The persuasiveness of political targeting

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Chapter 1

We Have Always Lived in a World Full of Political Targeting

Introducing the dissertation

On a regular day, Alex, an occasional Facebook user, browsed through the Facebook feed and liked a post about environmental conservation. Unbeknownst to Alex, this activity was tracked by Facebook, marking an interest in environmental topics in the user profile. A month later, the Green Party, seeking to garner more support in the upcoming election planned to launch a wave of sponsored ads on Facebook. One of the ads focuses on the party's environmental initiatives, and for this ad, the party happily ticked the box which offered them an option of interest-based targeting. Of course, Alex was included in the target group. After seeing this ad a few times, the environmental enthusiast Alex was intrigued and began considering voting for the Green Party.

This narrative elucidates the theoretical operations and persuasive mechanisms of political targeting, which, as many assume, is highly effective. The concept of political targeting came into the limelight over the last decade, particularly following the Cambridge Analytica scandal, and has since ignited debates within academic and legal spheres. There is a widespread belief that such targeting can strongly influence voter decision-making and has the potential to alter election outcomes decisively. Concerns have been raised that political campaigns, through identifying and combining micro-level characteristics, are able to craft messages tailored to individual voters, potentially leading to significant manipulation of the electorate and undermining the principles of democracy. However, it is vital to critically assess these assumptions before they are widely accepted as truth. This involves examining whether the common portrayals accurately reflect the intricacies of how political targeting functions and persuades voters in real-world scenarios. Consequently, this dissertation aims to investigate the persuasiveness of political targeting.

To better understand the complexities of political targeting, it is essential to contextualize the discussion within the broader framework of political campaigning. Recent research indicates that political campaigns generally have minimal to small average effects on voter behavior (Coppock, Hill, & Vavreck, 2020; Kalla & Broockman, 2018). This might suggest that the persuasive power of political advertising is somewhat limited. However, it is important to approach these conclusions with caution and consider additional factors that might explain the observed "ineffectiveness" of political ads. Firstly, the majority of studies on political advertising have been conducted in the United States. The U.S. political

landscape, characterized by a dominant two-party system, is not reflective of many other global electoral contexts. In such a polarized environment, voters often have firmly established political identities, which reduces the potential for advertising to sway their decisions. Instead, political ads in these settings may play a greater role in mobilizing existing supporters rather than converting opponents (Panagopoulos, 2016). In contrast, voters within a multi-party system exhibit higher voter turnout rates and more volatile voting choices; consequently, the primary objective of campaigning in such contexts is persuasion (Karp, Bowler, & Banducci, 2003). Secondly, many prior studies assess the persuasiveness of political ads as an isolated attempt, examining the effects of a single exposure to a political message followed by immediate measurement of voter preferences, as though the election were the following day. This methodological approach does not accurately reflect real-world conditions, where voters' attitudes and opinions are shaped by continuous exposure to various sources of information over extended periods, rather than through last-minute cramming. The modest effects observed in these empirical studies might be underestimating the true influence of political advertising. In reality, even small shifts in voter behavior, when accumulated over time and across multiple exposures, could significantly influence election outcomes. This highlights the importance of considering repeated exposure when evaluating the persuasiveness of political campaigns. Therefore, to obtain more nuanced insights into the true persuasiveness of political campaigns, it is crucial to expand our vision to include different electoral systems, such as multi-party settings, to consider the temporal impact of repeated exposure to political advertising over a longer period, and to use more complex methodologies for better understanding of the real-world impact.

The influence of repeated exposure to persuasive messages on shaping attitudes and behaviors has been observed in communication literature. The mere exposure effect substantiates the role of repeated exposure in persuasion. Parties that secure more media coverage and public visibility can cumulate small impacts and create a sense of familiarity among voters, which can be a decisive factor in electoral outcomes (Hansen & Wänke, 2009). Historically, this advantage has been leveraged by bigger and more resourceful parties, thereby enhancing their chances of electoral success. With the advancement of technology and the widespread use of social media, online political advertising has been increasingly adopted by various parties (Bär, Pierri, De Francisci Morales, & Feuerriegel, 2024; Vergeer & Hermans, 2013).

This can be attributed to not only the cost-effectiveness of online advertising but also its broader reach capabilities. Online media often outperform traditional media in geographical districts where the media market does not align with the geographical boundaries. In such districts, parties are not constrained by geographical limitations and can communicate with voters regardless of their location. This flexibility makes online platforms particularly valuable for less visible parties to reach voters, especially in down-ballot races (Fowler, Franz, Martin, Peskowitz, & Ridout, 2021). Therefore, political campaigners must delve into understanding how and to what extent certain party characteristics benefit more from online political ads.

In turn, voters who have limited access to political information through traditional media can obtain information about candidates via online platforms. Such widespread accessibility of online platforms has created a diverse ecosystem with voters varying in different characteristics, including demographics, partisanship, political opinions, and levels of knowledge and literacy. This heterogeneity within the electorate suggests that certain voter segments may be particularly vulnerable to persuasive attempts through political advertising. Understanding this susceptibility is crucial for political campaigners, as it highlights voter groups most responsive to online political ads' influence. Identifying these potentially susceptible voter groups allows campaigners to strategically target their advertising efforts, thereby optimizing their campaigns and potentially swaying voter decisions in their favor.

This leads us to one of the most significant advantages of online advertising: targeting techniques. While swaying a wide voter base through political advertising presents challenges, targeting specific voter segments based on their characteristics may yield surprisingly persuasive outcomes. The effectiveness of targeting techniques can be attributed to the increased relevance and perceived trustworthiness of the ads, as explained by the Social Identity Theory and the Elaboration Likelihood Model (Petty & Cacioppo, 1986; Sirgy, 1986). Literature has also evidenced the effects of political targeting associated with various criteria from demographics to psychometrics (Dobber, Trilling, Helberger, & de Vreese, 2019; Krotzek, 2019). However, several gaps in the literature remain. First, current research has rarely investigated the differences in effects among various targeting criteria, as well as between the presence and absence of targeting, and between accurate targeting and mistargeting. Second, the underlying mechanisms and immediate responses to targeted advertising have been largely neglected. It is

essential to examine the extent to which targeting specific criteria affects the persuasiveness of political ads through underlying responses. Understanding these mechanisms allows for a more nuanced interpretation of how voters process information and make decisions based on targeted messages. Third, studying immediate responses can provide insights into how the perceived persuasiveness of campaign strategies dynamically evolves. As discussed, the effectiveness of persuasive messages can be either amplified or reduced with repeated exposure. The frequency of this exposure significantly influences its persuasiveness. Therefore, it is crucial to continuously analyze how voters cognitively and affectively process information during each exposure to identify the optimal moments for achieving the best electoral outcomes. This requires discerning any evolving trajectory in voter responses to repeated exposures.

Taken together, there has been insufficient empirical evidence on how repeated exposure to different targeting attempts affects their persuasiveness and the temporal trajectories of these effects. A thorough understanding of these processes is crucial for developing predictive models that can forecast the dynamics of voting behavior. This dissertation aims to comprehensively answer the following overarching research question:

Overarching RQ: *To what extent does repeated exposure to online political ads affect vote choice, who is most impacted by this effect, which targeting criteria are more effective, what underlying mechanisms explain this effectiveness, and how do voter responses evolve over time with repeated exposure?*

This introductory chapter will be structured around four subsections. First, I will clarify the terminologies employed in the realm of political targeting, acknowledging the multiplicity of terms that refer to analogous concepts. An examination of the historical application of the targeting techniques will be presented, alongside a discussion on their contemporary adaptation, particularly in the context of the prevalent use of social media. Second, I will address the overarching impacts of political targeting, both from theoretical perspectives and through empirical evidence. Special emphasis will be placed on the significance of the persuasiveness of political targeting, a central theme of this dissertation. Third, I will present the outcomes of a literature review, which involves revisiting and critically analyzing existing scholarly work, and identifying any gaps or areas that require further exploration within the current body of research. Fourth, I will

provide a detailed overview of this dissertation by briefly introducing the three empirical studies and outlining the methodological approaches and anticipated contributions of each.

What political targeting is and how it has been practiced

The terminologies

Political advertising is defined as a controlled message used to promote political parties, candidates, policy issues, or ideas to influence voters' attitudes, beliefs and behaviors through mass communication channels (Kaid, 2004). Based on the definition provided, it is evident that the fundamental characteristic distinguishing political advertising from other forms of political communication is its control over both the message distribution and the message content. This control serves the purpose that the advertiser can deliver and shape campaign messages without external alterations, thereby guaranteeing that the intended message reaches the target audience as originally crafted. When this strategic control over the ad distribution and content gets finely granulated, we encounter what is described as delivering "specialized messages to specific voters" (Dommett, 2019). This precise approach is at the core of targeting, where advertising is not just a broad sweep aimed at the general public but a carefully orchestrated campaign to engage specific segments of the electorate.

As reflected in the literature, this approach has been discussed using various terms, including narrowcasting (Barasch & Berger, 2014), segmentation (Phillips, Reynolds, & Reynolds, 2010), profiling (Zarouali, Dobber, De Pauw, & de Vreese, 2020), data-driven campaigning (Dommett, Barclay, & Gibson, 2023), political targeting (Russmann, 2020), and microtargeting (Kruikemeier, Sezgin, & Boerman, 2016). These terms, while sometimes used interchangeably or in combination, underscore the primary objective of improving campaign efficiency by reaching the most receptive electorate through the strategic use of voter data such as demographic information, prior voting behaviors, and personal interests and preferences. The key distinctions among these terms lie in their approach to the granularity of targeting, the sophistication of the voter data involved, and the extent to which communications are customized. For instance, segmentation might focus on broader demographic groups, whereas microtargeting involves intricate

algorithms to predict voter behavior at an individual level. The development of these terms reflects a growing sophistication and precision in political campaign strategies, driven by advances in data analytics and an increasing availability of detailed voter information. In this dissertation, I employ the neutral term political targeting to describe the data-driven technique without specifying the sophistication level of the voter data used.

The evolvement of political targeting

From the inception of political advertising, the concept of targeting has been present, although the more granular targeted political advertising is fairly recent. Fowler, Franz, Martin, et al. (2021) recognize four generations of political targeting. Initially, political ads were disseminated to the general public through mass media channels such as billboards, direct mails, newspapers, radio, and television. While these mediums were used to reach broad audiences, the choice of specific outlets within each medium was often strategically chosen to optimize reach and impact. For example, television, radio, and newspapers leveraged their broad appeal, ensuring the messages reached those who regularly consumed and engaged with certain outlets; billboards were strategically placed in specific neighborhoods to catch the attention of desired electorates; direct mails were sent to specifically targeted households based on voter lists and geographic data. Targeting at this stage is relatively basic and rudimentary, primarily relying on general demographic data to segment the population. For quite a long time in the late twentieth century, political targeting was primarily achieved via direct mail or door-to-door canvassing (Fisher & Denver, 2008). During this period, the data utilized by canvassers mainly included basic address information and voting preferences, which were gathered from sources such as the census, electoral rolls, voter registration records, and marketing research (Bennett, 2016).

The advent of computer technology in the 1990s facilitated more sophisticated data collection and analysis, marking a significant shift toward the use of extensive voter databases and enhanced precision in targeting strategies. By the 2000s, the internet further revolutionized political communications, with platforms like email becoming integral tools for direct voter contact. Shortly thereafter, the explosion of social media platforms revolutionized political targeting. The 2008 Obama campaigns were particularly notable for their innovative use of social media and big data analytics, which allowed for advanced techniques such as psychographic

profiling and microtargeting, purportedly reaching voters at an individual level. During the 2016 US presidential campaign, the use of highly microtargeted political ads based on allegedly complex voter (psychometric) profiles represented the zenith of political targeting. As online advertising increasingly makes its mark in the market, the dominance of traditional media in political advertising, led primarily by television, seems to be diminishing (Fowler, Franz, Martin, et al., 2021). A content analysis study compared the advertising strategies employed on Facebook versus television in the United States during the 2018 election period and revealed that a significantly wider array of candidates opted to advertise on Facebook for extended campaign periods compared to television (Fowler, Franz, & Ridout, 2021).

Unmasking the reality: extensive but not efficient

The shift from traditional canvassing to sophisticated digital strategies underscores a significant transformation in political targeting driven by technological advancements and changes in the media landscape (Roemmele & Gibson, 2020). This transformation prompts a critical inquiry: Does it ensure precise and effective targeting? To address this question, it is essential to revisit the aforementioned definition of political targeting, which necessitates control over both the distribution and the content of ads to their targeted audience. Unfortunately, existing literature suggests a discrepancy between theoretical claims and the actual implementation of targeting in political ads. Many studies have shown that political targeting in practice appears to be less accurate and sophisticated than claimed (Kefford et al., 2023; Kruschinski & Bene, 2022). A European study on the large-scale dataset of over 80,000 political ads from Meta shows that there are considerable discrepancies between targeted and actual audiences (Bär et al., 2024). Even in the United States, where targeting is most prevalent, inaccuracies persist despite some program-level targeting efforts. A survey study found that targeted ads on Facebook often fail to reach their intended targeted recipients, especially when it involves targeting sensitive personal data (Sances, 2019). While Democratic campaigns typically focus on reaching Democratic voters, a significant number of Republicans still encounter ads from Democratic campaigns (Fowler, Franz, Martin, et al., 2021).

This phenomenon underscores the inefficiencies within the current strategies employed by political advertisers, attributable to three factors. First, the level of

sophistication in targeting is often limited by the parties' strategic choices. The prevalent approach to political targeting remains largely unchanged with the observation made by Hillygus and Shields (Hillygus & Shields, 2008): political parties still predominantly allocate their campaign resources to macro-targeting strategies in political campaigns. Although targeting is a widespread strategy among political parties globally, parties tend to concentrate their spending on a single targeting criterion (Votta et al., 2024). This approach typically involves focusing on voters who align with the party's political spectrum, potentially as a strategy to optimize campaign spending. Parties also often lack the resources needed to hire external professional support for implementing new techniques. Despite technical consultants' enthusiasm for promoting the benefits of targeting, political parties, even in affluent countries, continue to rely heavily on the activism of local volunteers (Dommett, 2019; Jacobson, 2015). Second, online platforms' algorithms drive — to a large extent — the discrepancies between targeted and actual audiences. Unlike traditional media, it is difficult for political parties to validate if the ads have reached the intended targeted voters. During the ad delivery phase, online platforms play an independent and central role and are therefore responsible for creating discrepant or even discriminatory outcomes. Previous research has shown skewed ad delivery across different countries. For instance, in the United States, Facebook political ads with lower budgets are less likely to be delivered to women (Ali et al., 2019). Similarly, a European study shows that lower-educated, female, and younger people are more expensive for political parties to reach (Votta et al., 2024). Apparently, Facebook has its own definition of what "relevance" is, which is likely to be an automated estimate instead of users' interactions with the ad (Ali et al., 2019). Third, stringent regulations prohibit sophisticated targeting in political campaigns. The Cambridge Analytica scandal was brought to public attention with the microtargeting strategies used in the 2016 US election campaign. Since then, increased scrutiny over the use of voter data in political advertising has led to regulatory interventions, resulting in the implementation of the European Union's GDPR and California's CCPA. Nowadays, with online platforms like Twitter/X stepping back from political advertising, the primary venues for (targeted) political ads have become limited, predominantly practiced on Meta platforms (including Facebook and Instagram), along with Google and Snapchat. Among different online platforms, Meta stands out as the most powerful one for (targeted) political advertising, attributable to its extensive

user base and advanced ad targeting tools. Political advertisers on Facebook must undergo a verification process to disclose who is paying for the ad, and the content of political ads is highly scrutinized and actively monitored. Google and Snapchat permit political advertising, while they also impose stringent measures to regulate this practice. Google, for example, restricts targeting based on public voter records, while Snapchat mandates a rigorous review process for political ads to ensure compliance with its policies.

Therefore, the current landscape of political targeting does not exhibit high levels of sophistication, which sets the tone for the selection of targeting criteria analyzed in this dissertation. This dissertation opts to focus on targeting criteria such as party affiliations and political issue preferences rather than delve into more sensitive or granular demographic targeting. This reflects a conscientious approach to align with real-life campaigns within ethical and regulatory confines because party-based and issue-based targeting are the predominant targeting criteria employed by political parties.

Impacts of political targeting: What literature reveals

Political targeting, a double-edged sword

As discussed, political targeting is extensively utilized by parties worldwide and has consequently attracted significant scrutiny from regulators. This conflict between campaigners and regulatory bodies arises from both the potential benefits and risks associated with targeted political advertising.

On the one hand, the proper use of data-driven targeting techniques can yield promising results. First, political targeting enables the delivery of more relevant political ads to voters (Zuiderveen Borgesius et al., 2018). This is particularly relevant for issue campaigning, the market is saturated with a variety of information about various issues that may concern some voters but not others. Data-driven targeting simplifies the process for voters to be exposed to and comprehend the issues that matter most to them and that impact their daily lives. Consequently, this assists them in making more informed voting decisions. Secondly, targeting techniques aid in reaching social groups that are traditionally difficult to contact. These include individuals who either bypass (local) traditional

media, are inaccessible through these channels, or those who do not actively seek out political information and rely solely on passive exposure. By connecting with these groups, targeted political ads could help to enhance their political awareness, knowledge, and engagement. Third, the cost-effectiveness and simplicity of political targeting make it a valuable tool for small and new parties. These parties often operate with limited budgets and resources, making traditional, broad-spectrum advertising campaigns financially unfeasible (Gibson & McAllister, 2015). Political targeting, however, allows them to spend resources more wisely by focusing on specific demographic groups likely to be receptive to their campaign. Therefore, political targeting can level the playing field, giving small and new parties a chance to make their mark in a crowded political landscape.

On the other hand, the malicious use of targeting can present significant threats. First, political targeting can lead to discriminatory ad delivery, as focusing on specific voter groups inherently involves excluding others (Barocas, 2012). This selective targeting can lead to unequal access to information and may skew voter behavior. Second, opaque ad dissemination mechanisms on social media platforms exacerbate the unfairness among parties. Research indicates that platform algorithms may exhibit biases, favoring ads from certain parties, such as those from populist groups (Bär et al., 2024). Additionally, there is evidence that some parties may face higher advertising costs than others (Votta et al., 2024), further complicating the fairness of targeted political ads. Third, highly personalized ads can lead to voters feeling that their privacy has been violated. This perception of intrusion into personal space can have a chilling effect on political engagement, as voters may be concerned about expressing their views or participating in political activities (Zuiderveen Borgesius et al., 2018). Fourth, targeted ads can mislead and manipulate voters, resulting in political polarization. To counteract these effects, it is crucial to empower voters with political knowledge and online privacy literacy (Minihold, Lecheler, De Vreese, & Kruikemeier, 2024).

In summary, the impact of political targeting is contingent upon the objectives of campaigners and the algorithms employed by platforms. Targeting strategies may serve to engage voters who cannot be reached by traditional media or may selectively ignore segments deemed irrelevant by political entities. While such strategies can potentially inform and enlighten voters, they also possess the capacity to manipulate and demobilize them. Additionally, while smaller parties might benefit from increased visibility through targeted approaches, these strategies could

simultaneously undermine the campaign efforts of certain parties. The varied consequences of political targeting underscore the complexity of its impact on the democratic process. These outcomes call for further exploration into the efficacy of different targeting practices and their implications. Central to understanding these effects is the role of persuasion.

The persuasiveness of political targeting

The success of any form of advertising strategy is largely defined by the persuasion outcome. Persuasion is defined as a conscious communication act encompassing the formation, reinforcement, and change of individual responses (Dillard & Shen, 2012; O'Shaugnessy & O'Shaughnessy, 2003). Unlike manipulation and propaganda, it is important to note that persuasion is a free process where the audience is in charge of their own beliefs and behaviors (Van Dijk, 2006). Persuasion manifests in various proxies across different fields. In consumer research, persuasion can be observed through the judgment of a product (Meyers-Levy & Malaviya, 1999), attitude change (Petty & Cacioppo, 1986), and purchase intention (Friestad & Wright, 1994). In the political realm, persuasion is primarily reflected in voting intentions which aim to influence the outcome of elections (Schmitt-Beck & Farrell, 2003).

To realize persuasion, the persuader utilizes rhetorical appeals to align with the addressee. Aristotle's three rhetorical appeals constitute the essence of persuasive communication: the appeal to credibility, the appeals to emotion and affection, and the appeal to logic and informativeness (Pelclová & Lu, 2018). These three appeals highlight the importance of alignment between the sender and receiver of the persuasive message, such that the sender should be perceived as credible by the receiver, and the message should resonate with the receiver as well as engage the receiver. Achieving this alignment necessitates that the sender accurately identifies the characteristics of the receiver to craft the most appropriate and impactful appeal. In the field of advertising effects research, the key to successful persuasion has always been address as determine and resonate with the target audience (O'Shaugnessy & O'Shaughnessy, 2003). In the political realm, the persuasive returns of targeted ads specifically are realized through treatment effect heterogeneity, that is, different voter groups respond differently to different campaign messages (Tappin, Wittenberg, Hewitt, Berinsky, & Rand, 2023).

The theoretical rationale of the effectiveness of political targeting stems from persuasive communication. Drawing on the Elaboration Likelihood Model (Petty &

Cacioppo, 1986), when voters encounter political ads that address issues of personal significance, they are likely to engage in central route processing. This route involves a high degree of consideration and mobilization, leading to more durable attitude changes. Meanwhile, the source of political ads can serve as a peripheral cue. For instance, if the source of the ads is a party that the voter favors, the message may be accepted with minimal cognitive effort due to the established trust and favorability towards the party. The underlying mechanism of how information is processed, whether centrally or peripherally, can be traced back to social psychology concepts such as self-referencing (De Keyzer, Dens, & De Pelsmacker, 2015) and Social Identity Theory (Greene, 1999). These theories suggests that individuals are more likely to engage with and favorably evaluate messages that resonate with their self-concept or reflect their personal values. Therefore, in theory, the strategic application of issue relevance, source credibility, and demographic targeting in political advertising can significantly influence the persuasiveness of the campaign messages. Empirical research also supports these assumptions. A comprehensive literature review encompassing 32 manuscripts focused on personalized (behavioral) advertising found that the effectiveness of targeted advertising is determined by ad characteristics, including the criteria used for targeting and the accuracy with which ads are tailored to individual receivers (Boerman, Kruikemeier, & Zuiderveen Borgesius, 2017). This literature review also suggests that individual differences, such as the level of knowledge about the subject matter and the degree of trust in the advertisers, play significant moderating roles. Building on prior theoretical and empirical research in persuasive communication, this dissertation seeks to identify which targeting strategies, or combinations thereof, reach the most optimal persuasiveness across diverse voter characteristics.

Theoretical and empirical gaps

Since this area of research on political advertising is relatively new, there are still many gaps that need to be filled. Chapter 2 presents a meticulous literature review, adopting a top-down approach to structure the examination of political targeting. It begins by outlining a theoretical framework that posits the hypothesized effects of political targeting on individual-level responses. This framework serves as a

benchmark for reviewing existing literature, enabling the identification of discrepancies between empirical studies and theoretical expectations. The findings in this chapter reveal significant theoretical and methodological gaps within the existing literature. In this section, five of these gaps are elaborated to highlight areas where further research is needed to enhance our understanding of the persuasiveness of political targeting. This sets the stage for subsequent chapters to explore these gaps in detail, proposing new theoretical directions and methodological adjustments to address these deficiencies.

Beyond the US-centric context

Much of the research on political targeting has been conducted within the context of the United States. According to the literature review in Chapter 2, between 2010 and 2020, 13 out of 20 studies researching the effects of data-driven campaigning, including two studies that did not specify a country context, were conducted in the United States. This imbalance in research raises significant issues. Firstly, the substantial financial resources of campaigns, superstar status of candidates, intense debates on contentious issues, relatively lax personal data protection laws, and high levels of political personalization make the United States a unique case. Secondly, multi-party systems are more prevalent globally, including in most European, Latin American, and Asian democracies, whereas two-party systems are primarily practiced in the United States. Consequently, findings that are heavily US-centric may be less likely to be generalized to other political contexts. This raises a pertinent question: How does data-driven campaigning influence their electorates in countries outside the United States with different political and regulatory landscapes? I will outline two characteristics of a potential alternative context in which the effects of data-driven campaigning could be further investigated.

First, the nature of the electoral system fundamentally shapes voters' responses toward data-driven campaigning. In a two-party electoral system, party identification is an enduring sense of attachment to a political apparatus (Campbell, Converse, Miller, & Stokes, 1960). This stable affiliation facilitates a predictable pattern of voter behavior that can be hardly altered. As a result, persuasion attempts are considered risky. Scholars have noted a shift away from persuasion efforts towards a growing emphasis on mobilization strategies in political campaigns (Panagopoulos, 2016). Conversely, in a multi-party system, party identification exhibits less stability and voters' decisions are also subject to

fluctuation (Thomassen, 1976; Thomassen & Rosema, 2009). This variability creates an opportunity for persuasive communication to play a significant and effective role in political campaigns. Moreover, in a two-party system, party resources are generally more consolidated and substantial, facilitating a more accurate utilization of data-driven campaigning strategies. In multi-party systems, although competitiveness is distributed among several larger parties, data-driven strategies provide an opportunity for smaller parties with limited budgets to enhance their visibility.

Second, varying regulations on personal data across different regions significantly influence the practice and reaction of data-driven targeting campaigning. For example, the United States has less stringent data protection laws compared to Europe, impacting the reach of online advertising and the precision of targeting (Bygrave, 2010). This discrepancy may also affect voters' responses to targeted ads. In regions with stricter data protection laws, voters might feel more secure and therefore respond more positively to data-driven campaigning messages; or conversely, they might become more vigilant and skeptical about the use of their personal information in campaigns (Bellman, Johnson, Kobrin, & Lohse, 2004). The regulation context in which data-driven campaigning is conducted is critical when assessing its effectiveness.

The most persuasive political targeting strategies

As outlined in the literature review, the implementation of political targeting encompasses two components: the voter data and the extent to which this data drives decision-making. This includes a judgment on which specific voter data types are most effective and which combinations of voter data yield superior efficacy in targeting. Existing research predominantly concentrates on the effects of a single targeting criterion on voter data, rather than assessing the comparative effectiveness of various targeting criteria. For instance, while previous studies have demonstrated that online ads tailored to voters' partisanship and issue preferences significantly impact vote choices (Endres, 2020; Lavigne, 2020), the effectiveness between these two criteria has not been systematically compared.

Moreover, different combinations of targeting criteria should also gain more scholarly attention. It is generally theorized that more personalized ads are more effective, suggesting that ads become increasingly effective as they align closely with more voter characteristics. However, scholars have identified a paradox within

personalized advertising, that is, highly personalized ads can sometimes be perceived as intrusive or creepy, potentially leading to adverse reactions (Aguirre, Mahr, Grewal, de Ruyter, & Wetzels, 2015). The question then arises: how much voter data should be utilized in targeting? The assumption that "the more the merrier" does not always hold true. The literature review shows that only two experimental studies concerning the effects of political campaigning have addressed this issue. Both studies suggest that voters react most positively to campaign messages that employ just one targeting criterion (Gahn, 2024; Tappin et al., 2023). This finding appears counterintuitive, considering that in many countries — including Canada, France, the United States, and Germany — over half the expenditure on Meta ads involves the application of three or more targeting criteria (Votta et al., 2024). More attention and explanation should be offered to the discrepancy between these experimental findings and the real world. A possible interpretation is that, the results from experimental studies suggesting that the highest effectiveness corresponds to campaigns using a single targeting criterion may be influenced more by the specific choice of that criterion rather than the mere number of targeting criteria employed (Boerman et al., 2017).

This dissertation specifically examines party- and issue-based targeting, which are recognized as pivotal criteria in the realm of political campaigning. The focus is to explore and compare how voters process these two targeting strategies and their combination differently, which aims to deepen understanding of how specific strategic targeting decisions impact voter response and campaign efficacy.

Repeated exposure and timing

A contradiction is noted between the real-life practice of political advertising and the empirical findings regarding its effectiveness. Political parties often significantly ramp up their advertising expenditure on platforms like Facebook close to election day (Ridout, Fowler, & Franz, 2021). However, experimental evidence suggests that measuring vote choice immediately after a single exposure to political advertising is unlikely to yield significant effects (Coppock et al., 2020; Kalla & Broockman, 2018), indicating that concentrating all persuasive efforts in the final moments before an election may not be an effective strategy. This discrepancy underscores the scientific gap in insights about the timing of ad delivery in maximizing campaign effect. Current research on the effects of political advertising has predominantly focused on the impact of single exposures to ads and, to a lesser extent, on repeated

exposure. However, studies incorporating the time factor remain scarce. This gap in research is problematic because political advertising is not merely a one-time effort but involves frequent exposure over time. A meta-analysis study underscores that the length of the interstimulus interval significantly influences the trends of the mere exposure effect (Montoya, Horton, Vevea, Citkowicz, & Lauber, 2017), indicating that the effect of repeated exposure is presented differently depending on the time duration. Therefore, it is important to find answers to questions like: How do voters process repeated exposure to political ads, how does such processing be translated to persuasion, and how does such processing evolve over time? Therefore, the underlying mechanisms of ad effects should be thoroughly investigated to avoid overlooking the potential evolvement of individual responses occurring during the middle of the campaign period.

Underlying mechanisms

Studying the immediate and underlying responses offers a causal explanation for how decision-making on vote choice is made. In the field of communication science, Valkenburg and Peter (Valkenburg & Peter, 2013) proposed three response states that mediate media effects, including cognitive, affective, and attitudinal responses. Scholars argue that cognitive and affective reactions distinctively form attitudinal constructs (Breckler, 1984) and that attitudes can be driven by one of the two components (Millar & Tesser, 1989). Here I will discuss these two immediate response states together with the Elaboration Likelihood Model (Petty & Cacioppo, 1986). Greenwald (Greenwald, 1968), in the Cognitive Response Theory, points out that cognitions bearing on attitude objects are acquired through public and face-to-face communications, rather than being innate. According to the Social Cognitive Theory, cognitive responses consist of attention and retention (Bandura, 1986). Built on these two definitions as well as Valkenburg and Peter's (Valkenburg & Peter, 2013) contribution, cognitive responses can be seen as the extent to which individuals attend to and apply cognitive effort to comprehend the content of persuasive communications, including absorption, perception, and counterarguing. Cognitive efforts to process persuasive messages tend to be activated when the recipients of the message are motivated by a personal connection to the information (Petty & Cacioppo, 1986). In contrast, affective responses, defined as a statement of affect (Ostrom, 1969), are associated with recipients' identification with the message source. This means that positive affective components within attitude change are triggered when the ad source aligns with the recipients' self-identity

(Petty & Cacioppo, 1986).

Zooming in on the field of political targeting studies, despite being essential for analyzing the effectiveness of persuasive communications, cognitive and affective response states have not been examined simultaneously. As indicated in the literature review in Chapter 2, scholars frequently assess the success of political targeting based primarily on voting outcomes, rather than the decision-making processes of voters. This oversight is concerning because it may cause researchers to overlook the nuanced factors in campaign messages that influence voting behavior, thereby leaving a gap in the understanding of how decisions are made. Additionally, exploring both cognitive and affective responses provides a fresh perspective on the evolution of individual reactions. While substantial attitudinal and behavioral changes might not be immediately observable, examining immediate responses can reveal more noticeable and intuitive shifts in a shorter time frame. These research gaps underscore the necessity for more comprehensive approaches to understanding the psychological mechanisms that influence electoral behavior.

Moderating effects

Chapter 2 acknowledges that the literature on political targeting has largely overlooked the moderating effects of non-individual characteristics. These characteristics vary from a country's history, culture, economy, and media landscape to its political environment, electoral systems, and regulatory framework. Nowadays, targeted advertising is commonly employed by parties across the entire political spectrum, encompassing a wide range of ideologies (Bär et al., 2024; Votta et al., 2024). As discussed in the previous section, one of the biggest promises of political targeting is that smaller and newer parties derive the most advantage. Yet, due to the predominance of research within the US-centric electoral context, where the Democratic Party and the Republican Party are equally well-resourced and influential, the literature has neglected a crucial question: Which characteristics of parties enable them to benefit most in terms of persuasiveness from political targeting?

In multi-party contexts, scholarly attention has been drawn to the dominance in elections among bigger and smaller parties, particularly between new parties and established parties. Understanding these dynamics is crucial for evaluating how new parties can effectively position themselves and compete against

well-established parties that have a significant foothold in the political landscape. This is particularly important because, in most multi-party elections, the majority of new parties struggle to secure seats. Taking the Netherlands as an example, since 1948, ninety percent of new parties have failed to gain any representation in the House of Representatives (Van Spanje, 2021). The reasons for this tendency are multifaceted. First, new parties struggle to establish the same level of recognition and emotional connection with voters that longstanding parties enjoy. Established parties have had more time to build trust and loyalty among their voters, a critical advantage that new entrants lack. Second, there's a higher degree of uncertainty associated with voting for new parties. Unlike established parties whose policy positions and ability to influence legislative outcomes are well-known, new parties present an unknown quantity. In multi-party systems where numerous parties surface during each election cycle, it is particularly challenging for voters to assess the potential policy impact and electoral viability of new parties (Martin, 2020). This uncertainty makes voters less inclined to take the perceived risk of supporting them. However, the introduction of political targeting can address this issue by enabling new parties to gain visibility and effectively communicate their values and policies to specific segments of the electorate. Therefore, it is crucial to investigate whether new parties can realize "equalization" via targeted ads (Gibson & McAllister, 2015), as it offers implications for building a democratic electoral environment where all parties have a fair chance to compete.

In examining the individual-level moderators that influence the persuasiveness of political targeting, Chapter 2 reveals that while literature has thoroughly examined dispositional factors like age, gender, and party identification, it has paid less attention to developmental factors. Developmental factors refer to an individual's responsiveness associated with cognitive, emotional, and social development (Valkenburg & Peter, 2013). I identified two key developmental factors in voters that may moderate the persuasiveness of political targeting, which, to date, have not been explored in existing literature.

For a long time, political knowledge has been considered a crucial attribute enabling voters to effectively process campaign messages (Lau & Redlawsk, 1997). Higher levels of political knowledge not only foster greater political participation but also enable more informed voting decisions (Galston, 2001; Larcinese, 2007). Lower levels of political knowledge would only be inconsequential to voting decisions if information shortcuts were produced, as that keeps less knowledgeable

voters informed (Bernhagen & Schmitt, 2014). In today's digital age, targeted advertising serves as these shortcuts, exposing voters of all levels of political knowledge to political information and ostensibly assisting them in making accurate decisions. However, as discussed in the previous section, the digital landscape is also rife with persuasive cues that may have manipulative intentions. In such scenarios, pre-existing political knowledge may become a crucial moderator that can help voters resist being swayed by such tactics.

Another developmental factor closely related to the efficacy of processing online political ads is online privacy literacy. Political advertising on social media is often perceived as an invasion of privacy (Hersh & Schaffner, 2013; Zuiderveen Borgesius et al., 2018). A high level of understanding of how personal data is managed on social media platforms can empower voters to process ad information more judiciously. Individuals who reckon themselves as highly literate perceive themselves as having more control over online information and thus less afraid of information disclosure (Turow & Hennessy, 2007). Furthermore, repeated exposure to political ads from the same party may diminish trust and trigger defensive responses among voters. The degree to which these defensive mechanisms are activated may correlate with privacy literacy. Current research does not clearly define the role that privacy literacy plays in this context, suggesting a significant opportunity for further investigation into how it affects voter responses to online political ads.

In sum, here, I highlight the need to consider both party characteristics and individual developmental characteristics that influence the persuasiveness of targeted political communications. This will not only enrich our understanding of the more influential and influenced actors in online political advertising but also contribute to the development of a more equitable and informed democratic process.

Real-life settings and mobile ubiquity

Chapter 2 identifies the necessity to research the effects of targeted political ads in a real-life setting, particularly in a mobile environment. It reveals that most existing research has used a (field) experimental design with controlled exposure media. This approach does not adequately reflect the phenomenon that voters nowadays access political information across various devices and platforms. The literature review underlines the need for an innovative methodology that involves studying voters in their natural environments. This enables accurate documentation of

voters' exposure to political ads in a real-life setting, such as the variability of media consumption, the ad source and ad content, the frequency of repeated exposure to political ads, and the timing of exposure. Adopting such a comprehensive method addresses the limitations of experiments and self-reported survey data, which is often plagued by accuracy issues, and significantly enhances the validity of the research findings.

Meanwhile, there is a gap in empirical research regarding the effects of what voters themselves reckon as political ads. While the average effect of political advertising is often argued to be minimal to small, in reality, political parties spend millions of dollars on such campaigns. This discrepancy between the perceived and actual impact of online political ads may be attributed to the skewed focus on the supplier side in research. Specifically, there may be a divergence between what advertisers define as online political advertising and what receivers perceive as such. Research on political advertising that utilizes a real-life setting has primarily been conducted from the communicator's perspective, often relying heavily on interview and focus group data provided by campaigners (Anstead, 2017; Dobber, Trilling, Helberger, & de Vreese, 2017; Kruschinski & Haller, 2017), or using platform-generated advertising data such as Facebook ad library and Google Transparency Report (Cano-Orón, Calvo, López García, & Baviera, 2021; Jain & Wood, 2020). There has been a lack of rigorous investigation into how individual voters, as the critical recipients of ads, define political ads. To develop a more comprehensive understanding of the impact of online political advertising, research should enable voters to exhibit what they themselves identify as political advertising, which will provide a more accurate assessment of the strategic effectiveness of political ads. Therefore, it is necessary to develop a research method that enables voters to actively capture and record self-defined political ads as well as their reactions to the ads.

What this dissertation unveils

The Netherlands: An exemplary multi-party context

This dissertation focuses on the Netherlands as the context for studying the persuasive impact of political targeting. This selection can provide insights that may be considered a unique case for specific exploration while also being

generalized to other countries as a representative example.

The uniqueness of the Netherlands as a study context is largely derived from its multi-party structure and the resultant highly diverse and fractionalized parliament (Otjes & Voerman, 2022). Both the 2021 and 2023 Dutch General Elections saw a high level of participation with more than 35 parties vying for seats, and more than 17 of them successfully entered parliament. Both elections led to the formation of coalitions. In other words, numerous Dutch political parties participate in the legislative assembly, and typically, no single party usually secures an absolute majority, which results in extensive negotiations and compromises among parties. This interplay of political forces leads to more complex voter profiles, meaning that voters may not strictly align with a single party but rather their preferences might intersect various party lines depending on the issues. Consequently, there is a need for more precise targeting strategies and an increased importance on issue-based targeting. Additionally, in such a political environment, campaigners should account for vote volatility due to the likelihood of shifting voting choices in the final stages of the campaign.

In terms of generalizability, the Netherlands serves as an exemplary benchmark for typical country-level engagement as well as regulatory settings in political targeting. On the one hand, the Netherlands exhibits average spending and targeting sophistication in political advertising. For instance, in the 2021 General Election in the Netherlands, 25 Dutch political parties allocated a budget ranging from two to six million US dollars to sponsor 27,000 political ads on Facebook and Instagram (Votta et al., 2024). This financial outlay was less than that observed in the United States, Brazil, Canada, and Germany, yet it was on par with expenditures in Norway and Denmark, and surpassed those in Sweden, Italy, and New Zealand. Moreover, 95 percent of these ads by Dutch parties incorporated at least one targeting criterion, with 41 percent using three or more such criteria. Compared to other countries, this level of targeting sophistication was lower than in Canada, the United States, Germany, and New Zealand, but exceeded that in Sweden, Brazil, Norway, Denmark, and Italy. The Netherlands provides a balanced perspective that is neither skewed by the highest nor the lowest extremes seen in other countries. This middle-ground positioning facilitates the exploration of standard practices and effectiveness that are likely to be applicable or adaptable across various democratic contexts.

On the other hand, similar to other countries in the Global North, the Netherlands' robust digital infrastructure and high levels of internet penetration ensure that online political advertising is popular (Wittenborg, 2018). Meanwhile, the Netherlands adheres to the same regulations regarding the collection and utilization of voter data as other EU member states, highlighting a norm that can be extrapolated across the EU. These regulations not only govern the practice of political targeting but also shape voters' perceptions of such campaign strategies. A comparative study on voters' acceptance of political targeting across 25 countries found that revealed that negative reactions to political targeting are more pronounced in countries with stringent regulatory frameworks (Vliegenthart et al., 2024). This suggests that voters in these countries possess greater digital savvy and persuasion knowledge, such that stronger regulatory environments heighten voter sensitivity to the extent of targeting which enables them to recognize and resist the manipulative intents of such messages.

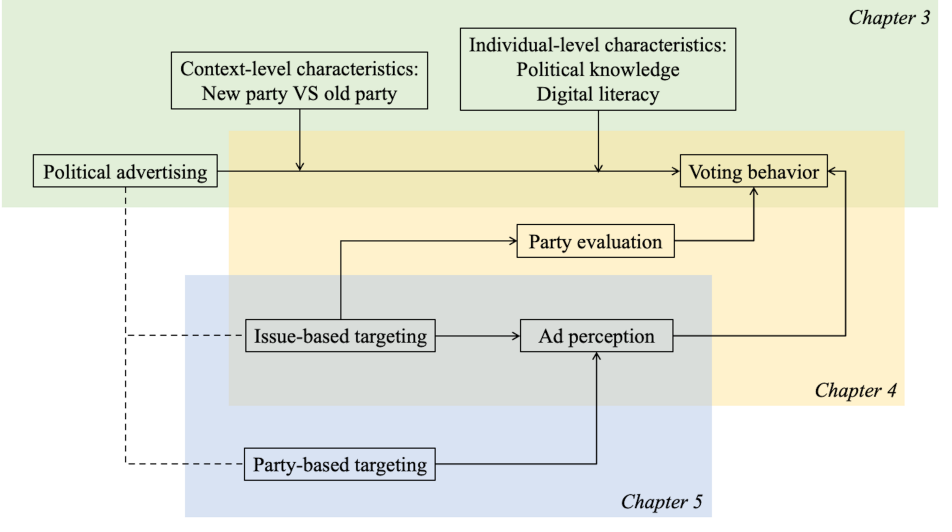
In sum, while the Netherlands, with its fractionalized party system, may appear to be a unique case, it also offers valuable insights that are broadly applicable. The extent to which these insights can be generalized depends on the specific aspects of individual-level effects under study. For instance, the intricacies of voting decisions may be more particular to the Dutch context, whereas advertising effects on vote propensity and preference could apply more universally across democracies. Moreover, voters' immediate reactions to political ads utilizing various targeting criteria can offer generalizable findings. These insights contribute to a better understanding of the effects of political targeting in modern democracies.

Dissertation outline

Building on the gaps in the literature, this dissertation includes three additional chapters (Chapters 3, 4, and 5), each dedicated to an empirical study that delves into certain aspects of the effects of political targeting. *Figure 1* presents a graphical overview of the chapters along with their interrelationships. As shown in the figure, the three chapters explore distinct aspects related to the persuasiveness of (targeted) political advertising: the moderating effects of party and voter characteristics, the mediating effects of immediate responses, and the over-time effects of repeated exposure. Each chapter also builds on the findings of the preceding one, progressively narrowing its focus to increasingly detailed aspects within the framework of data-driven targeting effects. This sequential approach

enhances the depth and specificity of the research.

Figure 1: Overview of Chapters 3, 4, and 5



As the first empirical study in this dissertation, **Chapter** 3 aims to establish a preliminary understanding of the effects of online political advertising in a multi-party context, setting the foundational tone for the remainder of the dissertation. This chapter addresses the uncertainties surrounding the general persuasiveness of political advertising, especially since previous literature has suggested minimal persuasive effects of political campaigning. This chapter examines the impact of repeated exposure to online political ads on vote intention. Given the multi-party context, the vote outcome is particularly differentiated between the propensity to vote and the ultimate vote choice. This differentiation occurs because voters in a multi-party context tend to have a similar propensity to vote for parties with similar ideologies, while the final vote choice is more complex and is the primary target of campaigners. Additionally, this chapter identifies the circumstances where political advertising's persuasive effect is the strongest. It delves into how the persuasive effects of political advertising differ across various party features and individual developmental characteristics, such as whether certain parties benefit more compared to others, and what characteristics make voters more susceptible to persuasive cues. Specifically, Chapter 3 fills the gap concerning the moderating effect of context-level characteristics, further

investigating whether new parties gain greater influence from online political campaigning. Meanwhile, it assesses the conditional effects of political knowledge and online privacy literacy — key individual-level developmental characteristics — on electoral outcomes. The following research questions are posed: *How does the exposure level to online political ads affect vote intention in a multi-party context? How is this effect moderated by party-level factors such as party age, and individual-level factors such as political knowledge and online privacy literacy?*

Methodologically, Chapter 3 utilized a real-life desktop environment to enhance the external validity of the findings. By integrating a browser tracking plugin with panel survey data, an innovative and robust methodology was developed which allowed for the passive and accurate capture of the online political ads to which participants were exposed. The browser tracking technique considerably improves upon traditional self-reporting measures, minimizes recall bias, and increases the precision of ad exposure levels. This offers greater validity and reliability for researching the impacts of political advertising. The panel survey measured participants' vote propensity and actual vote choice in the 2021 Dutch General Election. The findings underscore the persuasiveness of political advertising and identify the voters who are more susceptible to such campaigns. Crucially, the results highlight the importance of differentiating between vote propensity and vote choice in a multi-party setting. The study demonstrated that, in a multi-party electoral system, vote choice is a more volatile behavioral indicator that can be influenced by ads. This provides insights into the shifting dynamics among the electorate in non-US-centric democracies.

After establishing the persuasiveness of online political advertising, this dissertation progresses to examine the persuasiveness of specific targeting strategies. Among all the targeting criteria, voters' interests or concerns hold paramount importance, as they are efficient in terms of resonating with different demographic groups and determining electoral decisions. Campbell et al. (1960) points out that voting behavior may follow issue attitudes regardless of the party allegiance when the voter's attitude is strong enough. Meanwhile, research has also shown that issue-based advertising only influences nonpartisans (Pfau, Holbert, Szabo, & Kaminski, 2002), implying that strong party identification may diminish the impact of issue-based targeting. Therefore, how the effectiveness of issue-based targeting interacts with party identification in a multi-party scenario warrants further examination. In such systems, multiple parties may compete for the same

voter segments with overlapping issues, which could dilute the effectiveness of issue-based targeting. Therefore, **Chapter 4** aims to investigate the persuasiveness of issue-based political targeting, while diving into researching the underlying mechanisms that affect the success of such targeting strategy. Specifically, this chapter builds on the implications derived from Chapter 3 to assess the persuasiveness of campaign efforts in a multi-party setting, using vote choice as the outcome variable. It also focuses on two mediating factors that are immediate responses to each ad exposure: ad perception as a cognitive response, and party evaluation as an affective response. These factors are critical in understanding the process of how persuasive messages shape individual responses (Valkenburg & Peter, 2013). Additionally, given the strong effect of party identification on voting behavior, party identification is included as a moderator in this study to explore how it influences the relationship between issue-based targeting and voter responses. The key research questions are: *How does issue congruency in online political ads affect vote choice? How is this effect mediated by ad perceptions and party evaluations? How does party identification moderate this process?*

To answer the research questions, Chapter 4 introduces a sophisticated methodology that integrates a mobile experience sampling method, panel surveys, and content analysis. This method represents an advancement over the browser tracking approach used in Chapter 3, as it enables the monitoring of real-life and real-time political ads that voters encounter across a variety of devices and online platforms. This comprehensive coverage is crucial given the shift towards mobile device usage for accessing political information, ensuring that the data collected reflects a more accurate and holistic view of the advertising landscape. Plus, the uploaded ad content also reflects what voters perceive as political ads, rather than relying on predefined political ads from a supplier's perspective. Moreover, the event-contingent sampling design helps to capture voters' most immediate responses to the ads. The findings confirm the positive but small persuasive effect of issue-based targeted ads, as well as highlight the crucial mediating role of ad perception in achieving successful political targeting.

Acknowledging that the frequency of repeated exposure has a positive impact on vote intention (Chapter 3), and that each exposure to a correctly targeted ad generates a positive ad perception which subsequently provides a small impact on the final vote decision (Chapter 4). It then becomes crucial to explore the over-time pattern in the persuasiveness of repeated exposure to political targeting. **Chapter 5**

offers an understanding beyond the immediate targeting effects by investigating the dynamics in voter perception over longer periods. This marks a pioneering attempt to temporally compare the impacts of targeting and mistargeting in political campaigns. Theoretically, this chapter recognizes that changing opinions or beliefs is a process that unfolds over time and attempts to reveal insights into ad fatigue, defense mechanisms, or possible backlash effects, offering a deeper understanding of the strategic implications of sustained or repeated targeting. This chapter also compares the effectiveness of the two most prevalent targeting criteria: party-based and issue-based targeting. Party-based targeting is instrumental in connecting with core supporters, which not only reinforces voters' loyalty but also optimizes the allocation of campaign resources. Issue-based targeting can engage like-minded voters, facilitating the persuasion of potential supporters and broadening the campaign's influence. By comparing these strategies, this analysis provides a comprehensive understanding of targeted campaign efficacy. The following research questions are formulated: *How do party-based and issue-based targeting versus mistargeting affect ad perceptions over time? Which (combinations of) targeting strategies are more effective in generating a positive perception in the long term?*

To ensure control over the content and frequency of ad exposure, a longitudinal experiment was implemented. This approach is pivotal in addressing the research questions effectively, as it facilitated the systematic observation of different targeting strategies and changes in ad perceptions among participants over a defined period. The results provide a dynamic view of how repeated exposure influences individual voter responses to advertising depending on the accuracy of the targeting. It also offers insights into the effectiveness levels of different targeting strategies utilized in the long term.

To conclude, **Chapter 6** provides a comprehensive examination and synthesis of the literature review in Chapter 2 as well as the empirical findings from Chapters 3, 4, and 5. It delves into the theoretical frameworks underpinning these findings and explores their broader societal implications, highlighting how they contribute to our understanding of the persuasiveness of targeted political advertising in the digital age. Additionally, this chapter identifies and proposes new avenues for future research, suggesting ways to build on the groundwork laid by this dissertation. Through this, I encourage continued exploration and collaboration within the academic community, potentially leading to further valuable insights and developments in communication science.