/10.1068/a44314
- Termansen, M., Jacobs, S., Mwampamba, T. H., Ahn, S., Castro, A., Dendoncker, N., Ghazi, H., Gundimeda, H., Huambachano, M., Lee, H., Mukherjee, N., Nemogá, G. R., Palomo, I., Pandit, R., Schaafsma, M., Ngouhouo, J., Choi, A., Filyushkina, A., Hernández- Blanco, M., ... González- Jiménez, D. (2022). Chapter 3: The potential of valuation. In P. Balvanera, U. Pascual, M. Christie, B. Baptiste, & D. González- Jiménez (Eds.), Methodological assessment report on the di- verse values and valuation of nature of the intergovernmental science- policy platform on biodiversity and ecosystem services (pp. 1– 170). IPBES secretariat. https://doi.org/10.5281/zenodo.6521298
- Tozer, L., Hörschelmann, K., Anguelovski, I., Bulkeley, H., & Lazova, Y. (2020). Whose city? Whose nature? Towards inclusive nature- based solution governance. *Cities*, 107, 102892. https://doi.org/10.1016/j. cities.2020.102892
- Truong, S., Gray, T., & Ward, K. (2022). Enhancing urban nature and place-making in social housing through community gardening. *Urban Forestry & Urban Greening*, 72(2022), 127586. https://doi. org/10.1016/j.ufug.2022.127586
- Triguero- Mas, M., Anguelovski, I., García- Lamarca, M., Argüelles, L., Perez- del- Pulgar, C., Shokry, G., Connolly, J. J. T., & Cole, H. V. S. (2021). Natural outdoor environments' health effects in gentrifying neighbor- hoods: Disruptive green landscapes for underprivileged neighborhood residents, *Social Science & Medicine*. Volume, 279(2021), 113964. https://doi.org/10.1016/j.socsc imed.2021.113964
- Tzoulas, K., Galan, J., Venn, S., Dennis, M., Pedroli, B., Mishra, H., Haase, D., Pauleit, S., Niemelä, J., & James, P. (2021). A conceptual model of the social-ecological system of nature- based solutions in urban environments. *Ambio*, 50(2), 335–345. https://doi.org/10.1007/ s1328 0-020-01380 2
- Wachsmuth, D., & Angelo, H. (2018). Green and gray: New ideologies of nature in urban sustainability policy. *Annals of the American Association of Geographers*, 108(4), 1038–1056. https://doi. org/10.1080/24694 452.2017.1417819
- Watts, S., & Stenner, P. (2012). Doing Q methodological research: Theory, method, and interpretation. SAGE Publications Ltd.
- While, A., Jonas, A. E. G., & Gibbs, D. (2004). The environment and the entrepreneurial city: Searching for the urban "sustainability fix" in Manchester and Leeds. *International Journal of Urban and Regional Research*, 28(3), 549–569. https://doi.org/10.1111/j.0309-1317. 2004. 00535.x
- Wiesel, I., Steele, W., & Houston, D. (2020). Cities of care: Introduction to a special issue. *Cities*, 105(June), 102844. https://doi.org/10.1016/j. cities.2020.102844
- Zabala, A. (2014). Qmethod: A package to explore human perspectives using Q methodology. *The R Journal*, 6(2), 163–173. https://journal.r-project.org/archive/2014- 2/zabala.pdf
- Zabala, A., Sandbrook, C., & Mukherjee, N. (2018). When and how to use Q methodology to understand perspectives in conservation research. *Conservation Biology*, 32(5), 1185–1194. https://doi.org/10.1111/cobi.13123

3.8. Appendices

Table 3.iv. Original statements in Spanish

ITEM NO.	ORIGINAL STATEMENT IN SPANISH				
nositivo rol	ationship between individuals and nature (Relational Value)				
•	, ,				
#1	Cuando conecto con la naturaleza de Vitoria-Gasteiz tengo una sensación de tranquilidad,				
"0	soy más feliz. Me ayuda vivir una vida plena y buena.				
#2	Los espacios verdes de Vitoria-Gasteiz, como el Anillo Verde, son importantes para mi salud mental.				
#3	Siento que la naturaleza y los paisajes de Vitoria-Gasteiz constituyen una parte importante de mi identidad como persona.				
#4	Cuidar de la naturaleza me ayuda a llevar una vida más plena.				
#5	La naturaleza me da muchísimo más de lo que yo le puedo dar a ella. Si la trato bien, ella me lo devuelve.				
#6	Pienso que la naturaleza es el origen del hombre, de donde vinimos. La naturaleza es como nuestra gran casa.				
#7	Hay entornos naturales que me producen una sensación de armonía.				
positive rel Value)	ationship between humans within their social communities through nature (Relational				
#8	Los espacios verdes de Vitoria-Gasteiz ayudan a mejorar el sentido de comunidad.				
#9	La naturaleza es parte de nuestra identidad como ciudad de Vitoria-Gasteiz.				
#10	Los parques de Vitoria-Gasteiz son lugares donde puedo compartir experiencias con personas que son muy diferentes de mi.				
#11	Si la naturaleza está bien, nosotros también estamos bien. La salud de nuestra comunidad depende del estado de la naturaleza.				
#12	Somos responsables de los impactos que generamos en el medio ambiente porque pueden perjudicar a otras personas.				
#13	Tenemos la obligación de cuidar de la naturaleza para las generaciones futuras.				
negative re	lationship between individuals and nature (Relational disvalue)				
#14	La mayoría de las personas estamos perdiendo nuestra conexión con la naturaleza.				
#15	Los espacios naturales dentro de las ciudades atraen suciedad, insectos, ratas y palomas. Esto no me gusta.				
#16	Hay aspectos de la naturaleza que me dan miedo.				
#17	No necesito pasar tiempo en espacios naturales para sentirme bien.				
negative re	elational bond between humans within their social communities through nature (Rel.				
#18	Ahora que los espacios verdes de Vitoria-Gasteiz están más llenos de gente debido a la pandemia, tienes que irte más lejos para estar solo. Esto no está bien.				
#19	Por la noche normalmente no paseo por los parques de Vitoria-Gasteiz. Intento evitarlos porque no me siento muy seguro/a.				
#20	No voy a algunos parques de Vitoria-Gasteiz por que suelen estar llenos de gente que no me gusta.				
positive fra	ming of the instrumental value of NCP (Instrumental value)				

#21	El Anillo Verde contribuye a generar turismo y beneficios económicos para la ciudad.
#22	Los huertos de los barrios y la agricultura urbana de Vitoria-Gasteiz son importantes para una alimentación sana y de proximidad.
#23	La preservación de la naturaleza de Vitoria-Gasteiz es sinónimo de calidad de vida para los ciudadanos de esta ciudad.
#24	Los parques urbanos de Vitoria-Gasteiz ayudan a generar un entorno saludable. Tienen un impacto positivo en nuestra salud corporal.
#25	Los parques de Vitoria-Gasteiz son espacios que me ofrecen la oportunidad de hacer ejercicio como correr, andar en bicicleta, o patinar. Me hacen sentir muy activo/a.
#26	Proteger la naturaleza nos ayudará a prevenir futuras crisis económicas causadas por la pérdida de especies y el cambio climático.
#27	La naturaleza contribuye de forma notable a mejorar la calidad del aire.
#28	Proteger la naturaleza nos ayudará a reducir el riesgo de nuevas pandemias y otras emergencias de salud pública.
#29	Los espacios naturales me gustan para relajarme. Son espacios donde puedo pasar muchas horas.
negative	framing of instrumental values of NCP (Instrumental disvalue)
#30	No me gusta el Anillo Verde porque siento que está sucio y llenos de mosquitos.
#31	Creo que Vitoria-Gasteiz se gasta demasiado dinero publico en programas para conservar la naturaleza.
#32	Pienso que los parques en el centro y en las afueras de Vitoria-Gasteiz son un aburrimiento. No tienen demasiado valor para mi.
#33	Creo que parte del Anillo Verde debería de usarse para construir viviendas más baratas para la gente de Vitoria-Gasteiz.
#34	Por lo general prefiero ver una película con un buen amigo que dar un paseo por la naturaleza con ese mismo amigo.
intrinsic	value of nature
#35	No creo que la función principal de la naturaleza sea servir a los humanos. La naturaleza tiene valor en si misma.
#36	Los animales se merecen tener derechos.
human-ı	nature relational models
#37	No pasa nada si perdemos bosques y humedales, si mantengamos lo suficiente para los humanos.
#38	Los seres humanos tenemos el derecho a usar la naturaleza de la manera que queramos.
που	

Table 3.v. Factor loadings for each Q-sort and factor. **Note:** Values in bold and marked with an asterisk are indicating the flagged Q-sorts for each factor. Q sort marked with two asterisks are cofounded Q-sorts (they loaded significantly on more than one factor).

iactor).		Q-sort loadings on each Factor			
Number Q	-sort	Factor A	Factor B	Factor C	Factor D
Q1		0.8236*	0.4065	0.1799	0.1714
Q2	Q2		0.6880*	0.1696	0.1180
Q3		0.7939*	0.4251	0.0146	0.2215
Q4		0.2791	0.6965*	0.1906	0.2882
Q5		0.1956	0.6064*	0.0115	0.5384
Q6		0.6765*	0.3432	0.3236	0.2864
Q7		0.6281*	0.4577	0.3747	0.0773
Q8		0.2019	0.5723*	0.3140	0.3919
Q9		0.1540	0.0845	0.7229*	-0.1978
Q10		0.7136*	0.3678	0.2203	0.1934
Q11		0.7466*	0.3894	0.2302	0.2760
Q12		0.5343	0.7080*	0.1920	0.0235
Q13		0.7173*	0.3769	0.2472	0.1183
Q14		0.1249	0.8964*	-0.0191	0.0727
Q15**		0.5115	0.5913	0.4186	0.0956
Q16		0.7030*	-0.0521	0.0016	-0.1436
Q17		0.3338	0.6893*	0.2048	0.2088
Q18		0.6843*	0.4219	0.0656	0.3069
Q19		0.2436	0.1863	0.7315*	0.3847
Q20		0.3547	0.5606*	0.2821	0.0880
Q21**		0.3322	0.6333	0.5405	-0.1005
Q22		0.2760	0.4866	-0.0888	0.6132*
Q23		0.1096	0.0549	0.0276	0.8752*
Q24		0.3867	0.7020*	0.1251	0.2027
Q25		0.3956	0.6477*	0.2690	0.1352
Q26		0.6607*	0.2567	0.5322	0.2078
Q27		0.7752*	0.4476	0.2623	0.1040
Q28		0.5556*	0.2825	0.2428	0.2186
Q29		0.7283*	0.3745	0.3587	0.2223
Number of	∑=27	13	10	2	2
loading Q-sorts					
Percentage of	∑=73,63	28,95	25,73	10,10	8,85
explained variance					
Factor		8.40	7.46	2.93	2.57
Elgenvalue					

Multi-level finance impacts on local participation, inclusion, and equity: The case of the NextGenerationEU funds for urban renaturing programs

Chapter IV. Multi-level finance impacts on local participation, inclusion, and equity: The case of the NextGenerationEU funds for urban renaturing programs

Abstract

We analyze the role of multi-level ad-hoc emergency funds (MAEF) as an opportunity for municipalities to advance ambitious local climate action. Emergency funds follow a vertical multi-level governance structure, including strict timelines, evaluations, and competencies spread across policy scales, which condition local aspirations for transformative governance in terms of participation, inclusion, and equity. This is the case of the European NextGenerationEU funding program. Drawing on qualitative data (interviews with key local actors, participant observations, and archival data), we analyze the role of the NextGenerationEU-funded naturalization project implementation in the city of Vitoria-Gasteiz, Spain, 2012 European Green Capital. We offer an empirical analysis of how MAEF's requirements challenge locally formulated values of governance advancing civic participation, inclusion, and equity. Findings indicate that the municipal dependence on multi-level financing schemes comes as a trade-off with local democratic governance where the need for slow-er and market-detached civic engagement processes clashes with investors' interests for financially capturing climate action and with EU requirements for rapid project execution. As a result, civic contestation against the projects' governance processes reflects a critique of: a) a bricolage approach to ensure successful applications for climate finance rather than democratic governance, and b) a resulting lack of transparent communication of project selection and implementation. However, participation, inclusion, and consideration of social equity goals could have been realized much earlier before MAEF are being released, upstream. This reality calls for local decision-makers developing more transparent governance models helping build up civic support when projects are in their early conception stage.

Keywords:

Climate finance, multi-level governance, NextGenerationEU funds, Vitoria-Gasteiz, urban climate action

This chapter has been submitted to the journal Environmental Science and Policy:

Neidig, J., Anguelovski, I., Albaina, A., & Pascual, U. (forthcoming). Multi-level finance impacts on local participation, inclusion, and equity: The case of the NextGenerationEU funds for urban renaturing programs.

Multi-level finance impacts on local participation, inclusion, and equity: The case of the NextGenerationEU funds for urban renaturing programs

4.1. Introduction

In May 2020, the European Commission released its recovery plan to boost its member states out of the Covid19-pandemic, the so-called NextGenerationEU (NGEU). Only a few months later, Spain received notice of being disbursed 77 billion Euros in direct transfers and up to 140 billion Euros in loans, to finance national projects aligned with the European Green Deal's to be executed by December 2026 (European Parliament, 2023). In July 2022, the then-mayor of Vitoria-Gasteiz, proud 2012 European Green Capital, declares "Today Vitoria-Gasteiz has earned again an endorsement from Europe. We are on the right track to become a European supercity, we are on the train of Europe, and we want to take advantage of it." (City-hall Vitoria-Gasteiz, 2022a), after having secured nearly two million Euros of Spanish NGEU funds for naturalizing one of its core mobility axes.

As urban projects towards climate change adaptation and mitigation get rolled out under multi-level climate finance (Causevic and Selvakkumaren, 2018), including smart or low-carbon infrastructures, energy retrofitting of buildings, or renaturing programs, questions emerge as to the equity and justice impacts of financed interventions and governance processes (Knuth and Krishnan, 2021; Smeds and Acuto, 2018). In this rather fast-paced technocratic process, municipalities seem indeed to have little margin to develop inclusive, democratic, and socially innovative governance models that advance local climate action without replicating multi-scale inequalities (Colenbrander et al., 2017). In addition, projects operate on strict timelines, complex administrative rules, and build upon a green growth narrative that has been shown to leave equity and inclusivity considerations apart (García-Lamarca et al., 2021).

The NGEU embodies a multi-level climate finance tool embedded in the context of the global rupture of the Covid19-pandemic. Due to the high financial volume and quick disbursement of funds, those multi-level ad-hoc emergency funds (henceforward: MAEF) offer municipalities with tight budgets the sudden opportunity for immediate implementation of cost-intensive, transformative climate action towards low-carbon and resilient cities (Crescenzi et al., 2021). Being integrated in a vertical administrative structure of competencies, from the European to the municipal level, they require complex decisions over fund distributions and types of interventions being filtered by different government scales and an efficient apparatus of multi-level operationalization between multiple public and private actors (Kern and Bulkeley, 2009).

MAEF are hence formulated around values of governance that condition or may even contradict local aspirations for transformative governance processes. We take these conflicting visions as a starting point, and ask: *To what extent do multi-level ad-hoc emergency*

funds allow for civic participation, inclusion, and equity in urban climate action? We embed our analysis in the critical body of literature that disentangles the role of nested green finance schemes in achieving inclusivity in local governance (Westman et al., 2019; García-Lamarca et al., 2022). The novelty, uniqueness, and financial volume of MAEF, such as the NGEU, make it particularly important to understand how they condition action on the ground. We hence contribute important insights on the impacts of such ad-hoc and vertical financing instruments on local governance.

We follow two urban naturalization projects being implemented as of the end of 2023 in Vitoria-Gasteiz, a mid-sized city in the Basque Country, Spain, under the NGEU framework. Both projects aim for a naturalization of inner-urban public space yet follow different rationales to be eligible for NGEU funds. We chose Vitoria-Gasteiz as case city given its long-standing trajectory of materializing greening efforts through European multi-level governance and financing and of participating in European initiatives such as the Covenant of Mayors or the European mission of 100 climate neutral cities. The city has also attained global recognition for its successful climate actions (Kern, 2019).

In the remainder of this paper, we offer an empirical analysis of how MAEF' requirements challenge locally formulated values of governance advancing civic participation, inclusion, and equity in urban climate action. For this end, the following section reviews the literature showing the ramifications of multi-level climate financing in terms of equity in local planning before we turn to a conceptualization of NGEU funds in the context of multi-level governance. Then, after presenting our methodology and case study context of Vitoria-Gasteiz, we analyze the dilemmas of multi-level governance for local democratic climate action focusing, first, on how civic-participation, inclusion, and equity are operationalized in two urban naturalization projects under the NGEU and the national recovery and resilience plan (henceforward: RRP) framework. Second, we shed light on MAEF as a possible poisoned gift for local democratic governance. Lastly, we discuss our findings and call for a bricolage approach for funding allowing for transparent and participatory processes.

4.2. Advancing urban climate action through multi-level governance and finance

4.2.1. Multi-level climate finance and the issue of achieving urban equity.

In the context of climate urbanism (Long and Rice, 2019), multi-level governance has shifted over the last few decades from hierarchical, top-down towards more horizontal and nested models, constituted by new networks of transnational and private actors (Bulkeley, 2005; Nielsen and Papin, 2021). This has seemingly attributed a higher degree of agency to

municipalities to materialize locally innovative responses to the climate crisis (Castán Broto, 2017). In this context, new forms of climate finance associated with projects falling under the broad umbrella of low-carbon transitions have allowed public agencies to advance projects difficult to finance through conventional public funding (Robin, 2022; Bracking and Leffel, 2021). Private climate finance increasingly offers public (credit-worthy) administrations access to financial markets by turning urban climate interventions into an investment asset for mostly private capital (Jones et al., 2020).

By the same token, embedding public climate governance into private capital markets enables private investors to take advantage of rather minimal efforts undertaken to combat climate change (Long, 2021). Urban climate projects, whose objective is to increase societal resilience against the climate crisis, are thereby being applied a logic of financial capture, which furthers an economic growth narrative of climate urbanism while hindering socially orientated actions that tackle socio-ecological injustices accelerated through enduring market logics (García-Lamarca et al., 2022; Hilbrandt and Grafe, 2022). Local climate action projects become then decontextualized, with the requirements of financial investors being prioritized over those resulting from needs of local communities (Aalbers, 2020).

In this context, an increasing body of literature focuses on so-called green bonds (Bracking, 2019), a debt instrument that offers both low interest rates to the borrower, e.g., municipalities, and risk averse investments, yet low return rates to the lender (Long 2021; Jones et al. 2020). Projects financed through green bonds must be labelled as "green", either self-certified or relying on transnational certification schemes (Hilbrandt and Grubbauer, 2020). However, recent studies have shown that financed green interventions, contrary to their initial ambition to enable novel projects through daring investments, employ a business-as-usual "flashy" approach, paving the way for the greenwashing of conventional projects (García-Lamarca and Ullström, 2022; Jones et al., 2020).

In practice, the disbursement of multi-level (private) financial tools is globally unequally distributed, as they require cities to be credit-worthy which complicates access for especially Global South municipalities (Bigger and Webber, 2021; Robin and Castán Broto, 2020). They have also been shown to reinforce socio-economic exclusion within spatial boundaries of those cities successfully attracting private capital. For example, Christophers (2018) and Bigger and Millington (2020) found that drawing on green bond finance for novel transit and water infrastructures projects in Washington D.C., New York, or Cape Town has increased the burden of already vulnerable communities facing higher rates of public services through the need to produce financial returns for green bond investors. Such burdens call for the

democratization of multi-level financing and governance processes, based on the values of transparency, accountability, and equitable and inclusive participation (Schalatek, 2012).

4.2.2. NextGenerationEU funds in the context of multi-level governance and finance

The operationalization of NGEU differs from other conventional European multi-level funding schemes (e.g., EU Horizon, URBACT, or LIFE), by its significantly larger volume in form of a one-time payment, their strict timelines in the context of the covid-19-pandemic and by decisions over project selection being highly political and strategic across policy scales (Crescenzi et al., 2021). With a budget of over 800 billion Euros, 723.5 billion Euros are being directly disbursed to EU member states (EC, 2023a). To be eligible for NGEU funds, by April 2021 each member state had to present a national RRP laying out pathways for an (economic) recovery from the pandemic. A minimum of 37% of each national RRP's budget had to be dedicated to "green" projects and another 33% to the digital transition. Plans were ideally to be developed in collaboration with relevant sectors and contain actions with a final completion date of December 2026 and an overall aim for social and territorial cohesion and gender equality. In short, NGEU funds were sold as a win-win-win situation "to boost jobs and growth, the resilience of our societies, and the health of our environment." (EC, 2020). To finance NGEU, the European Commission became the largest issuer of green bonds aiming for a volume of up to 250 billion Euros dedicated to projects of the national RRPs' green components with measures "compatible with internationally accepted social and environmental principles" (DG Budget, 2022).

NGEU works under a vertical multi-level structure (Kern and Bulkeley, 2009). Member states are the official recipients of funds, yet they are then distributed according to the national RRPs to the regional and local scales, both to public and private sectors. To ensure efficient implementation and alignment of project goals with cross-territorial agendas, recipients must follow strict reporting, evaluation, and timeline guidelines (Dawidowicz et al., 2023). Some perceive this process as reinforcing neoliberal and technocratic governance dynamics since standardized project reporting consolidates institutional and private actors as evaluators and authority. In this process, project credibility is depending on market mechanisms; thus legitimizing a top-down governance approach (Bracking and Leffel, 2021; Hilbrandt and Grafe, 2022; Hilbrandt and Grubbauer, 2020).

In the case of Spain, the total of NGEU funds are distributed across ten policy levers divided in 30 components. Although municipalities are anchoring European green and digital strategies on the ground, once projects are executed locally, national level agencies are responsible for the adherence of local projects to European goals (Spanish Government,

2021). So far, the impact of NGEU on local governance is only comparable to the 2009-2011 Spanish Plan-E (Spanish Economic and Employment Stimulus Plan), the governmental response to the 2008 financial crisis, which included the transfer of 8 billion Euros to Spanish municipalities to fight unemployment and increase infrastructure planning in a context of otherwise European austerity politics. Plan-E hence represented an unpredictable cascade of funds for cities as a free pass for any kind of project, yet also allowing for misuses of funds as evaluation processes were lacking (Carozzi and Repetto, 2019; Montolio, 2018).

4.3. Data and methods

4.3.1. Data collection and analysis

First, we draw on data from 14 semi-structured interviews with Vitoria-Gasteiz' key informants, i.e., decision-makers, urban planners, and representatives of neighborhood associations with a history of involvement in local governance to explore the conflicting values being expressed in multi-level financial governance operations. Interviews in Spanish lasted between 40 and 60 minutes, were conducted between March and June 2023, audio-recorded, and transcribed. Second, we also conducted participant observations at six public events between 2022 and 2023, such as participatory and informatory sessions regarding both naturalization projects, city-hall organized conferences about their long-term green vision and the 2023 European Conference of Mayors in Brussels.

Last, interviews and participant observation were further complemented by document analysis, including policy documents on the city, regional, national, and European scale regarding the multi-level execution of NGEU funds and archival data surrounding the two urban naturalization projects. These three data sources were analyzed in Nvivo and triangulated using thematic clustering around the different project phases, values of governance across policy scales, e.g., efficiency, participation, green innovation/experimentation, or economic growth, narratives of greening, and relationships between stakeholders.

4.3.2. Case study context

Following the 2012 European Green Capital Award, Vitoria-Gasteiz has successfully attracted competitive European funding, including, among others, EU Horizon, Life+, and Interreg, that helped finance small-scale green infrastructure and mobility interventions. In addition, recent MAEF have enabled large-scale urban transformations. For example, following the Spanish Plan-E, the municipality could finance a complete redesign of the public transport network through a comprehensive participatory process, and the pilot flagship superblock (with a cost

of five million Euros). Fifteen years later, NGEU funds are expected to have a similar impact, as the city has secured funds for multiple projects, such as the implementation of low-emission zones and pedestrianized areas, and the digitalization of the parking system.

Here we focus on two NGEU-funded projects following the same objective of greening public space yet are administered under different components of the Spanish RRP. The Los Herrán Street project aims for the naturalization of a main urban traffic axis and falls under the Spanish RRP' second policy lever of resilient infrastructures and ecosystems and its component #4 of ecosystems conservation and restauration. The Old Town's naturalization project through micro-greening interventions belongs to the fifth policy lever of modernizing and digitalizing Spanish industries and its component #14 targeting specifically the competitiveness of the tourism sector.

Both projects are in neighborhoods with fewer greenspaces and lower ecological quality compared to the rest of the city (Aznarez et al., 2023) and were already envisioned in the city's 2014 Urban Green Infrastructure Proposal (original: documento de propuesta de la infraestructura verde urbana de Vitoria-Gasteiz, henceforward: UGIP) as part of an inner-city green belt and broader network of green corridors. The UGIP builds upon an inclusive governance approach, "requiring a consensus on [project] need and associated benefits" through shared information, raised awareness, and widespread citizen participation as for design and implementation (UGIP 2014). Of great importance is further the alignment of local green infrastructure projects with European objectives of increasing biodiversity and climate change adaptation (Marañón, 2020).

4.4. The Dilemmas of multi-level governance for local democratic climate action

Our analysis of the use and deployment of these funds in Vitoria-Gasteiz reveals the dilemmas of multi-level governance for building climate action in ways that can further local democratic practices.

In a first subsection, we zoom on two projects where civic participation, inclusion, and equity are challenged by the nature of NGEU funds mobilized for the projects and the conflicting visions of green embedded in the projects. We use these three components of democratic local governance as our analytical lens to examine how institutional visions associated with a shallow meaning of green (i.e., investing in aesthetic green elements) and with an economic growth paradigm contrast with a vision of deeper socio-green transformations such as the retrofitting of low-quality housing and access to health services.

Here we refer to *civic participation* as a process of involving non-institutional actors, e.g., neighborhood residents and collectives, throughout the different phases of a given urban climate project, and of co-governance of the projects and associated plans (McClymont, 2018). *Inclusion* refers to the recognition of intersecting needs of urban residents in the design of the projects, with specific emphasis on those that are historically marginalized in planning processes (Amorim-Maia et al., 2023; Calderón-Argelich et al. 2023) and to the plural meanings and visions linked to a green city (Neidig et al., 2023). Lastly, *equity* refers to the justice components of the projects and the ways in which the projects consider broader socioeconomic needs and exclusion of urban residents (Anguelovski et al., 2019).

In the following, we first present for both naturalization interventions a project description and their multi-level operationalization within the NGEU and RRP framework (table 1). We then show the main findings regarding the impacts of a multi-level governance approach and specifically MAEF on civic participation, inclusion, and equity in local governance. Section 4.2 then deepens the analysis into the tensions of those funds and democratic governance focusing on the need for efficient funding bricolages and for transparent justification of local climate projects goals.

4.4.1. The challenge of civic-participation, inclusion, and equity in multi-level ad-hoc emergency funds

Table 4.i. Summary of projects' multi-level operationalization

NATURALIZATION OF LOS HERRÁN NATURALIZATION OF OLD TOWN

		STREET	
NATIONAL SCALE	National RRP	Policy lever #2:	Policy lever #5:
	component	Resilient Infrastructures & Ecosystems	Modernization & digitization of the industrial fabric and small and medium enterprises, recovery of tourism & promotion of an entrepreneurial Spain
		Component #4:	Component #14:
		Conservation & restauration of ecosystems and their biodiversity	Plan for the modernization & competitiveness of the tourism sector
	Selection,	Fundación Biodiversidad	Department of Tourism, Commerce and
	administration, & evaluation of	(under the Spanish Ministry of Ecological Transition and the	Consume of the Basque Government;
	funded projects	Demographic Challenge)	Final decision by Spanish Ministry of Industries, Commerce and Tourism
	Objective of RRP component	To increase urban green infrastructure, through actions to restore ecosystems, reduce habitat fragmentation, and promote connectivity in municipalities with over 50.000 residents.	To build a modernized and more competitive tourism sector through its greening and digitalizing
	Application process	Next to project proposal, municipalities had to present:	Presentation of PSTD by local entities, co-developed by national, regional, and

LOCAL SCALE		 An environmental impact assessment, A long-term urban green strategy (e.g., green infrastructure, mobility, or sustainability plan) A project-specific strategy for governance & participation, for communication & awareness-raising, for indicator measurement & monitoring. 	local administrations and local private actors. Two evaluation rounds: - first by the respective regional ministry, - second by the national ministry to assure alignment of local plans with the regional and national tourism strategies
	Objective of local project	 To strengthen climate change adaptation goals, To ensure the economic revival of adjacent empty commercial spaces, To create inclusive greenspace while reducing inner-city traffic and related emissions 	 To add aesthetic value, To enhance tourism, To enhance ecological connectivity, To strengthen social cohesion
	Financial contributions of NGEU to project implementation	the project has projected costs of a total of 13.5 Mio € of which around 1.9 Mio € will be financed through NGEU funds (announced in July 2022);	Two rounds of NGEU funds: 2.8Mio € for the 1 st phase of the PSTD (announced in December 2021) of which 355.000 Euros are dedicated to the naturalization of the Old Town 2.59 Mio € for the 2 nd phase of the PSTD (announced December 2022)
	Project component:	 Mobility transformations (via traffic calming, pedestrianization, and prioritization of bike and public transport), Urban green infrastructures (multi-use park with nature-based play equipment, small forest & water areas, urban gardens & green corridors, recovery of an underlying stream for rainwater drainage and cooling system in heat waves) 	Naturalization of the Old Town's emblematic narrow streets and squares through small-scale interventions (given the lack of largest available space) - Green facades and roofs - Pocket parks - Green furniture (planted pots or trees) - Improvements to existing greenspaces though co-design and co-management by municipal technicians & neighborhood residents

4.4.1.1. Case 1. Naturalization of Los Herrán Street

Project Context

Los Herrán Street is one of the city's major South-North traffic axes. The project entails several green interventions, including mobility transformations (via traffic calming, pedestrianization, and prioritization of bike and public transport), and the implementation of urban green infrastructures (e.g., a multi-use park with play equipment, small forest and water areas, the creation of urban gardens and green corridors and the recovery of an underlying stream for rainwater drainage and cooling system in heat waves). The project is framed in terms of climate change adaptation, economic revival of local commerce, and the provision of inclusive

greenspaces by reducing inner-city traffic and associated emissions (city-hall Vitoria-Gasteiz, 2022b).

Projects under the RRP's second policy lever of resilient infrastructures and ecosystems fall under the Spanish Ministry of Ecological Transition and Demographic Challenge that transferred the management of urban naturalization and resilience projects to the governmental Fundación Biodiversidad (English: Biodiversity Foundation, henceforward: FB). FB is responsible for project selection, administration, and compliance of funded projects aiming to increase urban green infrastructure, through ecosystem restoration and reduction of habitat fragmentation, through a coherent way of understanding the urban environment across the national territory (BOE 2021). Recipient administrations are encouraged to take charge of most project components inhouse, especially the implementation of a participatory process.

Figure 4.i. left: informatory stand presenting the project in the Los Herrán Street, right: the campos negros, (eng: black fields) with their current use as basketball fields, to be transformed (photos by the authors, May 2023)





Civic participation, equity, and inclusion

Early drafts of the Los Herrán Street project first appeared in the city's flagship green strategies, including the 2006 Sustainable Mobility and Public Space Plan which proposed a city-wide implementation of "superblocks". The project then became more specific under the 2011-2015 municipal government (led by the Spanish conservative Partido Popular) yet did not move forward due to the incapacity of securing funding. Only in July 2022, the broader public, including the government's opposition parties, became aware of the detailed project. The institutional narrative of the project of the then-leading conservative Basque Nationalist Party (PNV) strongly marketed its European dimension and NGEU funding as an opportunity to become a "European supercity" (city-hall Vitoria-Gasteiz, 2022a).

The Los Herrán Street project remains limited in its *civic participation* components. Our analysis of archival data and interviews reveals that, coinciding with the municipal elections, that PNV used its campaign to announce the NGEU funding mechanisms and unravel the project in a quite centralized manner. The then-mayor and councilor participated in street actions (Photo 1), an information session for the broader public (attended by around 200 neighbors), and a workshop with neighborhood schools. This process was accompanied by street surveys among residents to gauge the public opinion around the project -- 68% of respondents were seemingly in favor, -- and to collect "suggestions and complaints" (Interview 6, city-council). While members of the city-council confirmed in interviews the importance of an informatory "participatory" process, they also stated that at times participation risks going against climate mitigation goals -- an inherent contradiction to funding conditions put forward by the FB and the RPP.

"The project is more or less defined; there can be limited participation, but most things will be like in the proposal. Some may say [the politicians] ignore participation. But you cannot start to listen to everyone who tells you they want to drive their car inside the city, they want this and that, you must be brave and say we know, this is good for the city, this comes from an analyzed strategy confirming it will be positive. Even if they complain, we must move forward. (Interview 6, 2023, city-council)

While other projects of this scale usually draw on cross-departmental collaboration, this project has exclusively been dealt with by the then-Mayor's communication office. In just a few months, contracts worth 12M Euros were signed by August 2023, to be executed within 20 months (city-hall Vitoria-Gasteiz, 2023). The centralized governance approach, absent of both communication leading up the project announcement and of citizens' involvement in project designing, produced internal criticism of technical staff and opposition parties. Overall, however, the project outcome was not rejected by the municipal opposition, which highlights that greening tends to be a rather consensual post-political vision in local politics (Neidig et al.., 2022):

"Before you announce it to the press, you can inform that there may be a project like this, even if you don't give all the details. But, well, there has been nothing (...). We would have liked to be involved and participate from the beginning and not have learned about it from the media. (...) The neighborhoods (...) also heard about it through the media. Yes, there have been street actions to explain the project, a few information sessions, but this is not enough. There must be meetings with the neighborhood to, together with them, propose the best options. Because if not, what can occur is resistance to this type of project and we are talking about something very crucial as fighting climate change." (Interview 8, city-hall)

From a *social equity* standpoint, our analysis reveals that the project does not entail any clear measure to address socio-economic exclusion, especially the needed rehabilitation of poor building stock and of a center for elderly residents, which many of the active neighborhood collectives see as a funding priority (Interviews 1, 11, neighborhood associations). Los Herrán Streets is a traffic axis crossing several of the city's mainly working-class neighborhoods developed in the 1950-60s. Many of the housing stock in adjacent neighborhoods are classified as "degraded" due to problems of heat insulation, humidity, and accessibility. Those neighborhoods are characterized by an aging population, high unemployment rates compared to the rest of the city, and a lack of retail options (Ensanche 21, 2018).

Despite residents' overall support for improving Los Herrán Street, civic critiques are especially framed around *inclusion*, that is the lack of consultation and consideration of residents' specific intersecting needs and identity. This is further manifested in a petition initiated in September 2023 by the city's first league Basketball club to preserve the *campos negros* (Photo 1), the black fields, an asphalted area being used by local, Latino and Pakistani communities to play basketball, cricket, or soccer. Here, different ideas of inclusion are clashing as the municipal planners envision a modern park in place of the degraded space, allowing for gender inclusivity and multi-uses, yet are overrunning the neighborhood historic place attachment. A member of the adjacent neighborhood association explains:

"The campos negros usually gather immigrants, but also students from the adjacent schools, who in their free time go there to play basketball and soccer. Then there is usually a South American group that plays a lot during the weekends, and people of Pakistani origin who play cricket. It is a place that is used by all the people. We have no idea what they want to do it, it seems they want to make it green, but with artificial grass. (...) And then, they don't want to put games that are competitive. Please, it's a big enough place so that all the people can be there, playing volleyball, cricket, people playing..." (Interview 1, neighborhood association)

4.4.1.2. Case 2: Naturalization of the Old Town

Project Context

The Old Town's naturalization is one of several interventions under Vitoria-Gasteiz' Tourism Sustainability Plan at Destination (in Spanish: Plan de Sostenibilidad Turistica en Destino, henceforward: PSTD) developed under the RRP. It includes the naturalization of the Old Town's emblematic narrow streets and squares through small-scale interventions such as green facades and roofs, pocket parks, green furniture (planted pots or trees), and improvements to existing greenspaces (CEA, 2022) (Photo 2). They aim for added aesthetic

value, enhanced ecological connectivity, and social cohesion, building upon a long-term process of space co-design and -management together with municipal technicians and neighborhood residents.

Figure 4.ii.: left and middle: project visualizations and branding of the Old Town project by the CEA and architects (from CEA & Paisaje Trasversal, 2022); right: one of the narrow Old Town streets as possible space for small-scale greening interventions. (photo by the author, June 2022)







Projects under the RRP's fifth policy lever belong to the Spanish Ministry of Industries, Commerce and Tourism that then allocates funds to the 17 regional ministries of tourism and local recipient entities. The objective is to generate a competitive green and digital tourism sector by involving private actors and by naturalization initiatives contributing to the sectors' economic growth. Special attention is further attributed to the administrative requirements of evaluating impacts of the local PSTD that helps generating "knowledge derived from the collection, analysis and interpretation of information, (...) and its effects on the tourism sector." (Spanish Ministry of Industries, Commerce and Tourism, 2023).

Civic participation, equity, and inclusion

The initiator of the Old Town's naturalization vision is the municipal environmental think-tank. the Environmental Studies Center (Spanish acronym: CEA). CEA's budgets are approved by the city-council, making it an institutional actor in the eyes of residents. Founded in 1986, the center has been the driving force behind most of the city's green initiatives, which has guaranteed local-to-international recognition and support across political parties (Neidig et al., 2022). Our analysis of interviews reveals that, prior to securing budget, CEA started in 2020 to work on the Old Town greening, envisioning a process of project co-design and co-

maintenance together with neighborhood residents. The first project presentation to the city-council received positive support across all political actors:

"The reception was very good. (...) All the political parties told us: "it will be an ambitious project, but start doing things, even if you fail". In other words, everybody thought that it is very difficult, that we are going to make many mistakes, but that we should start to intervene." (Interview 5, CEA)

The project's objectives fit well within the overall institutional greening discourse focusing on the value of greening through progressive urban experimentation (Neidig et al., 2022), in this case a new form of micro-landscaping within a constrained historic morphology. Nonetheless, the city-hall has thus far only minimally communicated the project to the broader public, especially in relation to the NGEU funds financing it.

The *civic participation* aspect of the project has so far been limited in scope and attendance success. In June 2022, after a first diagnosis of possible small-scale interventions by an external architecture studio, the CEA and the architects organized two participatory workshops to start building trust with neighbors (fieldnotes by the authors, interviews 4,5,9). However, despite located in a neighborhood with an established social fabric and tradition of activism, those workshops were poorly attended, with only six non-institutional participants in the first and ten in the second workshop. As part of the workshop, the organizers admitted that the project budget had yet to be approved even though NGEU tourism funds were already available (fieldnotes by the authors, interviews 4, 5). Since then, CEA has been planning campaigns to raise awareness, encourage citizen participation, and strengthen ties between all actors emphasizing the collaborative and process-orientated nature of the project. Yet, specific actions remain quite poor in impact, including initiatives such as a neighborhood competition of "greenest balconies", for which plants, pots, and growing instructions are being gifted to residents.

Similarly, to the Los Herrán Street project, the greening of the Old Town is entirely focused on a limited definition of green interventions and a negligence of deeper *social equity* goals. The neighborhood faces issues of poor housing quality, energy poverty, and accessibility. While many of the neighborhood's Southern residential buildings have been upgraded, often through a process of early gentrification, the Old Town's North remains degraded, with a high percentage of lower-income foreign-born residents living in social vulnerability. In response, civic activism is directed against city-hall strategies that seemingly focus on the economic revival of the zone yet neglect urgent issues around the poor quality of especially immigrant families' homes and of neighborhood health services.

There have always been tensions with the city-council, because they have always been more concerned about the neighborhood's image than about actual needs of the residents, which are housing, the very old health center ... (...) So, they started proposing rehabilitation projects, but ignored our social needs of many years. There was a lot of networking of different local groups to denounce this and to create alternatives. A platform was created by all the collectives and a very large diagnosis of the social needs was made. (...) In that sense, it is a very rich neighborhood with a powerful and vindictive neighborhood association (...) (interview 9, neighborhood association, 2023)

Neighborhood activists are framing a counter-green and -touristification discourse that prioritizes practices of *inclusion* of residents' needs emphasizing the social cohesion, social organization, and identity of the neighborhood and its residents. They further denounce the institutional focus on the economic re-valuation of its territory as a tourism site that centers around a beautification and museumification of the historic fabric. Their mistrust towards institutional actors and processes is reflected in the poor attendance of the workshops initiated by CEA, especially lacking participation of the Old Town's foreign-born residents. During those sessions, residents expressed that they "did not want another botanical garden nor touristic attraction park" (fieldnotes by the authors) driven by a green aesthetic.

This lack of confidence has recently intensified through a bottom-up initiative of several collectives to create a playground co-designed with children on a former Old Town parking lot (Interview 9). Looking for funding, the neighborhood participated with the project in the annual city-wide contest, through which all residents could vote for one project submitted by residents and collectives. The project known in Basque as "Haurren Auzoa" (kids's neighborhood) won the contest in 2018 and was meant to receive municipal budget which created a dependency on the city-hall for its execution. With this institutional involvement, the initiative became instrumentalized by the city-hall starting to market a bottom-up project aiming for children-inclusive planning around its vision of an economic revival of the zone, furthering the sentiment of residents of a lacking inclusion of the neighborhood's social needs and resulting self-organized bottom-up initiatives. An interviewee from the neighborhood association explains:

"At that time more things happened, the [city-hall] decided to prioritize other projects and told us there was no money. Then came the pandemic. In the meantime, the PNV also brought it up in the media as the star project for the Old Town's revitalization. We were very angry, it's not a project within the city's rehabilitation plan. This is a project that arose from the neighborhood's needs. (..). Then they also presented the project in some NextGeneration grants to promote sustainable tourism, and we were like, what do you mean, to promote sustainable tourism? Without asking us, they used our documents for the application. The

park is now done and very nice, it is used a lot, (...) that part is fulfilled, but the process of the city-hall was a disaster." (interview 9, neighborhood association, 2023)

Overall, the project has two contradicting goals around local governance: on the one hand, NGEU funds focus on the economic growth of the tourism sector, in which the naturalization contributes to a beautification of the historic neighborhood which ultimately is expected to translate into an economic re-valuation. On the other hand, the naturalization through its envisioned slow participatory process is expected to enhance environmental awareness, quality of life for residents, and social cohesion across neighbors and collectives. Yet, residents are contesting in a collaborative and organized effort the city-hall's touristification of the city's emblematic historic center, thus feeling forced to leave the environmental benefits of the project aside.

4.4.2. The poisoned gift of receiving multi-level ad-hoc emergency funds for local democratic governance?

Drawing on this analysis, we focus here on the tensions expressed by local planners and technicians between a) a municipal need and position to have to deploy an efficient funding bricolage that may hinder a co-produced urban climate project and b) a need for transparent justification by institutional actors to ensure residents' support for project implementation.

First, as NGEU funds are being disbursed, local governments find themselves trapped between multi-level climate funding's requirements and compromising localized visions of a "slow-er" governance that would prioritize democratic climate action. The city's political and technical leaders share their dependence on NGEU funds and a need to harness their capacity to obtain them, even when projects might first be unpopular, also to achieve their ambitious climate goals.

"This is a strategy that comes from Europe. Europe is telling you what to do and how to do it (...). It is an opportunity for us, otherwise our rate of investment would have been much worse, we would not have enough money to invest. As small local entity, we must always be connected to higher institutions that give you sufficient funding." (interview 6, city-council, 2023)

"They are saying the NGEU funds are for politicians to show off. The projects that we have done are sometimes unpopular. But of course, when Europe gives you money, you must take advantage of it. You don't know if it is going to benefit or harm you, but you must do it." (interview 7, city-council, 2023)

In practice, access to MAEF such as NGEU is facilitated by municipal agencies already having strategies and project proposals ready to be pulled out for calls with short application timelines. The structure of this multi-level funding environment increases an already existing gap in access to formal funding sources between cities with a lower economic and technical capacity (and often more vulnerable to climate impacts) and those more greatly prepared to apply to funds (Knuth and Krishnan, 2021; Robin and Castán Broto, 2020). Although such new climate finance sources are praised for their ability to support projects otherwise difficult to fund, Vitoria-Gasteiz' planners do express that both projects would have nonetheless been funded in a matter of time, given the city's leadership role in climate urbanism: "When there are plans, it is easier to obtain financing. And we knew that the [Old Town] project was going to be funded. Then, NGEU appeared, and it is true that those who have something prepared, even if at the level of an idea, have it easier." Respondents further highlight the bricolage funding approach, by folding greening into tourism projects: "One of the NGEU is associated with tourism, it emphasizes the historic center, so that was a possibility for us to include our green infrastructure project" (interview 5, CEA).

Accessing MAEF, although an opportunity to materialize ambitious municipal climate goals, however, comes hence with the risk of being a poisoned gift for local democratic governance as its advantages for achieving local objectives may not be seen by residents. This challenges civic support for local project implementation and hence a successful outcome. In the interviews, local decisionmakers, that perceive cross-scale governance as a sign of progressive policymaking, expressed this dilemma of obtaining citizen support for schemes and project goals that might be ambitious for a city (climate-wise), but might not stand within residents' priorities (Photo 3).

"The local adaptation of this European discourse with its much more global vision is really complicated. You have to transmit it to the citizens, so they understand why we are doing things, that it is not an idea we have had overnight. Sometimes, we may have a discourse a bit closer to this European vision, we are brave. At a political level, being brave has the risk that you may lose. Adapting these objectives that Europe is transferring and trying to insert them in the city's culture with its complications that may arise during the project execution (...) can also be separating you. (interview 6, city-council, 2023)

Second, from a communications standpoint, there is a sense that attaching a European "identity" on to local climate projects might further disconnect residents from their municipal leaders, as in both projects examined here civic respondents criticize the project framings as responding to European priorities, exemplified by the municipal mention of becoming a

"European Supercity". The resulting civic contestation of selected projects hence stems from the lack of transparent communication when projects get disclosed, articulated, and justified, especially in the context of a municipal dependency on those multi-level funding schemes, as a neighborhood association highlights.

"If anything, you have to be honest and say "To get this money, we have to justify or do it this way." But at least, (...) make a proper communication, a channel of transparency, and tell this the collectives, ask: "How can do we do it?" It would already be perceived differently." (interview 9, neighborhood association)

Instead of clearly communicating funding requirements, our analysis shows that the city refers to the strict timelines and evaluation measures excusing the implementation of a fully transparent governance process. Consequently, local decisionmakers externalize the city's own agency and responsibility to higher scale institutional actors while partly contradicting RRP obligations and locally stated ambitions of participatory governance, such as put forward in its own UGIP. This lacking transparent communication by institutional actors most likely endangers a successful implementation of especially the Old Town project's vision of cogovernance.



Figure 4.iii: Marketing campaign of Vitoria-Gasteiz' city-hall announcing the city as "European Supercity" in Spanish and Euskera (photo by the authors, June 2023)

4.5. Discussion

In this paper, we analyzed the extent to which MAEF allow for the democratization of local governance prioritizing civic participation, inclusion, and equity of urban renaturing programs. We drew on qualitative data around two urban naturalization projects being currently

implemented under the NGEU framework in the city of Vitoria-Gasteiz. Our findings show that funding requirements diverge from locally envisioned values about governance with conflicted perspectives of participation, inclusion, and equity by civic and institutional actors. We argue that civic contestation of the projects' governance is driven by two contrasting approaches of operationalizing multi-level projects: a) a bricolage approach to assure success of applications for climate finance, and b) a resulting lack of transparent communication that determines civic perceptions of projects. We argue that MAEF hence constitute a poisoned gift for local democratic governance as there is an inherent contradiction between the technocratic European vertical multi-level financing structure transferring money from private financial markets to local climate action and its locally formulated aspiration of inclusion and civic participation.

The MAEF given their financial volume can allow for bolder experimentation in local project implementation. However, local democratic governance demands a slower rhythm than time frames embedded in such funds, especially if associated with civic participation which requires developing long-term trusting relationships between institutional and civic actors. This need for slow-er and market-detached processes clashes with investors' interests for financially capturing local climate action that ultimately favors "income over outcome" (Jones et al., 2020, p.54). It also clashes with the governance structure of MAEF with short application and implementation timelines that reinforces technocratic top-down processes through their required evaluations by technical experts, aiming for coherence across policy scales (Bracking and Leffel, 2021; Hilbrandt and Grubbauer, 2020). In sum, the administrative nature of MAEF leaves little space to deploy civic participation once funds are being disbursed, although it also highlights that the fact that municipalities had not conceptualized projects early on – before NGEU release – in a more inclusive manner.

To efficiently access MAEF, local decision-makers deploy an institutional bricolage approach to climate finance. They resort to drafted projects of local climate action that will be bit by bit realized as new adequate funding schemes appear. This dynamic hence benefits those municipalities with the already existing technical and economic capacity to prepare and advance climate action (Bigger and Millington, 2020). In consequence, planners and elected officials seem to prioritize narratives aligned across policy scales when preparing local projects, favoring economic growth over the inclusion of local needs formulated by residents (Aalbers, 2020). In the case of Vitoria-Gasteiz, planners' visions of inclusion clash with those of residents. Although both projects follow ideas of inclusive design of its greening elements, in form of gender-neutral and multi-use greenspaces or through a co-design of green

elements, the residents' demand a deeper understanding of inclusion that refers to locally situated priorities, needs, and place attachments.

We do acknowledge the presence of technical and political voices expressing a certain skepticism regarding civic participation in large-scale urban redevelopment projects in order to achieve *social equity goals*. We refer here to the risk of conservative groups contesting or even blocking ambitious climate action, such as a car-free city, through mobilizing against measure of traffic calming, as for example encountered in an urban mobility project in Quebec, Canada (see Scanu et al., 2019). That is, we believe that social equity through distributional justice benefits can still come out from non-participatory processes if they are pushed forward by progressive municipal governments to ensure the greening of historically overlooked areas is moving forward.

The case of the Los Herrán Street project may be scarce of participatory justice in form of *civic participation* yet contains a clear distributional justice dimension by enabling access to a high-quality greenspace and reducing the environmental burdens through traffic reductions for adjacent majorly working-class neighborhoods (Anguelovski et al. 2020). However, framing the project around "becoming a European supercity" and its (unsuccessful) instrumentalization for the municipal elections can thus be seen as a missed opportunity to communicate its strengths from a social equity perspective that include improvements of and accessibility to public greenspace in a historically neglected neighborhood and advances in climate change adaptation. The lack of a civic participation, however, also hinders advancing the *inclusion* of residents' intersecting needs and of greater *social equity* goals.

The Old Town project with its envisioned *civic participation* through co-governance could have the potential to resolve the historically grown relationship of mistrust between neighborhood residents and local institutional actors. This could be done through the *inclusion* of neighborhood's visions of green and through paying closer attention to more vulnerable residents by prioritizating neighborhoods' *social equity* needs in project design and implementation. The lack of transparent communication, however, is a missed opportunity to clearly demarcate these possible strengths of the project and its socially orientated nature through a slower governance process. Moreover, the bricolage approach to funding, here through NGEU tourism funds, may risk lacking civic support as the funds clearly formulate the economic growth goals through a greened local tourism sector. Although led by a technical entity with an intended detachment of project goals from local party politics, tensions are unlikely to be resolved under the current financing scheme. Transparent communication reasoning the funding scheme is key to assure residents' support and project success.

We have found that contestation of greening projects goes beyond their projected material outcomes of improving and greening degraded public space adhering to inclusive designs principles. Critiques are framed in a twofold way: the first one centers on governance processes with lacking transparent communication and civic participation that result in a perceived neglect of including local needs. We concur with Smeds and Acuto (2018) who argue for shifting focus on climate action from framing goals around socio-technical outcomes towards more-process oriented urban experimentation through co-governance. Real participation - before funds are announced and released, for example - could help making climate action a priority among residents by having their needs and voices heard and supporting them in taking ownership of project successes (Grabowski et al., 2019). Governance processes should be designed in a way that they acknowledge historically grown place-attachments and socio-economic exclusion. The second critique concerns the shallow institutional understanding of green, as both tackle the naturalization of public space in neighborhoods, that although lacking access to high-quality greenspace, moreover, require deeper socio-green interventions in the sense of an energy retrofitting of residential buildings and a better access to health services (García-Lamarca and Ullström, 2022).

Overall, striking the dependency of municipalities on MAEF to advance climate action, we argue that a bricolage approach still may be an efficient way to secure fundings while also allowing for the democratization of local climate action. Planners and decisionmakers excuse the lack of civic participation and inclusion with the strict timelines and requirements of MAEF, although participation, inclusion, and the consideration of social equity goals could have been realized much earlier, upstream. As both projects were envisioned and drafted before securing funding for their materialization, they had access to two indispensable resources: time and a technical entity dedicated to developing new strategies and projects. This puts Vitoria-Gasteiz with its unique environmental entity of the CEA in a rather privileged position compared to other European mid-sized cities, which also would have allowed them to develop comprehensive processes of civic participation and inclusion and bring them into the bricolage of climate action. That is, a bricolage approach to funding can then allow for a democratization of local climate action when it gives space to integrate shared principles and local needs with residents of necessary urban climate action at the European policy level.

4.6. Conclusion

As NGEU funds are a novel recovery instruments that is still underway, its exact impact on deeply greening and digitalizing local climate action remains to be seen. However, what becomes apparent in the two projects analyzed in this paper is that the formulation of NGEU

funds as put forward both by the EU and the Spanish RRP hence endanger local aspirations of implementing principles of democratic governance in urban renaturing programs. Being on the train of Europe, as Vitoria-Gasteiz' then-mayor claimed, hence comes as a trade-off for advancing local climate action, although Europe's train was less present before NGEU and greater attention could have been given to questions of civic participation and inclusion. We therefore call for future research closely examining the consequences of those trade-offs on social and environmental justice locally and for an evaluation of outcomes of implemented projects to understand the real extent of MAEF to realize local climate ambition, with a focus on smaller cities with less economic and technical capacity to develop a bricolage approach to funding.

4.7. References

- Aalbers, M.B., 2020. Financial geography III: The financialization of the city. Prog. Hum. Geogr. 44, 595–607. https://doi.org/10.1177/0309132519853922
- Amorim-Maia, A.T., Anguelovski, I., Chu, E., Connolly, J., 2022. Intersectional climate justice: A conceptual pathway for bridging adaptation planning, transformative action, and social equity. Urban Clim. 41, 101053. https://doi.org/10.1016/j.uclim.2021.101053
- Anguelovski, I., Connolly, J.J.T., Garcia-Lamarca, M., Cole, H., Pearsall, H., 2019. New scholarly pathways on green gentrification: What does the urban 'green turn' mean and where is it going? Prog. Hum. Geogr. 43, 1064–1086. https://doi.org/10.1177/0309132518803799
- Aznarez, C., Svenning, J., Pacheco, J.P., Kallesøe, F.H., Baró, F., Pascual, U., 2023. Luxury and legacy effects on urban biodiversity, vegetation cover and ecosystem services. npj Urban Sustain. https://doi.org/10.1038/s42949-023-00128-7
- Bigger, P., Millington, N., 2020. Getting soaked? Climate crisis, adaptation finance, and racialized austerity. Environ. Plan. E Nat. Sp. 3, 601–623. https://doi.org/10.1177/2514848619876539
- Bigger, P., Webber, S., 2021. Green Structural Adjustment in the World Bank's Resilient City. Ann. Am. Assoc. Geogr. 111, 36–51. https://doi.org/10.1080/24694452.2020.1749023
- Bracking, S., 2019. Financialisation, Climate Finance, and the Calculative Challenges of Managing Environmental Change 51, 709–729. https://doi.org/10.1111/anti.12510
- Bracking, S., Leffel, B., 2021. Climate finance governance: Fit for purpose? 1–18. https://doi.org/10.1002/wcc.709
- Bulkeley, H., 2005. Reconfiguring environmental governance: Towards a politics of scales and networks. Polit. Geogr. 24, 875–902. https://doi.org/10.1016/j.polgeo.2005.07.002
- Carozzi, F., Repetto, L., 2019. Distributive politics inside the city? The political economy of Spain's Plan E. Reg. Sci. Urban Econ. 75, 85–106. https://doi.org/10.1016/j.regsciurbeco.2019.02.002
- Castán Broto, V., 2017. Urban Governance and the Politics of Climate change. World Dev. 93, 1–15. https://doi.org/10.1016/j.worlddev.2016.12.031
- Causevic, A., Selvakkumaran, S., 2018. The role of multilateral climate funds in urban transitions between 1994 and 2014. J. Sustain. Financ. Invest. 0, 1–25. https://doi.org/10.1080/20430795.2018.1465769
- Calderón-Árgelich, A., Anguelovski, I., Connolly, J.J.T., Baró, F., 2023. Greening plans as (re)presentation of the city: Toward an inclusive and gender-sensitive approach to urban greenspaces. Urban For. Urban Green. 86. https://doi.org/10.1016/j.ufug.2023.127984
- Christophers, B., 2018. Risk capital: Urban political ecology and entanglements of financial and environmental risk in Washington, D.C. Environ. Plan. E Nat. Sp. 1, 144–164. https://doi.org/10.1177/2514848618770369
- Marañón, B. 2020. VITORIA-GASTEIZ GREEN CAPITAL: a HUMAN-SCALE city Sustainable Mobility and Urban Green Infrastructure, Environmental Studies Centre (Centro de Estudios Ambientales, CEA) of the Vitoria-Gasteiz City-Council
- City-hall Vitoria-Gasteiz (2022a). Más de 2 millones de fondos europeos para la reforma de Los Herrán. Press release 1st July 2023, https://blogs.vitoria-gasteiz.org/medios/2022/07/01/mas-de-2-millones-de-fondos-europeos-para-la-reforma-de-los-herran/, last accessed: 4th Oct 2023
- City-hall Vitoria-Gasteiz (2022b). Next Generation EU Proyectos concedidos VG:
 Naturalización de Los Herrán y su entorno 1ª Fase, https://www.vitoria-gasteiz.org/wb021/was/contenidoAction.do?idioma=en&uid=u_394194a9_1860b654c4a__7f7
 4. Last accessed: 4th Oct 2023
- City-hall Vitoria-Gasteiz (2023). Las obras para la reforma de Los Herrán comenzarán este otoño tras adjudicarse hoy el contrato. Press release, 3rd August 2023. https://blogs.vitoria-gasteiz.org/medios/2023/08/03/las-obras-para-la-reforma-de-los-herran-comenzaran-este-otono-tras-adjudicarse-hoy-el-contrato/, last accessed 4th Oct 2023
- Colenbrander, S., Dodman, D., Mitlin, D., Colenbrander, S., Dodman, D., 2017. Using climate finance to advance climate justice: the politics and practice of channelling resources to the local level of channelling resources to the local level. Clim. Policy 0, 1–14. https://doi.org/10.1080/14693062.2017.1388212
- Dawidowicz, A., Kulawiak, M., Ogryzek, M., 2023. Is it possible to create a unified urban greenery management system (UGMS) on a national scale? The concept for EU Member State of

- Poland, Environmental Science & Policy, Vol. 145, p73-92, https://doi.org/10.1016/j.envsci.2023.03.019.
- Crescenzi, R., Giua, M., Sonzogno, G.V., 2021. Mind the Covid-19 crisis: An evidence-based implementation of Next Generation EU. J. Policy Model. 43, 278–297. https://doi.org/10.1016/j.jpolmod.2021.03.002
- Garcia-Lamarca, M., Anguelovski, I., Cole, H., Connolly, J.J.T., Argüelles, L., Baró, F., Loveless, S., Pérez del Pulgar Frowein, C., Shokry, G., 2021. Urban green boosterism and city affordability: For whom is the 'branded' green city? Urban Stud. 58, 90–112. https://doi.org/10.1177/0042098019885330
- García-Lamarca, M., Anguelovski, I., Venner, K., 2022. Challenging the financial capture of urban greening. Nat. Commun. 1–4. https://doi.org/10.1038/s41467-022-34942-x
- García-Lamarca, M., Ullström, S., 2022. "Everyone wants this market to grow": The affective post-politics of municipal green bonds. Environ. Plan. E Nat. Sp. 5, 207–224. https://doi.org/10.1177/2514848620973708
- Grabowskia, Z., Klosc, Z., Monfredad, C. 2019. Enhancing urban resilience knowledge systems through experiential pluralism. Environmental Science and Policy 96 (2019) 70–76. https://doi.org/10.1016/j.envsci.2019.03.007
- Hilbrandt, H., Grafe, F., 2022. URBAN VISIONS OF GLOBAL CLIMATE FINANCE: Dispossessive Mechanisms of Futuring in the Making of Groy 896–905. https://doi.org/10.1111/1468-2427.13106
- Hilbrandt, H., Grubbauer, M., 2020. Standards and SSOs in the contested widening and deepening of financial markets: The arrival of Green Municipal Bonds in Mexico City. Environ. Plan. A 52, 1415–1433. https://doi.org/10.1177/0308518X20909391
- Jones, R., Baker, T., Huet, K., Murphy, L., Lewis, N., 2020. Treating ecological deficit with debt: The practical and political concerns with green bonds. Geoforum 114, 49–58. https://doi.org/10.1016/j.geoforum.2020.05.014
- Kern, K., 2019. Cities as leaders in EU multilevel climate governance: embedded upscaling of local experiments in Europe. Env. Polit. 28, 125–145. https://doi.org/10.1080/09644016.2019.1521979
- Kern, K., Bulkeley, H., 2009. Cities, Europeanization and multi-level governance: Governing climate change through transnational municipal networks. J. Common Mark. Stud. 47, 309–332. https://doi.org/10.1111/j.1468-5965.2009.00806.x
- Knuth, S., Krishnan, A., 2021. Climate Finance for Cities and Urban Governments. The British Academy, COP26 Briefings
- Long, J., 2021. Crisis Capitalism and Climate Finance: The Framing, Monetizing, and Orchestration of Resilience-Amidst-Crisis 9, 51–63. https://doi.org/10.17645/pag.v9i2.3739
- Long, J., Rice, J.L., 2019. From sustainable urbanism to climate urbanism. Urban Stud. 56, 992–1008. https://doi.org/10.1177/0042098018770846
- McClymont, K., 2019. Articulating virtue: Planning ethics within and beyond post politics. Plan. Theory 18, 282–299. https://doi.org/10.1177/1473095218773119
- Montolio, D., 2018. The effects of local infrastructure investment on crime. Labour Econ. 52, 210–230. https://doi.org/10.1016/j.labeco.2018.02.006
- Neidig, J., Anguelovski, I., Albaina, A., Pascual, U., 2022. "We are the Green Capital": Navigating the political and sustainability fix narratives of urban greening. Cities 131, 103999. https://doi.org/10.1016/j.cities.2022.103999
- Neidig, J., Anguelovski, I., Lliso, B., Pascual, U., 2023. Pluralizing environmental values for urban planning: How to uncover the diversity of imaginaries about socio-natures from Vitoria-Gasteiz (Basque Country, Spain). People Nat. 1–22. https://doi.org/10.1002/pan3.10506
- Nielsen, A.B., Papin, M., 2021. The hybrid governance of environmental transnational municipal networks: Lessons from 100 Resilient Cities. Environ. Plan. C Polit. Sp. 39, 667–685. https://doi.org/10.1177/2399654420945332
- Robin, E., 2022. Rethinking the geographies of finance for urban climate action. Trans. Inst. Br. Geogr. 47, 393–408. https://doi.org/10.1111/tran.12508
- Robin, E., Castán Broto, V., 2020. Towards a Postcolonial Perspective on Climate Urbanism. Int. J. Urban Reg. Res. 45, 869–878. https://doi.org/10.1111/1468-2427.12981
- Scanu, E., Cloutier, G., Trudelle, C., 2021. Contesting the greening of the urban growth machine: Ecological modernization and the promethean counter-discourse. Environ. Plan. E Nat. Sp. 4, 1369–1388. https://doi.org/10.1177/2514848620952326

- Schalatek, L., 2012. Democratizing climate finance governance and the public funding of climate action. Democratization 19, 951–973. https://doi.org/10.1080/13510347.2012.709690
- Smeds, E., Acuto, M., 2018. Networking Cities after Paris: Weighing the Ambition of Urban Climate Change Experimentation Special Section Article 9, 549–559. https://doi.org/10.1111/1758-5899.12587
- Spanish Government (2021). Plan de recuperación, transformación y resiliencia. Gobierno de España Spanish Government (2022). Plan de modernización y competividad del sector turístico. June 2022 Spanish Ministry of Industries, Commerce and Tourism, 2023). ESTRATEGIA DE SOSTENIBILIDAD TURÍSTICA EN DESTINOS. Plan de Recuperación, Transformacióny Resiliencia. Versión revisada en Enero 2023.
- Westman, L.K., Castán Broto, V., Huang, P., 2019. Revisiting multi-level governance theory: Politics and innovation in the urban climate transition in Rizhao, China. Polit. Geogr. 70, 14–23. https://doi.org/10.1016/j.polgeo.2019.01.002

Chapter V. Discussion and conclusion

In the last chapter of this Ph.D. dissertation, I briefly summarize the key findings of each of the thesis' chapters, before I turn to an overall discussion of cross-cutting findings. This is followed by a discussion of the limitations of the research design and process and of possible future research avenues. Finally, I lay out various implications for urban policy and planning.

Using previous work in urban geography, critical urban studies, urban political ecology, and ecological economics as a starting point, the overall research structure followed the design of a single critical case study. I used the 250.000 resident city of Vitoria-Gasteiz, a European and international leader in the arena of green and sustainable policies as an illustrative example of a Global North mid-sized city deeply embedded in multi-level governance dynamics. I mobilized a multi-method approach of critical discourse analysis, grounded theory, and the semi-quantitative Q-methodology to examine the embodiment and resulting ramifications of a contemporary green city ideal in local urban governance.

With the contemporary green city ideal I have been referring to a global imaginary of a city characterized by a narrow focus on the implementation of smart, low-carbon, and nature-based infrastructures under a paradigm of sustainability and climate urbanism, operationalized through multi-level and technocratic governance processes and private climate finance, and under which nature is seen as instrumental to human well-being. Here, Swyngedouw's (1996) concept of socio-natures describing the complex and historic interdependencies, entanglements, and constellations of society and nature offered a conceptual pathway to explore challenges and opportunities for formulating and embedding an alternative green city ideal in local governance.

I developed a multi-scalar analysis, from the individual to the supranational, and at different moments in time. Through this approach, my thesis offers a contribution to, first, an understanding of the historic path dependencies across scales that help anchoring the green city ideal in local urban governance (Chapter II). Second, drawing on a framework of plural values about nature, I propose novel methodological and conceptual entry points that can help advance the green city ideal towards formulations of more inclusive, relational, and place-based notions of socio-natures put forward by urban residents (Chapter III). Third, I show through an analysis of urban naturalization projects financed through multi-level ad-hoc emergency funds that funding requirements strongly impact local democratic governance processes with conflicted perspectives of participation, inclusion, and equity by civic and institutional actors, which in turn challenges the implementation of locally situated socionatures in urban governance (Chapter IV).

These three focal points of analysis have allowed me to shed light on how imaginaries around the green city ideal are formulated in response to multi-scalar processes and discourses of sustainability, resilience, and nature. I have found that individual and community forms of socio-natures are contesting this process. I have also found that local decision-makers find themselves in a delicate dilemma situation, navigating multi-scales dynamics to attract needed financial resources that often (partly) contradict own local aspirations for a democratic green urban governance. These overall findings make me argue for a) the need for the implementation of a green city ideal recognizing the diverse and layered connections of local communities with nature and (b) the prioritization of social justice goals focused on situated and intersecting needs of residents over goals of economic ("green") growth.

5.1. Key results of individual studies

The results of the critical discourse analysis of the historic production of an urban green identity in the European mid-sized city of Vitoria-Gasteiz over four decades (**Chapter II**) show how greening at first developed into an urban strategy driven by an early good leadership that put social issues as a top priority in local governance. The analysis indicates that with increasing success of local greening interventions and the uptake of a global green growth discourse, greening policies experienced a discursive shift from a social good towards an economic opportunity driven by the vision of becoming an international green(ing) pioneer. I argue from this analysis that the local rationale for materializing a green city was characterized in the early 1980s by a vision of early progressive environmental innovation. This vision developed into a "political fix" generating a consensus-focused environmental political agenda in dire political conflict times. With increasing international prominence of the concept of sustainability starting from the 1990s, the rationale for local greening became then translated into a logic of a "sustainability fix" that emphasizes greening as a win-win for the economy and environment. The city's green ambition thus blunted from a deep green rationale into a shallower sustainability discourse prioritizing economic growth over social issues.

Overall, the Chapter II results point to three multi-scalar processes that enabled a shifting rationale of greening from a political to a sustainability fix. First, the findings highlight that the "(g)localization" and increasingly dominant multi-level approach of environmental policymaking, driven by transnational events, networks, and award schemes brought international discourses and financial pressures at the center of greening practice in Vitoria-Gasteiz, while simultaneously shifting both decision-making and discursive power towards new transnational and multi-level public and private actors. This in turn, helped consolidate the role of technical and political decisionmakers to advance urban greening experimentation, grounding technocratic and expert-driven approaches into urban governance. Second, while

the interdependencies with other scales of policymaking could potentially put pressure on local politicians to commit to higher environmental standards, it also enabled and significantly shaped shallow local framings around sustainability and urban greenery, turning green into a form of policy booster. Lastly, my findings reveal how the sustainability fix narrative has been underpinned by a widely accepted, uncontested and depoliticized understanding of greening whose meaning travelled from other places and policy scales to local governance processes. This chapter thus has shown that the creation of an urban green identity is not a singular process, but the result of shifting multi-scale dynamics over time. I hence accord with Angelo's (2019a, 2019b) and Long's (2016) emphasis on understanding the historic evolution of greening in different places in order to be able to better counteract the how and why of a possible reinforcement of injustices through the grounding of the contemporary green city ideal.

Chapter III zoomed then into the individual scale and urban residents themselves to elicit locally prevalent plural values and related imaginaries about urban socio-natures, drawing on the semi-quantitative Q-methodology. Results suggest that society-nature relationships of urban residents in Vitoria-Gasteiz do range from a deep relational bond with all living-beings towards more utilitarian/instrumental perceptions of the value of the manifold urban nature's contributions to residents. The four different perspectives exemplified by the Relationalist, the Green Citizen, the Green Individualist and the Precarious and Community-Driven Newcomer perspective thus illustrate that nature's contributions to people are rarely perceived as either purely instrumental or relational, or purely positive or negative contributions, but are characterized by multidirectional and deeply entangled socio-natural relationships. I also found an overall positive perception of nature and its contributions to people as participants overall responded positively to those statements expressing a direct instrumental and relational link between individuals and nature. However, each of the four perspectives found exhibits certain traits that distinguish them from each other. I consequently argue that each perspective requires distinct considerations in urban planning and governance processes, in order to frame policies around locally situated notions, needs, and knowledges that can value the diverse meanings and values of nature for urban residents.

Out of the four perspectives on society-nature relations elicited in this study, my results further suggest that the *Relationalists'* and *Green Citizens'* perspectives are those more aligned with dominating institutional greening discourses as they depict nature and its various contributions as purely positive. Nonetheless, I also point out that current instrumentally framed green city discourses tend to undermine the deep relational bonds that residents may hold with nature such as those exhibited by the *Relationalist* perspective. The *Green Citizen* perspective, in

contrast, is strongly mirroring the local political discourse of the "We are the green capital"-narrative identified in Chapter II. I conclude thus that green planners have strong supporters in order to materialize urban climate action.

Moreover, especially the *Green Individualist* and the *Precarious and Community-driven Newcomers*' formulated perspectives around socio-natures may require special attention in urban green governance processes. The two perspectives showed partly contradictory responses to community-related values about nature, which may limit the creation and deepening of social cohesion and a collective identity. The *Precarious and Community-driven Newcomer* perspective mirrors needs and understandings of urban greenery of historically marginalized groups in urban governance (Anguelovksi et al., 2020). This analysis allows me to also emphasize the importance of acknowledging the multiple needs and perspectives in respect to design, maintenance, and use of urban greenery as being crucial to support diverse residents in negotiating and contesting their ideal of the green city. I hence concur with other recent studies such as Tozer et al. (2020), Mansur et al. (2022), or Pineda-Pinto et al. (2022) for a careful and intersectional participatory approach by decisionmakers to visibilize these marginalized forms of socio-natures and to pay closer attention to the how and why of the formulation of anti-community values found in this study.

In **Chapter IV**, I examined the extent to which multi-level *ad-hoc* emergencies funds allow for the democratization of local governance prioritizing civic participation, inclusion, and equity of urban renaturing programs. I focused in this study on the operationalization and civic contestation of two urban naturalization projects being currently implemented under the NextGenerationEU framework in the case of Vitoria-Gasteiz. The main findings suggest that funding requirements diverge from locally envisioned values about governance and do cause conflicts among perspectives of civic and institutional actors of what concerns a governance based on participation, inclusion, and equity. The analysis allows me to argue that civic contestation of the two urban naturalization projects concerned mostly their governance process. The findings unravel two contrasting governance approaches to realize multi-level projects: a) a bricolage approach characterized by the little-by-little realization of long drafted projects as new opportunities of finance arise and b) a resulting lack of transparent communication.

In short, my findings indicate that multi-level emergency funds come in the form of a poisoned gift for local democratic governance. This is because municipalities, such as Vitoria-Gasteiz, on the one hand, show a strong dependency on those funds as well as multi-level governance processes to be able to materialize policies geared to necessary climate action. On the other hand, requirements of financing schemes leave little space to embed local meanings and

needs in relation to planned interventions in the local governance process. I have found in the two urban naturalization projects analyzed that although social equity goals in form of distributional justice of access to new created green spaces were being met, the multi-level governance process of both project implementations still challenged a more inclusive and participatory process. Formal requirements by the funding schemes were put forward as an excuse for a deeper inclusion of the neighborhoods' intersectional needs in the projects' design, especially given the neglect of genuine participatory processes.

In sum, I argue that there is an inherent contradiction between the technocratic European vertical multi-level financing structure translating private capital toward local project implementation and a locally formulated aspiration of inclusion and civic participation. The chosen approach by planners to secure funding, in form of a bricolage approach, however, could allow for a democratization of local climate action as projects are being drafted before funds are released; hence the lack of a clear timeline would allow for municipalities to realize a participatory process much earlier, upstream. This chapter is hence an important contribution to the emerging body of literature to urban climate finance by offering a novel case study of a highly understudied supranational ad-hoc emergency funding scheme. I show that its governance structure and broader framing embedded in a green growth narrative reinforce top-down and technocratic dynamics found in studies of urban private climate finance mechanism such as green bonds, with impacts on achieving social justice goals (see for example, Christophers, 2018; Hilbrandt and Grubbauer, 2020, Jones et al., 2020; Garcia-Lamarca and Ullström, 2022).

5.2. Cross-cutting results and contributions

Overall, the empirical focus and the single case study design of this Ph.D. dissertation offer an in-depth analysis of a mid-sized city deeply embedded in multi-scale discourses of sustainability and climate urbanism. Although the findings must be interpreted in their situated cultural, historic, and socio-economic context of Vitoria-Gasteiz, they give nonetheless valuable insights into how planners and decisionmakers in Global North mid-sized cities navigate the contradictions resulting from implementing and embodying the contemporary green city ideal. The dilemmas, challenges, and limitations local decisionmakers are facing in the specific context of Vitoria-Gasteiz serve as examples of how global discourses condition and can even largely determine local notions of the green city ideal across a diversity of actors. They also show how civic voices do contest established planning practices with demands for locally situated visions of a green city ideal building upon a more equitable, (nature-)inclusive, and participatory city making.

Each of the three empirical studies contributes in their own to the overarching goal of understanding the different processes, perspectives, and practices of the making of a green city ideal across scales. Based on the paradigmatic case study of the European Green Capital of Vitoria-Gasteiz, Chapter II shows that the local making of a green city ideal over time is a non-linear process. Instead, it reflects urban policy and planning responses to constantly changing constellations of transnational actors, networks and urbanism paradigms. Chapter III gives insights into the plural and multi-dimensional meanings that individuals attach to the notion of living in a "green city" and individual perspectives about urban nature beyond institutional discourses and instrumental imaginaries typically put forward by the political elite under the contemporary green city ideal. Chapter IV then sheds light on the specific ways of materializing a contemporary green city ideal through multi-level renaturing projects in which visions of democratic governance sharply differ between institutional and grass root (civic) actors. Cross-cutting findings of Chapter II and III have further been illustrated and disseminated for a non-scientific audience through a REVALUE CITIES video, that can be found here.

In the following, I trace the cross-cutting findings of the three standalone empirical studies and embed them in the broader literature presented in Chapter I, focusing on the democratic governance of the green city, on the construction of the green city ideal and its multi-level dimension and influences, and lastly, on the alternative visions of socio-natures, values, and the city.

5.2.1. The democratic governance of the inclusive green city

I embed this dissertation in the broad body of literature that discusses the impacts of current modes of governance and financing, and related broader discourses on ingrained goals of inclusive and democratic governance practices at the core of the green city ideal. The literature points here specifically to technocratic and top-down processes that may overrun intents for more bottom-up and participatory approaches by a strong focus on the provision of infrastructures, quantifiable standards, and a strict definition of who counts as an expert (see for example, Hilbrandt and Grubbauer, 2020; Cohen, 2020; Long and Rice, 2019; McCann, 2013).

The findings from this dissertation hence concur with this body of literature and give insights into how these technocratic processes unfold and are operationalized in concrete project implementation (Chapter IV). I have pointed towards a strong dependency of municipal authorities of mid-sized cities, such as Vitoria-Gasteiz, on multi-level finance to advance local environmental (e.g., climate) action. In order to attract much needed economic resources,

local goals have to be strongly aligned with internationally formulated requirements (Affolderbach et al, 2019). I argue then that the extent to which local actors can develop their own agency is hence limited. In this context, municipalities are experiencing multiple pressures resulting from a capitalist logic of global urbanism and increasing inter-urban competitiveness in order to be eligible for climate financing, exemplified by the need to meet internationally formulated standards, such as carbon emission goals (While et al, 2004; Nciri and Levenda, 2020).

In response to these strong dependencies, municipalities must develop strategies that enable them to compete for funding and international reputation. My results show how Vitoria-Gasteiz in this context uniquely created a bricolage approach that includes the drafting of projects and strategies before having secured funding for their realization. As different financing schemes are being released, projects will be materialized bit by bit. However, findings of Chapter IV have shown how this bricolage approach reinforces technocratic process, in which planners and decisionmakers develop what they deem adequate climate action in reference to international objectives, yet only marginally employ participatory and inclusive governance models to involve civic actors in the co-production of a locally situated green city ideal.

My results further contribute to the previous literature by showing how these technocratic processes became only slowly embedded in local governance over time (Chapter II). That is, I find that urban environmental governance in Vitoria-Gasteiz indeed was based on an approach of early democratic experimentation in a Spanish post-dictatorship context in the 1980s. However, the arrival of sustainable development as local planning strategy turned the city's governance into an increasingly post-political and neoliberal process of city-making aligned with international discourses starting in the early 2000s (Martí-Costa and Tomàs, 2017; While et al., 2004).

The results presented in Chapter II further exemplify the increasingly grounding of a bricolage approach over time. For example, the development of Vitoria-Gasteiz' 2006 sustainable mobility and public space plan with its proposed superblock model was one of the core urban strategies that catapulted Vitoria-Gasteiz in its international leader role. Its implementation however happened and is still happening, as little-by-little multi-level funding schemes are released. Although this plan has been designed with a real participatory process, the implementation of its specific projects follows a technocratic approach reinforced by multi-level structures, as became visible in the case of the renaturalization of Los Herrán street in Chapter IV.

I argue that a bricolage approach towards materializing urban climate action can indeed support the turn towards more inclusive and participatory governance approaches. That is, municipalities, whose technical and economic capacity is similar to the characteristics of Vitoria-Gasteiz, could employ early on real participatory processes before funds (with restricted timelines) are being released. Slower participatory processes that aim for trusting relationships between multiple institutional and civic actors could then guarantee that project design and implementation follow inclusive, intersectional, and just principles and assure their long-term civic support (Anguelovski et al. 2020, Amorim Maia et al, 2022, Calderón-Argelich et al., 2023).

While chapter II and IV are empirical contributions to understand challenges of a more democratic and inclusive urban governance, Chapter III offers a methodological approach as an opportunity for more inclusive framings of socio-natural urban governance. The application of the semi-quantitative Q-methodology hence follows the multiple calls for more inclusive methodological approaches to elicit plural meanings of socio-natures (IPBES, 2022; Arias-Arévalo et al., 2018; Tadaki et al., 2017; Pascual et al., 2023). Q-methodology here may be an step to advance policy-making towards the integration of locally situated plural meanings of socio-natures if participants are carefully selected to represent plural actors and perspectives and contain diverse forms of local knowledge. Being a normative approach by nature (Nielsen et al., 2019), the results of Chapter III's Q-methology draw on participants with diverse socio-economic profiles and give insights into for planners relevant notions of locally situated socio-natures. The findings from this study can then be used as a starting base to expand technocratic governance approaches towards those that include alternative forms of knowledge and multiple "non-expert" perspectives.

5.2.2. The construction of the green city ideal and its multi-level dimension and influences

Previous studies from critical urban planning, urban political ecology and urban geography strongly emphasize the cross-scales linkages, connections, and interdependencies that became strengthened and reinforced under shifting paradigms of sustainability and climate urbanism (Angelo, 2019a, Long and Rice, 2019). The broad body of literature on multi-level governance conceptualized then the global and local processes that enabled these strong multi-level entanglements of diverse transnational public and private actors (e.g., Bulkeley, 2005, Bulkeley and Bestill, 2005, Castán Broto, 2017). The multi-scalar approach to this dissertation's research design and analysis of data contributes to this body of literature by offering a strong empirical lens into how the contemporary green city ideal is being constructed across multiple levels of policymaking, yet materialized, contested, and negotiated locally in the European mid-sized illustrative case city of Vitoria-Gasteiz.

Scholars such Angelo (2019, 2021) or Long and Rice (2019), have identified a shifting meaning of nature driven by several processes happening simultaneously on the global scale, including the de-industrialization of many urban city centers and the neoliberalization of urban governance under a shifting paradigm from sustainability to climate urbanism, mainly in Global North discourses (Castán Broto and Robin, 2021). These processes have enabled the formulation, anchoring and implementation of a universal – in the sense of being the dominant paradigm in international environmental policymaking -- understanding of urban nature and broader socio-technical interventions as undoubtably desired solutions to many urban problems and challenges (Angelo and Wachsmuth, 2020).

However, the historic evolution of Vitoria-Gasteiz' greening discourse shows that its green city ideal does not neatly fall into the above-described global processes. The city experienced rather late an industrialization and a transition to a democracy; both processes were only fully unfolding by the late 1970s, at a time when many other Global North urban agglomerations already lived a shift to neoliberal city making (Long, 2016; Martí-Costa and Tomàs, 2017). In this initial phase of democratic governance, local planners and decisionmakers formulated a green city ideal that was much more advanced and progressive than its nowadays form as it prioritized local social and environmental issues and dedicated resources to the creation of an urban socio-natural community. It is only later that the active embodiment of the contemporary (neoliberal) green city ideal based on the implementation of smart, low-carbon, and nature-based infrastructures fully unfolded. My dissertation hence makes relevant contributions to the multi-level governance theorization and conceptualization by offering a nuanced and in-depth historic lens and a snapshot of current operationalization of the contemporary green city ideal in a specific social, political and economic context.

My analyses of both Chapter II and IV show that this embodiment of the contemporary green city ideal was only possible given the city's strong embeddedness in multi-level dynamics. With the winning of the European Green Capital award in 2012, the city officials noted the potential of Vitoria-Gasteiz' urban green policies, strategies, and initiatives as of becoming an urban booster to internationally brand an urban identity aligned with global discourses (Garcia-Lamarca et al., 2019; McCann, 2013). In the aftermath of this award, the city joined multiple transnational networks, alliances, and city missions, such as ICLEI, the C40, or the European mission of 100 climate-neutral cities, which in turned enabled an easier access to multi-level climate finance, for instance the NextGenerationEU funds, as results from Chapter IV have shown.

My findings further reinforce the importance of place-based formulations of climate action, socio-natures, and broader imaginaries around the green city ideal and open the debate of

how to re-territorialize power and authority over governance processes such as prevalent in Vitoria-Gasteiz' early democratic governance in the 1980s. The concept of glocalization (Swyngedouw, 2004) can serve here as an helpful analytical framework as it emphasizes the strong linkages and tensions between the local and global. The evolution of the urban governance in Vitoria-Gasteiz can hence be interpreted as the embodiment of glocalization processes, as the local institutional narratives of the green city ideal reacted to the reshuffling of multi-level governance structures. This consequently leads to the question of how the reshuffling of those structures can contribute to re-locate the discursive power to local actors to support the formulation of a locally situated green city ideal.

5.2.3. Socio-natures, values, and the city

The main empirical findings of this thesis help demonstrate that there are local and civic contestations of the green city ideal formulated in the local political agenda. For example, Chapter IV illustrates how these civic contestations are framed against the technocratic and top-down character of local governance processes and the lack of transparency in the implementation of local projects. Further, findings of both Chapters III and IV confirm that civic actors, collectives, and individuals, have, although diverging, much more complex and layered forms of socio-natures. The one-dimensional objectives -- as formulated around the two green infrastructure-based projects implemented under the NextGenerationEU funds -- focus merely on the adding of visible green elements that can address distributional inequities in access to nature. With this simplified framing of green goals, they undermine citizens' understandings of the green city with a strong justice dimension (including health and local intersectional needs in respect to public space). Moreover, chapter III offers interesting insights into the plural meanings attached to the idea of urban nature as articulated by a diversity of individuals across socio-demographic profiles and shows that residents develop nuanced notions of what constitutes their green city ideal, in which relations with nature are also highly relational and community-driven. However, these plural forms of socio-natures can also conflict with each other.

Based on these findings, I concur with the literature that disentangles the multiple forms of socio-natures in urban contexts and beyond and that calls for a closer attention to the where, how, by whom, and why of formulations of specific green city ideals (Kaika, 2017, Tozer et al., 2020). My findings have once more confirmed that urban residents increasingly contest these top-down and market-driven approaches and demand more transparent and inclusive governance processes that considers the diverse and entangled socio-natures. These findings are in line with previous empirical studies that draw attention to the counter-imaginaries, discourses, and strategies that emerge in contrast to a local institutional materialization of a

contemporary green city ideal and a related dominant formulation of instrumental socio-natural relations (Matheney et al., forthcoming; Oscilowicz et al., 2023, Anguelovski and Connolly, 2021, Scanu et al. 2021, Anguelovski, 2016).

Based on the findings of this Ph.D. dissertation, I ague that if the contrasting views between institutional and civic perspectives are not negotiated locally between all relevant actors, including institutional and political ones, as well as the diverse civic groups and individuals, a cross-scale formulated and technocratic implementation of the contemporary green city ideal can duly endanger much needed societal support for pro-environmental (e.g., climate) action in light of accelerating socio-ecological crisis. For this end, local governance processes need to shift from focusing on consensus politics toward an agonistic planning paradigm (McAuliffe and Rogers, 2019). This can be done by eliciting and integrating plural values about nature and their resulting locally situated understandings of socio-natures (Pascual et al., 2023).

5.3. Limitations and reflections on my research practice

As every research endeavor, this thesis also has several limitations. I used an empirical and grounded-theory approach of a single critical case study design. This focus on a single mid-sized city within a European context allowed me to dive deep into political, cultural, and social factors and the broader historic context that shape local imaginaries. However, this approach can also contribute to reinforcing the already unequal distribution of empirical and conceptual research with a major focus on Global North cities characterized by higher technical and financial capacities to face the socio-ecological crisis. I duly acknowledge that this focus on more privileged Western cities may challenge the development of truly decolonial and intersectional research and practice moving beyond mainstream Western narratives. It also may undermine alternative green city ideals arising from informal and more bottom-up approaches to urban governance and in less prominent contexts of the Global South. That is, the findings of this dissertation need to be interpreted in light of its contextual and situational elements. Hence, I do recognize that conclusions drawn from this research may not apply universally.

Second, the context of the covid-19 pandemic complicated the access to and relationship building with informal actors, such as neighborhood collectives, activist groups, or individual residents that given their care duties and ways of organization throughout the pandemic were more difficult to reach. That is, availability and willingness to participate in my research was much higher for institutional actors, that could dedicate time of their paid working hours to converse with me. This access to institutional actors was further facilitated by the research grant that enabled the development of this thesis as having been partly funded by the

Environmental Studies Center of Vitoria-Gasteiz. Although my initial research ideas were much more focused on civic notions of the green city ideal, this thesis developed embedded in the context of the pandemic into a rather institutional analysis and with that amplifying attention on those formal actors already holding most power in decision- and discourse-making processes.

Lastly, although I argue throughout the different chapters for the need for more participatory approaches in research and practice, I acknowledge that this thesis falls short from applying truly participatory methodologies of knowledge co-production with non-academic actors. Instead, I have applied a more traditional multi-method approach, including critical discourse analysis, grounded theory and the semi-quantitative Q-methodology drawing on ample data sources, such (semi-)structured interviews, surveys, q-sorts, participant observation field notes, policy documents and archival data. To really "co-produce" local forms of socio-natures, there is a need to deploy participatory action research with a specific focus on the inclusion of historically marginalized communities and of marginalized forms of knowledge in research design and implementation that then can inform policymaking.

5.4. Further Research

In the context of Global North urban literature, I have offered a novel focus by selecting a European mid-sized city that is neither post-industrial nor a bigger metropolitan area. However, given the long trajectory of greening that catapulted the city into an international leadership role, Vitoria-Gasteiz as a case city mirrors a rather privileged institutional context in which sufficient human, technical, and financial resources can be allocated to develop further projects and strategies. There is a need to understand how other mid-sized cities with a less prominent profile and fewer resources respond to multi-scalar (financial, governance, and environmental) processes and pressures to advance necessary climate action, both in the Global North and South. That is, future research could apply in-depth historic analyses of how and why urban green identities and discourse evolve embedded in local contexts of cities with very diverse socio-economic profiles.

Further, there is a need for exploring alternatives or counter-imaginaries to the contemporary green city ideal formulated by a vast diversity of actors, and especially of those outside of formal institutional processes. First, research could disentangle contestations of prevalent understandings of the green city of both conversative and progressive social groups. A clearer understanding of why certain groups contest climate action is needed to achieve transformative change to a more nature-positive society. Second, future research should also

examine what Robin and Castán Broto (2020) call "below-the-radar" climate action, that is, those practices and initiatives that happened beyond institutionalized processes and discourses. There is hence a need for carefully deployed post-colonial research approaches to elicit alternative socio-nature imaginaries in Global South urbanism.

Future research could also focus on dissect methodological pathways and processes of coproducing local and cross-territorial imaginaries about multiple forms of socio-nature that then can translate into political action. Close attention should here be paid to the how, why and with whom of co-production processes to avoid the reproduction of unequal power dynamics (Turnhout et al., 2020). These approaches could also help to shed light on possible pathways of reframing urban governance driven by a consensus politics towards one of agonistic planning.

5.5. Implication for urban policy and planning/policy recommendation

When I started this Ph.D. research project, I was driven by the rather loose question of what makes a city to be considered a green city. That is, green not only understood as having as much of visibly green elements, but as having a deeply rooted understanding of a city that puts the environment and society at the core of its planning, based on ideas of inclusivity, equity, and democratic values and based on an understanding of nature a deeply entangled with society and hence undoubtedly affected by political decision-making processes, forms of governance and its local histories.

Over the process of conducting fieldwork, exchanging with local actors, and writing this thesis applying a critical lens on institutional actors and processes, I did find that the multi-scalar dynamics and institutional inertias strongly determine the outcome and local perceptions of implemented urban green projects and their associated governance processes. While I acknowledge that municipalities often have limited possibilities given their dependencies on and embeddedness in multi-level structures and finance, I also believe that local decisionmakers can address issues of equity, inclusivity, and participation more holistically.

For this end, a research and planning approach is needed that prioritizes relational and intersectional practices and that gives space to express and negotiate civic and those traditionally marginalized voices and their forms of socio-natures (Anguelovski et al., 2020). The plural values framework proposed by IPBES (2022) with its call for integrating the notion of relational values in policy-design and implementation is hence a useful conceptualization for both theory and practice to move towards more nuanced, place-based and (nature-

)inclusive urban governance that can help enhance inclusion and participation of local, marginalized, communities. I reiterate my call for an agonistic planning practice (McAuliffe and Rogers, 2019) that allows for a shift of urban governance from a focus on consensus politics towards one that allows for conflicted visions of the socio-natural city to be negotiated. I hence argue for shifting planning approaches to the implementation of a green city ideal recognizing the diverse and layered connections of local communities with nature and the prioritization of social justice goals focused on situated and intersecting needs of residents over goals of economic ("green") growth.

In the following, I list a few specific suggestions for policymakers of mid-sized cities in a Global North context:

Implement an alternative vision of a plural green city ideal as objective and practice in urban governance:

- Develop intersectional approaches to include diverse needs and socio-natural meanings attached to specific projects by identifying ex-ante project realization local historically marginalized actors and place attachments and integrate them holistically throughout project design, implementation, and long-term maintenance.
- Formulate urban policies and projects whose framings move beyond the instrumental values of nature towards more place-based and situated understandings of what nature means to urban residents.
- Give space and support to initiatives and projects of local climate action that are formed beyond an institutional context. Encourage bottom-up initiatives without institutionalizing, reframing, and utilizing community goals for political (instrumental) agendas. Encourage those projects, for example community gardens, school yards, or community-designed urban parks, that aim to strengthen relational values, such as of care for humans and more-than-humans, community identity and cohesion, stewardship, or emotional connections.

Prioritize participatory processes over technocratic politics of consensus:

- Communicate clearly and transparently, from an early idea up until its materialization, the project's objective, envisioned governance, and the reasoning for the funding schemes used for its realization to assure local long-term civic support and understanding.
- Develop processes, methodologies, and formats of co-production and co-governance that give voice to those needs and perspectives underrepresented in local governance

- processes, especially of immigrant communities, elderly, and children. Move beyond purely informative "participatory" sessions by providing space for discussion and negotiation of projects' projected processes and outcomes.
- Deploy a bricolage approach to attract multi-level funding based on a timelinedetached participatory process, i.e., dedicate time and resources to a process of codesign with civic actors upstream.

Challenge the contemporary green city ideal by prioritizing social justice components and locally situated formulations of local climate action.

- Develop projects of climate action that move beyond a narrow distributional focus of providing access to (re-)naturalization and greening towards integrating access to health care, housing, and energy justice in project rationales.
- Develop projects that integrate distributional, recognition and procedural goals: climate action projects should help to assure that their benefits are distributed equally across the diverse local communities; they should recognize intersectional needs especially of those historically marginalized, and they should apply a real participatory process.
- Implement accompanying policies, such as rent control or the provision of public houses, to avoid possible gentrification or displacement of vulnerable groups driven by the materialization of a green city ideal.

5.6. Concluding remarks

This research was driven by the curiosity to understand more closely what a so-often in media, science, and policy praised green city actually entails, embodies and means for a plural society. Only a few weeks into this dissertation project, my own meaning attached to the idea of a green city and nature more broadly became drastically re-shuffled as the global covid-19 pandemic quickly unfolded. Having had the luxury of seeking refuge in my parents' house in rural Southern Germany and of avoiding long weeks of home confinement in Spain, long daily evening walks through the hilly landscapes became my coping mechanisms throughout the first phase of the pandemic and this dissertation. These strolls through my landscapes also helped me to re-connect with many childhood memories of playing in the surrounding fields and woods and to find peace while trying to understand what is happening in the world.

The long phone and zoom calls with friends and colleagues in Spain confined either alone or with their cared ones to her homes furthermore emphasized the privilege of being able to access nature, be it in the city or in the countryside. Coming back to Bilbao in summer 2020, a city I barely knew, long walks through the for me new cityscapes and surrounding

landscapes helped me to quickly develop a sense of place, of finding places offering me refuge throughout this first tumult period of arriving in a new place. My rather recent engagement with the intellectual concept of relational values turned thus immediately into an embodied emotional experience and an even stronger motivation for this dissertation.

The health crisis strongly conditioned the research design, most and foremost, the methodologies applied and the research participants willing or able to share their needs, perceptions, and knowledge in respect to their ideal of the green city. The pandemic further fortified the need to research and practice more inclusive and plural notions of the green city ideal. Home confinement and social restrictions brought a much bigger awareness to big parts of society of the importance of nature.

I am very grateful to the many and very diverse people I met along the way in this difficult context, for those sharing so openly their visions of what a green city means to them and showing me their favorite green spaces around the city (I count more than 60 formal interviews and many more informal conversations). The most important take-away I keep from these conversations is that an alternative green city ideal cannot be formulated and put forward in (g)local politics if it happens without open ears, discussions and cared spaces that allow for diverse urban residents, local communities, social collectives and activists, planners, and decision-makers to express their own values, worldviews, and needs.

5.7. References

- Affolderbach, J., O'Neill, K., Preller, B., 2019. Global-local tensions in urban green neighbourhoods: a policy mobilities approach to discursive change in Freiburg, Vancouver and Luxembourg. Geogr. Ann. Ser. B Hum. Geogr. 101, 271–290, https://doi.org/10.1080/04353684.2019.1681286
- Amorim-Maia, A.T., Anguelovski, I., Chu, E., Connolly, J., 2022. Intersectional climate justice: A conceptual pathway for bridging adaptation planning, transformative action, and social equity. Urban Climate 41, 101053. https://doi.org/10.1016/j.uclim.2021.101053
- Angelo, H., 2019a. Added value? Denaturalizing the "good" of urban greening. Geogr. Compass 13, 1–14. https://doi.org/10.1111/gec3.12459
- Angelo, H., 2019b. The greening imaginary: urbanized nature in Germany's Ruhr region. Theory Soc. 48, 645–669. https://doi.org/10.1007/s11186-019-09361-5
- Angelo, H. 2021. How green became good. Urbanized Nature and the Making of Cities and Citizens. Chicago university press.
- Angelo, H., Wachsmuth, D., 2020. Why does everyone think cities can save the planet? Urban Stud. 57, 2201–2221. https://doi.org/10.1177/0042098020919081
- Anguelovski, I. 2016. From Toxic Sites to Parks as (Green) LULUs? New Challenges of Inequity, Privilege, Gentrification, and Exclusion for Urban Environmental Justice. Journal of Planning Literature, 31(1), 23-36. https://doi.org/10.1177/0885412215610491
- Anguelovski, I., Brand, A.L., Connolly, J.J.T., Corbera, E., Kotsila, P., Steil, J., Garcia-Lamarca, M., Triguero-Mas, M., Cole, H., Baró, F., Langemeyer, J., del Pulgar, C.P., Shokry, G., Sekulova, F., Argüelles Ramos, L., 2020. Expanding the Boundaries of Justice in Urban Greening Scholarship: Toward an Emancipatory, Antisubordination, Intersectional, and Relational Approach. Ann. Am. Assoc. Geogr. 4452, 1–27. https://doi.org/10.1080/24694452.2020.1740579
- Anguelovski, I., Connolly, J. 2021. The Green City and Social Injustice. 21 Tales from North America and Europe, Routledge, New York
- Bulkeley, H., 2005. Reconfiguring environmental governance: Towards a politics of scales and networks. Polit. Geogr. 24, 875–902. https://doi.org/10.1016/j.polgeo.2005.07.002
- Bulkeley, H., Betsill, M.M., 2005. Rethinking sustainable cities: Multilevel governance and the "urban" politics of climate change. Env. Polit. 14, 42–63. https://doi.org/10.1080/0964401042000310178
- Calderón-Árgelich, A., Anguelovski, I., Connolly, J.J.T., Baró, F., 2023. Greening plans as (re)presentation of the city: Toward an inclusive and gender-sensitive approach to urban greenspaces. Urban For. Urban Green. 86. https://doi.org/10.1016/j.ufug.2023.127984
- Castán Broto, V., 2017. Urban Governance and the Politics of Climate change. World Dev. 93, 1–15. https://doi.org/10.1016/j.worlddev.2016.12.031
- Castán Broto, V., Robin, E., 2021. Climate urbanism as critical urban theory. Urban Geogr. 42, 715–720. https://doi.org/10.1080/02723638.2020.1850617
- Christophers, B., 2018. Risk capital: Urban political ecology and entanglements of financial and environmental risk in Washington, D.C. Environ. Plan. E Nat. Sp. 1, 144–164. https://doi.org/10.1177/2514848618770369
- Cohen, D.A., 2020. Confronting the urban climate emergency: Critical urban studies in the age of a green new deal. City 24, 52–64. https://doi.org/10.1080/13604813.2020.1739435
- Garcia-Lamarca, M., Anguelovski, I., Cole, H., Connolly, J.J.T., Argüelles, L., Baró, F., Loveless, S., Pérez del Pulgar Frowein, C., Shokry, G., 2019. Urban green boosterism and city affordability: For whom is the 'branded' green city? Urban Stud. https://doi.org/10.1177/0042098019885330
- García-Lamarca, M., Ullström, S., 2022. "Everyone wants this market to grow": The affective post-politics of municipal green bonds. Environ. Plan. E Nat. Sp. 5, 207–224. https://doi.org/10.1177/2514848620973708
- Hilbrandt, H., Grubbauer, M., 2020. Standards and SSOs in the contested widening and deepening of financial markets: The arrival of Green Municipal Bonds in Mexico City. Environ. Plan. A 52, 1415–1433. https://doi.org/10.1177/0308518X20909391
- Jones, R., Baker, T., Huet, K., Murphy, L., Lewis, N., 2020. Treating ecological deficit with debt: The practical and political concerns with green bonds. Geoforum 114, 49–58. https://doi.org/10.1016/j.geoforum.2020.05.014

- Kaika, M., 2017. 'Don't call me resilient again!': the New Urban Agenda as immunology ... or ... what happens when communities refuse to be vaccinated with 'smart cities' and indicators. Environ. Urban. 29, 89–102. https://doi.org/10.1177/0956247816684763
- Kotsila, P., Anguelovski, I., Baró, F., Langemeyer, J., Sekulova, F., JT Connolly, J., 2021. Nature-based solutions as discursive tools and contested practices in urban nature's neoliberalisation processes. Environ. Plan. E Nat. Sp. 4, 252–274. https://doi.org/10.1177/2514848620901437
- Long, J., 2016. Constructing the narrative of the sustainability fix: Sustainability, social justice and representation in Austin, TX. Urban Stud. 53, 149–172. https://doi.org/10.1177/0042098014560501
- Long, J., Rice, J.L., 2019. From sustainable urbanism to climate urbanism. Urban Stud. 56, 992–1008. https://doi.org/10.1177/0042098018770846
- Mansur, A. V., McDonald, R.I., Güneralp, B., Kim, H.J., de Oliveira, J.A.P., Callaghan, C.T., Hamel, P., Kuiper, J.J., Wolff, M., Liebelt, V., Martins, I.S., Elmqvist, T., Pereira, H.M., 2022. Nature futures for the urban century: Integrating multiple values into urban management. Environ. Sci. Policy 131, 46–56. https://doi.org/10.1016/j.envsci.2022.01.013
- Martí-Costa, M., Tomàs, M., 2017. Urban governance in Spain: From democratic transition to austerity policies. Urban Stud. 54, 2107–2122. https://doi.org/10.1177/0042098016669452
- Matheney, A., Anguelovski, I., Kotsila, P. et al. (forthcoming) Illuminating Radical Spatial Imaginaries: Counter-mapping urban environmental justice struggles for the city yet to come.
- McAuliffe, C., Rogers, D., 2019. The politics of value in urban development: Valuing conflict in agonistic pluralism. Plan. Theory 18, 300–318. https://doi.org/10.1177/1473095219831381
- McCann, E., 2013. Policy boosterism, policy mobilities, and the extrospective city. Urban Geogr. 34, 5–29. https://doi.org/10.1080/02723638.2013.778627
- Nciri, A., Levenda, A., 2020. Urban policy (im)mobilities and refractory policy lessons: experimenting with the sustainability fix. Urban Geogr. 41, 1158–1178. https://doi.org/10.1080/02723638.2019.1575154
- Nielsen, J., de Bremond, A., Chowdury, R. R., Friss, C., Metternich, G., Meyfroidt, P., Murnoe, D., Pascual, U., & Thomson, A. (2019). Toward a normative land system science. *Current Opinion in Environmental Sustainability*, 38, 1–6.
- Oscilowicz, E., Anguelovski, I., García-lamarca, M., Helen, V.S., Shokry, G., Perez-del-pulgar, C., Argüelles, L., James, J.T., Oscilowicz, E., Anguelovski, I., García-lamarca, M., Cole, V.S., Shokry, G., Perez-del-pulgar, C., Argüelles, L., Connolly, J.J.T., 2023. Grassroots mobilization for a just, green urban future: Building community infrastructure against green gentrification and displacement. J. Urban Aff. 00, 1–34. https://doi.org/10.1080/07352166.2023.2180381
- Pascual, U., Balvanera, P., Anderson, C.B., Chaplin-Kramer, R., et al., 2023. Diverse values of nature for sustainability. Nature 620. https://doi.org/10.1038/s41586-023-06406-9
- Pineda-Pinto, M., Frantzeskaki, N., Chandrabose, M., McPhearson, et al., 2022. Planning Ecologically Just Cities: A Framework to Assess Ecological Injustice Hotspots for Targeted Urban Design and Planning of Nature-Based Solutions Planning Ecologically Just Cities: A Framework to Assess Ecological Injustice Hotspots for Targeted U. Urban Policy Res. 1–17. https://doi.org/10.1080/08111146.2022.2093184
- Robin, E., Castán Broto, V., 2020. Towards a Postcolonial Perspective on Climate Urbanism. Int. J. Urban Reg. Res. 45, 869–878. https://doi.org/10.1111/1468-2427.12981
- Scanu, E., Cloutier, G., Trudelle, C., 2021. Contesting the greening of the urban growth machine: Ecological modernization and the promethean counter-discourse. Environ. Plan. E Nat. Sp. 4, 1369–1388. https://doi.org/10.1177/2514848620952326
- Swyngedouw, E., 1996. The city as a hybrid: On nature, society and cyborg urbanization. *Capitalism, Nature, Socialism*, 7(2), 65–80. https://doi.org/10.1080/10455 75960 9358679
- Swyngedouw, E., 2004. Globalisation or 'glocalisation'? Networks, territories and rescaling. Cambridge Rev. Int. Aff. 17, 25–48. https://doi.org/10.1080/0955757042000203632
- Tozer, L., Hörschelmann, K., Anguelovski, I., Bulkeley, H., Lazova, Y., 2020. Whose city? Whose nature? Towards inclusive nature-based solution governance. Cities 107, 102892. https://doi.org/10.1016/j.cities.2020.102892
- Turnhout, E., Metze, T., Wyborn, C., Klenk, N., Louder, E., 2020. The politics of co-production: participation, power, and transformation. Curr. Opin. Environ. Sustain. 42, 15–21. https://doi.org/10.1016/j.cosust.2019.11.009
- While, A., Jonas, A.E.G., Gibbs, D., 2004. The environment and the enterpreneurial city: Searching for the urban "sustainability fix" in Manchester and Leeds. Int. J. Urban Reg. Res. 28, 549–569. https://doi.org/10.1111/j.0309-1317.2004.00535.x