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Article

Experts as Game Changers? A Critical Discourse Analysis of Climate Measures in the Metropolitan Region of Amsterdam

Tanja Herdt [1,2,*] and Víctor Muñoz Sanz [2]

[1] IRAP Institute of Spatial Development, OST Eastern Switzerland University of Applied Sciences, Switzerland
[2] Department of Urbanism, Delft University of Technology, The Netherlands

* Corresponding author (tanja.herdt@ost.ch)

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Abstract
This article analyzes the acceptance of climate policy measures in the Metropolitan Region of Amsterdam to understand how policy and planning interrelate with private and public interests. While legitimizing climate policy and measures, values can also cause conflict when operationalized locally. By analyzing value conflicts in public discourse, we gain insights into questions of environmental behavior and their influence on the acceptance of climate action. We report on quantitative and qualitative discourse analysis covering 410 articles from Dutch newspapers between 2015 and 2021 in the Metropolitan Region of Amsterdam related to the energy transition, mobility, and urban greening. Our findings show that public discourse mostly remains abstract and detached from local contexts. As experts and politicians dominate the debate, the discourse mainly addresses science- and policy-related arguments, representing the public interest but reflecting only insufficiently private interests and the local (re-)distribution of benefits and burdens. Therefore, we attribute spontaneous protest to the lack of reference to differentiated values at the local level and find the argument of NIMBYism insufficient to explain residents' opposition. Instead, our findings point to experts' and decision-makers' lack of recognition of the local "idea of place" and a community's identity as an explanation for the sudden emergence of protests. Here, urban design may bridge the gap between policy and planning by translating technical and economic constraints into place-specific designs.

Keywords
climate change adaptation; climate change mitigation; critical discourse analysis; environmental behavior; identity of place; public acceptability; urban design; urban planning; values

Issue
This article is part of the issue "Planning Around Polarization: Learning With and From Controversy and Diversity" edited by Oswald Devisch (Hasselt University), Liesbeth Huybrechts (Hasselt University), Anna Seravalli (Malmö University), and Seppe De Blust (ETH Zürich).

1. Introduction

In 2019, several actions by the Extinction Rebellion movement shook the city of Amsterdam. Activists and sympathizers blocked roads and protested at Dam Square to demand radical political actions against the climate emergency: "I am quite angry that my generation is not being listened to. I have stopped flying and eating meat, but politicians hardly take any serious measures to improve the climate. It feels like we're being abandoned," said Evaline Vink, one of those demonstrators, to the press (Khaddari & Wiegman, 2019, para. 37). In 2021, another climate demonstration took place in Dam Square, organized by the citizens' initiative "Windalarm" to protest plans to build wind turbines near their neighborhood. Although the demonstration was against the implementation of climate measures, Naut Kusters, one of Windalarm's co-founders, told the newspaper that the initiatives' ultimate goal was to reach the net-zero targets as soon as possible: "That is not a point of discussion" (van Zoelen, 2021, para. 5).

This contradictory protest behavior highlights the discrepancy between abstract climate policy goals and the realities of implementation and is symptomatic of the

political and social challenges associated with the transition to climate neutrality and the adaptation of our cities. The accumulation of such conflict articulations suggests that the reason for the protest is not solely due to individual unwillingness, often derided as NIMBYism, the "Not In My Backyard" reactivity. NIMBY implies that local citizens are unwilling to accept personal costs in exchange for public interest. We argue that a more plausible reason for conflict is that, despite far-reaching consequences, the values of those affected locally are not sufficiently considered. Thus, becoming evident in a radical simplification of public debate on climate measures.

This article examines the tension between political climate goals and local acceptance of those measures. It analyses how conflicts of public and private interest are represented in public debate and how well public interest, as represented by experts, is connected to citizens' environmental values. This research is based on the hypothesis that considering people's values in planning and communicating climate measures will increase acceptance.

We examine to which degree experts mainly work with arguments that embody commonly accepted values in the public interest, appealing to the consensus of climate goals without addressing conflicts and contradictions in their implementation. We investigate the role of media when shaping the public discourse. We posit that journalism operationalizes a particular type of expert voice, namely that of trained scientists and professionals with direct and indirect involvement in city planning. While we recognize that community members possess situated forms of expert knowledge of their environment, the actors we consider experts in this article are those whose technical knowledge is institutionally legitimized.

We analyze public discourse on climate adaptation and mitigation in Dutch media outlets covering the Metropolitan Region of Amsterdam (MRA, *Metropoolregio Amsterdam*) from 2015 to 2021. This interlinking of measures reflects the limited space for intervention in Dutch cities, which lets municipalities often combine measures for climate mitigation with those for climate adaptation (e.g., subsidizing green roofs and solar panels). We used quantitative conceptual and relational content analysis to question dimensions of distributive justice and values of climate adaptation and mitigation in public debate. Our objectives were (a) to identify conflict-related arguments highlighting tensions between values and interests; (b) to question how interests and values relate, whose voice is represented in discourse, and the types of arguments used; and (c) to understand instances of support and protest as related to agreement, disagreement, or questioning of specific climate measures.

Because discourse influences the extent to which the spatial distribution of benefits and burdens is perceived as equitable and whether individuals and communities feel represented (Herdt & Jonkman, 2021), this analysis may help improve how municipalities, planning administrations, and governmental bodies communicate planning-related climate actions.

The structure of the article is as follows. First, we provide some theoretical basis for our analysis, looking at how values relate to questions of climate adaptation and mitigation and planning conflicts. We then discuss our mixed-methods approach, comprising qualitative and quantitative data analysis, the results of which are reported and discussed in Section 4. We conclude by emphasizing the importance of understanding how planning processes can connect public and private interests, how to communicate, and how to involve citizens. Here, we believe urban design can play an important role as a "bridge practice" (Mehrotra, 2020), between global policy ambitions and local community values.

2. Values and the Acceptance of Climate Policies and Projects

Values are general goals or ideals that people consider important in their lives and according to which they orient their behavior (Schwartz, 1992). Because of their abstract nature, values allow us to make assumptions about an expected or desired future or the behavior of others. They encompass diverse situations and actions, comprising various pro-environmental perspectives and actions (Seligman & Katz, 1996). One of the two value dimensions described by Schwartz (1992) is that of self-enhancement vs. self-transcendence. This dimension reflects the extent to which a person values the welfare and interests of others (self-transcendent) as opposed to their own personal interests (self-enhancing). Four categories of values influence people's behavior with regards to climate policy or climate-related measures (De Groot & Steg, 2008; Perlaviciute et al., 2018):

1. Biospheric values, which address concerns for nature and the environment;
2. Altruistic values, which express concern over the well-being of others and society;
3. Egoistic values, which concern safeguarding personal resources such as wealth and status;
4. Hedonic values, which address seeking pleasure and comfort.

The first two address public interest and are self-transcendent, whereas the latter two address personal interest and self-enhancement.

Rarely do climate projects, such as energy projects, exclusively address the biospheric value category. Instead, such projects have a variety of characteristics that can negatively impact some of the four values categories while benefitting others (Perlaviciute et al., 2018). Values that drive climate action range from individual to global concerns and can change over time (Martiskainen et al., 2020). Therefore, people's acceptance of climate measures is not given by a particular value scheme, and

there is no strong link between socio-demographics and environmental values (Sargisson et al., 2020). Other factors like personal and social norms may be more closely related to environmental behavior (Klöckner, 2013). In general, biospheric, altruistic, and egoistic values seem most relevant for environmental behavior (Perlaviciute, 2022).

The importance of core values and beliefs is particularly evident when looking at negative responses to climate policies and projects, which often occur when people's individual core values are threatened, emotional reactions are evoked, or elements of distributive or procedural justice are not adequately addressed (Marshall et al., 2019; Perlaviciute et al., 2018; Sargisson et al., 2020). One can distinguish two forms of protest which respond to different value categories. Social movements in favor of climate policies (e.g., Fridays For Future) address the absence of climate policies and action in individual concerns about the global and local environment and the wellbeing of future generations, vulnerable populations, etc., as well as concerns that their own families are being negatively affected by climate change. Here, biospheric, altruistic, and egoistic values are being addressed simultaneously (Martiskainen et al., 2020; Wallis & Loy, 2021). When threatening egoistic values, e.g., increasing costs or decreasing property value, climate policies and projects can evoke protest. The same action may equally address altruistic values, particularly if individuals feel that benefits and burdens are not equally distributed or if people feel excluded from decision-making processes. Here, it is assumed that people use a form of "practical rationality" to evaluate the given situation in terms of each value category. The mechanism of opposition to or rejection of climate measures appears to be related to the extent to which various project features violate or support the individuals' core values.

2.1. Value Conflicts in Urban Planning

In addition to tensions between climate policy, projects and individuals' core values, conflicts between the values themselves are at the heart of todays' urban planning. Values mediate the tensions between development for environmental, economic, and social sustainability (Campbell, 2016). They are also ethically motivated. The belief in something essential and legitimate serves to justify actions or to establish specific rules of conduct (Langford, 2004). Values are, therefore, deeply embedded in infrastructure and existing regulations and shape communities and their behavior (van den Hoven et al., 2015). During the planning process, inherent values become operationalized by experts and are transformed into social norms, which then shape design strategies and the implementation of projects (Dignum et al., 2016; van den Hoven et al., 2015).

Conflicts can arise from various "translation gaps" during the planning process. A gap between inherent values and a design strategy may result from a structural change in the planning process, e.g., in legislation or administrative procedures. Such change can affect people's sense of the equitable distribution of benefits and burdens (e.g., access to public resources and goods) and procedural justice (e.g., not being involved in the decision-making process). Recent studies have shown that these two factors significantly influence individual decisions and address values of all kinds, e.g., selfish and hedonistic values, altruistic values, and biospheric values (Perlaviciute et al., 2018).

2.2. Acceptance of Climate Measures

Conflicts can also arise if the planning process does not translate embedded values well enough into project design. At the beginning of a planning process, climate mitigation measures are usually addressed in abstract terms, referring to altruistic and biospheric values, e.g., sustainability or climate protection for future generations. They provide legitimacy to policy and planning. Government agencies and communities express such values in the public interest, and early in the planning process, they are usually supported by the majority. However, when these values are operationalized for specific local projects, they may face opposition from the community.

Furthermore, administrative practices and experts within government agencies may alter values (Langford, 2004). Any outcome often stems from complex relationships among various organizational frameworks such as funding and budgeting, legislation, and administrative regulations, which rely heavily on expert knowledge, making them hard to communicate to the general public.

Current research shows that people resist climate policies especially when they feel excluded from decision-making (Carattini et al., 2019; Gross, 2007). Public participation is, therefore, often cited as a possible means of addressing public resistance. But, if people have the perception of being asked too late or not having any significant influence on the outcome of the project, involvement is perceived as fake participation and can, again, fuel public resistance (Colvin et al., 2016; Gross, 2007; Perlaviciute et al., 2018; Reilly et al., 2016; Terwel et al., 2012).

Experts, therefore, play an important role in the operationalization of values during the planning process. They not only contribute to a project through their knowledge and expertise but also must translate values into coherent design strategies at multiple stages of the design process. They need to align a project with the organization's internal standards and consider the three relevant value categories important to the public.

2.3. Beyond NIMBYism

Public opposition against climate adaptation and mitigation projects is often dismissed as NIMBY, implying that

local citizens are unwilling to incur personal costs for the public interest. However, the influence of NIMBYism on the acceptance of climate mitigation measures is controversial: on the one hand, NIMBYism is used in public discourse as presumptive argument to explain local resistance to climate measures (Verhoeven, 2021); on the other, public support does distinguish different types of climate mitigation projects, e.g., urban greening vs. the installation of wind turbines. Criteria such as role perception, communication of complex planning processes, or individual reputation seem to play a role in the use of NIMBYism as an argument in public discourse. For instance, experts may use NIMBYism to explain the stopping of a project without further explanation of the complex administrative and legal actions behind it (Verhoeven, 2021). Similarly, local stakeholders and interest groups may insist on NIMBYism as a reason for opposition to a project, even if they must adjust their arguments to maintain their public appearances (Esaiasson, 2014).

While there is evidence for a correlation between the physical distance to a project's implementation and the responses to climate change or support for a specific project (Hart et al., 2015), the NIMBYism argument often ignores residents' other genuine concerns, such as a fair distribution of costs and benefits and the impact of climate projects on the identity and symbolic value of a place (Devine-Wright, 2005, 2013). Research on place attachment in climate adaptation projects has shown that place identity is situated within wider socio-political structures, institutions and cultural symbols. It is formed at multiple scales (Gustafson, 2009; Hernandez et al., 2007), and influenced by multiple factors such as personal mobility (Lewicka, 2011) as well as identity processes which are embedded in occupations carried out in particular places (Breakwell, 1986). This assumption is supported by research findings on climate mitigation projects, such as windfarms, suggesting that projects can disrupt and threaten place related identities and evoke resistance when perceived by residents to be "out of place" (Devine-Wright, 2009).

Following Patrick Devine-Wright (2011), we aim to investigate links between social values, identities, and collective actions, especially "NIMBY" resistance to climate adaptation and mitigation strategies. In debates about climate measures, it is often claimed that private interests (e.g., protection of ownership, property value, and character of place) may dominate. This set of interests may relate to conflicting values, but may also reflect a lack of influence in decision-making processes or a physical outcome poorly connected to the identity of place. To go beyond NIMBYism as an explanation and to better understand how climate is debated, our research aims to elucidate how private and public interests are addressed and connected in the public debate around climate adaptation and mitigation projects in the MRA.

Since research has shown that mass media's influence on the significance people afford to climate-related issues in their daily lives (Boykoff, 2011; M. Boykoff & J. Boykoff, 2004; McAllister et al., 2021), this article examines as well how the public discourse about climate is affected by media coverage and use of journalistic practices such as so-called "balanced reporting." Here, research on media coverage sheds light on the role of the expert in public opinion making through the use of balanced reporting and, the use of social media by individuals' and local interest groups' role on public opinion making (Painter, 2011; Painter & Ashe, 2012).

3. Methodology

3.1. Case Study

The MRA is a partnership comprising thirty-two municipalities in two provinces, North Holland and Flevoland. The MRA has the largest population in the Netherlands (2.5 million inhabitants, i.e., 14% of the Dutch population). Its agenda for 2020–2024 features an implementation line on transition planning that addresses, among other things, climate adaptation, energy transition, and their relation to the landscape. The MRA has the city of Amsterdam at its center. With the approval of the Roadmap Amsterdam Climate-Neutral 2050 (*Routekaart Amsterdam Klimaatneutraal 2050*) in 2020 and the Environmental Vision 2050 (*Omgevingsvisie 2050*) in 2021, the city has taken a pioneering role in planning and implementing a diverse portfolio of climate measures.

3.2. Comparative Analysis of Public Debates: Mixed-Method Content Analysis

This article analyses the tensions between public and private interests in the public discourse on climate adaptation and mitigation in Dutch media outlets from 2015 to 2021. During this period, the Paris Agreement was signed, new roadmaps for climate neutrality were developed, and Amsterdam's Environmental Vision 2050 was approved. We used quantitative conceptual and relational content analysis to investigate dimensions of distributive justice and climate adaptation and mitigation values in public debate as portrayed in public media. The dataset comprised ten Dutch public media outlets from the online archive Nexis Uni (Table 1; see also Supplementary File). It did not include professional journals, planning documents, or community-led media. The regional and local newspapers were chosen because their overall core local news coverage falls within the MRA. To ensure we only considered news within the MRA, we filtered the database according to location search terms (names of municipalities and regions; Table 2; see also Supplementary File).

We used 48 search terms organized into four topics to identify relevant articles in the online archive (Table 1). We set three search terms common to all topics to identify newspaper articles specifically about climate adaptation and mitigation projects. Three topics and keywords are grounded in the so-called strategic choices due

Table 1. Alignment of topics, strategic choices of Amsterdam's Environmental Vision, and search terms to identify relevant articles in the database.

Topic	Strategic choices Amsterdam	Common search terms (Dutch)	Common search terms (English)	Topic specific search term (Dutch)	Topic specific search term (English)
Climate measures		*klimaatverandering*, *klimaatadaptatie*, *klimaatmitigatie*, *klimaatmaatregel**	*Climate change*, *climate adaptation*, *climate mitigation*, *climate measure**	*maatregel** *plan* *planen* …	*measures* *plan* *plans* …
Urban greening	*Rigoureus vergroenen* [Rigorous greening]	*klimaatverandering*, *klimaatadaptatie*, *klimaatmitigatie*, *klimaatmaatregel**	*Climate change*, *climate adaptation*, *climate mitigation*, *climate measure**	*vergroen** *openbaare groen* *vegetatie* *hitte-eilandeffect* …	*greening* *public green* *vegetation* *heat island effect* …
Sustainable mobility	*Duurzaam en gezond bewegen* [Sustainable and healthy mobility]	*klimaatverandering*, *klimaatadaptatie*, *klimaatmitigatie*, *klimaatmaatregel**	*Climate change*, *climate adaptation*, *climate mitigation*, *climate measure**	*parkeerduurbeperking* *parkeerbeperking* *parkeerverordening* *parkeerverbod* …	*parking time restriction* *parking restriction* *parking ordinance* *parking prohibition* …
Energy transition	*Groeien binnen grenzen* [Growing within boundaries]	*klimaatverandering*, *klimaatadaptatie*, *klimaatmitigatie*, *klimaatmaatregel**	*Climate change*, *climate adaptation*, *climate mitigation*, *climate measure**	*windmolen* *windenergie* *energietransitie* *energiezuinig* …	*wind turbines* *wind energy* *energy transition* *energy-efficient* …

Note: Complete table in the Supplementary File.

to their specific connection to climate adaptation and mitigation, as described in Amsterdam's Environmental Vision 2050 (Gemeente Amsterdam, 2021, pp. 49–69). The fourth topic looked at climate adaptation and mitigation projects in general.

With these parameters, we retrieved a dataset of 410 articles and got insights into temporal trends and on the weight of each category in the discourse.

We identified seven codes that align social, economic, and environmental categories related to climate adaptation and mitigation plans and projects with the models of value orientation and values related to climate policy proposed by De Groot and Steg (2008) and Perlaviciute et al. (2018). Some codes fall into two or more value-orientation categories, highlighting the dynamics of values recognized in the literature. In this way, we seek to identify conflict-related arguments that indicate tensions between values and interests (Table 2). To increase the precision of the analysis, we defined multiple keywords within each code (Table 3).

We used the qualitative analysis software ATLAS.ti to investigate the dataset, applying iterative rounds of coding, to quantify the number of hits per code and identify trends over the period of analysis. This process generated an overview of different types of discourse, topics, and the analytic categories attached to them, instances of co-occurrence between analytic categories, and how these co-occurring categories relate to conflict between public and private interests. Furthermore, we used quantitative content analysis to examine how interests and values relate, whose voice is shaping the discourse, and the types of arguments put forward. For this, we made a context-appropriate distinction between experts and citizens. By "experts," we mean the actors who influence and are actively involved in policy, planning, and implementation of climate measures (i.e., politicians, scientists, and planning professionals). Secondly, we analyzed manually positions and arguments. We focused specifically on those sentences and paragraphs coded under "Public support and protest." We ran a qualitative content analysis to identify nuances within this category through the choice of wording as well as the choice of sentence structure: support and agreement (positive sentiments towards climate measures), protest (in demand of or against climate measures), disagreement (negative sentiment towards climate measures), explicit instances of NIMBYism, or questioning of the specific measures proposed (as insufficient or ineffective) or of the process

Table 2. Codes and related value orientation and values.

Value orientation	Values	Codes
Egoistic	Social power (control)	CONTROL, FREEDOM
	Wealth (material possessions)	COST
	Authority, influential (having impact on people and events)	PARTICIPATION, PUBLIC SUPPORT, AND PROTEST
Altruistic	Social justice	JUSTICE
	Equality	ACCESSIBILITY
	Helpful (helping welfare of others)	HEALTH, COST
Biospheric	Respecting the earth	SUSTAINABILITY
	Unity with nature	CLIMATE, PUBLIC, AND GREEN SPACE
	Protecting the environment, preventing pollution	ENVIRONMENT, HEALTH
Hedonic	Pleasure, enjoying life, gratification for oneself	HEALTH, PUBLIC, AND GREEN SPACE

of implementation. As a result, we could then visualize the intensity and development of different sentiments.

4. Data Analysis and Results

4.1. Development of Discourse: Codes

We found that the number of quotes coded under "Public support and protest" rose significantly over the period 2019–2021, coincident to the period of drafting of several documents naming specific plans concerning climate measures (Table 4). When looking at the number of citations in each of the four topics of study per year, citations coded under "Public support and protest" in the topic of energy transition increased particularly in 2021, the year where the municipality of Amsterdam disclosed options for new locations for wind turbines on municipal land (Figure 1).

When analyzing in detail how those quotes under "Public support and protest" related to instances of support, disagreement, or questioning of the measures, we noted how, in the topic of climate measures in general, disagreement escalated starting in 2019. Again, the subtopic of the energy transition is the one in which measures were questioned more often. This trend can be attributed to the aforementioned planning options for installing wind turbines in the environs of residential neighborhoods in the east and north of the city. These plans fueled demonstrations and protests that successfully gained media attention.

4.2. Development of Discourse: Timeline of Events

To contextualize the data, we constructed a timeline of the most important climate related events and policy acts at the various levels of the planning process. When we look at the development of the discourse over time, and relate it to those major events guiding international, national, and local planning and policy, we can identify two very distinct phases. Before 2019, the debate was very general with hardly any reflection of climate measures. Then, 2019 shows a peak in protests demanding climate actions, moved mainly by biospheric values, highlighting the reverberations of the "Fridays for Future"

Table 3. Examples of codes, their explanation, and keywords.

Code	Explanation	Keywords (Dutch)
JUSTICE	Distributive, procedural justice	*justitie*, *gerechtigheid*, *billijkheid*, *billijk**, *oneerlijk**, *onrechtvaardig**, *onwettig**, *onrechtmatig**…
PUBLIC SUPPORT AND PROTEST	(Dis-)agreement, mobilisation	*publieke steun*, *protest**, *burgerinitiatie**, *tegenstand**, *demonstratie**, *petitie**…
COST	Financial costs, affordability, increase or loss of value	*kosten*, *prijswaardevermeerdering**, *waardevermindering**, *financiele schade*, *betaalbaar**, *onbetaalbaar**…
PARTICIPATION	Active participation, citizen engagement, having a voice	*actieve deelname*, *deelnem**, *participatie*, *co-creatie*, *enquête* workshop**…

Note: Complete table and English translation in the Supplementary File.

Table 4. Overview of categories of codes and number of citations per year.

Year	2015	2016	2017	2018	2019	2020	2021
Number of articles	24	9	30	34	134	179	338
			Number of citations per code				
Public support and protest	3	1	6	14	153	86	244
Costs	2	0	7	12	118	128	88
Justice	8	1	22	8	67	43	34
Freedom	2	1	4	10	27	51	48
Health	0	0	2	6	38	51	94
Environmental impact	5	0	4	8	13	41	94
Participation	0	2	3	3	30	39	170

movement initiated by Greta Thunberg, and demonstrations by globally acting groups such as Extinction Rebellion.

With the realization of the severity of the climate crisis and the announcement of the European Green Deal and other European plans, urban planning and policy measures concerning climate adaptation and mitigation started to become more concrete, in documents such as the National Environmental Vision (*Nationale Omgevingsvisie*, or NOVI) and the working document of Amsterdam's Environmental Vision. At that point, we notice a clear shift in public discourse, towards disagreement and protest against local implementation plans by citizens, and interest groups (Figure 2).

4.3. Most-Cited Arguments, 2015–2021

The most cited topics picked up in the discourse concern the economic impact on people. Quotes on costs relate to the conflict between the private interest concerning values as wellbeing, ontological security and affordable lifestyle, and the public interest of sustainability and climate protection. However, it is interesting to note that arguments centered around the topic of participation have a comparable share. Indeed, we found that disagreement is usually accompanied by criticism of the planning process, a feeling of not being heard or recognized, and a demand for greater and more meaningful citizen participation (Figure 3).

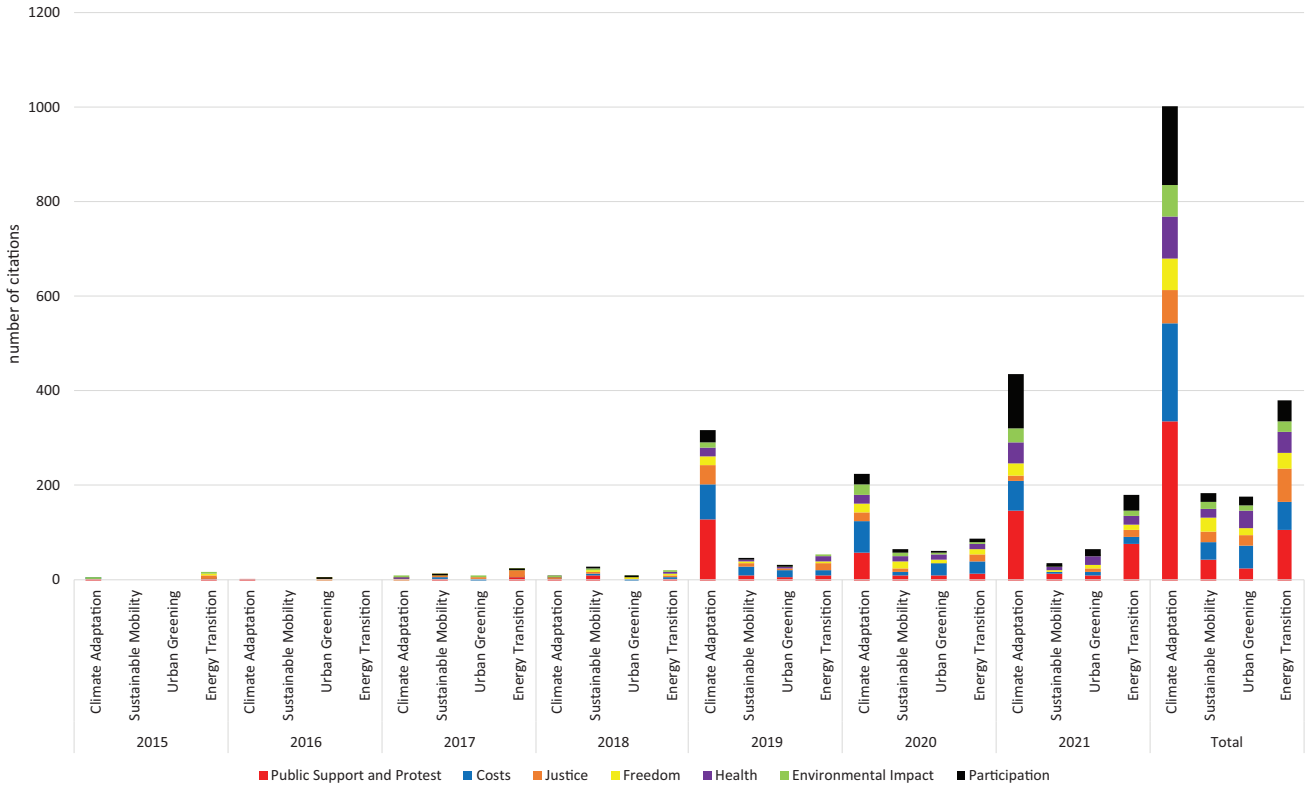

Figure 1. Development of discourse, 2015–2021: Categories of codes and number of citations per year per topic.

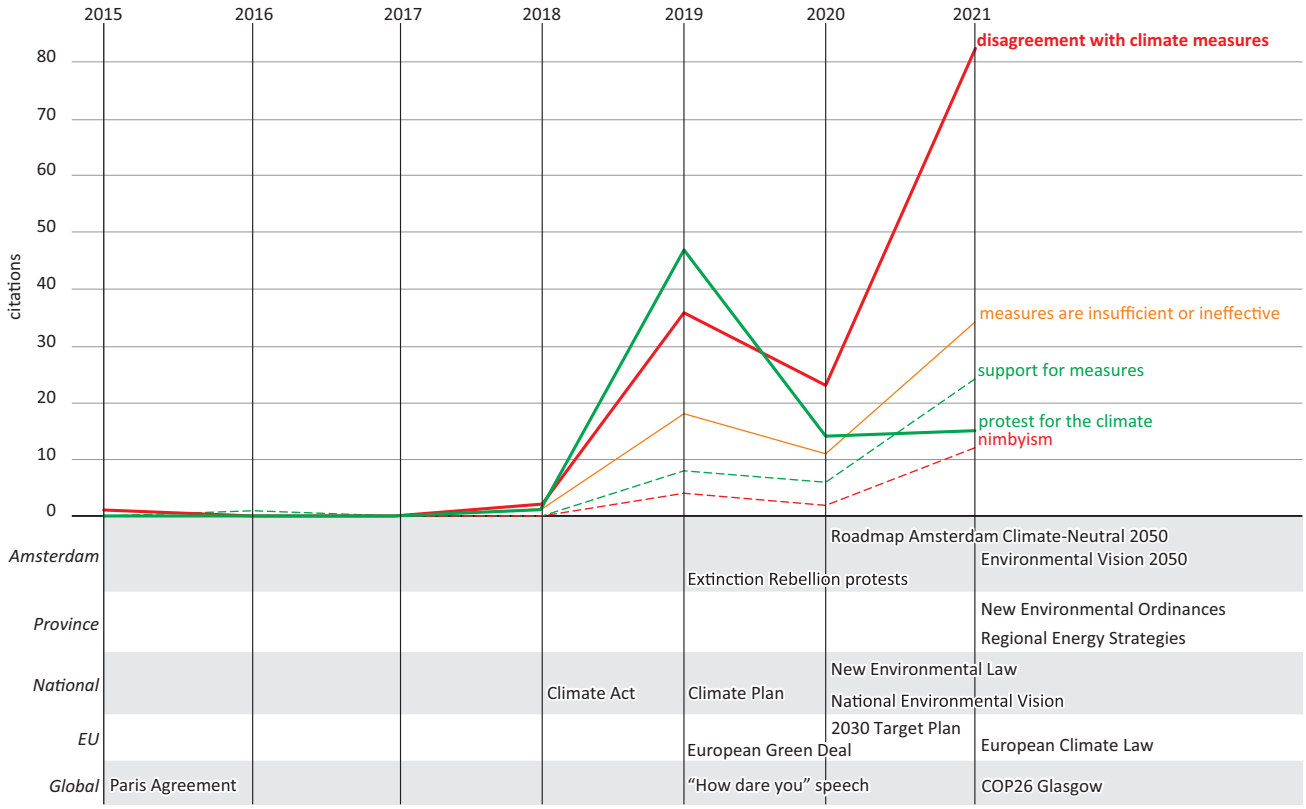

Figure 2. Timeline showing development of discourse: Protest for climate vs. disagreement with climate measures.

4.4. Main Themes and Trends Related to Disagreement or Dissatisfaction With Climate Measures

Looking at the progression of these arguments in time, our analysis suggests that costs and participation in climate adaptation and mitigation projects may be the most important aspects driving future discourse. In this respect, they can tip the balance in favor of, or against, climate adaptation and mitigation initiatives more than questions around their impact on the environmental qualities of a place or arguments linking measures to improved health (Figure 4).

4.5. Whose Voices Shape Discourse? Who Is Talking?

This sudden change from broad agreement to strong protest is also reflected in the concreteness of communication. If we analyze how climate measures are being

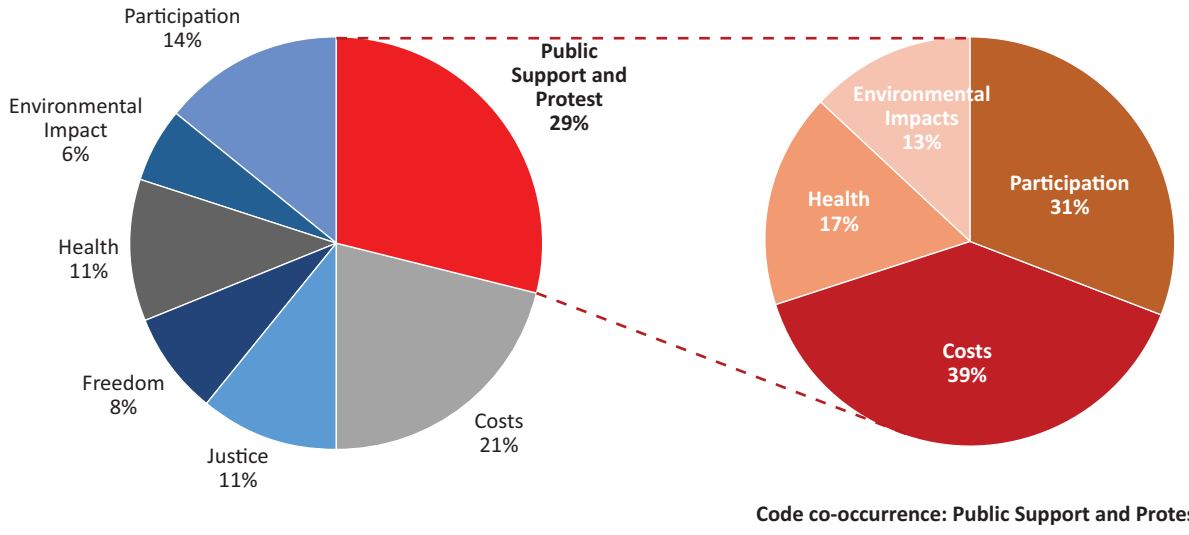

Figure 3. Most-cited arguments (2015–2021) and most-cited topics in co-occurrence with the "Public support and protest'' code.

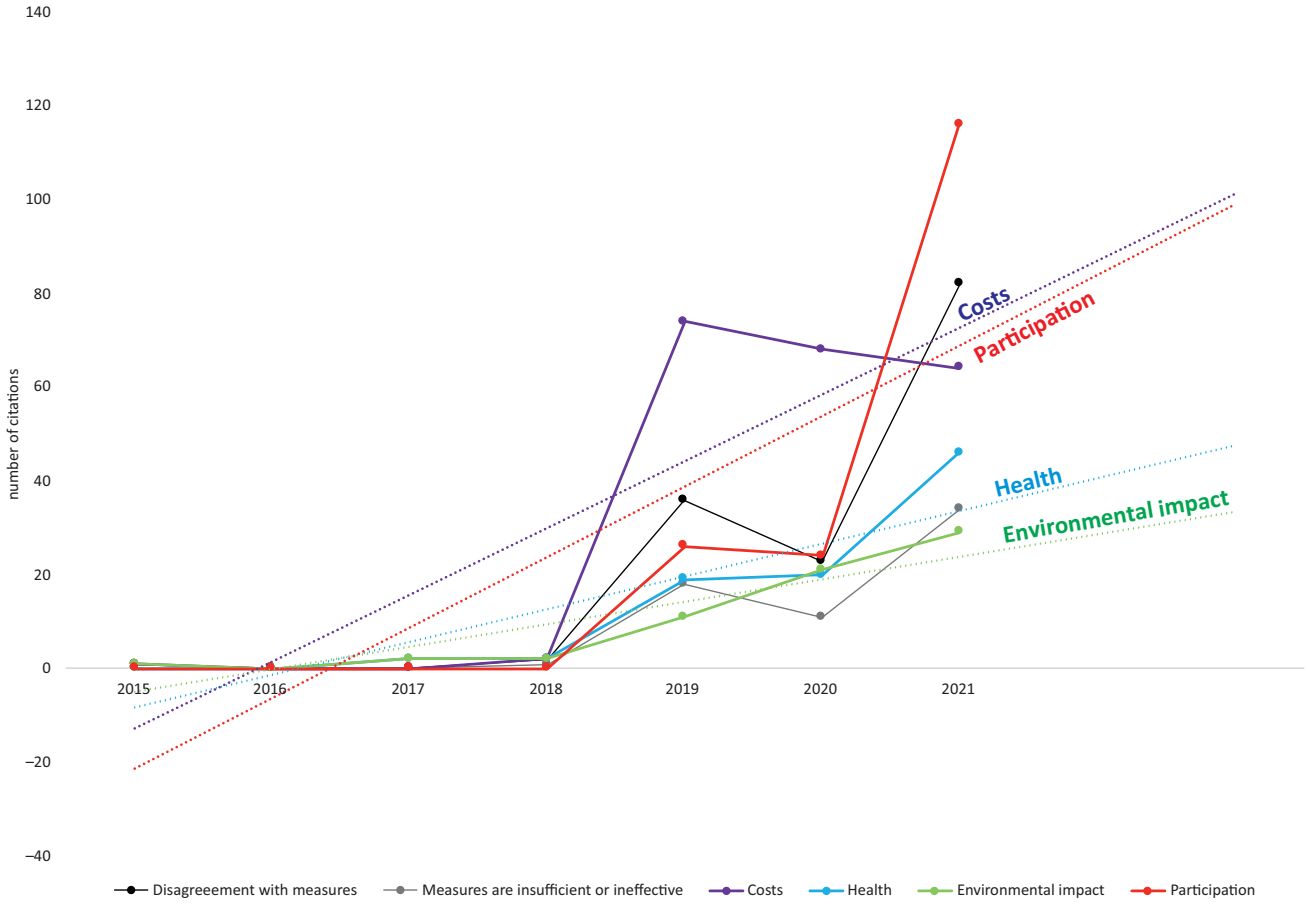

Figure 4. Main themes and trends related to disagreement or dissatisfaction with climate measures.

discussed in the media, it is striking that the discourse is dominated by a high level of abstraction and detachment from the implications of climate actions in the local context. In our sample of news articles, there is an over-representation of experts (politicians, scientists, planners, among others), who represent public interests such as the need for a sustainable economy and consumption. The discourse represents a set of values and norms for climate adaptation and mitigation, based on scientific facts. This is particularly evident in articles concerning the topic of the energy transition (Figure 5).

5. Three Themes Out of the Qualitative Analysis of Coded Citations Within the Dataset

5.1. Global vs. Local: Why Here, Why Us?

We observed a general disconnect in the public imagination between the abstract terms used by experts in public debates, highlighting biospheric and altruistic values, and the strategies for locally implementing specific climate measures:

> I understand that this measure has been taken to reduce our emissions, but why should the Netherlands with its 17 million inhabitants feel responsible to solve climate change? Because while we are all going to drive at 100 on this very small piece of earth, they continue full throttle in America and in Asia. We are too small to make a difference. (van Herk, 2019, para. 4)

Firstly, we noticed that the debate does not address questions related to "benefits and burdens" of climate mitigation measures sufficiently. Then, there seems to be difficulties in apprehending the complexity and systemic nature of climate change, and its connectedness to local action. This relates to questions on who should be held accountable. This argument often arises in reactions of protest as a: "why here, why us" question.

5.1.1. Disconnect Between Different Levels and Agencies of Planning

Secondly, we identified a disconnect in communication concerning the different levels of planning and the planning process, i.e., from national policy to regional strategy to local implementation:

> An additional disadvantage is that thirty regions in the country are each working separately on their own Regional Energy Strategy. So it is a patchwork quilt. Van den Berg: 'What you then see, for example, is that all windmills are planned on the border with

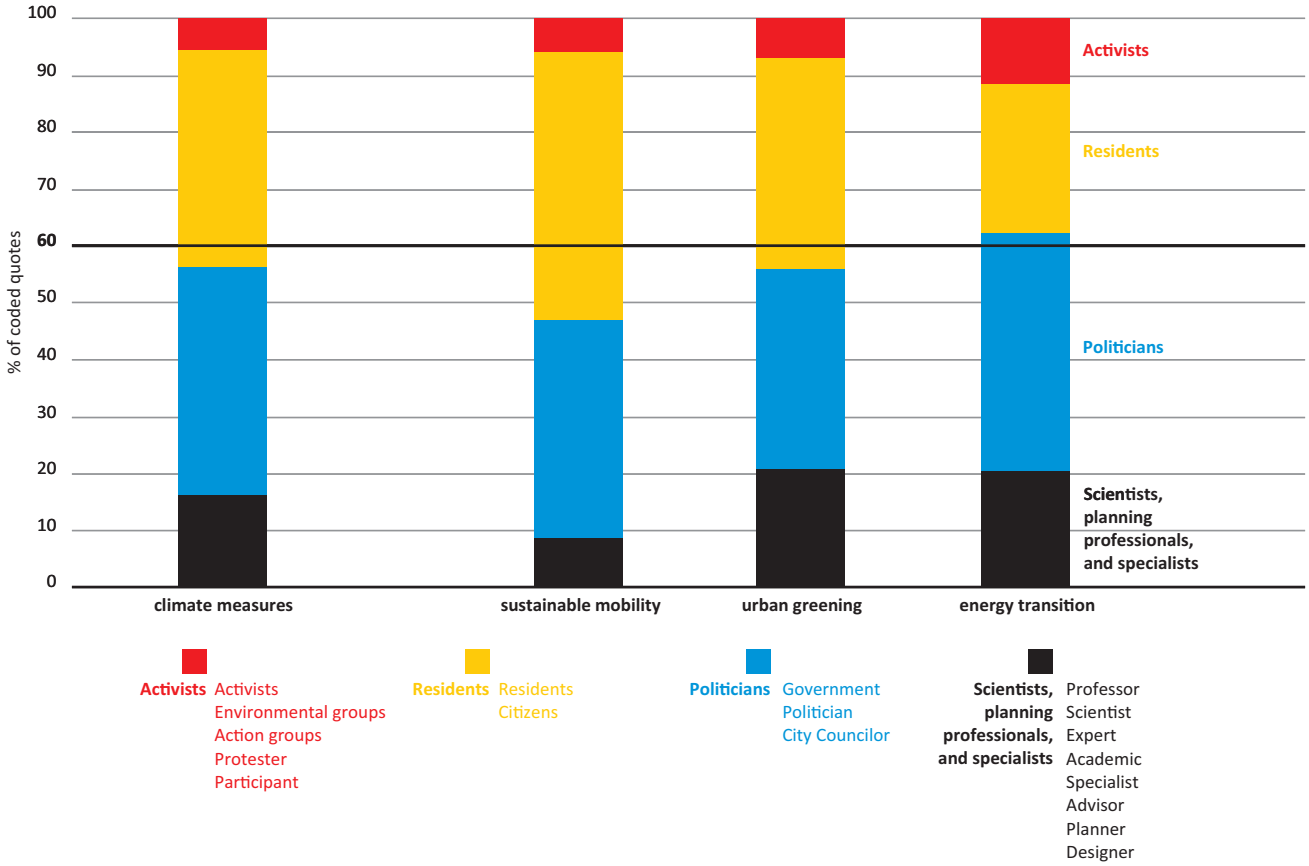

Figure 5. Most represented voices in discourse, 2015–2021.

> one other region, so that objections are only made from one side. Then you are no longer talking about a national assessment, but about a regional interpretation.' (van der Woud, 2021, para. 11)

The different phases of the planning process are not well communicated by the experts who devise the strategies, and the discourse does not give information on the significance of the planning steps and its actors. Experts follow the logics of their own organizations, and that is sometimes at odds with public expectation. In the case of the wind turbines in Amsterdam, the information on search areas resulted in local protests in the eastern area of IJburg. However, the planning document that stirred conflict was actually not meant to fix a specific location for their installation—it just declared areas with potential for wind energy. Yet, instead of opening a process of dialogue towards the further definition of the plans, the way it was communicated made residents feel that the installation of wind turbines in their environs was a *fait accompli*. This is not only a problem of communicating the process, but in the manner of communication, that emphasizes the notion that the planning process is a black box.

In the case of the green energy production by wind turbines and so-called solar meadows, such instances of resistance ultimately lead to the abandonment of plans and relocation to areas where no great resistance is expected, such as natural areas outside settlements or urban areas with less political or economic leverage. Such actions may result in an uneven distribution of burdens amongst residents and makes evident that questions of distributive justice need to be addressed in the planning of climate measures.

5.1.2. Green Is Not Idyllic

Finally, there is a problem with the communication and comprehension of the true spatial dimensions of some measures. Most climate mitigation measures concerning, e.g., the energy transition involve large infrastructure and industrial facilities:

> Wherever those windmills and solar meadows are planned, the protest against those plans is growing. Solar meadows and wind farms—however idyllic the names may sound—are not an asset to the landscape. They are in fact industrial installations, and who wants that in their backyard? (Wegman, 2021, para. 9)

Names such as "solar meadow" can give lay people false expectations about the dimensions and appearances of such installations. We argue that a mismatch between promises and expectations—and an emphasis on abstract ideas decoupled from outcome—relates also to urban design gaps when it comes to the

context-specific integration of such infrastructures in densely populated regions such as the MRA. In that regard, the question of addressing the identity of place through urban design gains great relevance.

6. Discussion and Conclusions

Our survey revealed a great disconnect in the public debate between public interest, as represented by experts and politicians, and the interests of residents. Private interests that reflect egoistic or hedonistic values play only a minor role in shaping the debate. Instead, public debate is characterized by globally legitimated arguments and recommendations presented by experts and politicians, who address climate mitigation measures as a public interest and under a set of biospheric values. "The consequences of climate change are already noticeable, with hot summers and heavy rainfall. That is why we are investing not only in measures to make the city more sustainable, but also in measures to keep the city liveable," noted Marieke van Doorninck, Amsterdam's alderwoman of Sustainability and Spatial Development ("Amsterdam schept banen," 2020, para. 2).

We also noticed a significant imbalance in value categories represented in public debate. Contributions by experts and planners are often characterized by a reductive oversimplification of the population's environmental behavior, also reflected in their use of terminology. Following the idea of "balanced reporting," public media continue to rely on experts to display knowledge and share scientific facts. Yet, our research shows that reporting on climate change in public media generally does not connect to the local communities, their concerns, and facts on the ground. Local resident groups hardly find a voice in the debate, and their individualities are amalgamated into a uniform, generic group. The most frequently mentioned addressee in the analyzed dataset is simply *mensen* ("the people"). Instead, local activists in the Amsterdam region use social media to share opinions and organize local protests. This segmentation of public debate into different media channels could make a common debate on local actions even more difficult.

When the debate on climate adaptation and mitigation focuses primarily on costs, it pits experts and politicians against the general public comprised of taxpayers and property owners. In such a debate, the expert's role is to uphold altruistic and biospheric values against potential cost and public spending increases. In contrast, the general public is reduced to defending their taxpayers' and property owners' interests associated with egoistic values. This is evident in how van Doorninck referred to economic aspects as the way to appeal for support: "Doing nothing [in terms of climate adaptation and mitigation] costs more, both in terms of quality of life and in the wallet" (van Zoelen, 2020, para. 8). In public debates, experts are often portrayed as separate from their roles as individuals and members of communities and families, and their portrayal does not consider the distribution of responsibilities among them. Additionally, this portrayal of experts pits their knowledge against that of locals.

Amongst experts, public opposition is often attributed to the NIMBY effect (Verhoeven, 2021; Wicki et al., 2022), often ignoring the potential of residents' other genuine concerns, such as a fair distribution of costs and benefits amongst residents, equal rights in public decision-making, and the impact of local projects on the identity and symbolic value of a place. Lumping everything into NIMBYism also disregards the complex balancing of value categories in individual decision-making processes, in which egoistic values are not necessarily more influential than biospheric and altruistic value categories (Perlaviciute, 2022). Research on participation has further shown that, if residents' concerns are not adequately addressed, negative emotions are likely to persist (Perlaviciute et al., 2018).

Overall, our analysis shows that the communication of measures from institutions to residents often follows the so-called decide-announce-defend model, a top-down, barely participatory method of public policy, known from the implementation of large-scale environmental measures such as energy infrastructures, flood protection, landfills, and nuclear repositories (Wolsink, 2007). The big difference between those projects and the smaller climate measures studied here is that the latter must be accommodated in, or close to, urban areas and within an existing framework of communities and diverse stakeholders. Accordingly, the organizational and administrative context of planning and implementation (which includes the planning approach, the design, and the legal framework) differs substantially from the small-scale context of urban transformation projects.

The experts in public debate on climate measures often follow the logic of an existing organizational framework, with opaque administrative processes barely transparent to the public. Policies addressing abstract goals such as the protection of nature and quality of life for future generations, the outcomes of policy implementation seem disconnected from public expectations. In that context, the public debate also shows a lack of recognition of the local "idea of place" and/or identity of inhabitants and community.

In the public discourse, we find a disconnect between different levels of planning—ranging from the European Union or the national government initiatives to regional strategies and local implementation—which puts in question the feasibility of participatory approaches. While participatory planning is to some extent already the norm in the Netherlands, processes differ very much and include various degrees of involvement. Municipalities generally consider public participation in urban planning as processes where inhabitants can inform themselves and comment on already elaborated design proposals. Processes of cooperative design or co-creation are only rarely part of the aforementioned established processes. Today, participative measures' impact on connecting to

place attachment and the identity of place is very limited. Since place attachment and identities are highly relevant for understanding climate adaptation, mitigation, and risk communication (Devine-Wright, 2013), this may help explain the unexpected emergence of opposition, specifically in Amsterdam, 2019–2021. Accordingly, in 2021 the municipality of Amsterdam experimented with a representative citizen assembly meant to give advice on ways to reduce the city's carbon footprint. While its twenty-six recommendations were highly relevant, the assembly outcomes had no binding effect on the choice of climate measures, their spatial allocation, and design (Brenninkmeijer et al., 2021; Bürgerrad, 2021).

Komendantova and Battaglini (2016) already pointed out that people nowadays long for meaningful engagement in finding solutions to minimize impact and not only be informed about outcomes. We concur with these authors' call for early engagement and transparency in the planning and implementation of climate measures despite or even because of challenges in communicating and comprehending the actual spatial dimensions of some measures. A dialogue-based communication strategy as part of a dependable participation process can help reconcile experts' positions and opinions with those of residents. Referring to Langford's idea of operationalizing values in planning processes, we would like to suggest a necessary adaptation of existing planning processes in the context of climate measures. Introducing value-based participative processes should lead to a better alignment of policy with local design projects and residents' expectations. We see potential in changing the role of experts; specifically, planners and urban designers could engage more in the participative process to foster value-based solutions on the local level.

As a result of our research, we recommend that administrations revise their communication strategies, reporting local planning and opportunities for participation through multiple media channels. Local situations and voices from the population require more emphasis. Additionally, deeply democratic forms of climate governance should be explored, facilitating grassroots and climate action "from below." As Appadurai (2001, p. 42) claims, "deep democracy" alludes to "roots, anchors, intimacy, proximity and locality," and therefore speaks about ways to bring about socio-environmental change that hold deep and true representation in the local place (Zapata Campos et al., 2021). Here, an integration of urban design methods into participation processes may help to translate technical and economic constraints into place-specific designs.

Future research could look at existing planning processes in the Netherlands and other national planning contexts to investigate how they manage or fail to connect public and private interests in climate measures. Such results would offer insights into the transferability of our findings and the types of practices that need to be incorporated in the organization of planning from an early stage on. Here, the use of social media analysis, interviews, and focus groups could offer a broader understanding on the relationship between the instruments and organization of planning processes, opportunities for participation, and the role of experts as facilitators and communicators of climate measures.

In conclusion, because of the strong link between attachment to a place, identity, and the acceptance of climate measures, future research could explore a more robust integration of urban design into the planning of local climate measures. Urban design methods hold the potential to further integrate alternative design scenarios conceptually and visually into planning, communication, and decision-making processes. In this respect, urban design, serving as a "bridge practice" between the physical characteristics of a city, socio-economic demands, and governance guidelines and regulations (Mehrotra, 2020), seems ideally suited to address the challenge of integrating climate action in cities in a way that is both socially inclusive and specific to the location.

Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the authors (unedited).

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About the Authors

Tanja Herdt is a professor of urban design at OST, Switzerland, and a guest researcher at TU Delft. She is an academic and a practicing urban designer with an emphasis on urban transformation, methods of urban analysis, and the history and theory of the city. Tanja received her PhD from the Department of Architecture at ETH Zurich, where she also was head of research on sustainable urban development at ETH-CASE. From 2019 to 2022 she was an associate professor of theory and methods of urban design at TU Delft. Her book on Cedric Price entitled *The City and the Architecture of Change* was published by Park Books in 2017.

Víctor Muñoz Sanz is an assistant professor of urban design at TU Delft, currently leading research on productive cities and landscapes. Prior to this, he was a postdoctoral researcher at TU Delft, coordinator of the Jaap Bakema Study Centre, and co-principal researcher of Automated Landscapes at Het Nieuwe Instituut. Víctor holds a degree in architecture from Escuela Técnica Superior de Arquitectura de Madrid, an MA in architecture in urban design from Harvard University, and a PhD cum laude in architecture from Universidad Politécnica de Madrid.