Battle for Inbox and Bucks: Comparing Email Fundraising Strategies of Donald Trump and Joe Biden in the 2020 U.S. Presidential Election

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Despite its proven pervasiveness and effectiveness, the role of email in political campaigns has been understudied. In this article, we seek to understand the use of emails by Donald Trump's and Joe Biden's campaigns during the 2020 U.S. presidential election. Employing newly collected email data (N = 4051), we compared how the two campaign teams differ in the use of appeals in their emails, and the functions of the message (e.g., attack, acclaim). We found that, while both campaigns used emails primarily for fundraising, Trump's campaign (compared to Biden's campaign) was more likely to use all of the four appeals we defined — material, solidarity, ideology, and issue appeals. We also found that by

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sending emails, Biden's campaign tends to acclaim itself more while Trump's campaign attacks opponents more.

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Online media and information technologies play an ever-increasing role in electoral politics. One expanding area of research has focused on how politicians and campaigns use these digital technologies, including Facebook (e.g., Kreiss et al., 2018; Metz et al., 2020), Twitter (e.g., Barberá et al., 2019; Graham et al., 2013; Haim & Jungblut, 2021), Instagram (e.g., Bast et al., 2022; Haim & Jungblut, 2021), YouTube (e.g., Gulati & Williams, 2010), and campaign websites (e.g., Hassell & Monson, 2014). Research often focuses on these media because of the availability of data (Epstein & Broxmeyer, 2020; Kreiss et al., 2018). However, little research has examined another key campaign technology: emails.

A campaign email is an easy and effective way to reach voters and raise donations (Stromer-Galley, 2014). Emails help campaign teams better leverage voters' interests and through various discursive strategies, influence voters' perceptions, attitudes, and even decisions (Nickerson & Rogers, 2014; Vromen & Coleman, 2013). During the 2020 presidential election, Donald Trump's campaign sent 2,558 unique emails in the 484 days before the election—about 5.4 emails per day (Mathur et al., 2020), suggesting that, at least from the perspective of a campaign, emails can play a significant role in contemporary electoral contests.

Despite their pervasive use in campaign communications, few studies have analyzed campaign emails, primarily due to data collection difficulties (Epstein & Broxmeyer, 2020). Specifically, in contrast to other platforms such as Facebook (Stromer-Galley et al., 2021) or Twitter (Jungherr, 2016), little is known about the differential use of emails across candidates and parties. Therefore, conceptualization about campaign

emails is incomplete without considering whether their use by campaigns is more similar to traditional campaign communication in offline setting (e.g., direct mail, see Hassell & Monson, 2014) or online spaces (e.g., Facebook, see Auter & Fine, 2018). This lack of descriptive knowledge on the use of appeals in campaign emails is an important research gap because it obscures insights into how digital communication strategies are tailored to influence voter perceptions and behaviors differently from traditional and other online mediums.

We fill this research gap by using a newly collected database of campaign emails, including those sent by the 2020 Donald Trump and Joe Biden campaigns (Mathur et al., 2020). This study is focused on the difference in email strategies between the two campaign teams. In particular, we compared how Trump's campaign and Biden's campaign differ in the use of various appeals, and the functions of the messages in their emails. Our work adopts appeals and functions from past scholarship regarding direct mail fundraising (Hassell & Monson, 2014). Considering that email fundraising is an effective campaign tool, we also incorporated the functions of email fundraising (Benoit, 2000, 2001). Measuring both the appeals and functions of email fundraising helped in the understanding of emails as a campaign strategy.

Literature Review

Why Studying Emails is Important

Strategic use of emails can play a vital role in political campaigns. First, emails allow campaigners to reach out and mobilize a vast amount of voters at a low financial cost. Unlike traditional media advertising (TV, radio, print) or direct mail, which incurs significant production and distribution costs, emails require only the time to write and design the message. In addition to being a cost-efficient method for reaching large audiences, emails can also be easily forwarded, creating a potential secondary audience. Second, emails help campaigners monitor and analyze voters' reception behaviors and their

interests. Using tracking techniques, political campaigners have access to multiple levels of behavioral data as people sign up to receive emails, open emails, click on links or participate in petitions and donations (Hamin, 2018; Nickerson & Rogers, 2014). For instance, open and click-through rates of emails can help campaigns understand recipients' interests and optimize future communications. Third, emails can offer immediate source reliability because of the information on the email address provided in the sender column (Cornfield, 2004).

Despite the continued pervasiveness of emails, scholarship on political campaigns are increasingly focuses on newer and more sophisticated uses of technology (e.g., Kreiss et al., 2018; Kreiss & Mcgregor, 2019; Linos et al., 2021; Stier et al., 2018). This focus away from emails is likely due to two reasons. First, collecting a comprehensive database of campaign emails is difficult (Bode & Vraga, 2018). Second, emails are not nearly as "novel" or new as the latest social media platform or emerging technology.

By recognizing emails as an important form of political communication, we also highlight that a political campaign's communication goals may be multi-faceted. Of course, many studies examining the effect of social media (e.g., Bail et al., 2020; Campbell, 2013; Enikolopov et al., 2020; Fujiwara et al., 2023; González-Bailón et al., 2023; Guess et al., 2023b, 2023a; Haenschen, 2016; Nyhan et al., 2023; Theocharis & Lowe, 2016) and digital advertising (e.g., Aggarwal et al., 2023; Beknazar-Yuzbashev & Stalinski, 2022; Bond et al., 2012; Liberini et al., 2023; Unan et al., 2024) on politics have focused on changes in political attitudes or voting-related behaviors. However, these very technologies can also be used to achieve other political campaign goals, including (though not limited to) fundraising (Auter & Fine, 2018; Petrova et al., 2021). In other words, content produced by an election campaign to raise funds, including emails, should be considered a form of political communication.

Campaign Emails, Political Advertising, and Fundraising

Email (a portmanteau of "electronic mail") is one of the oldest digital mediums in campaign communication, and its early proponents hoped it would reinvigorate American democracy (Groper, 1996). As early as 2000, email was widely adopted in presidential elections to reach voters (Bimber & Davis, 2003; Farnsworth & Owen, 2004). It remains a critical digital communication source for campaigns to communicate with supporters (Baldwin-Philippi, 2017; Hassell & Oeltjenbruns, 2016). For example, the Trump campaign had an estimated sixteen million email addresses on its subscriber list, and the Biden campaign had over seven million email addresses (Schultz, 2020). These two campaigns sent hundreds of millions of emails each week (Schultz, 2020).

Using email to communicate campaign messages is convenient. Once sent, email messages are easily referenced, stored, and searched, sustaining a long track record of use (Stromer-Galley, 2014). Given these advantages and its vast user base, email messages have a massive potential political impact (Epstein & Broxmeyer, 2020). However, potential blowback disincentivizes campaigns from sending unsolicited messages to voters and prospective donors because people perceive unsolicited emails as invasive (Krueger, 2006). Therefore, it is more productive for campaigns to harvest their own lists organically than to acquire them from outside sources. Campaign websites are increasingly devoted to collecting email addresses compared to providing information to voters like candidates' policy positions (Serazio, 2014).

Campaigns' use of email is highly heterogeneous in frequency and content (Caudill, 2018), negativity levels (Hassell & Oeltjenbruns, 2016), sensationalism (Muther et al., 2020), and rhetorical strategy (McLaughlin et al., 2018). Given these differences in use, the outcomes of campaigns' emails may vary across open rates (the percentage of people

who receive the email versus who opens the email) and success in attracting donations to the campaign (Gaynor & Gimpel, 2021).

Given the extensive use of emails in campaigns, it's imperative to explore how campaign emails contribute to broader strategies. We argue that emails play a vital role in political campaigns, serving as a key channel for both political advertising and fundraising. Campaigns utilize emails to disseminate strategic narratives, promoting their candidates or critiquing opponents by highlighting specific agendas and policies. Moreover, emails are an essential tool for fundraising activities during election campaigns.

Emails for Political Advertising

Political advertising refers to, "a communication process by which a source (usually a political candidate or party) purchases the opportunity to expose receivers through mass channels to political messages with the intended effect of influencing their political attitudes, beliefs, and/or behaviors" (Kaid, 1981, p. 250). Kaid (1999) suggested two defining characteristics of modern political advertising - (1) the ability to control the message, (2) the use of mass channels to distribute the message. Political advertising plays an important role in political life. Previous studies on the effects of political advertising have yielded mixed outcomes, with variations largely dependent on what effects are examined. Some studies have provided evidence for the effects of political advertising on increasing voters' political knowledge (e.g., Atkin et al., 1973; Surlin & Gordon, 1977), affecting candidate image evaluation (e.g., Atkin & Heald, 1976; Becker & Doolittle, 1975), and impacting voters' election decisions (e.g., Kaid & Sanders, 1978; Weaver-Lariscy & Tinkham, 1996). However, when it comes to voter turnout, recent studies have found minimal effects of political advertising (e.g., Aggarwal et al., 2023; Beknazar-Yuzbashev & Stalinski, 2022; Unan et al., 2024).

Content matters in political advertising. Different content strategies in political advertising can play a role in the success of candidates. Researchers have studied political advertising content with various foci, including content emphasizing candidate images or issues (e.g., Ansolabehere & Iyengar, 1994; Shyles, 1983), positive or negative content (e.g., Benoit, 1999; Kaid & Johnston, 1991), and usage of emotional appeals (e.g., Kern, 1989). Similar content can be delivered to voters in various forms through different channels, including direct mail, newspapers/magazines, broadcasting/cable advertising, websites, emails, and social media platforms.

However, findings from previous studies on political advertising should be applied cautiously to campaign emails due to their unique modality and function. First, unlike traditional political advertising media such as TV and radio, email is a text-based form of communication, which may affect the effects of content on recipients. For example, compared to image or video-based media, provoking emotional responses through text-based messages via email may be more difficult. Second, email serves a distinct role compared to other advertising media. Traditionally, political advertising aims to convey the campaign's message to persuade voters and spur turnout. However, the primary goal of email campaigns is more to mobilize than to persuade (Hassell et al., 2022; Nielsen, 2011). Thus, it is uncertain whether findings from the political advertising literature on other communication channels are relevant to emails. For example, a recent study on U.S. congressional candidates' emails found no differences in usage of emotional appeals across candidates and minimal impacts on voters (Hassell et al., 2022).

Emails for Fundraising

In addition to being used for political advertising, emails are important in modern campaigns for their role in fundraising (Marland & Mathews, 2017; Mathur et al., 2023). Beyond their low-cost and ease-for-use nature, an advantage of emails is their ability to enable senders to evaluate the effectiveness of their messages and understand what is relevant to recipients by analyzing tracking data, such as open rates and donation amounts(Almeida & Casais, 2022; Goic et al., 2021). According to Nielsen (2011), emails provide campaigns with the ability to send personalized messages to segmented groups of supporters, increasing the relevance and effectiveness of their fundraising appeals.

Existing research on campaign emails have been focused on their content and effects. Researchers have found that several factors can impact the open rate of emails and the amount of contributions, including the content of the subject line, timing of sending, and level of competitiveness (Gaynor & Gimpel, 2021). In their study of emails sent by over 3,000 campaigns during the 2020 U.S. election cycle, Mathur et al. (2023) found that explicit fundraising was a primary goal of these emails. This was evidenced by the fact that 70% of the sampled emails contained a donation request, even after removing the footers of these emails, which often contain such requests by default. They also found that the use of manipulative tactics, such as employing levels of deception and clickbait, was common rather than exceptional.

The fundraising role of campaign emails should be notably highlighted after social media platforms such as Facebook cut off political advertising and fundraising on their platforms (Schneider, 2021). Despite their widespread use in political campaigns for advertising and fundraising, the study of campaign emails remains limited, primarily due to challenges in collecting data at scale from the semi-private nature of emails (Kang et al.,

2018; Marland & Mathews, 2017). Therefore, by drawing on a recent archive of campaign emails from the 2020 U.S. Presidential election, this study aims to explore the content of these emails, including their appeals and functions, with a particular focus on how different candidates (i.e., Trump vs Biden) strategically utilized emails.

The Appeals in Campaign Emails

Political campaign communications are tailored toward the intended goal and audience of the communication (Barnard & Kreiss, 2013; Karlsen, 2011). Appeals made to individuals that campaigns are seeking to turn out to vote (Gerber et al., 2013; Valenzuela & Michelson, 2016), persuade to vote for their campaign (Bailey et al., 2016; Brader, 2005), or convince to make a contribution all carry unique appeals (Han, 2009). Fundraising appeals are unique because campaigns must convince individuals that not only is their campaign worthy of support, but it is worthy of a financial investment (Brady et al., 1999). In addition, fundraising appeals must be explicitly made to attract contributions (Grant & Rudolph, 2002).

The main predecessor to email fundraising is direct mail fundraising. Direct mail fundraising is when political campaigns send physical mail to prospective donors with an appeal to contribute (Godwin, 1988; O'Shaughnessy & Peele, 1985). Previous studies identified three main appeals in direct mail fundraising: ideological, material, and solidary (Hassell & Monson, 2014). Importantly, each of these appeals is leveraged by campaigns to resonate with specific audiences.

Ideological Appeals. Ideological appeals are presented in messages that highlight partisan politics (Hassell & Monson, 2014). These appeals invoke ideology or use language that highlights a candidate's party affiliation as a reason for donating. Previous research

found that ideological appeals are especially important for fundraising at the end of the campaign (Godwin 1988; Hassell 2011), and campaigns target more ideological appeals toward donors who have previously donated (Hassell & Monson, 2014).

Solidary Appeals. Solidary donors contribute based on personal connections, the desire to be associated with the campaign, or the social status that contributing affords them (Hassell & Monson, 2014). These donors are often asked to donate by people that they personally know and may be motivated by wealth and social connections (Francia et al., 2003; Sinclair, 2012). Said another way, solidary donors contribute because of desired social standing, and although there may be a possibility of material gain in the future, it is not their primary motive (Hassell, 2011). Fundraising appeals that are solidary emphasize these points.

Material Appeals. Donors motivated by material appeals wish to influence legislation and gain access to the political process for *material gain* (Francia et al., 2003; Hassell & Monson, 2014). Not all of these donors may necessarily expect to gain personal access to candidates, but they may be motivated to contribute to further specific policies they support. These donors expect returns on their political investment above and beyond the public good benefits (Hassell, 2011).

In addition to the three appeals, in this study, we incorporate an additional type - *Issue Appeals*. We define issue appeals as calling for support and donations by highlighting one's standing points on specific issues (e.g., election fraud, immigration, abortion). Individuals who donate based on *issue* incentives give to a campaign because they wish to influence policymakers for upholding the values that they resonate with, such as human rights, gender, and race equality. We, therefore, ask:

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RQ1: What is the distribution of the four fundraising appeals used in emails from the Biden and Trump campaign?

Moreover, we also ask:

RQ2: Which campaign (Trump and Biden), was more likely to use ideological, solidary, material, and issue appeals?

The Functions of Campaign Emails

Past research has used functional theory to examine political campaign strategies in both traditional media such as TV or print (Benoit, 2000; 2001), blogs (Trammell et al., 2006), and social media (Borah, 2016). Functional theory claims that a message has a functional purpose, and messages in political campaigns use acclaim and attack as persuasive strategies (Benoit, 2000; 2001). Using functional theory to study campaigns is useful because, "such discourse is intended as a means of accomplishing a goal: winning the election" (Benoit, 2007, p.32). Prior studies on political campaigns have consistently demonstrated the use of these message strategies in political campaigns, including Presidential elections (Faules & Baker, 1965). Benoit (2001) explain that acclaim ads are used to praise the politician's strengths, and attack ads focus on the opponent's weaknesses. Beyond traditional campaign advertising, acclaim vs. attack strategies have been studied in blog posts (Trammell et al., 2006). Druckman et al., (2010) studies political campaign strategies on candidate websites. Taking a longitudinal approach, they examine strategies over three election cycles. Their findings show that there are few differences in campaign strategies between politicians' websites and television advertising. Examining Facebook posts of presidential candidates from the 2008 and 2012 elections, Borah (2016)

demonstrated that the republican candidates attacked more. These findings were similar to Benoit et al.'s (2001) study showing that democrats as a group attack less. It is important to note that acclaim and attack strategies have sometimes been considered as tone rather than function in the literature (Cho, 2013).

Negative messages are a common strategy in political campaigns (Buell & Sigelman, 2008; Druckman et al., 2010; Jamieson, 1993; Lau & Rovner, 2009; Skaperdas & Grofman, 1995). Yet research also shows that everyone may not use negative messages. Under certain circumstances, such as when a candidate is an incumbent in an election, they may attack less than those candidates who are challengers (Benoit, 2007). Other studies have also highlighted the role of incumbency in political campaign research (Evans et al., 2014; Tinkham & Weaver-Lariscy, 1995). Examining senate ads, Kaid and Davidson (1986) showed that incumbents used less negative messaging. In a similar study, Tinkham and Weaver-Lariscy (1995) found that incumbents attacked fewer times than challengers. Studying Twitter use in 2012 elections by House candidates, Evans et al. (2014) also noted that incumbents attacked less. Past research calls this an "incumbency advantage" (Ansolabehere & Snyder, 2002; Mayhew, 2008; Weisberg, 2002), such that previously elected candidates have a potential advantage. However, for Facebook posts used by presidential candidates in the 2008 and 2012 elections, Borah's (2016) study shows that the party predicted campaign strategies more than incumbency. Although there is some indication of different results on the relationships between incumbency, party, and use of attack/acclaim in campaign messages, overall, research shows that incumbency plays a primary role in these circumstances. Hence, we propose:

H1. Biden (the challenger) will attack more while Trump (the incumbent) will acclaim more.

RQ3: How did Trump's and Biden's campaigns acclaim and attack?

Method

Data Collection

For this study, we used the *Archive of Political Emails*, which is an archive of emails from U.S. political campaigns that began in 2019 (Mathur et al., 2020). Emails in this archive are collected by manually signing up for candidates' email lists from their website. Emails are then stored to the archive within the hour of it being sent by the campaign. Previous literature has found that this archive is comprehensive compared to other collection strategies (see Mathur et al., 2023 for a 2020 example).

For our analysis, we focused on emails sent by Donald Trump and Joe Biden's campaign team during the 2020 U.S. Presidential election. Using the Archive of Political Emails, we identified all emails from the two senders from June 27, 2019 (the first email recorded) to January 6, 2021 (the day the results were certified by Congress). This process yielded 4,051 emails: 2,248 emails sent by Trump's campaign team and 1,803 emails sent by Biden's campaign team.

Data Analysis

To analyze the emails, two coders were trained to reach a suitable agreement on identifying *appeals* (Hassell & Monson, 2014) and *functions*. First, to establish intercoder reliability, a randomly sampled 100 articles for each dataset (Biden's emails and Trump's emails) were coded by the two coders. After two rounds of coding, the average Cohen's

Kappa between coders for all the labels was 0.891 (Cohen, 1960). The operational definitions for each variable and inter-coder reliability score are reported in Table 1. Following this approach, two coders then coded the remaining emails. The operational definitions and intercoder reliability scores for each label are reported in Table 1. Examples of emails with different appeals and functions are provided in Appendix A.

Table 1. Operationalization and Inter-coder Reliability Test

	Operationalization	Kappa's K	PA
Appeals			
Material	Mentioning quantifiable profits (e.g., donate for chances to win a free trip to meet candidates)	.879	.95
Ideology	Usage of partisan/ideological cues (e.g., "republican", "liberal", "left")	.960	.98
Solidarity	Calling recipients to be part of the team or join a larger supporter group (e.g., "stand with us and fight together")	.891	.97
Issue	Calling for support by describing specific issues (e.g., border policy, climate change, gun rights, defunding police)	.911	.97
Functions			
Attack	Attacking opponents' weakness	.874	.94
Acclaim	Promoting candidates' strength	.832	.92
Average		.891	.955

In addition to this manual coding, we also used a keyword list to identify emails that contained a fundraising word. The keyword list included the following substrings: "contribut", "donat", "donor", "fundrais", "war chest".

Results

Descriptive Results

Figure 1 illustrates the weekly frequency of the emails sent by the Trump and Biden campaigns between June 2019 and January 2021. It shows that the frequency of sending emails from Biden's campaign is overall stable, which is around 15-30 emails per week. However, the number of emails sent by Trump's campaign increases dramatically when approaching election day. The plot shows that the number of emails from both sides peaked around the week of election day, but the number of emails sent by Trump's team is more than double (110 emails/week) of Biden's team (50 emails/week).

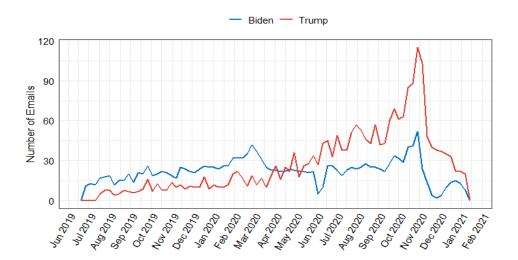


Figure 1. Frequency of fundraising emails from Biden and Trump's campaign

Our results also indicate that 95% of all Biden and Trump emails contained a fundraising keyword.

Appeals in Emails

To answer RQ1, we summarized the number of emails containing different combinations of the four appeals. The results are illustrated in the Venn diagram in Figure 2. Table 2 presents the difference in the proportion of emails containing single appeals between Biden's and Trump's campaigns. The results show that in emails from Biden's campaign, the mostly used appeals are solidarity (66%), followed by ideology (35%), issue (24%), and material (16%). In Trump's emails, there was also heavy use of solidarity appeals (76%) and ideology appeals (73%), but unlike Biden, Trump used material appeals (40%) more than issue appeals (33%).

We also found that Trump's campaign was more likely to use multiple appeals in a single email message. For example, although both campaign teams used *solidarity* appeals most in their emails, we found the percentage of solidarity-only emails is 31.8% for Biden's side. However, the number for Trump's side was only 4.2%, suggesting that most "solidarity" emails from Trump also contain other types of appeals. For example, the results show that among Trump's emails, 22.1% contain "solidarity + ideology", 14.5% contain "solidarity + ideology + material" appeals, and 19% contain "solidarity + ideology + issue" appeals. However, the percentage of these three categories for Biden's campaign is 16.2%, 4.3%, and 5.8%.

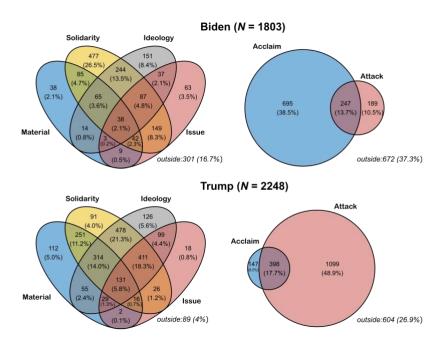


Figure 2. Venn diagrams of appeals and functions used in emails²

To answer RQ2, we tested the appeals usage difference between Biden's and Trump's campaigns. The results show that compared to Biden's campaign team, Trump's campaign was more likely to use the appeal of material ($\chi^2 = 278.77$, p < .001), ideology ($\chi^2 = 574.91$, p < .001), solidarity ($\chi^2 = 54.78$, p < .001), and issue ($\chi^2 = 37.69$, p < .001).

Function of Emails

Regarding the function of emails, Figure 3 illustrates that among Biden's emails, 52% are acclaiming their own candidates while 24% of emails contain messages that attack

² Venn diagrams were generated using the 'ggvenn' R package. The diagrams for email functions (right) were scaled, whereas the diagrams for email appeals (left) were not, due to the scale parameter's incompatibility with more than two sets. Although not shown in the diagrams, "outside" emails (those not belong to any category) were counted into the percentage calculations.

opponents. In Trump's emails, the percentages of attack and acclaim are 67% and 24%, respectively.

Table 2. Comparing proportions of emails with different appeals and functions

	Trump (Proportion)	Biden (Proportion)	Difference (Trump-Biden)	χ^2
Appeals				
Material	0.40	0.16	0.24	278.77***
Solidarity	0.76	0.66	0.10	54.78***
Ideology	0.73	0.35	0.38	574.91***
Issue	0.33	0.24	0.09	37.69***
Function				
Attack	0.67	0.24	0.43	719.65***
Acclaim	0.24	0.52	-0.28	336.79***

Notes. *** p < .001.

To test H1, which hypothesized that Trump was more likely to attack and Biden was more likely to acclaim, we tested the difference in functions in their emails between the two campaigns; we found that Trump attacked more ($\chi^2 = 719.65$, p < .001), while Biden's team acclaimed more ($\chi^2 = 336.49$, p < .001), therefore H1 was not supported.

Table 3. Top n-gram features used by Trump and Biden to attack/acclaim.

	Trump ($N = 2248$)			Biden (A		
	Features	N (total)	N (doc)	Features	N (total)	N (doc)
Attack	"radical_left"	328	305	"even_worse"	8	8
	"sleepy_joe"	310	210	"corrupt_adminis ttation"	6	6
	"do_nothing_demo crats"	102	100	"baseless_attacks"	6	6
	"phony_kamala"	102	80	"the_most_corru pt"	5	5
	"radical_democrats	65	62	"unfit_to"	4	4
Acclaim	"victory_in"	72	72	"to_victory"	175	154
	"to_victory"	50	50	"to_protect"	113	73
	"has_accomplished"	47	47	"biden_victory"	86	58
	"another_victory"	38	38	"protect_our"	51	43
	"we've_accomplish ed"	31	31	"safe_and"	46	42

Notes. We tokenized the text of the emails by n-grams (n=2:5) and sorted them by frequency. N(total) means the total frequency of the features used in all emails and N(doc) means how many unique emails.

To answer RQ3 focusing on how Trump's and Biden's campaign acclaim themselves and attack opponents, we analyzed the top features associated with the stakeholders. We tokenized the email text to n-gram features (n ranges from 2 to 4) and sorted them by the number of times that were used in the emails. Then we manually

selected the features associated with attacking or acclaiming and the results are presented in Table 3. We found that Trump's campaign attacks Biden's campaign by depicting the latter as "radical left", "sleepy", "do-nothing", and "phony" while acclaiming itself by using the words like "victory", and "accomplished". For Biden's campaign, the way they attacked Trump's campaign is often about using "worse", "corrupt", "baseless attacks", and "unfit". Biden's campaign often acclaimed itself by emphasizing "victory", "protect", and "safe".

Discussion

Scholars have recently focused on the political use of newer technologies (Lukito et al., 2023). As a result, older technologies, including email, are neglected, despite their widespread prevalence and effectiveness. To fill this gap, we conduct the present study to understand how the Donald Trump and Joe Biden campaign used emails as a means of fundraising during the 2020 Presidential campaign. Through a content analysis of 2,248 unique emails, we analyzed the appeals (e.g., material, ideology, solidarity, and issue appeals) and functions (e.g., attack vs acclaim) of Trump and Biden's campaign emails. Our analysis shows that emails are predominantly used to help the campaign raise funds. We also find that, compared to the Biden campaign, the Trump campaign is more likely to use all four types of appeals in their fundraising emails, and the Trump campaign attacked more while the Biden campaign acclaimed more.

These findings underscore the dual role of campaign emails as political communication: serving both as political advertising tools and, more significantly, as means for fundraising. In our examination of campaign emails from Biden and Trump campaigns, we found both campaigns used various narrative strategies to either promote themselves or critique their opponents. Moreover, soliciting donations appears to be a

primary objective of these campaign emails. This aligns with the analysis of a broader dataset of campaign emails during the 2020 U.S. election cycle (Mathur et al., 2023). This focus on fundraising offers valuable insights into the patterns and content of these emails. For instance, our analysis revealed a significant increase in the volume of emails from the Trump campaign during the final week of the election cycle. This surge could be attributed to the campaign's realization of being financially outpaced by Biden's campaign, as indicated by public fundraising data³.

In addition, this finding that campaign emails are predominantly used for fundraising can inform future conceptualization about the role of campaign emails in modern political campaigns and the use of appeals by campaigns to produce different behavioral outcomes. Political campaign emails appear to be attempting to influence the distinct behavior of a financial contribution. This finding calls into question whether findings of the effectiveness of political advertising more broadly (e.g., Hewitt et al., 2024) generalize to campaign emails. Instead, the functional appeals used in political emails uniquely provide insight into the appeals that campaigns believe will mobilize their strongest supporters to provide financial support, regardless of the appeals' potential (in)effectiveness on the broader electorate.

This study contributed three major findings. First, we found that the Trump campaign attacked the opponents more than promoting Trump. The results show that 67% of emails sent by the Trump campaign used the strategy of attacking their liberal opponents. In comparison, the percentage of attacking emails from the Biden campaign was only 24%. These results differed from what has been shown in political advertising literature regarding incumbency (i.e., Benoit et al. 1999). Benoit et al. (1999) posit that in television

³ See https://www.opensecrets.org/2020-presidential-race

advertising, incumbents attacked less and promoted more. But in the case of the emails, this study found that Trump primarily attacked even though he was the incumbent candidate. However, this finding is consistent with previous studies in negative political advertising regarding partisanship of candidates - Republicans tended to attack more than Democrats (e.g., Benoit et al., 1999; Borah, 2016). For example, Borah (2016)'s study on the political use of Facebook in the 2008 and 2012 presidential campaigns showed that Republican candidates attacked more and used more fear appeals.

The distinct strategies in using emails for acclaiming or attacking employed by the Trump and Biden campaigns also reveal significant insights into how campaigns tailor their appeals to different segments of supporters. The predominance of attack strategies in Trump's emails suggests that Trump's campaign prioritized mobilizing supporters through oppositional narratives, potentially appealing to voters who value confrontational political discourse. Conversely, the Biden campaign's comparatively smaller reliance on attacking opponents may reflect a strategy aimed at presenting a more positive vision, likely resonating with supporters who prefer constructive dialogue over partisan criticism.

Second, this study demonstrated that there is a big gap in the use of ideology appeals between Biden's and Trump's emails. We find that ideological appeals were used in 35% of emails from Biden's campaign but for the Trump campaign, the percentage is as high as 73%. This result reveals that compared to Biden, Trump is more likely to use partisan or ideological cues (e.g., "republicans", "radical left", "socialist democrats") to resonate with voters and attract donations. This use of ideological polarization suggests Trump's intent to strengthen loyalty among existing supporters while potentially attracting undecided voters who share similar partisan views. This finding aligns with previous research that

found that Trump supporters heavily relied on ideological and partisan cues (e.g., patriots, Americans) in their discourse around election denial conspiracies (Chen et al., 2022).

Third, we found that compared to the Biden campaign, the Trump campaign was more likely to use a *combination of multiple appeals* in a single email message. For example, although both Biden's and Trump's campaigns used *solidarity appeals* most in their fundraising emails, the proportion of emails containing a combination of "solidarity + ideology", "solidarity + material", or "solidarity + issue" is higher in Trump's emails. This is consistent with our finding that Trump's campaign had a significantly higher use of all four types of appeals. The Trump campaign's multifaceted use of appeals indicates a sophisticated strategy to engage a broad spectrum of voters by addressing various motivations and concerns. And we argue that Trump's campaign's use of emails is more strategic while Biden's is more to inform the voters.

It is important to note some limitations. First, the email data we used was collected from the Archive of Political Emails - which may not collect all emails sent by Trump's and Biden's campaign teams. Therefore, the findings of this study may not capture the whole picture of the two campaigns' email use, such as emails that were custom-tailored to a specific geographic location or sent only to past donors. Second, in this study, we only analyzed the emails from Biden's and Trump's campaign. The findings of this study should not be simply generalized to comparison on higher levels - such as Democratic vs. Republican campaigns. Third, all analyses in this study are on the content level, so we cannot answer questions about the effectiveness of the strategies in fundraising.

We suggest three directions for future research. First, future research can examine the effects of different email strategies in encouraging donations. This study examines campaign emails only for one Presidential election, while to better understand these strategies, examining multiple election cycles will be useful. Second, future research should examine campaign emails over multiple elections to compare the strategies used and how these strategies might have evolved since emails became a popular fundraising tool. Third, future research can strengthen the robustness of the findings by using data from more than one source (e.g., the Princeton Corpus of Political Emails).

Despite some of these limitations, our study contributes to political advertising research by examining campaign strategies in email communication. The importance of emails in campaigns has been highlighted in past research (Epstein & Broxmeyer, 2020; Stromer-Galley, 2014). The findings from our study add to this literature and help understand the strategies used by the Trump and Biden campaigns.

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Appendix A: Example campaign emails using different appeals and functions.

	Trump	Biden
Material Appeals	"I'm offering you and a guest the chance to have lunch with me in New York My team will cover the cost of your flight, hotel, and meal. All you have to do is show up! Contribute \$42 before August 4th at 11:59 PM"	"To celebrate this special time of year, we're giving you 10% off all items in the store with the discount code HAPPYHOLIDAYS"
Issue Appeals	"we have implemented HISTORIC tax cuts, nominated 220 Federal Judges - including THREE Supreme Court Justices, decimated ISIS, negotiated peace agreements in the Middle East, negotiated the USMCA, and we are leading a strong economic comeback"	"In the last few weeks, we received the worst job report in history. 20.5 million jobs lost last month and the highest unemployment rate since the Great Depression. We have lost nearly 90,000 American lives.
Ideological Appeals	"the Democrats have lost it. Crazy Bernie, Sleepy Joe, and the rest of the 2020 Democrats are so out of touch with the American People"	"I'm going to be upfront: in this email I'm going to ask for a donation to help me and Democrats defeat Donald Trump in November"
Solidarity Appeals	Supporters like YOU are showing up big league for the President when it matters most. President Trump knows none of this would be possible without you on our team,	"But, there's still a lot of work left to do. So in this all-important home-stretch of our campaign, can I count on you to stand with Joe and me and pitch in \$25 to ensure we take back the White House?"
Attack	" The BIG GOVERNMENT SOCIALISTS like Sleepy Joe, Crazy Bernie and Pocahontas know they can't win - not when I have YOU on my team"	" we simply wanted to prove to the American people that Vice President Biden is the best candidate to diagnose and then repair the countless failures of Donald Trump's presidency"
Acclaim	"we've been WINNING for YOU at an unprecedented rate:- Unemployment rates are the lowest they've been in decades- We've created MILLIONS of new jobs- The Beautiful WALL is being built- We appointed two fantastic conservative Supreme Court Justices"	"Our race is centered on an exceptional candidate. Voters are looking for steady leadership, experience, empathy, compassion, and character and they'll find all of these qualities in Vice President Joe Biden"