

“Often People Don’t Understand the Complex World”: How Local Governments Respond to Political Contestation About the Smart City

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Governments introducing smart city technologies increasingly encounter political contestation. The deliberative perspective aims to overcome contestation by seeking consensus through deliberation. The agonistic perspective critiques this deliberative perspective, arguing that emphasizing consensus-building in response to contestation can lead to a ‘post-political’ debate excluding certain citizens and opinions. This article presents an empirical assessment of this critique by analyzing governments responses to contestation about the smart city and its potentially depoliticizing implications. Therefore, 17 vignette interviews were conducted with civil servants working at major local governments in the Netherlands. The results reveal three depoliticizing responses in the smart city debate: (1) local governments aim to include everyone, but only if citizens act and behave in a way that they perceive as rational and reasonable; (2) local governments welcome a variety of viewpoints, but only if these views do not contradict what they see as the natural order and common sense; and (3) local governments allow for contestation, but only if it is perceived as being provided at the right time and in the right context. Two tentative explanations for depoliticizing responses are presented: a silent ideology within the government and a lack of practical methods to organize agonistic channels for engagement.

CCS Concepts: • **Applied computing** → **Computing in government**;

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1 INTRODUCTION

Many cities are introducing technological innovations in the areas of people, economy, government, mobility, housing, and environment to become ‘smart cities’ [1]. Cities introducing these smart city technologies have been critiqued for being technocratic and instrumental in serving the interest of states and corporations instead of the needs of citizens [2–5]. In response to this criticism, cities have started reformulating their initiatives as citizen-centric, prioritizing citizen participation from the design to the implementation and evaluation of smart city projects [2, 6, 7]. Research indicates, however, that often, the democratic quality of these citizen-centric engagement possibilities is still low because citizen engagement is rooted in civic paternalism and neoliberal conceptions of citizenship that view citizens as mere ‘data-points,’ ‘users,’ ‘testers,’ ‘audiences,’ or ‘consumers’ [2, 3, 8–10]. As a result, according to these critics, the engagement possibilities only encourage citizens to give

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feedback, suggestions, or co-create within an instrumental frame while discouraging the ability of citizens to challenge the normative and political understandings shaping the smart city [2, 3, 9, 11].

Consequently, these authors argue that becoming truly ‘citizen-centric’ requires an alternative understanding of ‘citizens’ that is consistent with aspirations to (re)politicize the smart city debate [2, 3, 12–14]. This is especially the case since the implementation of technologies and data embodies political value judgments rather than objective judgments based on neutral procedures [15, 16]. For example, in the smart city context, the development of smart cities inevitably brings about perceptions, values, and ethics of the ‘ideal future’ that are plural and debatable [10, 12, 13, 17]. Therefore, the smart city is a political space in which political contestation—or the clash of opposing opinions, views, values, and interests—is a central feature [16, 18]. Today, political contestation is increasingly visible in the smart city debate, and this manifests itself not only through letters of complaint, petitions, lawsuits, and protests but also through harassment and vandalism [19–21].

Local governments can have two normative positions on how to respond to the political contestation [22–24]. The dominant deliberative perspective aims to overcome and resolve opposing views, values, and interests on the smart city through rational deliberation to reach consensus [24–26]. In contrast, the agonistic perspective stresses the necessity of the expression and the acknowledgment of political contestation for a strong democratic smart city debate in which a plurality of opposing views may exist [24, 27, 28]. According to the agonistic critique, a post-political debate arises through the dominant deliberative interaction as it does not acknowledge the importance of political contestation and strives for consensus. The concept of ‘post-political’ refers to the idea that we have entered a time beyond political struggle and ideological preferences, reducing politics to the management of processes [29, 30]. It is argued that as a result, a deliberative response to political contestation can lead to the exclusion of particular citizens and their perspectives. In this study, the agonistic critique of the deliberative perspective is explored empirically to check for depoliticizing responses in debates about the smart city [23, 29, 31].

Our knowledge of political contestation about smart city technologies is growing, but so far, little or no empirical research has been conducted into how local governments respond to political contestation and its implications. This raises questions such as the following: What are considered acceptable and unacceptable manifestations of contestation? How could governments’ interactions with political contestation lead to the inclusion and exclusion (intentionally and unintentionally, consciously and unconsciously) of particular citizens and their views? These questions are particularly relevant for the smart city context, in which the technical aspect of applications can give rise to the idea that it is too complex for certain citizens to actively participate in debates or to oversee the political implications of decisions [32]. However, these questions are also highly important for today’s society, as governments face political contestation related to issues such as the coronavirus pandemic, nitrogen emissions, and refugees.

This research therefore aims to gain insight into how local governments respond to political contestation. With a focus on the depoliticizing responses that could lead to the exclusion of citizens and their opinions, despite the ambition to create inclusive, citizen-centric smart cities.

This study contributes to theory and practice in three ways. First, the research contributes to a more political perspective on citizens in the smart city literature by providing a theoretical and empirical understanding of government responses to citizen contestation. Through empirical findings, this study provides a framework that can help assess the presence of depoliticizing responses in policy contexts. Second, a methodological contribution to the literature is the use of vignettes as a method to elicit the perspective of civil servants about political contestation that manifests itself individual or collective, conventional or unconventional. Vignettes were chosen as a methodological technique to get responses to various expressions of political struggle that may not yet be experienced in every local government but can be expected in the future. Third, as a practical contribution, the research outcomes will be of value for local governments dealing with controversy, protest, and conflicts that want to understand how their interaction with political contestation might (de)politicize a public debate and could lead to both inclusion and exclusion.

The article is structured as follows. Section 2 outlines the agonistic perspective and its critique of the deliberative perspective to introduce three possible depoliticizing responses. Section 3 discusses the qualitative vignette research methodology and its use among 17 civil servants working at major local governments in the Netherlands. In Section 4, the results of the study describe how local governments respond to political contestation and whether the three depoliticizing responses are present. In Section 5, the article reflects on tentative explanations for the depoliticizing responses and offers practical and theoretical recommendations. The article concludes in Section 6.

2 THEORETICAL FRAMEWORK: GOVERNMENT RESPONSES TO POLITICAL CONTESTATION IN THE SMART CITY

To establish a theoretical framework for this research, two normative positions on government responses to political contestation will be presented: the deliberative perspective and the agonistic critique. Especially, the prominent agonistic critique by Mouffe [29] of the deliberative perspective will serve as a basis for deriving three depoliticizing responses to contestation that may result in a post-political debate. The normative positions will form the basis for an empirical analysis to explore how local governments respond to various manifestations of political contestation. Prior, it is necessary to briefly discuss how political contestation can manifest in the context of the smart city.

2.1 Manifestations of Political Contestation About the Smart City

Based on a systematic review of 58 articles, Van Twist et al. [33] show that political contestation—a clash between opposing opinions, views, values, and interest about the smart city—could manifest itself across two dimensions: (1) individual versus collective and (2) conventional versus unconventional.

First, contestation of smart city technologies has been visible through individual and collective actions. In individual actions, citizens share their opposing views, such as through a letter of complaint or a social media comment [34, 35]. In collective actions, groups of citizens come together to express political contestation, such as through organized campaigns, petitions, and possibly even vandalism [19–21].

Second, citizen(s) have expressed their opposing views through *conventional* and *unconventional* actions. Conventional actions fit within the established laws and regulations of the (political) system. To illustrate this, individual citizens or civil society groups can file formal complaints, sue governments, organize campaigns and petitions, or start activist movements [21, 34–36]. Citizens can also express political contestation through unconventional actions that may go beyond established laws or norms, and could be considered inappropriate. For example, citizens can voice their concerns about smart city technologies by covering sensors, engaging in civic hacking, or committing vandalism [19, 20, 37, 38].

In sum, the smart city can face different manifestations of political contestation. The main objective of this work is to understand how local governments respond to these different manifestations of contestation. To analyze this, these responses will be situated within a broader normative debate on legitimate government responses to political contestation.

2.2 Normative Debate About Government Responses to Political Contestation

Two normative positions are central in the literature regarding political contestation: the deliberative perspective and its agonistic critique [22–24]. This section will describe three depoliticizing responses that could result in the exclusion of certain claims and actions. These responses are derived from the agonistic critique by Mouffe [29] of the deliberative perspective, which she accuses of seeking to eliminate the ‘political’ dimension through consensus-seeking. Mouffe advocates for an agonistic perspective as a better and more inclusive alternative. Lowndes and Paxton [39] and Maesele and Raeijmaekers [23] have also used Mouffe’s work to distinguish three similar depoliticizing responses in relation to journalism and political science. The ordered presentation

of the three responses is only intended for readability purposes and should not be interpreted as a linear model or an indication of their relative importance.

2.2.1 Depoliticizing Response: The Moralization of Politics. Deliberative democratic theorists [25, 40–44] argue that public deliberation is the foundation of legitimate political outcomes. In their view, differences in opinions and values can be overcome and transformed through an equal, free, unconstrained public deliberation or ‘ideal speech situation.’ The conditions necessary for this are that governments facilitate an inclusive political talk in which all affected actors are included. These actors should respectfully exchange rational arguments, and the better argument will affect the debate’s outcome. In line with this, emotions and passions should be eliminated from the public sphere.

As a critique, authors advocating agonism [22, 29, 45–48] argue that in deliberative societies, a political debate is dismissed through the elimination of passion and the ‘moralization of politics,’ in which “the political is played out in the moral register” and contestation “formulated in terms of moral categories” [29, p. 75]. Thus, the opposition is not characterized with political categories (e.g., ‘right and left’) but is captured in moral categories (e.g., ‘right and wrong,’ good and evil,’ and ‘rational and irrational’). As a result, opponents’ claims and actions can be rejected by labeling their enemies as irrational, disrespectful, emotional, passionate, bad, evil, or stupid based on rational or moral criteria. Consequently, a discourse is created that justifies excluding and moralizing particular claims and actions from a debate.

To this end, according to the agonistic perspective, a vibrant, inclusive, and well-functioning democracy should mobilize passions and should recognize the legitimacy of claims and actions by opponents [22, 29, 45–48]. This means that political contestation should never be limited or moralized by local governments based on their perception of what constitutes as ‘rational’ arguments or ‘reasonable’ behavior.

2.2.2 Depoliticizing Response: The Non-Contestation of Hegemony. Deliberative democratic theorists [25, 40, 42–44] argue that pluralism exists, but eventually, democratic outcomes represent an ‘impartial standpoint’ on the ‘common good’ that is ‘equally in the interest of all.’ This assumes a public sphere where power, hegemony, and conflict can be eliminated.

As a critique, authors advocating agonism [22, 29, 46, 49, 50] argue that deliberative theorists try to deny the dimension of power, antagonism, and hegemony. These scholars argue that every policy outcome is the expression of hegemony and power relations. The idea of the ‘natural order’ and what is at a given moment considered as ‘common sense’ is the result of “sedimented hegemonic practices and never the manifestation of a deeper objectivity” [46, p. 2]. As a result, this can influence claims and actions that are encouraged or discouraged based on the facts and options of the existing order. Consequently, policy outcomes should be perceived as ‘contingent and temporary hegemonic articulations’ that can be confronted.

With regard to this, according to the agonistic perspective, in a vibrant and well-functioning democracy, every hegemonic order should make room for conflicting interests and acknowledge that the hegemonic order is contestable [22, 29, 46, 49, 50]. This means that contestation should never be preserved or hegemonized by local governments based on their perception of the ‘natural order’ and ‘common sense.’

2.2.3 Depoliticizing Response: The Negation of Contestation. Deliberative theorists [25, 42–44] aim to reach consensus. Consensus is the “only basis upon which public policy can be legitimately made” [51, p. 790]. Therefore, it is considered important to negotiate and compromise among competing interests in society to preclude, overcome, or avert the possibility of contestation.

As a critique, authors advocating agonism [22, 29, 45–47] argue that the deliberative model of democracy fails to recognize the antagonistic dimension of society that emphasizes that there are contestations without rational solutions. They criticize the deliberative perspective for reducing the political “to a set of supposedly technical and neutral procedures” in which policies can be managed by (legal and technical) experts, rejecting the existence of real alternatives that can be discussed [29, p. 34]. According to the agonistic perspective, a struggle between

Table 1. An Agonistic Critique of the Deliberative Perspective: Depoliticizing Responses

The Deliberative Perspective	The Agonistic Critique	Expected Depoliticizing Responses According to the Agonistic Critique of the Deliberative Perspective
Differences in opinions and values exist but can be overcome and transformed through inclusive public deliberation aimed at respectfully exchanging rational arguments.	Differences in values and opposing opinions are necessary for creating collective identities and passion around public topics.	The Moralization of Politics: when political opponents are no longer viewed as legitimate opponents, but rather as enemies by categorizing them using moral rather than political criteria.
Deliberative conversations take place through an impartial dialogue between various opinions and values. Decisions are made for the common good.	‘Impartial’ dialogues cannot reconcile all conflicting opinions and values. Therefore, the existing hegemony must always be challenged to accommodate a plurality of opinions.	The Non-Contestation of Hegemony: when hegemonic opinions and values of dominant groups or ideology cannot be legitimately contested.
Differences in opinions and values can be resolved through deliberative conversations that follow neutral procedures and lead to consensus.	The importance of contestation between different opinions and values must be acknowledged, as decisions are always political and always involve the need to choose between conflicting alternatives.	The Negation of Contestation: when the conflict dimension of society is not recognized as inevitable and important for a vibrant democracy but instead politics is reduced to a decision-making process following technical considerations.

different interests and political positions is required for a vibrant democratic society. This is necessary because decisions in society are always political and always involve the need to choose between conflicting alternatives.¹

Considering this, according to the agonistic perspective, a vibrant and well-functioning democracy requires the acknowledgment of contestation that does not eliminate the possibility of and the need for other opinions [22, 29, 45–47]. Therefore, contestation should not be dismissed or delegitimized by local governments based on the specific moment it manifests itself or by technical and seemingly neutral government-centric procedures that leave citizens without a real choice between alternatives.

This section has presented two normative positions on government responses to political contestation (Table 1). The deliberative perspective argues that contestations can and need to be resolved, whereas the agonistic critique suggests that democratic space needs to embrace conflict because otherwise depoliticizing responses could occur leading to the exclusion of certain citizens and their opinions. In the research, the two normative positions will form the basis for an empirical analysis of governments responses to political contestation with smart city technologies, to see whether this leads to the emergence of the three depoliticizing responses outlined in Mouffe’s critique of the deliberative perspective.

2.3 Empirical Analysis of Government Responses to Political Contestation

This research uses the two normative positions as a basis for empirically exploring government responses to political contestation related to smart city technologies. These responses follow the sense-making process, as defined by Weick [52], which involves interpreting the environment and making decisions. Furthermore, individual sense-making processes, such as those of civil servants, play a significant role in shaping how local governments respond to contestation. The empirical framework presented in the following aims to identify depoliticizing responses in the smart city debate, determine the dominant normative position, and investigate the manifestations of behavior that can influence the frequency of such responses.

¹To facilitate productive contestation, Mouffe [22, 29, 45, 46] argues that democratic politics should aim to transform ‘antagonism into agonism’: “the other is no longer seen as an enemy to be destroyed, but as an adversary: somebody with whose ideas we are going to struggle but whose right to defend these ideas we will not put into question” [45, p. 102]. Without agonistic channels for contestation, there is a risk of alienation, radicalization, and populism.

Table 2. Expected Manifestations of Depoliticizing Responses

Expected Depoliticizing Responses	Empirical Manifestations
The Moralization of Politics	Certain citizens and their actions are categorized in moral instead of political categories, and perceived as irrational, wrong, maleficent, or unethical.
The Non-Contestation of Hegemony	Certain claims and actions are considered non-contestable because they are perceived as not in line with the natural order or common sense of the hegemony.
The Negation of Contestation	Certain claims and actions are being negated because the contestation is considered as expressed at the wrong time or in an inappropriate context.

First, from an agonistic critique of the deliberative perspective, it is argued that deliberative interactions with contestation can lead to depoliticizing responses (Table 2). If these depoliticizing responses occur as a result of sense-making, one could empirically observe that certain people, claims, and actions are being moralized, for example, because they are perceived as irrational, emotional, wrong, or unethical rather than political; are being hegemonized, for example, because they are not perceived as standard or important for the common good; or are being negated, for example, because they are not manifested at the right time or when technologies already align to procedural and legal requirements.

Second, by identifying whether these depoliticizing responses are present, insight is also implicitly gained into the dominant normative position of local governments. If the deliberative perspective is dominant in civil servants' responses to contestation with smart city technologies, one could empirically observe that civil servants try to organize a debate where all parties involved engage in rational and reasonable discussions, contribute to the common good by engaging in a debate with impartial viewpoints, and resolve contestation by reaching consensus. However, if the agonistic perspective is dominant in civil servants' responses to contestation with smart city technologies, one could empirically observe that civil servants try to incorporate passion and emotion into the debate to promote inclusive discussions; give a voice to perspectives that do not align with their own view of reality; and make room for confrontation of perspectives, even if it does not seem the right time and right place from an administrative perspective.

Third, because of sense-making, local governments may respond differently to various manifestations of political contestation depending on whether they are expressed individually or collectively, and conventionally or unconventionally [33]. This is because local governments may consider some manifestation of contestation as more legitimate than others and have different ideas about appropriate responses. As a result, the way local governments make sense of different manifestations of contestation can influence the frequency of depoliticizing responses. For instance, it might be expected that collective manifestations of contestation may be taken more seriously and are therefore depoliticized less often than individual actions [53]. Additionally, there is ambiguity in the literature regarding the impact of conventional and unconventional behavior. Some studies suggest that unconventional manifestations of contestation may be taken less seriously and dismissed more quickly than conventional expressions of dissatisfaction, whereas others indicate that this is not necessarily the case [54].

3 METHOD

3.1 Research Design

This study aims to understand how local governments (would) respond to political contestations with the smart city and its implications. Therefore, semi-structured vignette interviews were conducted with civil servants working at 17 different major local governments in the Netherlands. These civil servants were interviewed as representatives of these local governments because all of them (1) work on smart city policies; (2) are seen as the point of contact for citizens with questions, concerns, and criticism; and (3) facilitate and shape the engagement of citizens in smart city projects.

This study employed vignettes as a methodological technique to structure the interviews [55, p. 183]. Qualitative vignettes in this study are presented as “short stories about hypothetical characters in specified

circumstances, to whose situation the interviewee is invited to respond” [56, p. 105]. Qualitative vignettes were chosen as a methodological technique because they can be used to understand subjective values, opinions, beliefs, and attitudes about a given situation [57, 58]. This is relevant because this study focuses on how civil servants make sense of political contestation as representatives of their local governments. Additionally, to understand civil servants’ perspectives on the different manifestations of political contestation (individual or collective; conventional or unconventional), civil servants must reflect on urban futures and manifestations of political contestation that are being experienced and that are not yet being experienced within their local smart city context. Therefore, vignettes are used to allow civil servants to reflect on the experiences within their own local government context and make unexperienced manifestations of political contestation with the smart city a “concrete, tangible and judgeable reality” [55, 59, p. 26]. Moreover, vignettes can desensitize topics by providing fictional scenarios that are non-personal to make respondents less reluctant to share sensitive information about their work [56–58, 60]. This is also relevant to this study, in which civil servants might have encountered social unrest or strong emotions in response to political contestations that had occurred previously within their local government.

Vignettes have been created in smart city research to imagine future scenarios of smart cities and their impact on citizens [10, 61, 62]. Others used vignettes to understand public views about smart city technologies [59, 63, 64]. In this study, vignettes were used as methodological input to understand how local governments (would) respond to political contestation about smart city technologies.

3.2 Constructing Vignettes

In this study, four vignettes were constructed (Appendix A.1). In terms of the content of the vignettes, each vignette subsequently addressed different manifestations of political contestation: individual and conventional actions (protest stickers and social media complaints), individual and unconventional behavior (threatening a member of a governing body), collective and conventional actions (protest), and collective and unconventional behavior (vandalism) toward smart city technologies (e.g., a smart waste pass, smart sewer system, smart lamp-post, and smart sweeper truck).

Multiple actions were undertaken to make the vignettes both relevant and plausible. First, the vignettes were constructed based on previous research findings on the different manifestations of political contestation in the smart city context [33] and on smart city technologies that have encountered controversy to make the vignettes plausible [57, 65]. Second, the vignettes were also pretested to examine if they were relevant, realistic, internally consistent, and not too complex [60, 66]. To do so, the vignettes were tested with five experts from academia and professional practice, with experience in both the smart city and local government context. Based on their feedback, the vignettes were further refined and adapted to be of relevance in the Dutch context.

3.3 Data Collection and Analysis

Based on the smart city vignettes, semi-structured interviews were held with 17 civil servants working at 17 Dutch municipalities. Recruiting was discontinued once ‘theoretical saturation’ was reached and no new insights emerged [67]. This meant that after the 12th interview, no new information was obtained, and 5 additional interviews were conducted to confirm the findings. Interviews were held with civil servants who are implementing smart city technologies and have experience in interacting with citizens on related topics. This enhanced respondents’ ability to engage with the vignettes [60]. Convenience sampling was used in this study, in which local governments were partly selected for their accessibility and availability [67]. This is important because not every local government in the Netherlands is yet engaged in the rollout of the smart city or has had to deal with political contestation about smart city technologies. In this study, 4 large (more than 500,000 inhabitants) and 14 medium-sized (more than 70,000 inhabitants) municipalities were included in the analysis, all of which have implemented smart city technologies and experienced political contestation. Additionally, it is important

to mention that the Netherlands is endorsed as a ‘consensus democracy’ in which the ‘polder model’ is central. This may lead to a preference for the deliberative perspective [68, 69].

The semi-structured interviews were conducted via Microsoft Teams between May and July 2022. The duration of the interview was, on average, 50 to 60 minutes. Interviewees were presented with the four qualitative vignettes, and the interviews were held with an interview protocol (Appendix A.2). Respondents were invited to share their thoughts on the scenario’s plausibility, how they imagined the local government would respond to (individual, collective, conventional, and unconventional) political contestation in that scenario, and why. Subsequently, civil servants were also invited to share their own experiences with contestation about smart city technologies and related subjects within their local government. Strikingly, this question often did not need to be addressed because the vignettes often ensured that civil servants presented their own examples.

The interviews were transcribed, analyzed, and coded using ATLAS.ti software. The thematic coding process can be divided into different phases [67, 70]. First, a subset of five interviews was coded using the identified theoretical concepts. For example, during this phase, quotes were coded in line with the sensitizing concepts that described the importance of rationality, pluriformity, consensus, and contestation (see Section 2.1). Moreover, during this phase, additional (sub)themes emerged. To illustrate this, many quotes of civil servants discussed the importance of legislation and ethics in relation to the interaction with contestation. Second, initial themes were generated. To do so, codes were compared, merged, and clustered into themes that shared similarities on the topic of political contestation. Third, the themes were further developed and reviewed, with new connections being made or adapted between the main categories of subcategories from the previous coding phase. For example, the concept of ‘moralization of politics’ resulted in clusters regarding attitude and behavior. Finally, the coding process resulted in a preliminary list of themes and subthemes used to code the remaining interviews (Appendix A.3). The list was interactively complemented when new codes were encountered.

4 RESULTS: GOVERNMENT RESPONSES TO POLITICAL CONTESTATION IN THE SMART CITY

The results of this research are described based on the 17 interviews. First, the findings present a general reflection on how local governments respond to political contestation, and whether (intentionally and unintentionally, consciously and unconsciously) depoliticizing responses are used. Thereafter, the findings discuss whether local governments tend to depoliticize certain forms of political contestation, such as individual versus collective and conventional versus unconventional actions, more frequently.

4.1 Empirical Findings for the Moralization of Politics

4.1.1 *Everyone Should Be Able to Join the Debate* . . . The interviews show that, in a general sense, local governments intend to bring about an inclusive political discussion about the smart city. Local governments consider it very important that everyone has the opportunity to participate in discussions about the future city (R2, R3, R5, R6, R14–R16). One respondent illustrated this by saying, “We think it is important to do it together with the city. We try to involve the whole playing field in the development of the city” (R6).

The civil servants involved in the study also realize that this is difficult. They indicate that discussions about smart city technologies are currently often still dominated by ‘experts,’ ‘technicians,’ ‘retirees,’ and ‘white men’ (R2, R5, R6, R9, R15, R16). According to the respondents, these people often have an affinity with technology, have enough time, or feel welcome at participation sessions organized by government agencies. Many local governments therefore try their best to organize sessions that are interesting for a wider audience. For example, local governments organize pop-up museums, tech cafes, roller discos, data walks, and hackathons (R2, R3, R5, R6, R9, R14, R16): “We experiment with different forms [of participation] where we involve different target groups. With the aim of getting everyone involved in thinking about what the city’s future should look like” (R6).

4.1.2 . . . But You Have to Act Rational. At the same time, reflecting on the vignettes and their own practices, civil servants do indicate that the inclusive and substantive conversation they envision is conducted with

‘reasonable’ people who have ‘rational’ arguments for their contestation and listen to other opinions as well (R2, R4–R9, R11–R14, R16, R17). For example, one respondent remarked about an ethical committee that had been put together: “They are all right-minded people, who can formulate very well why they are supportive of, or against something, and can list arguments” (R2).

This excludes—intentionally and unintentionally, consciously and unconsciously—citizens from participating in the smart city debate. Interviews with civil servants show that local governments label several citizens and their opposing viewpoints of smart city technologies as illegitimate (R1, R4, R7–R9, R11, R12). As an illustration, civil servants indicate that certain citizens in the smart city debate are dismissed as conspiracy theorists or *wappies*—a Dutch slang term with a condescending connotation used by respondents to describe people who they find difficult to take seriously, as they are believed to be fueled by disinformation and conspiracy theories in filter bubbles (R1, R4, R5, R7–R9, R11, R12, R17): “Normally the first thoughts are we push this away. This is nonsense. They are wappies” (R1), and “I got a request to disclose information about the smart city, but it was also linked to buying out homeowners and farmers. These people make bizarre twists in their minds” (R4). There are also civil servants who dismissed citizens with a critical perception as people who can no longer understand the world and therefore have incorrect assumptions about smart city technologies or cannot grasp the importance of the smart city (R4, R6–R8, R12, R13, R16). For example, a civil servant tried to make sense of criticism by dismissing it with the following statement: “Very often these people don’t understand the complex world” (R7), which steered the response in the direction of exclusion. Last, a few civil servants dismissed citizens and their criticism as troublesome and annoying (R4, R12): “These kinds of people are really a ‘pain in the ass’ in these projects” (R12). By labeling citizens as ‘wappie,’ stupid, or troublesome, they are disqualified as legitimate opponents by civil servants, and their opinions can be easily excluded from a political discussion about the smart city.

4.1.3 . . . But You Have to Behave Reasonably. Reflecting on the vignettes and actual cases, civil servants indicate that they like to talk with residents in a good atmosphere. This requires citizens to behave when they want to bring their criticism to the attention of the smart city debate. In response to the vignettes, for example, it appears that local governments consider political contestation as illegitimate and a ground for exclusion if it manifests itself through acts that are perceived as vandalism or threats (R1, R3–R17). To illustrate this, one respondent said, “If someone tells their story in a normal way, I think they should be heard and seen. Yes, but within the normal framework of communication. And if someone can’t or doesn’t want to meet that requirement, then he has lost his chance” (R12). In addition, civil servants indicate that not all citizens can find and follow the conventional routes to express their contestation (R4, R6, R12, R14, R16), they indicate that we also have a broader problem in the Netherlands when it comes to distrust in government bodies (R1, R4, R5, R7–R9, R12, R14, R16), and they argue that in today’s society we are increasingly dealing with citizens who express their opinions in a more extreme way (R3, R4, R8, R14, R16). Many of these civil servants indicate when confronted with unconventional behavior that it is difficult determining how to handle contestation that they may sympathize with but find the expression inappropriate (R5, R7, R13, R16). This is evident from the following words: “The boundary is indeed difficult to determine on paper, but I don’t think that if you threaten someone or set off fireworks, you are then invited for a conversation” (R5). Nevertheless, these civil servants often still believe that unconventional expressions of dissent should be limited and, if necessary, punished.

Moreover, citizens who express their political contestation about the smart city through unconventional actions (e.g., vandalism related to smart city technologies) are delegitimized by civil servants because their opposition is sometimes directly linked to possible criminal activities of these citizens (R6, R7, R15). For example, one respondent stated about criticism of cameras in the city: “The people who are dissatisfied are often the people who are getting caught by the camera images. You never want to make them happy” (R6).

4.2 Empirical Findings for the Non-Contestation of Hegemony

4.2.1 Everyone Can Have a Different Perception . . . The interviews show that, in a general sense, local governments certainly intend to bring about a discussion about the smart city in which everyone is allowed to

think very differently about smart city technologies. Moreover, civil servants indicate that they can understand political contestation about smart city technologies (R2, R4, R5, R8, R11, R13, R15–R17). For example, the respondents stated: “Well, of course, I am a citizen myself. I can very well imagine the resistance to such a smart city application” (R8), and “You can be very critical of the smart city. It is completely justified when people ask questions about smart cameras: ‘Oh, what is being installed now? What is this for?’ These are all perfectly legitimate questions, and we simply need to have a good answer to them” (R4).

Civil servants indicate that pluralism and contestation are also precisely what is vital in the creation of the smart city. Therefore, they argue that local governments should be willing to be curious about other views and engage with these residents to make better policies that meet the wishes and needs of residents (R2, R3, R5–R9, R11–R17). A few indicative statements: “We should embrace it [counterarguments] with the mantle of love” (R3), and “If there is some dissent, it should be part of the public debate. It’s allowed. As a government, you may have to choose to embrace it. We do not do this very often but embrace this discussion” (R7).

Moreover, civil servants indicate that it is crucial for local governments to be understanding of other opinions and take them seriously (R4–R6, R11–R17). For example, one respondent stated about a citizen who expressed concerns and criticism: “Yes, he is allowed to tell his story and express his frustration. I think we should listen to that because that is our job” (R12). Another respondent said, “You should start a conversation and make people feel heard and seen” (R12). However, one respondent also indicated that there is a tension present here: “This is one of the biggest challenges. Also, for the municipality. How can you engage with residents in an equal manner? That they feel heard, but not that you only listen to one percent of the citizens” (R15).

4.2.2 . . . But It Should Not Undermine Our Idea of the Natural Order. However, reflecting on vignettes and actual experiences reveals that civil servants have certain preconditions for managing political contestation, which often revolves around the local government’s definition of the smart city and its role within it.

For example, civil servants point out that many citizens approach local governments with questions and complaints about technologies that belong to companies or other government agencies (R1, R2–R4, R13). Consider, for example, the rollout of 5G or the CornonaCheck app. Local governments cannot and do not need to do anything with these objections, which allows them to dismiss contestation: “It’s not ours, not from our smart city club, so sorry” (R4).

Additionally, some civil servants (R1, R3, R4) point out that some technologies do not belong to what they label a ‘smart city.’ As a result, criticism that manifests itself here does not need to be interpreted as criticism of the smart city, even though citizens themselves may see it that way.

4.2.3 . . . But It Should Be in Line with What We Consider as Common Sense. It also is clear from the conversations with civil servants about the vignettes and their actual practices that what is perceived as ‘common sense’ by the parties in power can exclude or downplay any dissent that does not align with this—intentionally and unintentionally, consciously and unconsciously.

First, this takes form as civil servants’ believe that smart city developments inherently serve the public interest. The local government develops things that citizens ‘like’ or are interested in. Critique is quickly put into perspective in that light (R2, R3, R5–R8, R12, R14, R15, R17). Two civil servants commented, “Smart technologies are not always bad. The moment the widely supported norm is clear, then people want it rather yesterday than tomorrow” (R7), and “Those people also have a stake in it. Because the person who feels overheard [by sound sensors] is also the person who suffers when his mirror is kicked off his car and who lies awake because of the noise. Security is a kind of common need. Then we start thinking about what the best solution for that might be” (R12).

Second, local governments also seem to downplay political contestation when they think that citizens’ criticism of smart city technologies is strange or even unjustified because citizens are integrating other (more) intrusive technological applications into their own lives (R1, R4, R9, R16). For example, some civil servants stated: “There are technologies that go much further, and people simply integrate them into their own lives” (R1), and

“If you use your bank card abroad, the bank can also see exactly where you are or what you are doing, and people don’t find that a problem” (R4).

Third, civil servants argue that only a small group of citizens are concerned about smart city technologies. Therefore, it can be assumed that their voices are less relevant for local governments to change the prevailing hegemonic order. For example, civil servants state that most citizens are fine with the move toward the smart city (R1, R4, R7, R14) and recognize that the use of technology is becoming more and more inevitable, so what are we worried about? (R2, R6, R9). Additionally, respondents indicate that most people do not engage in this topic at all, either due to a lack of interest or because they experience more significant problems in their lives (R3, R6, R7, R14, R17): “I think the largest group of people thinks it’s all fine or doesn’t care. It seems that a small group of people [with opposing viewpoints] are making a lot of noise” (R4).

Fourth, the hegemony of the existing order in the smart city debate is further supported by civil servants who indicate that the decision of the local government ultimately ‘appropriately’ rests with the city council, who make their own assessment of public values (R2, R4, R6–R14, R16, R17). For example, one civil servant stated that “The majority decides” (R4), and someone else commented that “You can’t listen to every dissenting opinion because, in the end, it is about the public interest being properly taken into account” (R13).

4.3 Empirical Findings for the Negation of Contestation

4.3.1 There Is Room for Contestation . . . The interviews show that, generally, local governments feel that political contestation can and must have a place in the smart city debate (R1, R3–R5, R7, R9–R14, R16, R17). For example, one civil servant (R5) said, “Your most important critics, you should use them for feedback.” Some respondents even indicated they greatly miss the contestation of views (R3, R9, R14). To illustrate this, one civil servant (R3) said that the local government is discussing with other European countries “How to make sure you can take that citizen voice further.” Others state: “I want people to care more about this” (R3), and “I was kind of glad [when citizens came forward with counterarguments] because this was the first time we were able to talk: hey citizen, we are doing all kinds of things, get involved, and have an opinion about it” (R9). However, a civil servant (R1) also indicated that this is sometimes difficult because contestation can lead to political consequences that are not always acceptable.

Additionally, several local governments try to actively organize and institutionalize political contestation, such as through dialogue tables with action groups, ethics committees, and sounding boards (R2, R3, R5–R7, R9, R11–R14, R16). Civil servants said about this: “You have to facilitate dissent. We shouldn’t be too afraid of that as governments” (R7), and “That’s the organized opposition, and we are actively helping them too. We are actively supporting people who are helping other people to have a critical take on the smart city” (R3).

4.3.2 . . . But Only at the Right Time. Conversations with civil servants about the vignettes and actual cases indicate that political contestation is desirable for local governments, especially in the early stages of the development of a smart city application (R7, R9, R12). Civil servants indicate that local governments proactively pay attention to diverse residents’ interests and clashes of opinions in the early stages of the development of smart city technologies (R2, R4, R6–R9, R13, R14, R16). Thereby, it is often assumed that early involvement, transparent information, explainable goals, and engaging with citizens can overcome political contestation (at a later moment) (R1–R17). For example, one civil servant stated: “I can very well imagine that such criticism arises if nothing was discussed beforehand with the residents” (R8).

Interestingly, the moment when local governments open up to pluralism and contestation does not always correspond to the moment when citizens develop their critique. Talking about the vignettes, civil servants indicate that criticism from citizens often only manifests itself when technologies become visible in public spaces and impact daily life, not when the local government organizes participation in the early stages of smart city development (R7, R9, R10, R12, R16). One civil servant said: “As a government, you say, ‘We already had an information meeting when we drafted our smart city policy. But nobody came. Now we installed the camera in your

street, and now you are against it. We have already established the policy” (R7). Consequently, this temporal mismatch or friction that arises around ‘time’ ensures that political contestation manifests itself ‘too late’ and can be dismissed by local governments—intentionally and unintentionally, consciously and unconsciously—as out of order.

4.3.3 . . . But Only in the Right Context. In addition, civil servants’ reflections on the vignettes indicate that local governments often respond to contestation by referring to seemingly technical and neutral procedures through which the smart city takes shape, making contestation appear less meaningful (R1, R3, R12, R15).

First, civil servants indicate that there are always voices of critique present in society. Consequently, local governments cannot act on all criticism. For example, a respondent said this about the opposition: “You try to channel it” and “Yes, appease and keep it small” (R12). According to civil servants, criticism must be widely supported, politically backed, or disseminated by the media if local governments are to organize a debate on the topic or terminate a smart city application (R1, R3–R5, R10, R13–R16). For example, one respondent stated: “I think you always have to consider how broad the discontentment is” (R13). Political contestation to smart city technologies may well be ignored in this way because there are always other ‘more important’ and ‘bigger’ issues that demand attention.

Second, local governments restrain a contestation of views by indicating that smart city technologies comply with laws and regulations, are tested against ethical frameworks, or have gone through a political decision-making process (R1, R2, R4, R6, R10, R13–R15, R17). This makes political contestation unnecessary. For example, one civil servant stated: “Yes, if the personal data authority (AP) approves it. Yes, then it is allowed” (R4). One civil servant (R15) did explicitly mention that even when technologies comply with (privacy) regulations, there should always be room for residents’ objections.

Third, local governments restrain real contestation of views in the smart city debate by referring to it as an ‘experiment’ or ‘permanent beta.’ This emphasizes the provisional nature of the technologies and its continuous testing and refinement, without any clear endpoint or final version. This allows for dissent to be incorporated into the improvement of the technologies; however, it can also relativize the seriousness of any dissent during technical development (R1, R3, R8, R12, R13). For example, one civil servant said: “The word experiment already creates space [for municipalities] to say we will finish the experiment. After an experiment, we will evaluate the positive and negative effects” (R13). Another civil servant acknowledges that this form of permanent beta is nice for the government but less enjoyable for citizens who have complaints or concerns: “For me, it is fine, however for a citizen with critique, it always remains a half answer what you get” (R3). Moreover, stopping smart city experiments when they encounter dissent is often difficult (R1, R8, R14, R17). For example, one civil servant stated: “At some point, you cross a line where you start collaborating meaningfully with each other, using data, sensors, and digital connectivity. Then you can’t go back. Companies must also be able to rely on us, not just doing something for two years and then stopping” (R1).

4.4 Empirical Findings for Government Responses to Different Types of Political Contestation

In the preceding section, the exploration focused on how local governments respond to political contestation and utilize depoliticizing responses. Drawing upon the aforementioned analysis, the following conclusions will be drawn with caution regarding whether civil servants (intentionally and unintentionally, consciously and unconsciously) tend to depoliticize certain forms of political contestation more frequently, such as individual versus collective and conventional versus unconventional actions.

4.4.1 Individual Versus Collective. When it comes to the first depoliticizing response, the moralization of politics, civil servants appear to slightly more often consider individual actions as unacceptable compared to collective actions (R1, R3, R8, R9, R15). For example, enforcement is considered the logical consequence when individual citizens threaten a member of a governing body or cause vandalism. Local governments seem to show a little more understanding when contestation takes a collective form. Perhaps this stems from the unconscious

belief that innovative cities must continue to become smart to remain competitive and improve citizens’ quality of life. When there is collective contestation, the presumption might be that there must be more to it after all (R3, R13, R15, R16).

When it comes to the second depoliticizing response, non-contestation of hegemony, it seems that civil servants tend to more frequently disqualify collective contestation by insisting it must align with the accepted natural order (R1–R4). This is explained by civil servants referring to the ‘fact’ that technologies in the public sphere not only come from local governments but also from (collaborations with) companies. In such situations, these civil servants try to avoid confrontation because they believe that their local governments lack the necessary tools or civil servants do not see it as their tasks and responsibilities (R1, R5, R7, R17).

When it comes to the third depoliticizing response, the negation of contestation, it appears that civil servants are less likely to use the disqualifying objection that political contestation is only allowed at the right time when such contestation is expressed through individual actions (R7, R11). Perhaps it is easier for local governments to address criticism that manifests itself individually at any given time, with the participation tools that governments have, for example, by simply calling these people or inviting them for a conversation (R2, R5, R7).

4.4.2 Conventional Versus Unconventional. When it comes to the first depoliticizing response, the moralization of politics, strikingly civil servants are more inclined to dismiss citizens as enemies (using terms like *wappie* or *stupid*) rather than legitimate opponents when citizens express their political views through conventional means, such as a protest letter or a petition (R1, R4, R5, R9, R12, R13, R16). The reason may be that texts written for these conventional ways of protest are (subconsciously) regarded as unintelligible or nonsensical by civil servants and, as a result, as something not to be taken seriously. For example, this is the case when these texts connect a smart city application to conspiracy theories about the World Economic Forum or health risks (R1, R4). When citizens choose unconventional actions (e.g., threatening a member of a governing body or destroying cameras), the underlying presumption could be that these actions are more likely to stem from malice (rather than stupidity) and should be punished (R6, R7, R15).

When it comes to the second depoliticizing response, non-contestation of hegemony, it seems that civil servants are more likely to apply the disqualifying objection when conventional means are used. For example, civil servants more often point out that letters of complaint or campaigns for signatures are not in line with the tasks of the local government or what should be understood by the smart city (R1–R3, R13). Additionally, when conventional means are used, it appears that civil servants tend to apply the disqualifying objection more often, which requires citizens to conform to the common sense. When citizens express conventional actions, civil servants are more likely to point out that the city council ultimately makes the decision, that only small groups of citizens have critique, or that the technologies serve the public interest (R2, R3, R9, R10, R12, R13, R15–R17). The silent majority is invoked, perhaps because local governments may implicitly believe that facilitating debate for the active minority may increase conflict and hostility, lead to political consequences, or alter established plans and investment (R1, R7, R8, R14, R17).

When it comes to the third depoliticizing response, the negation of contestation, it appears that the disqualifying objection that political contestation should only take place at the ‘right’ moment weighs slightly less heavily when unconventional means are chosen (R9, R12). Apparently, local governments more often reject a letter of complaint or a protest in contrast to vandalism or harassment, arguing that it is not the right time. This may be because existing participation tools focus on the policy responses of governments, forcing conventional criticism to express itself within this framework, whereas citizens often only become aware of policy and develop contestation at a later stage, which can exclude them as legitimate opponents in the debate (R7, R12).

5 DISCUSSION

Governments introducing smart city technologies encounter political contestation, which can manifest itself through both individual and collective actions, in both conventional and unconventional forms. This research

Table 3. Overview of Empirical Findings: Intentions and Depoliticizing Responses in the Smart City Debate

	Intention of Local Government	Depoliticizing Responses
Moralization of Politics	Everyone should be able to join the debate But you have to act rational. . . . But you have to behave reasonably.
Non-Contestation of Hegemony	Everyone can have a different perception But it should not undermine our idea of the natural order. . . . But it should be in line with what we consider as common sense.
Negation of Contestation	There is room for contestation But only at the right time. . . . But only in the right context.

aimed to explore how local governments respond to political contestations about the smart city and its implications. To guide the empirical analysis of government responses to political opposition and determine whether they lead to depoliticization, the theoretical framework identified two normative positions based on the agonistic critique of the deliberative perspective.

This research demonstrates that local governments have the ambition to embrace the agonistic position. Governments do their best to organize an inclusive smart city debate with room for political contestation between counterarguments. However, despite these intentions, the results also indicate that the smart city debate shows (intentionally and unintentionally, consciously and unconsciously) three depoliticizing responses undermining these ambitions (Table 3). First, the results show that local governments want to involve all citizens in discussions about the smart city, but they also impose moralizing conditions, stating that those who wish to participate should act reasonably and rationally. Second, local governments welcome a multitude of views, but the study's outcomes demonstrate that these alternative opinions are hegemonized when they undermine the 'natural order' and the 'common sense' of the hegemony. Third, although local governments may allow for contestation, this study shows that the space is also delegitimized and is assumed to remain limited within the preconditions set by the local governments themselves, such as at what they consider the right time and in the right context.

Authors advocating agonism would argue that these depoliticizing responses arise because of a consensus-oriented deliberative perspective that refuses to acknowledge 'the political' as a concept that allows for passion, heterogeneity, and contestation [29, 49, 71, 72], resulting in a post-political debate about the smart city [29, 30, 73]. Local governments may recognize the value of the agonistic perspective in theory, but in practice, civil servants often revert to the deliberative perspective when facing real-life cases. In these situations, governments organize conversations that focus on exchanging rational arguments rather than emotions, seek impartial dialogue and the general interest rather than the exchange of diverse views that challenge the dominant ideology, and aim for consensus rather than contestation. Consequently, citizens that express political contestation could be moralized, hegemonized, and delegitimized by local governments instead of regarded as a political resource.

Authors advocating agonism argue that without channels for agonistic contestation, there is a risk that suppressed conflicts may escalate as excluded counter-publics become alienated, radicalized, and drawn to populism [29, 30, 74]. Therefore, Mouffe [22, 29, 45, 46] argues that democratic politics should aim to transform 'antagonism into agonism': "The other is no longer seen as an enemy to be destroyed, but as an adversary: somebody with whose ideas we are going to struggle but whose right to defend these ideas we will not put into question" [22, p. 755]. This could mean that local governments accept other political opinions and their passionate manifestation, not wanting to immediately change them by informing, persuading, or correcting citizens, but seeing these citizens and their opinions as legitimate opponents to create an actual, citizen-centric smart city. This study could provide researchers and civil servants with a framework that can help them become aware and assess the presence of depoliticizing responses.

Two tentative explanations for the depoliticizing responses will be reflected upon, based on the literature and input from the respondents.

First, a silent ideology may exist that invokes the depoliticizing responses. A silent ideology is characterized by a shared and coherent vision of society that entails unspoken underlying reasoning that prevents alternative visions from being discussed [75–77]. A silent ideology in the smart city seems to exist regarding (1) how a city should develop itself and (2) what manifestations of political contestation are desirable. Although civil servants say that local governments have the intention to give citizens and their criticism a place in the smart city debate, the results of this study indicate that the silent ideology is that cities need to become ‘smart’; ‘citizens’ should take a ‘constructive’ attitude and exchange ‘rational’ arguments; that ‘alternative opinions to consider’ are opinions in line with the facts and opinions of governments; and that the ‘desired contestation’ takes place at the right time and in the right context. This silent ideology ensures that alternative normative and political assumptions about the smart city remain undisputed. This silent ideology might be present because the Netherlands is considered a ‘consensus democracy’ that values the ‘polder model’ [68, 69]. As a result, the local governments in the Netherlands may unconsciously prefer the deliberative perspective, which focuses on ‘consensus,’ over the agonistic perspective, which emphasizes ‘conflict’ and ‘criticism.’ However, awareness of the existence of a silent ideology and its depoliticization and exclusion potential is important. Moreover, how governments respond to contestation is political and should therefore be part of political struggle [29, 49, 78]. As part of this struggle, a political community needs to discuss which boundaries of inclusion and exclusion are considered legitimate when organizing ‘inclusive’ citizen-centric debates.

Second, local governments may lack practical methods and tools for organizing agonistic channels for engagement, in which citizens with opposing viewpoints are viewed as legitimate political opponents at all times. In the smart city literature, some studies have theoretically explored how participatory design can increase the democratic debate and have developed and tested (agonistic) participatory processes [27, 28, 79–81]. Experimenting with these participatory design processes holds great potential for local governments, citizens, and researchers to enhance the democratic development of the smart city by incorporating a variety of values and interests in the development of the smart city [79].

Last, the study highlights a limitation of the agonistic theory of Mouffe [82], which is the lack of clear criteria to identify and accept or reject problematic expressions of antagonism and politicization. Mouffe [29, p. 52, 46, p. 139] only indicates on an abstract level that “Adversaries can fight—even fiercely—but according to a shared set of rules, and their positions, despite being ultimately irreconcilable, are accepted as legitimate perspectives” and “Adversaries agree about the ethico-political principles which organize their political association but disagree about the interpretation of these principles”. The study findings suggest that governments also struggle with the boundaries of acceptable and unacceptable expressions of contestation in some specific real-life situations. When confronted with unconventional behavior, civil servants acknowledge the difficulty of determining how to handle contestation that they may sympathize with but find the expression inappropriate. These complexities call for further academic and public debate in the future.

6 CONCLUSION

In the context of smart cities, political contestation by citizens is present. To understand the response of local governments to such contestation, the theoretical framework identifies two normative positions: the deliberative perspective and the agonistic perspective. Additionally, through the agonistic critique of the deliberative perspective, three potential depoliticization responses were derived that may exclude certain citizens, claims, and actions. To empirically investigate how local governments respond to contestation and to test whether these various forms of depoliticization are recognized in government responses, a vignette study was employed.

This study showed that local governments aim to create a citizen-centric smart city debate with room for political contestation. Civil servants indicated that local governments intend to (1) include everyone in the debate, (2) allow for a multitude of views on the smart city, (3) and enable a contestation between different positions.

However, from an agonistic perspective, the results of this study showed that the development of the smart city can lead to deliberative and depoliticizing responses in practice because (1) certain groups and their opinions and behaviors are morally excluded when they do not act reasonably and behave properly, (2) citizens who express different opinions are hegemonized and not taken seriously as political subjects when they want to struggle against what the hegemonic order sees as the 'natural order' and 'common sense,' and (3) contestation is delegitimized when it is not provided at the right time and in the right context. Furthermore, these depoliticizing responses seem to be employed more often in response to collective and conventional forms of contestation. The presence of depoliticizing responses could be the result of an implicit ideology within the government or a lack of practical methods for organizing agonistic channels for engagement. Consequently, there is a risk that local governments implementing smart city technologies instead of contributing to a lively democratic, citizen-oriented smart city debate could create exclusion.

The findings of this research have several scientific implications. First, it contributes to a more political agonistic perspective on citizen contestation in the smart city literature. Some studies in the smart city literature discuss agonistic pluralism; however, to my knowledge, no empirical research is available that uses the agonistic perspective to critically analyze government responses to contestation in the smart city context [24, 27, 83]. Through empirical findings, this study provides a framework that can help assess depoliticizing responses of exclusion. Second, this article contributes to the literature on the post-political debate regarding the smart city. In this literature, post-political responses are often seen as something that neoliberal corporations or paternalistic governments can be blamed for [2, 3, 73]. However, this study shows that depoliticizing responses might not only arise from intentional and conscious actions but also from a silent ideology (unconsciously) and from a lack of practical tooling (unintentionally). As a result, local governments seemingly want to facilitate an inclusive debate, but at the same time, they also (un)consciously and (un)intentionally exclude certain citizens. Third, this study shows that vignettes can be used to understand how local governments (would) respond to different manifestations of political contestation, which are foreseeable to manifest themselves in a similar form in the near future. Using vignettes as a conversation starter ended up working well, also because many local governments have had to respond to similar manifestations of political contestation (within different policy contexts or with different smart city technologies). The use of vignettes not only allowed civil servants to reflect on hypothetical situations but also prompted them to share their experiences of handling contestation.

The results of this study have practical implications for administrators, civil servants, regulators, and scientists working on smart city projects that aspire to create citizen-centric smart cities. First, this study indicates that governments could ask themselves more often which normative assumptions underlie smart city technologies and what mechanisms (intentionally and unintentionally, consciously and unconsciously) are responsible for the post-political debate. Second, this research sheds light on the tension that exists around consensus and conflict. As a result, it becomes important for public administrators to initiate a political discussion about what interaction with political contestation is considered legitimate in certain contexts, at certain times, and under certain conditions. Therefore, the following questions can be considered: To what extent do we find depoliticizing responses that could lead to exclusion acceptable? When do citizens really disqualify themselves? And what depoliticizing responses do we need to avoid?

Future research can address the question of whether there are international and governmental (e.g., public administrators vs. politicians) differences in openness to political contestation in the smart city, how these differences may change over time, and what factors may explain these variations in depoliticizing responses. Additionally, research could systematically investigate whether there is a silent ideology present within governments, whether there is an awareness among local governments of the existence of a silent ideology and its depoliticization and exclusion potential, and whether it is desirable to change this. Finally, it could be interesting to experiment with participatory design strategies and other forms of practical tooling that may allow agonistic discussion spaces in which local governments and citizens with different interests can shape citizen-centric smart cities.

A APPENDIX

A.1 Vignettes

Political Contestation: Individual & Conventional

<p>The Smart Waste Pass</p> <ul style="list-style-type: none"> The municipality of Hilst is starting a smart city experiment with the introduction of a smart waste pass for underground waste containers in a number of neighborhoods. In this way, the municipality strives for a sustainable city in which waste is dealt with more efficiently and circularly. With the help of the smart waste pass, the municipality wants to collect data about who throws away how much residual waste, where and when. At a certain point, the municipality notices that there is anger, mistrust, and even disgust about the smart waste card with which the government could spy on people. 	<p>Political Contestation</p> <ul style="list-style-type: none"> Lianne, a resident of the municipality of Hilst, sticks protest stickers and sends tweets in which she tags city council members to express her frustration. Lianne's action has led to the question of how to deal with this at the municipality of Hilst.
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Political Contestation: Individual & Unconventional

<p>The Smart Sewer System</p> <ul style="list-style-type: none"> The municipality of Boldam is starting a smart city experiment with the introduction of the smart sewage system with sensors that could measure and price the water discharge. In this way, the municipality strives for a climate-proof and healthy city in which people are motivated, for example, to no longer drain rainwater via the sewer. With the help of the sewage water data, the municipality also wants to measure the spread of corona and the use of narcotics. At a certain point, the municipality notices that there is concern, irritation, and even anger about the smart sewage system with which the government could spy on people. 	<p>Political Contestation</p> <ul style="list-style-type: none"> Bert, resident of the municipality of Boldam, sets off fireworks in front of the house of a member of a governing body to express his frustration. Bert's action has led to the question of how to deal with this at the municipality of Boldam.
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Political Contestation: Collective & Conventional

<p>The Smart Lamppost</p> <ul style="list-style-type: none"> The municipality of Noordveld is starting a smart city experiment with the installation of smart lampposts in a number of streets. In this way, the municipality strives for a safe city in which action can be taken more quickly in the event of violence, quarrels, or burglaries. With the help of cameras and sensors on the lampposts, the municipality wants to identify suspicious sounds and movements at an early stage. At a certain point, the municipality notices that there is annoyance, unrest, and even resentment about the smart lamppost with which the government could spy on people. 	<p>Political Contestation</p> <ul style="list-style-type: none"> Amar, together with his neighbors from the municipality of Noordveld, starts a a Facebook group 'stop the eavesdropping lamppost' and a noise-making protest to disrupt the data collection and to express their frustration. The action of Amar and his neighbors has led to the question of how to deal with this at the municipality of Noordveld.
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Political Contestation: Collective & Unconventional

The Smart Sweeper Truck	Political Contestation
<ul style="list-style-type: none"> The municipality of Hemstad is starting a smart city experiment with the introduction of a smart road sweeper in certain parts of the city. In this way, the municipality strives for a liveable city, where litter and vandalism are quickly tackled. With the help of smart cameras, the municipality also wants to detect stolen cars and confused people. At a certain point, the municipality notices that there is fear, unhappiness, and even aversion to the smart road sweeper with which the government could spy on people. 	<ul style="list-style-type: none"> Noëlle and a number of neighbors from the municipality of Hemstad spray graffiti on the sweeper trucks' cameras at night so that they become unusable. They do this to express their frustration.
	<ul style="list-style-type: none"> The action of Noëlle and her neighbors has led to the question of how to deal with this at the municipality of Hemstad.

A.2 Interview Protocol

Recurring questions per vignette:

- (1) Can you imagine such a situation occurring in your municipality? (recognize vignette - yes/no)
- (2) How would your municipality respond to this?
 - (a) Atmosphere: How would the municipality want the conversation to go? What if people get angry or emotional? What if things get uncomfortable? Etc.
 - (b) Process: How would the municipality organize the meeting? How would such a conversation proceed if citizens bring up topics that are not on the agenda, or if scientific expertise comes into question? Etc.
 - (c) Purpose: What would be the goal, intended outcome, or ambition of the interaction? What if the topics brought up do not fit within the municipality's administrative logic – in terms of right time/place? Etc.
- (3) Does your municipality have experience with citizens like Lianne/Bert/Amar/Noëlle, who expressed criticism in a similar manner? And what was the municipality's actual response to such cases? (3abc)

Final questions:

- (1) Does it matter for the atmosphere, process, and purpose of the interaction whether the contestation relates to:
 - (a) A smart waste card
 - (b) A smart sewer system
 - (c) A smart lamppost
 - (d) A smart sweeper truck
 - (e) Or some other smart city technology? Drones, robots, algorithms, wifi tracking.
- (2) Does it matter for the atmosphere, process, and purpose of the interaction whether the contestation manifests itself through:
 - (a) Filing a complaint, social media messages . . .
 - (b) Setting off fireworks, hacking . . .
 - (c) Petitions, protest marches, sticking protest stickers . . .
 - (d) Destroying technologies, threatening . . .
- (3) Can you describe the 'critical citizens' in your smart city? (background, profile, themes, etc.)

A.3 Code Tree

- (1) Inclusive debate
 - (a) Inclusive debate important
 - (b) Creating an inclusive debate
 - (c) Acting rational . . .
 - (i) Moralized: Illegitimate perception of wappies
 - (ii) Moralized: Illegitimate perception of people who lack knowledge
 - (iii) Moralized: Illegitimate perception of people that are annoying
 - (d) Behaving reasonably. . .
 - (i) Moralized: Enforcement in case of unconventional behavior
 - (ii) Moralized: Unconventional behavior relates to criminal activities
- (2) A variety of opinions
 - (a) Pluralism important
 - (b) Taking other opinions seriously
 - (c) Natural order
 - (i) Hegemonized: Does not fit our definition
 - (ii) Hegemonized: Does not suit our role
 - (d) Common sense
 - (i) Hegemonized: Act in public interests
 - (ii) Hegemonized: Other/worse technologies are implemented in the public sphere
 - (iii) Hegemonized: Contestation from a small group
 - (iv) Hegemonized: Decisions at the municipal council
- (3) Contestation
 - (a) Contestation important
 - (b) Creating contestation
 - (c) Time
 - (i) Delegitimized: Wrong timing
 - (d) Context
 - (i) Delegitimized: Conflict should be widely supported (politics, media)
 - (ii) Delegitimized: Smart city technologies are in accordance with laws, regulations, ethics, and political decision-making process
 - (iii) Delegitimized: Permanent beta

REFERENCES

- [1] L. Anthopoulos, M. Janssen, and V. Weerakkody. 2019. A Unified Smart City Model (USCM) for smart city conceptualization and benchmarking. In *Smart Cities and Smart Spaces: Concepts, Methodologies, Tools, and Applications*, Mehdi Khosrow-Pour, Steve Clarke, Murray E. Jennex, Annie Becker, and Ari-Veikko Anttiroiko (Eds.). IGI Global. Hershey, PA, 247–264.
- [2] P. Cardullo and R. Kitchin. 2019. Being a ‘citizen’ in the smart city: Up and down the scaffold of smart citizen participation in Dublin, Ireland. *GeoJournal* 84, 1 (2019), 1–13.
- [3] P. Cardullo and R. Kitchin. 2019. Smart urbanism and smart citizenship: The neoliberal logic of ‘citizen-focused’ smart cities in Europe. *Environment and Planning: Politics and Space* 37, 5 (2019), 813–830.
- [4] A. Greenfield. 2013. *Against the Smart City (The City Is Here for You to Use Book 1)*. Do Projects.
- [5] R. G. Hollands. 2008. Will the real smart city please stand up? *City* 12, 3 (2008), 303–320.
- [6] G. Trencher. 2019. Towards the Smart City 2.0: Empirical evidence of using smartness as a tool for tackling social challenges. *Technological Forecasting and Social Change* 142 (2019), 117–128.
- [7] Z. Tomor. 2020. *Smart Governance in Practice*. Ph.D. Dissertation. Utrecht University.
- [8] J. Gabrys. 2014. Programming environments: Environmentality and citizen sensing in the smart city. *Environment and Planning D: Society and Space* 32, 1 (2014), 30–48.

- [9] J. Engelbert, A. Ersoy, E. Van Bueren, and L. Van Zoonen. 2022. Capitalizing on the “public turn”: New possibilities for citizens and civil servants in smart city-making. *Journal of Urban Technology* 29, 3 (2022), 3–17.
- [10] A. Vanolo. 2016. Is there anybody out there? The place and role of citizens in tomorrow’s smart cities. *Futures* 82 (2016), 26–36.
- [11] T. Shelton and T. Lodato. 2019. Actually existing smart citizens: Expertise and (non)participation in the making of the smart city. *City* 23, 1 (2019), 35–52.
- [12] J. Breuer and J. Pierson. 2021. The right to the city and data protection for developing citizen-centric digital cities. *Information, Communication & Society* 24, 6 (2021), 797–812.
- [13] E. Keymolen and A. Voorwinden. 2020. Can we negotiate? Trust and the rule of law in the smart city paradigm. *International Review of Law, Computers & Technology* 34, 3 (2020), 233–253.
- [14] H. March and R. Ribera-Fumaz. 2016. Smart contradictions: The politics of making Barcelona a self-sufficient city. *European Urban and Regional Studies* 23, 4 (2016), 816–830.
- [15] A. Meijer. 2018. Datapolis: A public governance perspective on “smart cities.” *Perspectives on Public Management and Governance* 1, 3 (2018), 195–206.
- [16] D. Stone. 2012. *Policy Paradox: The Art of Political Decision Making*. W. W. Norton & Company, New York, NY.
- [17] A. Smith and P. P. Martín. 2021. Going beyond the smart city? Implementing technopolitical platforms for urban democracy in Madrid and Barcelona. *Journal of Urban Technology* 28, 1-2 (2021), 311–330.
- [18] A. Meijer and M. P. R. Bolívar. 2016. Governing the smart city: A review of the literature on smart urban governance. *Revue Internationale des Sciences Administratives* 82, 2 (2016), 417–435.
- [19] A. Amsellem. 2021. The noise of silent machines: A case study of LinkNYC. *Surveillance & Society* 19, 2 (2021), 168–186.
- [20] I. Hoefsloot, J. Martínez, C. Richter, and K. Pfeffer. 2020. Expert-amateurs and smart citizens: How digitalization reconfigures Lima’s water infrastructure. *Urban Planning* 5, 4 (2020), 312.
- [21] K. Morgan and B. Webb. 2020. Googling the city: In search of the public interest on Toronto’s ‘smart’ waterfront. *Urban Planning* 5, 1 (2020), 84–95.
- [22] C. Mouffe. 1999. Deliberative democracy or agonistic pluralism? *Prospects for Democracy* 66, 3 (1999), 745–758.
- [23] P. Maesele and D. Raeijmaekers. 2020. Nothing on the news but the establishment blues? Toward a framework of depoliticization and agonistic media pluralism. *Journalism* 21, 11 (2020), 1593–1610.
- [24] L. Van Zoonen. 2020. Publieke waarden of publiek conflict: Democratische grondslagen voor de slimme stad. *Justitiële Verkenningen* 3 (2020), 51–64.
- [25] J. Habermas. 1984. *The Theory of Communicative Action, Volume One: Reason and the Rationalization of Society*, Thomas McCarthy (Trans.). Beacon Press, Boston, MA.
- [26] S. Joss, M. Cook, and Y. Dayot. 2017. Smart cities: Towards a new citizenship regime? A discourse analysis of the British smart city standard. *Journal of Urban Technology* 24, 4 (2017), 29–49.
- [27] R. Bradshaw and R. Kitchin. 2021. Charting the design and implementation of the smart city: The case of citizen-centric bikeshare in Hamilton, Ontario. *Urban Geography* 4, 34 (2021), 567–588.
- [28] Baibarac-Duignan and M. De Lange. 2021. Controversy the datafied smart city: Conceptualising a ‘making-controversial’ approach to civic engagement. *Big Data & Society* 8, 2 (2021), 205395172110255.
- [29] C. Mouffe. 2005. *On the Political*. Routledge.
- [30] E. Swyngedouw. 2007. The post-political city. In *Urban Politics Now: Re-Imagining Democracy in the Neo-Liberal City*. nai010 Publishers, 58–76.
- [31] Y. Pepermans and P. Maesele. 2014. Democratic debate and mediated discourses on climate change: From consensus to de/politicization. *Environmental Communication* 8, 2 (2022), 216–232.
- [32] I. Van Zeeland, J. Breuer, and J. Pierson. 2021. Walkshops for citizen involvement: Walk the talk with smart city citizens. In *Proceedings of the 2021 IEEE International Smart Cities Conference*. 1–4.
- [33] A. Van Twist, E. Ruijter, and A. Meijer. 2023. Smart cities & citizen discontent: A systematic review of the literature. *Government Information Quarterly* 40, 2 (2023), 101799.
- [34] A. Adikari and D. Alahakoon. 2021. Understanding citizens’ emotional pulse in a smart city using artificial intelligence. *IEEE Transactions on Industrial Informatics* 17, 4 (2021), 2743–2751.
- [35] S. M. Figueiredo and J. Agyin. 2019. Hidden in plain sight: Toward a smart future in Eindhoven. *Architecture and Culture* 7, 3 (2019), 493–504.
- [36] E. Cabalquinto and B. Hutchins. 2020. “It should allow me to opt in or opt out”: Investigating smartphone use and the contending attitudes of commuters towards geolocation data collection. *Telematics and Informatics* 51 (2020), 101403.
- [37] L. Kong and O. Woods. 2018. The ideological alignment of smart urbanism in Singapore: Critical reflections on a political paradox. *Urban Studies* 55, 4 (2018), 679–701.
- [38] A. Marinelli and S. Parisi. 2020. (Smart) city and the (open) data: A critical approach to a platform driven urban citizenship. *Partecipazione e Conflitto* 13, 2 (2020), 1168–1179.

- [39] V. Lowndes and M. Paxton. 2018. Can agonism be institutionalised? Can institutions be agonised? Prospects for democratic design. *British Journal of Politics and International Relations* 20, 3 (2018), 693–710.
- [40] S. Benhabib. 1996. Toward a deliberative model of democratic legitimacy. In *Democracy and Difference: Contesting the Boundaries of the Political*, Seyla Benhabib (Ed.). Princeton University Press, Princeton, NJ, 67–94.
- [41] J. Cohen. 1988. *Democracy and Liberty*, J. Elster (Ed.). Deliberation Democracy.
- [42] J. Habermas. 1992. Further reflections on the public sphere. In *Habermas and the Public Sphere*, Craig Calhoun (Ed.). MIT Press, Cambridge, MA, 421–461.
- [43] J. Habermas. 1998. *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, William Rehg (Trans.). MIT Press, Cambridge, MA.
- [44] J. Rawls. 1993. *Political Liberalism*. Columbia Classics in Philosophy. Columbia University Press.
- [45] C. Mouffe. 2000. *The Democratic Paradox*. Verso Books.
- [46] C. Mouffe. 2013. *Agonistics: Thinking the World Politically*. Verso Books.
- [47] C. Schmitt. 1976. *The Concept of the Political*. Rutgers University Press, New Brunswick, NJ.
- [48] L. Wittgenstein. 1953. *Philosophical Investigations*. Wiley-Blackwell.
- [49] E. Laclau and C. Mouffe. 1985. *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. Verso Books.
- [50] O. Marchart. 2007. *Post-Foundational Political Thought: Political Difference in Nancy, Lefort, Badiou and Laclau*. Edinburgh University Press, Edinburgh, Scotland.
- [51] A. Weale. 2016. Between consensus and contestation. *Journal of Health Organization and Management* 30, 5 (2016), 786–795.
- [52] K. Weick. 1995. *Sensemaking in Organizations*. Sage Publications, Thousand Oaks, CA.
- [53] C. Butcher and J. Pinckney. 2022. Friday on my mind: Re-assessing the impact of protest size on government concessions. *Journal of Conflict Resolution* 66, 7-8 (2022), 1320–1355.
- [54] M. G. Giugni. 1998. Was it worth the effort? The outcomes and consequences of social movements. *Annual Review of Sociology* 24, 1 (1998), 371–393.
- [55] M. Bloor and F. Wood. 2006. *Keywords in Qualitative Methods: A Vocabulary of 36 Research Concepts*. SAGE, London, England.
- [56] J. Finch. 1987. Research note: The vignette technique in survey research. *Sociology* 21 (1987), 105–114.
- [57] R. Hughes. 1998. Considering the vignette technique and its application to a study of drug injecting and HIV risk and safer behaviour. *Sociology of Health & Illness* 20, 3 (1998), 381–400.
- [58] R. Hughes and M. Huby. 2002. The application of vignettes in social and nursing research. *Journal of Advanced Nursing* 37, 4 (2002), 382–386.
- [59] V. Butot, P. S. Bayerl, G. Jacobs, and F. De Haan. 2020. Citizen repertoires of smart urban safety: Perspectives from Rotterdam, the Netherlands. *Technological Forecasting and Social Change* 158 (2020), 120164.
- [60] C. Barter and E. Renold. 1999. The use of vignettes in qualitative research. *Social Research Update* 25, 9 (1999), 1–6.
- [61] C. Irazábal and P. Jirón. 2021. Latin American smart cities: Between worlding infatuation and crawling provincialising. *Urban Studies* 58, 3 (2021), 507–534.
- [62] K. Iveson and S. Maalsen. 2019. Social control in the networked city: Datafied individuals, disciplined individuals and powers of assembly. *Environment and Planning D: Society and Space* 37, 2 (2019), 331–349.
- [63] Y. Shimizu, S. Osaki, T. Hashimoto, and K. Karasawa. 2021. How do people view various kinds of smart city services? Focus on the acquisition of personal information. *Sustainability* 13, 19 (2021), 11062.
- [64] Y. Shimizu, S. Osaki, T. Hashimoto, and K. Karasawa. 2021. The social acceptance of collecting and utilizing personal information in smart cities. *Sustainability* 13, 16 (2021), 9146.
- [65] N. Rahman. 1996. Caregivers’ sensitivity to conflict: The use of the vignette methodology. *Journal of Elder Abuse & Neglect* 8, 1 (1996), 35–47.
- [66] T. Wilks. 2004. The use of vignettes in qualitative research into social work values. *Qualitative Social Work* 3, 1 (2004), 78–87.
- [67] A. Bryman. 2016. *Social Research Methods*. Oxford University Press.
- [68] A. Lijphart. 1968. Typologies of democratic systems. *Comparative Political Studies* 1, 1 (1968), 3–44.
- [69] J. De Vries. 2014. The Netherlands and the polder model: Questioning the polder model concept. *BMGN–Low Countries Historical Review* 129, 1 (2014), 99–111.
- [70] V. Braun and V. Clarke. 2022. *Thematic Analysis: A Practical Guide*. SAGE.
- [71] W. E. Connolly. 1991. *Identity, Difference: Democratic Negotiations of Political Paradox*. University of Minnesota Press.
- [72] H. Honig. 1993. *Political Theory and the Displacement of Politics*. Cornell University Press, Ithaca, NY.
- [73] C. Carr and M. Hesse. 2020. When Alphabet Inc. plans Toronto’s waterfront: New post-political modes of urban governance. *Urban Planning* 5, 1 (2020), 69–83.
- [74] E. E. Wolf and W. Van Dooren. 2018. Conflict reconsidered: The boomerang effect of depoliticization in the policy process. *Public Administration* 96, 2 (2018), 286–301.
- [75] G. March and J. P. Olsen. 2004. *The Logic of Appropriateness*. Arena, Oslo, Norway.
- [76] C. Van Montfort, A. Michels, and W. Van Dooren. 2013. Stille ideologie in beleid en bestuur. *Bestuurskunde* 22, 2 (2013), 3–12.

- [77] O. Vrielink, I. Verhoeven, and T. Van de Wijdeven. 2013. Meedoen met de overheid? Over de stille beleidspraktijk van de doe-democratie. *Bestuurskunde* 22, 2 (2013), 13–22.
- [78] J. Koppenjan. 2006. Conflict en consensus in beleidsnetwerken: Teveel of te weinig? *Bestuurswetenschappen* 60, 2 (2006), 1–18.
- [79] E. Björgvinsson, P. Ehn, and P. A. Hillgren. 2012. Agonistic participatory design: Working with marginalized social movements. *CoDesign* 8, 2-3 (2012), 127–144.
- [80] J. Matos-Castaño, A. Geenen, and M. Van der Voort. 2020. The role of participatory design activities in supporting sense-making in the smart city. In *Proceedings of the 2020 DRS International Conference*.
- [81] D. Ozkaramanli, A. Karahanoğlu, and P. P. C. C. Verbeek. 2022. Reflecting on design methods and democratic technology development: The case of Dutch Covid-19 digital contact-tracing application. *She Ji: The Journal of Design, Economics, and Innovation* 8, 2 (2022), 244–269.
- [82] U. Aytac. 2021. On the limits of the political: The problem of overly permissive pluralism in Mouffe’s agonism. *Constellations* 28 (2021), 417–431.
- [83] M. Galič and M. Schuilenburg. 2020. Reclaiming the smart city: Toward a new right to the city. In *Handbook of Smart Cities*, Juan Carlos Augusto (Ed.). Springer, 1–18.

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