

#Boycott as a Social Movement: Evidence from the X Platform

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Abstract

Numerous social movements have been organized since the beginning of the Israel– Hamas conflict in October 2023, ranging from street demonstrations to social media wars, which can be categorized as digital social movements. This study primarily aims to analyze such phenomena using social movement theory. The study intends to identify conversation patterns, actors and the most discussed issues under the 'boycott' hashtag (#boycott) used on the X platform between 11 November 2023 to 23 January 2024. The collected data are assessed using the social network analysis method, NodeXL software and Gephi software. The results show that the boycott hashtag is popular among 1,125 conversation networks worldwide, and the most influential users are petersweden7, maxblumenthal, disclosetv, therealkeean and zipzapzooom. The most dispositive topic is the boycott of brands that support the war, with 10,123 positive, 35,774 negative and twenty-five neutral sentiments regarding the topic. Thus, while traditional social movements are characterized by hierarchical structures and physical community roots, digital boycott movements, exemplified by those on platforms like X, are sustained by decentralized organizations, rapid mobilization facilitated by social media, participatory cultures and connective actions. These movements challenge conventional leadership paradigms and offer new avenues for grassroots activism and social change in the digital age.

Keywords: boycott, Israel– Hamas conflict, social media, digital activism, digital public sphere, social movement.

Introduction

The ongoing conflict between Israel and Hamas began when Israel declared war against Hamas in October 2023. As of 5 February 2024, more than 1,200 Israelis and other foreigners, including thirty-five American citizens living in Israel, and more than 27,000 Palestinians in Gaza have been reportedly killed (Zanotti & Sharp, 2023). On 7 October, Hamas and other organizations took approximately 240 hostages (ACLED, 2023). In late November, Israel and Hamas agreed on a cease-fire that would last several days. Two hundred and fifty Palestinians detained by Israel and 110 hostages held in Gaza were freed during the standoff. According to the United Nations, an estimated 1.7 million people in Gaza have been displaced (Zanotti & Sharp, 2023). Furthermore, according to a recent source, Israel's strike on Rafah could extend the battle to Lebanon, and also potentially will develop further public opinion about the war (Siddiqui & Osgood, 2024).

Polarized viewpoints on the war are prevalent on social media platforms, especially on X (formerly Twitter). On the one hand, many agree with US President Joe Biden that Israel has the right to defend itself against Hamas attacks and that Israel and Hamas should continue to work towards a 'two-state solution' (Mason, 2023). On the other hand, the offensive actions of the Israeli Forces, continuously targeting civilians who live in the Gaza Strip and extending their attacks to Lebanon, are considered acts of genocide to be halted immediately (Rafah, 2024). Furthermore, the International Court of Justice is currently reviewing Israel's right to self-defence, which is

constrained by international humanitarian law; the court has urged Israel to cease its attacks on civilians (House, 2024). These opposing viewpoints propagate swiftly, mostly via social media platforms such as X, the most widely utilized platform globally (Dupuis, Pham, & Weiss, 2019). Based on a report by the Armed Conflict Location & Events Data Project, a non-governmental organization that specializes in obtaining conflict data, at least 7,283 pro-Palestine, 845 pro-Israel and 243 neutral protests were held in more than 118 countries and territories between 7 October and 24 November (ACLED, 2023).

As digital public spaces, social media platforms have historically served as catalysts for numerous global social movements. One of the most famous examples is the Arab Spring movement, which was started by social activists online through X (then called Twitter) in 2011. Social media platforms played a crucial role in determining how events unfolded in the Middle East and North Africa (MENA) region during the 2010–11 movement. Notably, the Dubai School of Government reports that the number of Facebook users in the MENA region increased by 276 per cent, from 11.9 million in 2010 to 44.7 million in 2011 (Racha Mourtada & Salem, 2015). According to the Arab Social Media Report, Twitter also saw a notable surge in activity during this time, with daily post from the X platform from the region rising from 2.1 million in December 2010 to 2.9 million in January 2011 (R Mourtada & Salem, 2011).

Furthermore, across the MENA region, the Arab Spring had a significant political impact, leading to the fall of long-standing authoritarian regimes in nations such as Tunisia, Egypt, Libya and Yemen (Wolfsfeld, Segev, & Sheaffer, 2013). Revolutions in these countries called for political reform and democratic governance, bringing concerns of economic disparity, lack of political freedom and corruption to the fore. However, in several nations, the revolutions also resulted in political unrest and warfare as rival factions emerged in the power vacuums, sometimes engendering protracted civil conflicts, such as in Libya and Syria (Spanos, 2012). The Arab Spring highlighted the intricacies of and constant challenges regarding governance, democracy and political stability in the MENA region and sparked discussions about foreign interference and the sustainability of democratic reforms.

The ability of social media to trigger massive social movements is undeniable. This ability has been exemplified in impactful campaigns such as the #DeleteFacebook movement in 2018, fuelled by the Cambridge Analytica scandal. Despite a modest decline in user engagement, heightened scrutiny of Facebook's data privacy practices ensued, demonstrating the potency of social media boycotts in driving corporate accountability (Bofa, Wawan Budi, & Sudirman, 2022). Similarly, the #StopHateForProfit campaign in 2020 compelled significant companies like Coca-Cola and Starbucks to cease advertising on Facebook and prompted policy changes regarding hate speech and misinformation (Lechterman, Jenkins, & Strawser, 2023). These cases illustrate how social media activism can effectively raise awareness, mobilize support and shape corporate behaviour globally.

Amidst the ongoing conflict between Israel and Hamas, an increasing number of individuals have been expressing opposition to the war by boycotting brands perceived to support the war; thus, the boycott movement has gained substantial momentum (Nugraha, 2023). Utilizing social media platforms, protesters share information, popularize hashtags and encourage others to participate in the boycott. This form of digital activism is aimed at exerting economic pressure on companies associated with the conflict and providing people with a powerful means to assert their objection to the war. The boycott movement underscores the intersection of social media, activism and economic influence in shaping public opinion and exposing and challenging corporate associations with geopolitical events. The significant impact of the boycott movement has been evident in countries like Indonesia and Malaysia, where sales of certain US brands have dropped by 70 per cent since December 2023 (Sorongan, 2023), highlighting the tangible global consequences of social media-driven activism.

This study aims to comprehensively explore the boycott movement by leveraging evidence from the X platform and integrating relevant theoretical frameworks. The primary objective is to elucidate the multifaceted dynamics of boycotts within social activism and identify the actors involved, their demographic profiles, the salient issues driving the movement, and the prevailing sentiments associated with the boycott hashtag (#boycott). This study, therefore, aims to determine how far social media-related boycott technologies are able to contest or complement existing paradigms of social movement theories. Through studying the features of online activism, it focuses on the question of whether these movements fall in or fall out of the mainstream concepts of social movements – social mobilization, collective identity or resource mobilization that have in the past held the conceptualization of social movements.

More even though, this study seeks to understand how social media boycott movements impact modern forms of disruption and online mobilization. It investigates new ways of engagement, the expansion of voices, new strategies and new results of activism in an ever- globalized context. These movements are argued to have great promise in changing social activism practices but there are also questions brought up by these movements in practice. Through meticulously examining actors, issues, sentiments and theoretical underpinnings, this research attempts to understand the complexities of the boycott movement and its implications for modern social activism.

Method

This qualitative study uses social network analysis (SNA) and literature analysis framed by social movement theory to comprehensively examine the boycott movement within digital public spheres, where people discuss social, political and cultural issues. These spaces are vital for shaping opinions and fostering civic engagement in the digital age (Riether, 2016). This study's methodological framework can provide a nuanced understanding of the intricate dynamics, relationships and structures within the boycott movement while grounding the analysis in established theoretical perspectives on social movements (Rocha, Fancisco, Calado, & Sofia-Pinto, 2011). The analysis will be conducted in several stages to understand the complexities of the digital boycott movement. The technical stage will include the following steps.

Social network analysis

SNA will be employed to outline the network of actors, organizations and influencers involved in the boycott movement across X platforms. SNA entails a wide range of methodological, statistical and theoretical techniques and is specifically designed for relational data analysis (Friemel, 2018). Relational data denote the relationship between entities of interest (such as people, organizations or media material) that are not independent of one another. In a relational database, a collection of nodes and their connections (ties) constitute a social network (Riether, 2016).

A systematic process was conducted to analyse the dataset from the boycott hashtag conversation network. The data is manually examined to understand the backgrounds and roles of the actor involved in the discussion. This rigorous examination facilitated a comprehensive comprehension of the diverse cohort of individuals actively engaged in the discourse surrounding the contemporary worldwide boycott movement. By categorizing the backgrounds of these actors, we delineated their roles and affiliations inherent to their contributions to the movement. This categorization (Table 1) served as an indispensable framework for elucidating the multifaceted perspectives and substantive contributions of individuals who shaped the narrative and trajectory of the global boycott movement.

Table. 1. Interpretations of Measures

Centrality Measure	Interpretations
Degree	How many people can this person reach directly?
Betweenness	How likely is this person to be the most direct route between two people in the network?
Closeness	How fast can this person reach everyone in the Network?
Eigenvector	How well is this person connected to other well-connected People?

Source: CNM Social Media Module, 2016

This study employs the Clauset–Newman–Moore algorithm to analyze the roles of conversation starters, influencers, active engagers, network builders and information bridges within digital social movements (Table 3). This study examines the intricate dynamics of digital social movements by discerning the patterns of movement characteristic of the digital age, particularly the mechanisms underlying actor pairings and bridging. Furthermore, relationships between the selected actors will be identified via a structural analysis of the conversation network. The connections between involved actors are mapped using the indicators shown in Table 2.

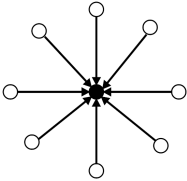
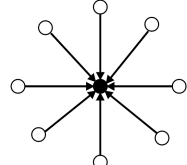
Table. 2. SNA Connection Measures Description

Measure	Description
Centralization	Centralization describes the extent to which the ties of the network depend on one or a few central nodes. A network is said to be concentrated if some nodes have considerably larger centrality scores than others.
Core-Periphery	The network structure describes groups of nodes that are closely connected and others that are more loosely linked.
Density	Show the links which connected per conversation node.
Degree centrality	The links reflect the connections between each discussion node. Degree centrality counts the number of connections made to and from a person within conversation clusters.
Betweenness centrality	Indicates the shortest path between users in a conversation network and determining user specific role within the conversation network.

Source: Brun, et all, 2018

The analysis will focus on identifying and classifying conversation starters, influencers, active engagers, network builders and information bridges using the indicators in the NodeXL tools (Adalat & Niazi, 2017) (Table 3).

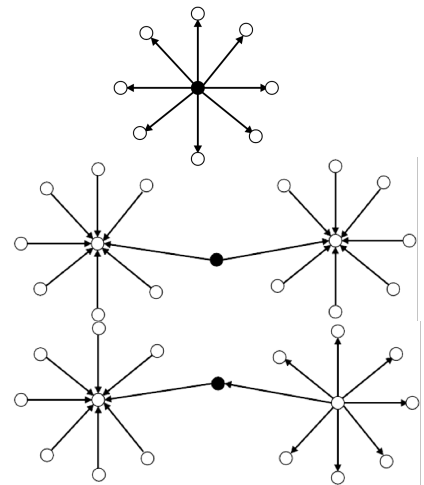
Table. 3. SNA Analysis User Classifications

Classification	Description	Graph Description
Conversation Starter	A conversation starter is a user in the network with much "in-degree" links and few or no "out-degree" links. The user creates the original topic and the flow of information in the a specific conversation network.	
Influencer	An influencer is an opinion leader in the network. They have several "in-degree" links, whereas they have very few "out-degree" links. The influencers form the opinion of others by frequently posting tweets, which are usually subjected to retweeting.	

Active Engager An active engager is a user in an online discussion network with numerous "out-degree" links and few, if any, "in-degree" links. They are sharing the information and establishing connections within the conversation network.

Network Builder The network builder has few "out-degree" and "in-degree" links; however, they are the most important part of the conversation network. Their main role will be to connect two or more influencers within the network.

Information Bridge An information bridge is one of the users in the online discussion network, who has only few "in-degree" and "out-degree" links. They act as go-betweens between influencers and active engagers who can reach other users in the network.



Source: Adalat et al., 2017

Tools

The research methodology incorporates a comprehensive SNA utilizing NodeXL (version 1.0.1.448), a cutting-edge tool developed by the SM Foundation. This software gathers data and analyses conversation patterns, effectively categorizing users and conducting sentiment analysis within the studied network (Smith, Rainie, Shneiderman, & Himelboim, 2014). Furthermore, the study leverages Gephi Mapping Software 0.10 to enrich the visualization of conversation patterns and facilitate a deeper understanding of the network dynamics. This sophisticated software can help generate intricate conversation maps, thereby enhancing the clarity and depth of the analysis of the conversation patterns identified within the network (Smith et al., 2014).

Data

This analysis uses data from the X social media platform from 11 November 2023 to 24 January 2024. The X platform was chosen because it is one of the best databases for SNA owing to its scalability, flexibility, performance, built-in graph algorithms, seamless integration, strong community support and capability to capture real-time data (Fedushko, n.d.). Furthermore, the data collection dates coincide with the emergence of the first boycott movement in mainstream media in this period around November 2023. The significance of this timing is underscored by the movement’s subsequent escalation, reaching its zenith in January 2024 with more than 1,000 daily conversations. This deliberate timeframe selection enables a comprehensive examination of the movement’s evolution, dynamics and impact within the studied social network, providing valuable insights into its trajectory and societal resonance during this critical period. The data are described in Table 4.

Dataset Explanation	Number of Used Data
Retweet	17833
Quote	358
Tweet	1191
Replies to	1739
MentionsInRetweet	1649
MentionsInReplyTo	1226
Mentions	460

Source: Author

Literature analysis

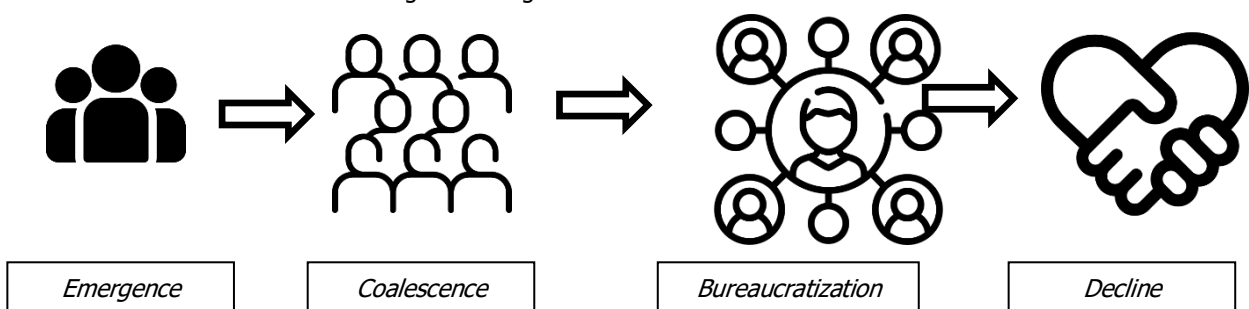
A literature analysis of research on social movement theory will be conducted to contextualize the findings within the broader theoretical framework of social movements and to obtain theoretical insights into the underlying motivations, strategies and dynamics driving the boycott movement in digital public spaces. The analysis will examine the thematic content of the digital discourse surrounding the boycott movement, exploring the salient issues, grievances and narratives propagated by participants. The discourse will be qualitatively examined to determine the discursive strategies employed by actors to mobilize support, frame the issues at hand and shape public opinion on digital platforms.

The research topic should be contextualized within the broader framework of the social movement theory and the historical evolution of the boycott movement. The social movement theory serves as a foundational framework for critiquing and evaluating the dynamics of contemporary digital social movements as it provides insights into the mechanisms of collective action, mobilization strategies and the role of key actors. By contextualizing the conversation network analysis within these theoretical and historical frameworks, we can understand the complexities and nuances of the contemporary boycott movement discourse and generate a robust and insightful interpretation of the results.

Evolution of the social movement theory

As conceptualized by Freeman and Johnson (1999), social movements occupy a unique space within the socio-political landscape, distinct from formal political initiatives yet not as structured as well-organized movements (Imhonopi, Onifade, & Urim, 2013). These movements often emerge from collective grievances and a shared sense of identity among their participants (Fominaya, 2010). Chaves et al. (2018) emphasize that collective action against a clearly defined opponent and the formation of a cohesive collective identity among the participants characterize such movements (Bimber, Flanagan, & Stohl, 2012). Traditional social movements typically follow a series of distinct stages, as elucidated by the following scholars such as Christiansen (2009) and (Darmawan, 2009) (Figure 1).

Figure.1. Stages of traditional social movement



The first stage, **Emergence**, involves the initial articulation of grievances and mobilization of affected individuals around common issues. During this stage, grassroots activists and community organizers play pivotal roles in raising awareness and galvanizing support. In the next stage, **Coalescence**, various factions consolidate within the movement and formulate collective goals and strategies. This stage often involves the emergence of charismatic leaders and establishment of formal organizational structures to coordinate activities and amplify the movement's impact. As the movement gains momentum, it enters the **Bureaucratization** stage, where it encounters challenges related to institutionalization and maintaining cohesion amid growing complexity, however, depending on the social movements, this stage may not always occur. This stage requires increased coordination

efforts, fundraising activities and engagement with mainstream institutions to effect change from within. Finally, the movement may enter a stage of ***Decline***, where internal divisions, external pressures or shifts in public sentiment result in waning support and gradually dissolving organizational structures. Notably, the end of one stage does not necessarily signify the end of the movement altogether as social movements often exhibit cyclical patterns of resurgence and decline (Polletta & Jasper, 2001).

According to Peterson (2024), the actors within traditional social movements can be categorized into three main groups. The first group includes the ***victims of the policies*** or issues being contested, who are directly impacted and often drive grassroots efforts to mobilize support and raise awareness. These individuals amplify the voices of the affected communities and highlight the human cost of societal injustices. The second group comprises ***elites who lend their support and resources to the movement***, particularly during the Coalescence and Bureaucratization stages. This group may include political leaders, social activists, journalists and other influential individuals who use their platforms to advocate for policy reform and amplify the movement's message. The third group comprises ***ordinary citizens who may not hold positions of power*** or influence but can shape public opinion and sustain grassroots mobilization efforts. These individuals are often called 'everyday activists' and contribute to the movement by participating in protests, social media campaigns and other forms of collective action (Peterson, 2024).

Social movements are not always directly affiliated with political parties or initiated by entities with formal political access or power (R Mourtada & Salem, 2011). Instead, they occupy an intermediary space between the political sphere and well-organized movements (Freeman and Johnson, 1999).

The rise of digital social movements has been facilitated by the proliferation of smartphones, internet connectivity and social media platforms, which has democratized access to information and provided new avenues for political expression and mobilization (Bahri & Widhyarto, 2021). Hashtags have become particularly powerful tools for aggregating and amplifying opinions across online communities, as demonstrated by their widespread use in movements such as #BlackLivesMatter and #MeToo (Isa & Himelboim, 2018).

Hashtags serve as powerful tools for political activism. A notable use of hashtags occurred in 2005, when Chris Messina introduced the 'Barcamp' hashtag to discuss pertinent issues unfolding in the United States (Kitchin, 2014a). This hashtag marked a pivotal moment in utilizing digital platforms for political discourse. Unlike traditional media channels, such as television and radio, hashtags facilitate the creation of a unified voice among diverse participants, transcending geographical barriers and enabling individuals to participate in meaningful dialogue and activism on a global scale (Bernard, 2019). This example of the Barcamp hashtag underscores the transformative impact of hashtags in shaping political activism and digital discourse, laying the groundwork for subsequent movements to leverage social media platforms for social and political change.

While traditional social movements are often grounded in local communities and physical spaces, digital social movements transcend geographical boundaries and form virtual communities based on shared interests and identities (Laucuka, 2018). This borderless and decentralized nature of digital social movements poses challenges to traditional forms of leadership and organizational structure. While charismatic leaders and formal organizational hierarchies play central roles in traditional social movements, digital social movements often rely on networked organizations, where authority and influence are dispersed across a network of participants rather than concentrated in a few individuals or organizations (Bernard, 2019).

Despite these differences, digital social movements share many common characteristics with their traditional counterparts. Both movements are driven by collective grievances and a desire for social change, and both rely on collective action and solidarity to achieve their goals (Devine, 2006). Moreover, both face similar challenges in maintaining momentum, sustaining grassroots support and navigating complex political and social landscapes.

While considerable scholarship exists on separate traditional and digital social movements separately, there is a lack of comparative analyses examining the features that distinguish these two forms of collective action. Traditional social movements, have been extensively studied within the disciplines of sociology, political science and communication studies. Conversely, digital social movements represent a novel phenomenon that has recently garnered increasing academic attention.

History of boycott movements

The history of boycott movements encompasses social, political and economic activism spanning centuries. The term 'boycott' itself was adopted in the late nineteenth century, inspired by the actions of Charles Cunningham Boycott, an English land agent in Ireland. During the Irish Land War that began in the late 1870s, Boycott became infamous for his refusal to lower rents for struggling tenants during economic hardship. In response, the local community organized a coordinated social and economic ostracism campaign against him. This strategy, known as 'boycotting', involved refusing to work for Boycott, conduct business transactions with him or engage with him socially. The success of this campaign against Boycott led to the popularization of boycott as a protest method (Buheji & Ahmed, 2023).

Since its inception, the boycott tactic has been used by various groups to challenge unjust actions, discrimination and unethical practices. One of the most famous examples is that of the Montgomery Bus Boycott of 1955–6, ignited by Rosa Parks' refusal to give up her seat to a white man on a segregated bus in Montgomery, Alabama. Parks' act of defiance catalyzed mass mobilization of African American citizens who collectively boycotted the city's bus system for over a year, demanding an end to racial segregation. Under the leadership of civil rights leaders such as Martin Luther King Jr., the boycott ultimately resulted in a landmark Supreme Court ruling declaring segregation on buses unconstitutional, thus marking a pivotal victory for the civil rights movement (Luther et al., 1989).

Throughout the twentieth and twenty-first centuries, boycott movements have continued to be a potent force for social change, amplified by advancements in communication technology and the emergence of social media. These movements have addressed various issues, including labour rights, civil liberties, environmental conservation and corporate accountability. In labour rights, workers have deployed boycotts to demand fair wages, safe working conditions and the right to unionize. For example, the United Farm Workers' grape boycott in the 1960s and 1970s, led by Cesar Chavez and Dolores Huerta, was aimed at creating pressure on growers to improve labour conditions for farm workers (William, n.d.).

In civil liberties, boycotts have been instrumental in challenging systemic discrimination and racial segregation (Wilson, Irene, & Sartika, 2022). Other notable examples include the United Farm Workers' lettuce boycott and the United States' boycott of the 1980 Moscow Olympics in protest against the Soviet invasion of Afghanistan. Environmental boycotts have targeted corporations engaging in environmentally destructive practices, such as deforestation, pollution or habitat destruction. These boycotts have sought to raise awareness about the environmental effects of consumer choices and pressure companies to adopt sustainable practices. Corporate accountability boycotts have targeted companies implicated in human rights abuses, unethical labour practices or support for oppressive regimes. These boycotts are aimed at holding corporations accountable for their actions and encouraging ethical behaviour.

Despite their effectiveness, boycott movements have been criticized for potential unintended consequences, such as harming workers or local economies dependent on the targeted industries. Additionally, boycotts may face resistance from entrenched interests or powerful entities unwilling to change their practices. Overall, the history

of boycott movements is a testament to the power of collective action and the capacity of ordinary people to challenge injustice, promote social change and hold powerful entities accountable. From the Irish Land War to the civil rights movement to contemporary environmental and corporate accountability campaigns, boycotts have served as powerful tools for advocacy, empowerment and social transformation.

Boycott and social movements in the digital age

The emergence of boycott movements in the digital age represents a significant evolution in the landscape of social activism, presenting new opportunities and challenges. While traditional social movements have historically relied on physical gatherings, mass protests and grassroots organizing to mobilize supporters and effect change, boycott movements in the digital age leverage online platforms, such as social media, to achieve their objectives (Bahri, 2023). This shift in tactics and strategies has reshaped the dynamics of social activism, leading to a reevaluation of the effectiveness and relevance of traditional social movement models in the present age.

Moreover, the internet enables individuals to directly communicate with the target of the boycott, whether it is a corporation, government entity or another individual. Activists can leverage social media channels to publicly call out the actions or policies of the target, demand accountability and seek resolution to their grievances. Such direct engagement can exert substantial pressure on the target, exposing their actions to public scrutiny and increasing the visibility of the boycott campaign (Lechterman et al., 2023).

Furthermore, the internet facilitates global solidarity and collaboration among activists; it enables boycott movements to transcend geographical boundaries and unite supporters from diverse backgrounds and regions (Vromen, 2008). Via online petitions, crowdfunding campaigns and virtual rallies, activists can pool resources, raise funds and coordinate actions across continents, thereby amplifying the impact of the boycott and increasing the likelihood of achieving meaningful change. Additionally, the internet enables the development of alternative forms of activism, such as digital sabotage, hacktivism and online protests. While controversial and often legally questionable, these tactics have been used by activists to disrupt the operations of targeted entities, expose wrongdoing and attract attention towards the issues driving the boycott (Uri & Covill, 2008).

However, the internet also poses certain challenges and risks to boycott movements. The decentralized nature of online activism can make it challenging to maintain cohesion and discipline within the movement, leading to fragmentation, infighting and message dilution (Shoemaker & Reese, 2013). Moreover, the anonymity and lack of accountability afforded by the internet can make it easier for bad actors to infiltrate and manipulate boycott movements for their agendas, thus undermining the legitimacy and effectiveness of the campaign (Kitchin, 2014a). There is a lack of research directly comparing traditional social movements to digital-era boycott movements. While traditional movements have proved effective in forcing social and political change for centuries, digital boycott movements raise questions as to what constitutes benefits and disadvantages. The paper, therefore, is going to delve deeper into the unique aspects, strategies, and outcomes that exist in each—the strong and weak points about these movements—in order to create some informed strategies for social change in the digital age.

Furthermore, the internet has revolutionized social activism; digital boycott movements can use social media to mobilize support, raise awareness, and apply pressure on targeted entities (Amenta & Polletta, 2019). While it may open up new possibilities, it will also create new problems for these movements. More research is required to examine the differences between traditional and digital movements regarding their organization, mobilization, participant demographics, and societal impact. Such a study would be a kind of comparison between two movement types with the aim of going through points of convergence and divergence, the role of technology, changes in

communication, and what is happening with social interactions in an attempt to seek insights into the nature of collective action in the digital age.

Results

Our study has obtained several insightful results, including the identification of the most active users who employed the boycott hashtag to disseminate information. This analysis uses the concept of betweenness centrality, which measures the importance of nodes in facilitating the shortest path through a network (Kitchin, 2014a). Essentially, users with high betweenness centrality exert significant control over the flow of information between other users in the network, thus wielding substantial influence over information dissemination (Kitchin, 2014b). Table 7 shows the users who were identified as being influential in shaping the spread of information within the network.

These individuals have been pivotal in directing the flow of discourse and content related to the boycott movement, shaping the narrative and influencing the trajectory of the movement's impact. The widespread use of the boycott hashtag on social media platforms has sparked a new movement encompassing participants from diverse backgrounds. Within the X ecosystem, Brunkers et al. (2018) categorized these participants into distinct groups based on their affiliations and roles, including journalists, private individuals, celebrities, activists, politicians, social bots, non-governmental organizations (NGOs), international organizations and companies. Each category represents a unique cohort of stakeholders contributing to the discourse around the pandemic, with differing perspectives, resources and scope of influence (Brünker, Deitelhoff, & Mirbabaie, 2019).

Journalists have been key to shaping the narrative surrounding the boycott hashtag, utilizing their platforms to disseminate news, analysis and commentary on the evolving situation. Private individuals from diverse backgrounds offer personal reflections, experiences and opinions on the #boycott impact on their lives and communities. Celebrities have leveraged their substantial social media followings to amplify key messages, raise awareness and mobilize support for various causes related to #boycott, adding a significant and impactful voice to the discourse. Additionally, activists have used X as a platform for advocacy, organizing and raising awareness about social issues and economic inequities. Politicians have also engaged in the discourse to communicate policy initiatives, disseminate public health guidelines and address constituents' concerns regarding the pandemic response. Social bots, NGOs, international organizations and companies contribute to disseminating information and amplifying certain narratives within the #boycott discourse on Twitter, each playing a distinct role in shaping the movement's trajectory and impact.

Understanding these patterns is deemed essential for comprehending the nuanced interplay of interaction and influence in the digital social movement landscape (Kitchin, 2014a). By assessing user connections based on specified parameters, this study aims to investigate the interactions and influence of users, ultimately contributing to a deeper understanding of contemporary socio-political dynamics in the digital sphere.

Table. 5. Actors Background in the Conversation

Roles	Percentage	Example
Journalist	6.5%	Private Account of Journalist
Private Person	25.5%	Ordinary Citizen
Celebrity	4%	Public Figures
Media	13%	Mainstream Media
Activist	3.5%	Social Activist
Politician	4.5%	Party Member
Social Bot	1.5%	Unidentified Account
NGO	1.5%	Non-Government Org
International Organisation	20.5%	The Member of the UN Organisation
Company	0.5%	Private Company
Government	18.5%	Government Official Account

Source: Data Analysis.

These percentages of the different actors present in the boycott conversation on the X platform hint at the great variety of actors and their involvement. Private individuals, taking 25.5% of the actors, are dominantly leading the conversation and could be an indication that private citizens actually participate in a large part of discussing and influencing the boycott. The next closest would be government officials at 18.5% and international organizations at 20.5%, which shows that state and global actors are also actively participating in the discourse, most likely because of political interests and policies. Media outlets, including mainstream media and journalists, then make up 19.5% combined, reflecting their impactful role in the shaping of public opinion and coverage. It is followed by other participants, including activists, celebrities, and companies, which contribute less significantly to the conversation, with percentages ranging between 0.5% and 6.5%. This brings forth the presence of social bots (1.5%) and NGOs (1.5%), which show the role of automated accounts and nongovernmental organizations in shaping or monitoring the conversation. These percentages represent the multi-dimensionality of the boycott conversation, where actors of different interests and influence converge to shape the general dialogue.

Based on the dataset provided, critical actors engaged in the discourse around the boycott hashtag on the X platform conversation network can be identified. Each actor plays a distinct role and brings a unique perspective, contributing to the nuanced and dynamic dialogue surrounding the movement. This multifaceted engagement underscores the complexity and breadth of stakeholders involved in advocating, critiquing or mobilizing support for various causes within the broader context of boycott-related discussions on the platform.

Conversation starter

The initial phase of the analysis involves meticulously identifying **the conversation starter** within the network structure by statistically examining the edge weight. Following the methodology delineated by Smith (2014), this entails ranking the top connectedX users based on the edge weight parameter, with higher values indicating significant connectivity within the network (Smith et al., 2014). Furthermore, the conversation starter is characterized by a high 'in-degree' value juxtaposed with relatively few 'out-degree' links (Adalat & Niazi, 2017). Such a configuration implies that posts originating from the conversation starter garner several retweets, replies and a high amount of engagement from numerous accounts utilizing the boycott hashtag, underscoring their role in initiating and catalyzing discourses within the digital social movement context (Table 7).

Table. 6. Conversation Starter users in the #boycott hashtag

Username	In-Degree Score	Out-Degree Score	Betweenness Centrality	User Profiles
petersweden7	3405	1	128399915.163	Journalist
disclosetv	1006	1	42612264.522	Media
therealkeean	733	1	30770430.868	Ordinary Person
zipzapzooooooom	722	1	30182722.395	Ordinary Person
jimfergusonuk	571	1	14883123.878	Government Official
evavlaar	438	3	10119694.169	Activist
sabatonfan69	317	1	9291899.771	Artist
alinejadmasih	281	1	22556519.571	Activist
mediairii	271	1	10172456.851	Media
jamesmelville	266	1	6276028.026	Activist

Source: Data Analysis

The conversation starters identified in this study initiate and cultivate conversation clusters to foster public concern around specific issues. This action catalyzes the emergence of a digital social movement, as posited by Della Porta and Diani (2020), where a cohesive population shares common goals. This initial step mirrors the formation of traditional social movements. Notably, the conversation starters, often ordinary citizens, undertake the crucial task of creating a shared objective. In doing so, they blur the boundaries between actors, particularly between the media and other users, thereby facilitating a borderless and interconnected engagement network. This process underscores the dynamic and evolving nature of digital social movements, where the delineation between media influencers and other participants is increasingly fluid and symbiotic in driving collective action and public discourse (Sierra-Caballero, 2018).

Influencer

The second crucial actor within the conversation network is **the influencer**, who is identified through the frequent tweeting and subsequent retweeting of their tweets by other users, thereby shaping opinions within the network. These influencers are determined using the betweenness centrality metric, which gauges the likelihood of them serving as the most direct route between two individuals in a network; their position in the network allows influencers to disseminate information across multiple conversation clusters (Kitchin, 2014b). Individuals who play pivotal roles in catalyzing discussions and shaping opinions on specific topics have the highest betweenness centrality values. They occupy a central position within the network (Table 7), enabling them to reach a broad audience, drive engagement and influence information diffusion and opinion formation within the digital ecosystem.

Table. 7. Conversation Starter users in the #boycott hashtag

Username	In-Degree Score	Out-Degree Scoe	Betweenness Centrality	User Profiles
petersweden7	3405	1	128399915.163	Journalist
maxblumenthal	153	1	47822153.613	Editor
disclosetv	1006	1	42612264.522	Media
therealkeean	733	1	30770430.868	Ordinary Person
zipzapzooooooom	722	1	30182722.395	Ordinary Person
dsigender	0	3	26957472.277	Activist
ziyarara	0	3	26597828.478	Ordinary Person
alinejadmasih	281	1	22556519.571	Journalist
jimfergusonuk	571	1	14883123.878	Government Official
mediairii	271	1	10172456.851	Media

Source: Data Analysis

The role of the ordinary person is often assumed by government and activist accounts that strategically select information aligned with their interests from the main discourse initiated by the conversation starter. This selected content is then disseminated among their followers, leading to the formation of multiple conversation clusters with different common goals. In the context of traditional social movements, the influencer's objective is to achieve coalescence, a phase described by Castelli (2020) as the point at which discussions and perspectives begin to converge and gain resonance within the broader discourse (Castelli Gattinara & Zamponi, 2020). Influencers leverage platforms to advocate for specific agendas and ideologies, fostering cohesion among diverse participants and facilitating the convergence of disparate viewpoints towards common objectives within the digital ecosystem of the conversation network.

Active engagers

The **active engager** is the third key actor within the conversation network. The active engager is distinguished by their propensity to disseminate information extensively to their followers, which is subsequently retweeted by their audience. These individuals have a high 'out-degree', denoting their active role in distributing information outwardly to their followers (Table 8). Conversely, they typically have few or no 'in-degree' links, denoting a low level of engagement with content generated by other users (Kitchin, 2014a). Active engagers facilitate information distribution and connection establishment within the conversation network (Adalat & Niazi, 2017). By consistently sharing content and initiating interactions, they act as conduits for the flow of information, effectively bridging disparate clusters and fostering engagement across the network. Active engagers can amplify key messages and discussions on various topics within the conversation network.

Table. 8. Active Engager in the Conversation

Username	In-Degree Score	Out-Degree Score	Betweenness Centrality	User Profiles
layla_2468	0	50	1460665.965	Ordinary Person
pinky22p	0	47	1270003.606	Ordinary Person
protestbc	1	31	7167641.885	Activist
iran_protest_	0	18	599483.000	Activist
traveler002	0	17	479664.000	Ordinary Person
aduadu810	20	16	721317.545	Ordinary Person
feelthinklove7	0	15	487386.240	Ordinary Person
abiabi512	10	14	241248.515	Ordinary Person
gueshy_t	2	13	3503.170	Ordinary Person
puravidabrent	0	12	308944.436	Ordinary Person

Source: Data Analysis

In digital social movements, the role of the active engager extends beyond merely disseminating information; they also serve to bureaucratize or formalize the movement. This process involves organizing and structuring actors within the movement as well as fostering job specialization and coordination to achieve success in advocating for specific policy agendas, such as those related to the boycott movement. Active engagers actively participate in discussions and facilitate dialogue among actors; thus, they maintain the vitality of conversation clusters and contribute to developing a cohesive and organized movement. Their contribution includes coordinating efforts, assigning roles and ensuring that various aspects of the movement, such as advocacy strategies and policy objectives related to the boycott movement, are effectively communicated and pursued. Thus, active engagers are

important for formalizing and operationalizing digital social movements; they drive collective action for achieving tangible outcomes.

Network builder

The fourth key actor in the conversation network is the **network builder**. This actor has relatively few 'out-degree' links and either few or no 'in-degree' links within the online discussion network (Kitchin, 2014b). Despite this limited outward reach and engagement with content generated by other users, the network builder occupies a crucial role in network dynamics. Their primary function involves facilitating connections between two or more influencers within the network, thus serving as intermediaries in disseminating information and exchanging ideas. The network builder enhances the flow of information and fosters collaboration among key stakeholders within the conversation network. This role is instrumental in promoting cohesion and synergy among influencers, ultimately adding to the effectiveness and impact of the digital social movement, particularly in addressing issues related to the boycott movement. Through their strategic networking efforts, network builders influence the trajectory of discussions and direction of the conversation network.

The users shown in Table 9 act as connectors between conversation clusters in the #boycott hashtag network. The 0 value of the 'in-degree' and 'out-degree' links is shown in the table. These users **do not create any tweets for their own network or followers**; their role is to merely retweet the tweets from one influencer to the followers of another, thus creating a new conversation cluster. The role of the network builder is crucial for cross-communication between influencers' networks.

Table. 9. The Network Builder in the COVID 19 Hashtag Conversation

Username	In-Degree Score	Out-Degree Score	Betweenness Centrality	User Profiles
26151815_	0	0	0.000	Ordinary Person
zanbizar	0	0	0.000	Activist
jason_to_dt	0	0	0.000	Ordinary Person
nuriamkeel	0	0	0.000	Journalist
wesleyd81	0	0	0.000	Ordinary Person
scarletpiano13	0	0	0.000	Ordinary Person
mp67029796	0	0	0.000	Ordinary Person
gregbecause	0	0	0.000	Ordinary Person
ryanjoh09967742	0	0	0.000	Ordinary Person
dmesg	0	0	0.000	Ordinary Person
ujlabhaalu	0	0	0.000	Ordinary Person

Source: Data Analysis

Information bridge

The final step in comprehending the pattern of digital social movements entails identifying the **information bridge**. This user has relatively few 'in-degree' and 'out-degree' links. According to Pew Research (2016), the information bridge facilitates connections between influencers and active engagers within the network, thereby enhancing information dissemination and fostering user collaboration. Notably, The absence of the information bridge as indicated by the NodeXL software in the boycott hashtag is among the most important course points in the movement from a social movement perspective. It may express that no information bridge was found in the network, which could influence the movement on linking the most important change makers

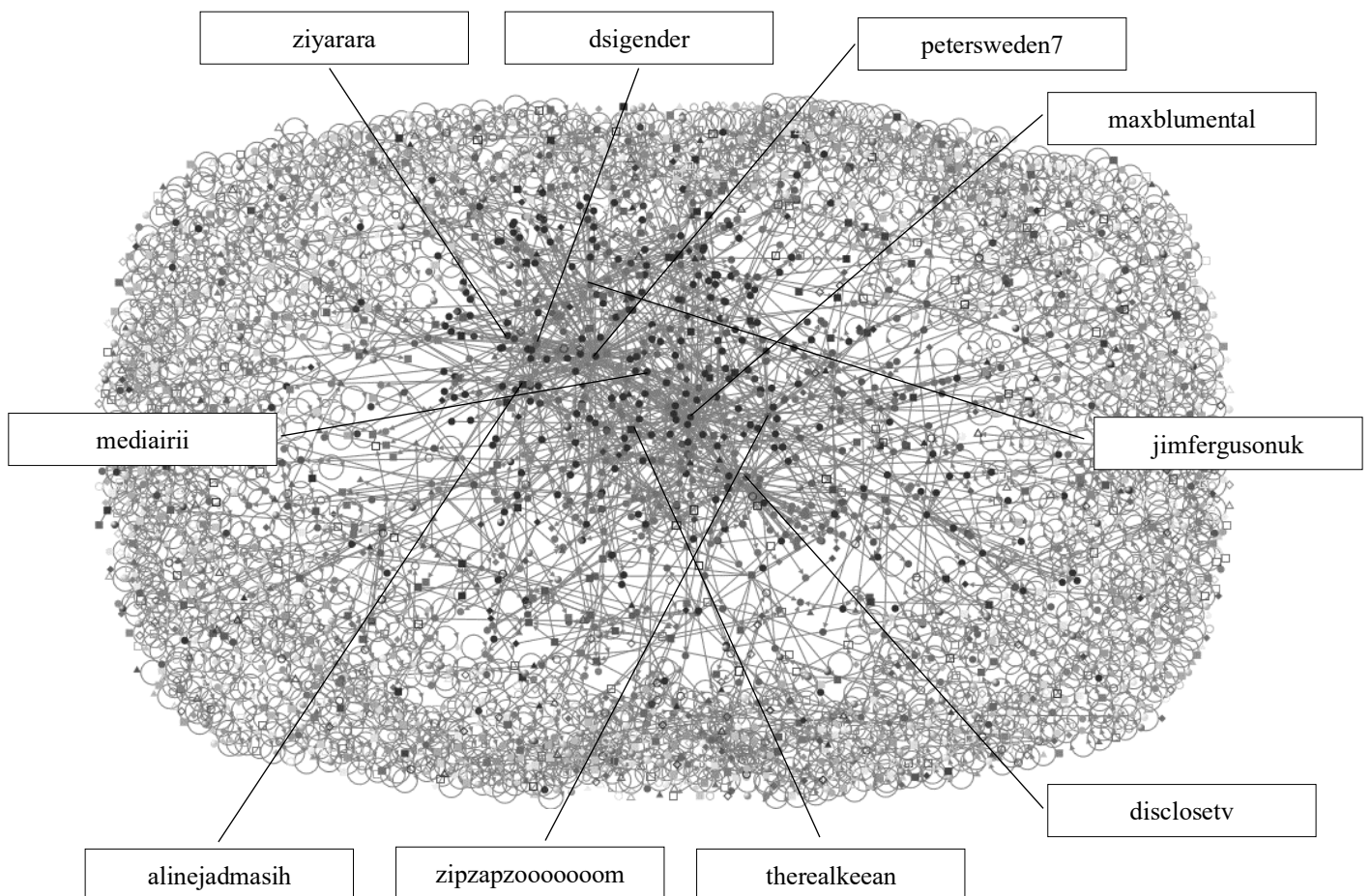
According to Flesher (2010), the absence of an information bridge provides another clue toward the decline of the boycott movement. It may follow one of the four decline pathways: repression, co-optation, success, or failure. In

this case, this boycott seems to fall into the pathway of failure, since it will be difficult to maintain momentum and thereby succeed with its purpose without interconnectivity and key influentials.. The absence of an information bridge is marked by diminished connectivity and cohesion within the network. Thus, identifying the presence or absence of an information bridge provides valuable insights into the stage of development and potential outcomes of digital social movements; it also offers crucial perspectives for understanding the trajectory and impact of such movements.

Interaction map

Following a comprehensive analysis of conversation-related parameters within the boycott conversation network, this study performed a structural analysis using an interaction map (Figure 2), consolidating insights from the data. Vertices representing users were grouped into clusters based on the Clauset–Newman–Moore cluster algorithm using NodeXL. The graph analysis utilized the Harel–Koren Fast Multiscale layout algorithm, illustrating the social structure of digital interactions on X within the boycott movement. Each arrow in the graph represents a conversation between users, representing the flow of information and dialogue within the network. This graphical depiction shows the interconnectedness, clustering and dynamics of the digital social movement on X centred on the boycott hashtag; it offers valuable insights into engagement patterns and overall network dynamics.

Figure. 2. Illustration graphs of the twitter conversation network in the #Boycott hashtag represent each user involved in the discussions as a dot.



Source: Data Analysis

Analysis of the boycott hashtag conversation network on X reveals the significant role of borderless actors, including journalists, activists, private individuals and NGOs, in shaping discourses and catalyzing collective action. These actors transcend traditional boundaries and leverage social media platforms to engage with diverse audiences and foster cross-border dialogue on socio-political issues. The fluidity of their roles, such as disseminating news, amplifying grassroots voices and organizing and mobilizing for social change, highlights their transformative potential within digital social movements. Furthermore, the absence of an information bridge within in boycott hashtag conversation network indicates a potential decline in connectivity and cohesion within the movement, emphasizing the dynamic nature of digital social movements and the need for ongoing analysis to track their evolution. This study underscores the significant contributions of borderless actors in navigating the digital sphere's interconnected landscape, amplifying diverse voices and mobilizing collective action globally.

Discussion

Analyzing the boycott hashtag on the X platform from 11 November 2023 to 23 January 2024 provides valuable insights into its relationship with traditional social movements, particularly in comparison with historical examples. Traditional social movements are typically characterized by several key features, including the emergence of collective grievances, formation of a cohesive collective identity among participants, mobilization of affected individuals around common issues and involvement of various actors in the movement's activities (Walters, 2005).

A defining characteristic of traditional social movements is the emergence of collective grievances among a group of individuals or communities (Porta & Diani, 2009), stemming from perceived injustices, inequalities or systemic societal issues. Historical examples of traditional social movements include the civil rights movement against racial discrimination in the United States during the 1950s and 1960s. The Montgomery Bus Boycott, led by civil rights activists Rosa Parks and Martin Luther King Jr., exemplifies how collective grievances can galvanize individuals to mobilize for social change. Similarly, the women's suffrage movement of the late nineteenth and early twentieth centuries sought to address gender inequalities in political representation. Another characteristic of traditional social movements is the formation of a cohesive collective identity among participants (Castelli Gattinara & Zamponi, 2020). This collective identity is often centred on shared values, goals or identities that unite individuals within the movement. In the civil rights context, participants shared a collective identity as advocates for racial equality and social justice. This collective identity mobilized individuals across racial, ethnic and socioeconomic backgrounds in support of the movement's objectives. Similarly, the women's suffrage movement fostered a collective identity among women advocating for the right to vote despite opposition and resistance from entrenched political and social institutions (Devine, 2006).

Traditional social movements involve the mobilization of affected individuals around common issues, often via grassroots organizing and activism for protests, demonstrations, and other forms of collective action (Betz, 2002). The civil rights movement in the United States mobilized individuals through nonviolent protests, sit-ins and marches (Morris, 1999). These grassroots efforts helped raise awareness, mobilize support and pressure policymakers to enact legislative reforms. Furthermore, traditional social movements engage various actors in their activities, such as grassroots activists, community organizers, and political

leaders. These actors play different roles within the movement, from raising awareness and mobilizing support to advocating for policy reforms and supplying resources. The civil rights movement involved diverse actors, including students, community leaders, and prominent political figures such as Martin Luther King Jr. and Rosa Parks.

This study provides a rich understanding of the complex dynamics inherent in digital social movements. The key differences and similarities between traditional and new social movements are explored by examining the characteristics of the boycott movement within the framework of social movement theory, thus shedding light on the evolving nature of collective action in the digital age. A notable characteristic of the boycott movement on the X platform is its decentralized and fluid nature, which diverges from the hierarchical structures of traditional social movements. Traditional social movements, rooted in physical communities, typically rely on established leadership figures or formal organizations to drive initiatives and mobilize participants. In contrast, the boycott movement on X is characterized by a distributed network of influencers, active engagers and network builders who collectively influence the discourse and mobilize support.

Drawing from social movement theory, this decentralized structure aligns with the concept of networked social movements, emphasizing the importance of networked communication technologies in facilitating collective action (Kitchin, 2014a). Networked social movements leverage digital platforms to coordinate activities, share information and mobilize resources across dispersed networks of participants. Additionally, the boycott movement on X exhibits rapid and decentralized mobilization, which is enabled by the real-time nature of digital communication platforms. Traditional social movements often require extensive planning and coordination to mobilize participants for rallies, protests or other collective actions. In contrast, the ease of sharing information and coordinating activities in real time via viral hashtags, online petitions or digital campaigns allows digital social movements to quickly mobilize support and generate momentum.

Furthermore, the boycott movement on X demonstrates a high degree of participatory culture, wherein individuals actively contribute to the movement's goals and objectives through digital engagement. Participatory culture, a concept rooted in media studies, emphasizes the active involvement of individuals in creating, sharing and remixing media content in online communities (Clinton, Purushotma, Robinson, & Weigel, 2019). Participants engage in various activities, including tweeting, retweeting, liking and commenting on posts related to the boycott movement, contributing to its visibility and impact. Moreover, this movement embodies the principles of connective action, a concept proposed by Bennett and Segerberg (2012) to describe the decentralized and networked nature of contemporary social movements. Connective action highlights the role of digital platforms in facilitating loosely organized networks of individuals with common interests or goals (Bennett & Segerberg, 2012). Thus, participants leverage X to connect with like-minded individuals, share information and coordinate collective action, thereby transcending traditional hierarchical structures and fostering horizontal communication networks.

Analyzing the boycott movement highlights the unique characteristics of digital social movements and their implications for contemporary collective action. By embracing decentralized structures, rapid mobilization, participatory culture and connective action, digital social movements such as the boycott movement on X challenge traditional notions of leadership, organization and mobilization, offering new avenues for grassroots activism and social change in the digital age. The extensive literature review in this study provides a comprehensive overview of traditional social movements, the historical evolution of the boycott movement, and the emergence of digital social movements in the digital age. Contextualizing the conversation network

analysis landscape within this theoretical and historical framework allows us to better understand the dynamics and implications of contemporary boycott movements on digital platforms.

As outlined in the literature review, traditional social movement theory offers valuable insights into the mechanisms of collective action, mobilization strategies and key actors' roles in social movements. The stages of traditional social movements, from emergence to decline, provide a roadmap for understanding the lifecycle of social movements and the challenges they face at each stage. Additionally, categorizing actors within traditional social movements into victims, elites and everyday activists highlights individuals' and groups' diverse roles and contributions in driving social change. The literature review underscores several key differences and similarities between traditional and digital social movements. While both types of movements challenge injustice and promote social change, digital social movements leverage digital platforms such as social media to mobilize supporters, disseminate information and coordinate collective action in ways that traditional movements cannot. The decentralized nature of digital social movements, facilitated by social media, enables rapid dissemination of information, global solidarity and alternative forms of activism.

Moreover, the historical evolution of boycott movements, from the Irish Land War to the Montgomery Bus Boycott to contemporary environmental and corporate accountability campaigns, underscores the enduring effectiveness of boycott tactics in effecting social change. The literature review emphasizes the role of boycott movements in challenging systemic discrimination, advocating for civil liberties and holding corporations accountable for unethical practices. By examining their historical evolution, we can glean valuable insights into the strategies, tactics and outcomes of contemporary boycott movements on digital platforms. The literature review also identifies challenges and criticisms facing boycott movements, such as unintended consequences, resistance from entrenched interests and risks associated with online activism. This will allow researchers to develop more nuanced analyses of contemporary boycott movements and formulate strategies to address potential pitfalls.

Furthermore, the Boycott movements, be they in a digital or more traditional format, have been perceived for quite some time as effective means of collective action against unethical practices or corporate power and social injustices (Kozinets, 2010). More traditional theories of boycotts, such as those forwarded by McCaughey (2011), emphasize the necessity of a common grievance, mobilization, and a shared identity among participants (McCaughy, 2011). In this regard, the boycott on the X platform shares some of these principles, particularly where there are collective grievances against particular entities or policies. The digital boycott movement occurring on X differs from many traditional boycott models primarily in the decentralized nature of this movement. Unlike the classical Montgomery Bus Boycott with salient leaders like Rosa Parks and Martin Luther King Jr., the X boycott is much more decentralized, resting not in the hands of any central leadership but rather a confluence of actors, including influencers and ordinary users. This shift to a more decentralized, leaderless structure has been noted in the literature on digital boycotts—for instance, in studies by Bennett and Segerberg (2012) that argue digital movements allow for wider, more inclusive participation at the cost of possibly losing coordination and clear leadership (Bennett & Segerberg, 2012). Moreover, whereas traditional boycotts tend to focus on specific actions or policies by companies or governments, such as the Montgomery Bus Boycott against segregation, digital boycotts on platforms like X are fluid. They can, therefore, develop as fast as the grievances against them. This makes the boycott much larger in reach and visibility because of its fluidity but also risks fragmentation and a lack of coherent

strategic direction. A comparative analysis of the traditional and digital boycott theories reveals that while digital boycotts can be quite effective at raising awareness, their loosely organized and transient nature may compromise their ability to achieve any tangible social or political change.

Clicktivism and Political Demobilization This positive focus of the study on digital activism brings up an important discussion: clicktivism—a term coined to describe online activism that requires minimal effort on the part of participants, for example, clicking "like," sharing posts, or using hashtags (Morozov, 2011). Some of the criticisms of digital activism, and of digital boycotts more specifically, are that it over-privileges a form of engagement that is largely symbolic and not geared toward action in the real world.

Participants in e-boycotts over the network of X will share the hashtag, but this level of involvement often is not considered enough to bring about real social or political change. More often than not, traditional boycotts had involved activities with more tangible actions, like not buying from certain stores or attending specific events, which took up more effort and sustained commitment from participants. These findings from the study show that the digital boycott movement on X does not stand in danger of falling into the clicktivism trap. The presented research indicates very fast mobilization of the supporters, thanks to real-time communication and sharing gone viral; this underlines the fact that digital movements can easily and quickly gather participants. Still, it is very important to realize one more chance related to political demobilization posited in the literature on digital activism. Tufekci (2017) suggests that the ease of online participation may foster a sense of political efficacy without motivating people to take further, more meaningful actions offline (Tufekci, 2017). In this study, while the boycott on X had gained considerable attention and support, it is not clear whether there really was a change in consumer behavior or policy change.

That is the limitation of digital boycott movements: they may create awareness and public pressure, but usually, their potential to bring about concrete change is limited by the fleeting nature of online engagement and the scarcity of sustained offline activism.

As discussed by Earl et al. (2017), political demobilization occurs when digital activism leads to a decrease in overall activism, as people become disengaged after participation in low-effort online actions. Based on the study, while the boycott on X might have mobilized participants quickly, it was also a cause for concern that these would not lead to sustained activism (Earl, Maher, & Elliott, 2017). Without a clear structure or central leadership, such movements may simply dissipate over time as new causes and interests take precedent, and the people in them move on to the next big thing. Such aspects have been at the heart of criticisms directed against digital activism, where movements momentarily coalesce around some ephemeral focus of online attention and interest. Comparing the results of this study with the theoretical frameworks of clicktivism and political demobilization gives proof of the fact that digital boycotts, like that on X, are clearly at an advantage in comparison with offline protests in terms of reaching a large audience and mobilizing easily; still, they cannot be safeguarded against the risks associated with online engagement. The challenge for digital boycotts is to sustain momentum and convert online engagement into sustained offline actions that lead to meaningful change. From a specific background of political demobilization, ease in participation may convert to weak levels of sustained activism and real-world impact.

There are a few limitations in this entire study that need to be kept in mind while interpreting the results. The given analysis covers only data from X, between November 11, 2023, and January 23, 2024, and hence does not include data for longer trends or information from other platforms that may provide a more panoramic view of the boycott movement. Moreover, this is a study of online engagement and does not look

at offline action or real-world outcomes, such as actual boycotting or attending physical protests, limiting the understanding of the tangible impact of the movement. Similarly, the research does not investigate intersectionality—intersectional relations of variables such as race, gender, socioeconomic status—that could potentially affect the nature of the engagement with the movement. However, while based on boycott theories, the study does not enable the comparison of this specific case to others of digital boycotts in order to contextualize the findings. It also raises the positive potential of digital activism without much elaboration of the potential drawbacks of such mobilization, including political demobilization, slacktivism, or co-optation of the movement. Thirdly, if X is biased toward showing information from more visible users, it might come at the cost of marginal voices; hence, the data may not be representative of all participants. Such limitations provide a way forward for future research: broadening the scope of analysis, investigating offline actions, and showing more balanced views on the challenges and impact of digital boycotts.

Conclusion

In conclusion, the comparative analysis of traditional social movements and the boycott movement on digital platforms reveals distinct disparities and parallels, underscoring the evolution of collective action in contemporary society. Traditional social movements, deeply rooted in physical communities and hierarchical leadership structures, manifest through the emergence of collective grievances, the formation of cohesive collective identities, grassroots mobilization and the engagement of diverse actors. Exemplified by historical events such as the civil rights movement and women's struggle for suffrage, these movements have historically relied on established leadership figures and formal organizations to spearhead initiatives and mobilize participants. Conversely, the boycott movement on digital platforms, exemplified by its manifestation on X with regard to the Israel– Hamas conflict, diverges from the hierarchical structures of traditional social movements. It embraces a decentralized and fluid organizational structure facilitated by networked communication technologies such as social media platforms, enabled by real-time digital communication and characterized by participatory culture and connective action. Participants engage in various digital activities, contributing to the movement's visibility and impact while leveraging social media to connect with like-minded individuals and coordinate collective action.

Despite these differences, traditional and digital social movements share common goals of challenging injustice and promoting social change. They represent collective responses to perceived grievances rooted in historical injustices or contemporary societal issues. Moreover, both types of movements can mobilize supporters, disseminate information and coordinate action to effect change. However, digital social movements, such as the boycott movement on X, leverage digital platforms to overcome geographical barriers, facilitate rapid mobilization and foster global solidarity, thereby extending their reach and impact beyond traditional boundaries.

The characteristics of the boycott movement on digital platforms challenge conventional notions of leadership, organization and mobilization within social movements. By embracing digital technologies, these movements offer new avenues for grassroots activism and social change in the digital age. They also pose challenges, such as navigating issues of online activism, unintended consequences and resistance from entrenched interests. Thus, further research into contemporary digital social movements, particularly boycott

movements on digital platforms, is crucial for understanding their dynamics, implications and potential for driving social change in the 21st century.

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