This is a pre-copy-editing, author-produced PDF of an article accepted following peer review for publication in Planning Theory.

The Online Conversion Framework: Understanding antagonism, planning theory, and social media

Ruth Potts, Johanna Riddle, Justin Hollander, Maxwell Hartt

Abstract
Digital technology is reshaping participatory planning, including conflict and antagonism in the planning process. Yet planning theory has largely failed to engage with emerging digital mechanisms that could stimulate antagonism in online environments. This paper seeks to explore different ways of framing conflict and antagonism in planning and the degree to which they reflect an increasingly digital approach to public participation. We introduce an Online Conversion Framework to delineate the process of conversion for antagonistic to agonistic action on social media, using posts from X (formerly Twitter) as an example.

Key words: *Public participation, digital planning, digital participation, conflict, antagonism, agonism, social media*

1.0 Introduction

Public engagement and participation have been considered keystone elements of democratic and thus 'good' planning practice for more than 50 years (Arnstein, 1969; Barry & Legacy, 2022). Digital advances have introduced new tools, methods, and ways of including the public in decision-making. Online forms of participation are framed by planning scholars as a means of extending Habermasian communicative rationality, and further democratising planning processes (Afzalan & Muller, 2018; Farinosi, Fortunati, O'Sullivan, & Pagani, 2019; Hollander, 2011). They are also praised as a low-cost mechanism for planning practice to be more inclusive, foster discussion, and improve the capacity of citizens to visualise and explore planning issues through improved mapping and modelling (Kahila-Tani, Kytta, & Geertman, 2019; Lin & Geertman, 2019; Williamson & Ruming, 2020). Digital technologies have also introduced new methods, platforms and opportunities for conflict, antagonism, exclusion in planning processes which can simultaneously encourage greater levels of agonistic deliberation, and the disruption and deterioration of such deliberative processes (Pokharel, Milz, & Gervich, 2022; Williamson & Ruming, 2020).

Conflict is integral in democratic planning processes, and unavoidable given the heterogeneity of stakeholders and interests involved in planning issues. Many planning theorists have sought to conceptualise conflict and how planners should manage conflict in planning processes (Forester, 2012; Innes & Booher, 2004; Kühn, 2021; Pløger, 2004). However, these theorists largely discuss conflict and antagonism in planning through formal public participation, in-person meetings, and engaging with individuals and groups on specific spatial planning issues, and largely fail to acknowledge the impact of digital technology on conflict and antagonism in planning processes. Moreover, the literature fails to engage with emerging digital mechanisms that could add to or stimulate antagonism in online environments such as social media bots, which are automated computer programs that can mimic human behaviour and perform basic activities on social media, such as sharing or

posting content, and sending friend requests (Edwards, Edwards, Spence, & Shelton, 2014). This paper seeks to explore different ways of framing conflict and antagonism in planning and the degree to which they reflect an increasingly digital approach to public participation. Drawing on this discussion, the paper characterises different types of conflict and antagonism in digital participation processes using example posts from social media platform X (Formerly Twitter) centred around the temporary weekly closure of a road to vehicular traffic in Cambridge, Massachusetts. The study builds on the spectrum of agonism to antagonism developed by McAuliffe and Rogers (2018) by adding Milan's (2018) four mechanisms for 'politics of visibility' on social media. Combining concepts from political science and media studies provides a unique and novel approach to understanding conflict in planning systems that are increasingly reliant on digital tools and spaces.

2.0 A changing landscape for public participation

The heterogeneity of communities and their interests means that planning decisions inherently create conflict (Lovan, Murray, & Shaffer, 2017). Following the communicative turn in planning in the 1990s, planning theorists argued that planners should adopt a democratic and inclusive approach to planning that includes communities in decision-making processes (Allmendinger, 2017). Public consultation and engagement are considered some of the primary tools to address stakeholder concerns, manage conflict, and reach community consensus on planning issues (Healey, 2020). Formal public consultation and engagement processes are often highly rigid – often involving a short window of time and specific formats through which citizens can 'have their say' on local planning issues (Stanley, 2016).

Public consultation and engagement processes have become increasingly reliant on digital technologies since the 2000s. This reflected a global societal shift towards greater use of digital technologies in day-to-day life due to their constantly improving availability, affordability, connectivity, and capacity. The introduction of mobile digital devices (i.e. smart phones) during this period meant that users could engage with planning issues at any time, in any location, rather than being limited to a static location or in-person consultation event (Evans-Cowley, 2010; Fredericks & Foth, 2013). For many local authorities, digitised public participation has predominantly included hosting an interactive website, which both informs and enables the public to make online submissions to the authorities on planning decisions (Evans-Cowley, 2010; Evans-Cowley & Hollander, 2010; Williamson & Parolin, 2012). Social media platforms have also been progressively adopted by many local planning authorities as a means of informing the public on key issues or inviting the public to engage with formal online submissions and online public participation processes on the authorities' official website (Afzalan & Evans-Cowley, 2015; Williamson & Ruming, 2020).

The Covid-19 pandemic accelerated planners' use of digital technologies to engage with the public. A global shift to remote working led planners to replace face-to-face consultation activities with digital alternatives, with video conference software (e.g. Zoom), and other digital platforms instantaneously becoming the primary means of engaging with stakeholders on planning issues (Agostino, Arnaboldi, & Lema, 2021; Einstein, Glick, Godinez Puig, & Palmer, 2022). Social media has also provided a highly dynamic digital landscape in which citizens can share their opinions on decision-making in real-time, ask questions, and actively participate in discussions around urban issues (Williamson & Parolin, 2013). The wide adoption of social media over the past two decades has resulted in a surge of public interest

in using social media to engage with others around key place-based issues (Lin & Geertman, 2019). Social media offers both a significant opportunity and threat to the planning system. The way in which planning issues are discussed by planners or other users on such platforms can influence stakeholder sentiments and beliefs, which in turn may influence their support for different political representatives, use of services, and engage with the planning system more generally (Schweitzer, 2014). Moreover, social media platforms themselves wield considerable influence. Developed and run by private profit-seeking firms, social media landscapes are not neutral canvases for participation. Proprietary algorithms shape user experiences, engagement, and interaction (O'Neil, 2016). The platform itself is a power structure that can provide disproportionate influence and undermine democratic participation.

While the digital shift introduced new opportunities to engage with historically hard to reach groups at a low cost, it also introduced several unique risks and challenges to democratic decision-making processes. Some online platforms used in consultation processes require little verification of an individual's identity (e.g. X or Facebook) or enable anonymous participation (e.g. online surveys), enabling users to obscure or entirely hide their identity (Pantić et al., 2021). This creates an opportunity for individuals or groups with alternate and possibly nefarious interests to subvert democratic planning processes (Bessi & Ferrara, 2016; Brachten, Stieglitz, Hofeditz, Kloppenborg, & Reimann, 2017; Hegelich & Janetzko, 2016). Such subversion is generally considered antagonistic and may include spreading misinformation, 'bombing' a video call with inappropriate visual or audio materials, repeated sharing of the same content over a period of time, or making irrelevant/unconstructive contributions to the engagement (Hollander, Potts, Hartt, & Situ, 2020; Lin & Kant, 2021). As a result, planners are increasingly faced with public consultation and engagement processes in which it can be difficult to discern the legitimacy, accuracy, and intentions of participants, and antagonistic behaviours may be more pervasive than at traditionally face-to-face events (Friedberg, Lim, & Donovan, 2020; Lin & Kant, 2021).

3.0 Planning and Antagonism

Conflict in planning processes is framed as an inevitable struggle of power between stakeholders with 'deeply felt differences and… diverse interests' (Forester, 2006, p. 447). While there has been significant discussion around the concept of conflict in the planning literature, there remains debate on whether conflict is something for planners to tame and reduce (Kühn, 2021), or encourage as part of a 'healthy' democratic planning process (Pokharel et al., 2022). T The concept of taming conflict reflects Habermasian communicative approaches to planning (Healey, 1996), while encouraging conflict mirrors more Foucauldian (Huxley & Yiftachel, 2000) and agonistic pluralist approaches (Mouffe, 1999). These approaches and the degree to which they engage with digital forms of antagonism such as social media bots are explored further below.

3.1 Habermasian Communicative Planning and Conflict

Communicative planning theory emerged in the 1980s as an extension of planning theory beyond rational planning and is based on Habermasian communicative rationality and a social constructivist paradigm (Calderon & Westin, 2021). Habermas emphasises the role of the public sphere and argues that deliberative and democratic consensus-building can only occur through social interaction in the public sphere (Habermas & Mccarthy, 1991). The premise of

communicative rationality is that facilitating discussion between individuals leads to greater levels of trust and understanding between them, shared knowledge, and ultimately agreement on the best way forwards (Hillier, 2003). Based on this, communicative planning theorists argue that planning is a social process that aims to develop 'objectivity based on agreement between individuals reached through free and open discourse' (Allmendinger, 2017, p. 243). In communicative planning, antagonism and conflict are always considered negative and are assumed to be the result of individuals with different interests lacking sufficient understanding of other's interests. Communicative planning does not assume that individuals will share a unified perspective or that conflict can be removed from planning processes, but rather encourages the identification and development of common interests and mutual understanding (Blau, 2022; Mäntysalo, 2002).

Communicative planning has been widely criticised for being unrealistic with its assumptions around how participants engage with each other, and its failure to account for uneven power dynamics and conflict between stakeholders (Calderon & Westin, 2021). Communicative planning assumes that individuals will enter into such discussions 'taking reasoned positions [based on]…an aspect of social life that has become problematized', be capable of critically reflecting on their 'values, assumptions and interests in the light of all other relevant claims and reasons', and put forward information honestly (Dahlberg, 2004, p. 7 & 8). Critics argue that these ideals are impossible to achieve, and that communication and consensus building cannot eliminate conflict from political processes such as planning (Flyvbjerg, 2004; Mouffe, 1999; Özdemir, 2021; Westin, 2022).

The internet is argued by some communicative planners as having expanded Habermas' concept of the 'public sphere' with a variety of social media platforms (e.g. X, Facebook) enabling debate and discussion on planning issues with varied levels of management and engagement by planning authorities (Zamith & Lewis, 2014). Mattila (2020, p. 51) argues such platforms can provide potentially egalitarian spaces, enabling all individuals with access to the internet to communicate with each other, scrutinise democratic processes, and 'form opinions through horizontal deliberation between citizens'. Habermas' (1984, p. 287) acknowledges, however, that citizens are highly subjective and suggests that such deliberation is highly dependent on 'common convictions', as the ideas of individuals can only gain traction if other individuals in the discussion accept the assumptions underpinning them. This suggests that social media is not in fact an 'egalitarian space' as it is unlikely that all users will share common convictions.

Habermas (2006) also argues that the internet does not extend the public sphere because of its tendency to fragment the public into what he calls 'isolated issue publics', whereby individuals end up in discussions in groups online where other speakers share similar interests and values. While social echo chambers can exist along the entire offline-online communication continuum, internet-based echo chambers are unique because online homophily (the principle that similar people are more likely to interact with one another) is a product of both individual behaviour and algorithmic sorting (Graham & Ackland, 2016). Social media platforms are run by private firms aiming to monetize user engagement and interaction. As such, it may be more profitable to encourage social fragmentation to catalyze polarisation and antagonistic behaviours towards those who are seen to disagree with the group rather than building understanding between individuals. The open and largely

unrestricted nature of social media platforms such as X also means that the opportunity for misrepresentation is particularly high. While communicative theory touches on the issue of individuals falsely representing themselves as part of deliberative discussions, it largely focuses on its use as a strategic approach in face to face deliberations (Habermas, 1984). Such discussions fail to acknowledge the severity and frequency of misrepresentations in online environs, the motivations of hiding ones identity in such environs (Mattila, 2020), and the impact of this on conflict in digital planning processes.

3.2 Conflict and Foucauldian planning

Recognising the many flaws of communicative planning, some planning theorists argue that Foucault's power analytics are a more realistic way of conceptualising the political machinations of planning practice (Certomà, 2015; Flyvbjerg, 1996; Van Assche, Duineveld, & Beunen, 2014; Yiftachel, 1998). Where communicative planning largely ignores the issue of power and power dynamics between stakeholders, Foucault argues that 'power is always present' (Foucault, 1988, p. 18) and is the ability to 'structure the possible field of action of others' (Foucault, 1982, p. 790). Reflecting this, planning is considered a means of controlling and potentially even oppressing the conduct of citizens through the use of rules, regulations, policies, and administration (Allmendinger, 2017). The effort to impose control over individuals and groups inherently leads to conflict between those imposing and those who resist control, exploitation or change. Thus conflict and antagonism are an expected and unavoidable element of planning processes (Nicholls & Uitermark, 2017; Pløger, 2004).

Resistance to power is described by Foucault as 'counter conduct' and reflects a desire to be 'governed' (or controlled) in a different way to that which is being exercised by those in power (Rosol, 2014). Counter conduct is thus considered an act of freedom and productivity, rather than an act of outright disobedience because it involves mobilization and change in the way in which power is exercised instead of the elimination of power (Purcell, 2009). For Foucauldian planners, conflict and antagonistic behaviour is an accepted component of planning processes, and represents shifting power dynamics between stakeholders.

The literature applying Foucault's theory of counter conduct in planning is limited (Rosol, 2015), and entirely missing in the context of digital forms of online public participation and engagement. Despite this, social media and other online forums are arguably digital spaces that enable individuals to criticise, question and vocally resist existing power structures and discourses with the potential of instigating institutional change. Using a Foucauldian lens, debates on planning issues in open online forums such as X can be considered part of counter-conduct because they enable individuals to identify issues with existing power structures and express how they would like to be governed instead of the current approach. While Foucault's theories of power and counter-conduct comprehensively explore power dynamics and dissent to existing political structures, they are not sufficiently detailed in explaining the behaviour of those who seek to disrupt and disobey without seeking to change power structures. In seeking to explain the actions and implications of antagonistic actors who seek to disrupt debate and distract individuals from productive counter conduct in online spaces, Foucauldian perspectives fall frustratingly short.

3.3. Conflict and Agonistic Planning

Agonistic pluralism is a theory of conflict developed by Chantal Mouffe in the 1980s and has been embraced by post-political planning theorists critical of Habermasian communicative planning (McClymont, 2011; Pløger, 2004; Yamamoto, 2017). Where Habermasian approaches to democracy see conflict as something to be managed or resolved, Mouffe and other radical democracy theorists argue that conflict (rather than consensus) is critical to a functioning democracy in a pluralistic society (Laclau, 1995; Laclau & Mouffe, 2014; Mouffe, 1999, 2000, 2002a)., In agonistic planning theory, conflict is categorised into two types – agonism and antagonism. Agonism is a form of democratic conflict in which differences in perspective can be confronted and contested in a constructive way using accepted rules of liberal democratic systems (Roskamm, 2015). Agonistic approaches to planning are argued to lead to decisions that are 'partly consensual but which also respectfully accept unresolvable disagreements' (Hillier, 2003, p. 42). Antagonism, on the other hand, is a form of hostile conflict in which individuals or groups see themselves as enemies incapable of constructive discussion or debate (Tambakaki, 2014). While Mouffe (2002b) argues that the purpose of democracy is to 'tame' antagonism through agonism, agonistic planning theorists have consistently maintained that law-based planning processes are incompatible with agonistic approaches because of the top-down structure of most planning systems (Grange, 2017; Hillier, 2011; Metzger, Allmendinger, & Oosterlynck, 2014).

Building on the work of (Mouffe, 1999, 2000, 2002a, 2002b), planning scholars have sought to explore and add greater nuance to the concept of antagonism in planning processes (McAuliffe & Rogers, 2018; Pløger, 2004; Roskamm, 2015). Pløger (2004) warns that planners often interpret any conflict between stakeholders as antagonism (rather than agonism) and may believe that such conflict is only able to be resolved legally or through political decision-making.. Recent work by Lowndes and Paxton (2018) argues that it is possible to institutionalise agonism by embedding greater opportunities for agonism around planning issues through for example citizens' assemblies, or referenda. However, they argue that online spaces such as social media remain challenging to incorporate institutionalised agonism because of interactions between actors on social media are characterised by 'an absence of respect and critical responsiveness…[in] exchanges involving minority or marginalised identities' (Lowndes & Paxton, 2018, p. 700).

McAuliffe and Rogers (2018) argue that antagonism and agonism are not binary, but rather exist on a spectrum. They argue that there are different levels of antagonism between the conversion from antagonism to agonism, including: 'rigid', 'soft' and 'strategic' antagonism (McAuliffe & Rogers, 2018, p. 223). Rigid antagonism involves resistance based on an unwillingness to acknowledge plurality or negotiate their moral values (e.g NIMBYism). Soft antagonism on the other hand involves acknowledging plurality but being unable to influence decisions. Finally, strategic antagonism refers to engagement in conflict within politics while simultaneously engaging with issues or stakeholders outside of formal processes or institutions (McAuliffe & Rogers, 2018). While such typologies add greater depth to our understanding of antagonism, there remain questions about whether these typologies reflect digital approaches to antagonism, such as social media and the advent of artificial intelligence actors such as social media bots who are programmed to provoke antagonism.

Few planning scholars have extended their discussion of agonism into online planning environments or digital spaces for public consultation. Despite this, the literature on agonistic

pluralism offers the greatest insight of the three theories discussed in this paper (communicative planning, Foucauldian planning, and agonistic pluralism) into antagonistic behaviour around planning issues in online environments. As such agonistic pluralism is used as the basis of the framework proposed in section 4.0 and is discussed further below.

3.4 Antagonism on social media

Scholars from disciplines such as media studies are divided in how agonistic pluralism might be considered in an online environment and to what extent online behaviours may be considered agonistic rather than antagonistic. For example, Jane (2017, p. 468) argues that 'online scenes of exclusion, dispute, vitriol and "hating"' exemplify deep democracy and agonism as imagined by Mouffe. Alternately, Evolvi (2019, p. 387) argues that many of these online interactions fail 'to create constructive agonistic confrontations' and thus must be considered antagonistic because of their encouragement of polarization rather than constructive debate. Tuters and Hagen (2019) also argue that overtly antagonistic behaviour on social media can become somewhat nebulous as posts, images and other media are shared, reinterpreted and reimagined by different users over time. This blurriness in turn can make it difficult for users and decision-makers to distinguish agonism and antagonism on social media.

Social media has become an important mechanism of political identity articulation and mobilisation (Fenton, 2018). Reflecting this, social media has increasingly been used in socio-political conflicts as a means of not only providing users with on-the-ground coverage of the events, but also facilitating discussion, and coordination of protest and resistance activities within and beyond the borders of such conflict (Zeitzoff, 2018). Often expressions of political identity on social media fall outside of traditional forms of public participation or formal political processes such as elections and may involve users engaging in a spectrum of activities ranging from activism to civil disobedience (Neumayer & Svensson, 2016).

Echoing the work of Mouffe, Neumayer and Svensson (2016) argue that activists on social media can be characterised based on the degree to which they are willing to act in civil disobedience and whether they consider those who disagree with them as enemies or adversaries (i.e antagonism vs agonism). Where antagonistic behaviour on social media involves concealment of identity, impersonation, or deliberate provocation it signifies a form of violation of social rules and thus antagonism, and is often aligned with particular ideological or political paradigms (Housley et al., 2018; Mylonas & Kompatsiaris, 2021). This reiterates the role of social media in not only developing individuals' identities, but also more collective and relational forms of identity. This occurs not just through the posting and sharing of user generated posts, but also through the social media's own algorithms. Such algorithms can adjust when and how often posts appear within users' feeds based on how many 'likes' it receives or the hashtags that are used (Bandy & Diakopoulos, 2021). This in turn contributes to meaning-making for the user by curating the user's feeds and adjusting the user's exposure towards or away from specific themes and other users.

Milan (2015) reasons that the interactions between users are particularly important in the mobilization of groups and the amplification of shared elements of collective identity, because of their visibility on social media platforms. Milan's (2015) argument is based on the premise that visibility of posts on social media inherently creates collective experiences based

on individually shared content, posts, and engagement. The visibility of content shared by users on social media in turn becomes a performance of expression that reiterates a position and how that position is juxtaposed against alternate and 'other' positions (Milan, 2015). While Milan (2015) does not engage with Mouffe's work around antagonism, there are obvious parallels between the two scholars on the topic of pluralism and the relational nature of conflict, and may help to explain the transition between agonism and antagonism around planning issues on social media. Recognising the failings of communicative planning and Foucauldian perspectives in addressing issues of agonism and antagonism, and the strengths of Mouffe, and Milan's conceptualisations of antagonism, this research and the model below build on the work of Mouffe and Milan to better understand antagonism and conflict in a digital planning environment. Understanding the multifaceted ways in which social media contributes to the development of collective identity is critical for planners, given the ubiquitous nature of social media and impact of users' interactions on social media have on their perspective on and engagement with planning issues.

4.0 Conceptualising antagonism and planning on social media

This section presents a new framework called the Online Conversion Framework that addresses the deficits in Mouffe's political theory in the context of an increasingly digital world, that planners can apply to community engagement in online spaces. The framework outlined in Figure 1 below combines conceptual models by Milan (2015) and McAuliffe and Rogers (2018) to develop a framework for the process of conversion from antagonistic to agonistic action on social media, using Twitter X as an example. By "taming" antagonism, the "political" is converted into "politics" (Roskamm, 2015). The framework integrates McAuliffe & Rogers' (2018) three modalities of antagonism (rigid Antagonists, soft Antagonists and strategic antagonists) and Milan's (2015) four mechanisms for 'politics of visibility' (individuality, performance, protesting, and juxtaposition) into an eight-rung ladder, reminiscent of Arnstein's (1969) Ladder of Citizen Participation. One noteworthy adaptation to McAuliffe & Rogers' (2018) modalities of antagonism includes an additional three modalities (rigid, soft, and strategic agonists) that support our definitions of agonistic conversion. Conversion from 'antagonist' to 'agonist' signals a transition in online actions, where agonists are allied with planners. This framework is intended as a strategic tool by which planners can categorize responses from the digital 'public' and identify trends in online discourse.

The Online Conversion Framework scales the actions of online public participants on X between antagonism and agonism. The bottom four tiers represent antagonist actions; there is an ongoing conversion process that occurs before the top four rungs of the ladder, where agonist actions are capable of influencing other participants and communicating with stakeholders. Ladder status is not static; the availability of new information influences perspective, and a user's actions may continually shift up and down the ladder. Each rung defines the position of a user's action, and the online function (sharing, tagging) corresponds to the level of engagement with other users on the platform. It is important to note that the rungs on the ladder are a classification of the actions of users, not the users themselves. Personified labels are used (e.g., agonist, antagonist) as a descriptive device. Examples of user activity on social media platform X are provided below for context. The key difference between agonist and antagonist behaviour in this framework is that agonist actions are a

mechanism to communicate with stakeholders and activists through a dialogue, and antagonist actions are realised opportunities to ventilate opinions and cause contention.

Further, we posit that there are qualifiable, transitory stages between online antagonistic and agonistic behaviour. Identifying the stages between antagonism and agonism equip planners to interpret and include online discourse when soliciting public engagement.

Figure 1: Online Conversion Framework

To illustrate this, we created the Online Conversion Framework using X data to scale the planners view of the conversion from online antagonist to agonist for a given planning initiative. With this framework, planners can (a) distinguish online actors (b) conceptualize the conversion of contentious opposition to constructive opposition or, antagonists to agonists. Key terms used to identify the groups or individuals solicited by an agonist or antagonist include: "interest group", which refers to X users subscribed to (or "following") a topic denoted by a #hashtag; a "stakeholder" or an individual users' X account, denoted by the "@" function; and the "audience" which are the followers of an account or #hashtag. Sample posts from X for this framework draw from online controversy catalysed by the Memorial Drive road closure in Cambridge, Massachusetts. The city piloted the road closure as early as 1975, and in 2020, the Massachusetts Department of Conservation and Recreation (DCR) seasonally closed Memorial Drive to vehicular traffic every Saturday and Sunday from April to November (City of Cambridge, 2023; Corr, 2022). This was intended to maximize outdoor recreation space in light of the COVID-19 pandemic and has been maintained by the city as such. However, alternative routes to redirect traffic during the road closure stirred protest from Cambridge city residents due to increased traffic activity and congestion in surrounding neighbourhoods. This article will feature the X posts of those who support the road closure and those who do not support the road closure to illustrate the range of applicability of the Online Conversion Framework. All the X posts below have been anonymised to protect the identities of individuals who posted on this topic. Where public organisations or public figures such as politicians have been 'tagged' in examples their identities have not been anonymised.

Rung 1 - Pure Antagonist

At the core, Rung 1 antagonist actions disrupt progress and create contention. Nonetheless, antagonist actions are essential participants in this conversion framework, as they are a baseline for opposition to agonistic progression. Rung 1 antagonists take visible private action from private accounts in which they post their thoughts and comments on their own private page. The action is considered private because only those who have requested and been granted access by the Rung 1 antagonists are able to view and interact with the current and historical posts from the Rung 1 antagonist. Rung 1 antagonists' post-types are not discoverable through the search function or distributed publicly by the algorithm. Although the audience of this antagonist is limited, the act of engaging in protest behaviour visible on social media through posts irrespective of their reach is an act of protest in itself (Milan, 2015). This tier of antagonistic behaviour has the least amount of political influence or social power because of their limited visibility to and thus connectivity with broader social relations (Yamamoto, 2017). Visibility of antagonists in any capacity is necessary to allow agonists to emerge as the social counterpart (Munthe-Kaas, 2015; Pløger, 2004).

Rung 2 - Rigid Antagonist

Where Rung 1 antagonists take visible *private* action, Rung 2 antagonists take visible *public* action as their accounts (thus their posts) are publicly accessible, and do not require requested access to view. Rung 2 antagonists' posts have a wider reach because they may be circulated by the algorithm and social media users via Direct Messaging. Rung 2 antagonists engage in passive public action because their posts do not engage directly with communities or individuals on social media by way of replying or tagging other accounts or hashtags. For clarity and continuity, we will use a real-world example of a road closure in Cambridge,

Massachusetts to represent each stage of the conversion process. In 2020 Cambridge City Council proposed Memorial Drive should be closed on Saturdays and Sundays from April to November and this spurred a mixture of positive and negative responses from the public (Corr, 2022). An example of a Rung 2 antagonist in this context is shown in Figure 2.

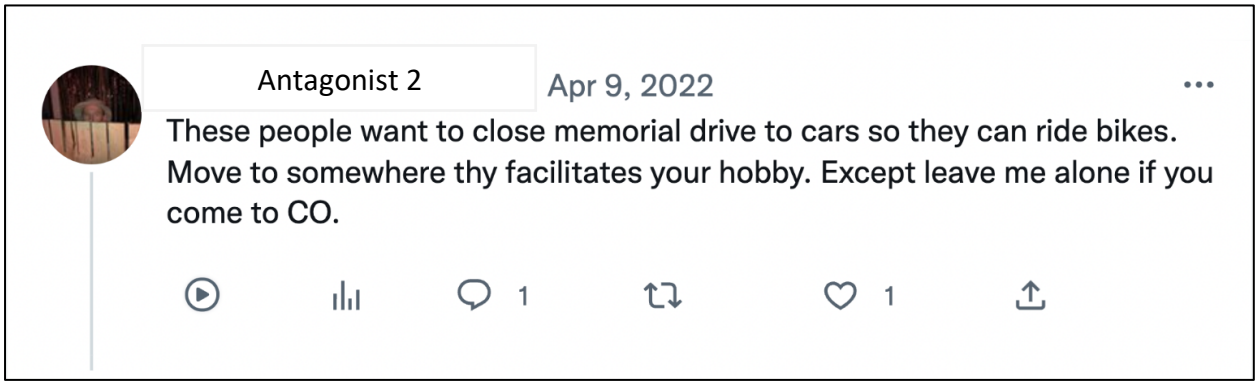

Figure 2: Memorial Drive Rung 2 Antagonist

This antagonist is responding in opposition to the Memorial Drive road closure two years after its implementation, postulating that Colorado, USA is more conducive to the needs of those who seek the open, recreational space Memorial Drive seeks to facilitate. Despite opposing opinions to the closure like the one in this post, Cambridge City Council has maintained its extended weekend closures (City of Cambridge, 2023). This example of 'rigid antagonism', enables the tweet X post and any interactions others have with it to act as an echo chamber of Rung 2 antagonist's own views. This stage of antagonism precipitates collective identity building (Milan, 2015).

Rung 3 - Soft Antagonist

Rung 3 antagonists are characterized as 'soft antagonists', representing the softening of antagonistic views, signalling the beginning of the transition from rigid antagonism and agonism (McAuliffe & Rogers, 2018). The inclusion of a #hashtag to call to a community or group in a public post is a subtle call to action and socio-political alignment. Hashtags are words or numbers that are combined with the # symbol and are used to categorise and follow different themes and concepts on social media. For example, users can click on a hashtag for a particular concept such as #memorialdrive shows users all posts that have included the same hashtag. A key trait of a Rung 3 antagonist's posts is that keywords in the post are *searchable,* via hashtags or key words (e.g. searching "Memorial Drive" will yield posts that mention Memorial Drive). These antagonists play by social media "rules" exhibiting a level of compliance with the communication structure of the platform. However, the more pointed target of their discontent (say, a politician with direct involvement with a cause that they care about) is not mentioned using the "@" function. We were unable to find an example of a Rung 3 antagonist in the case study of Memorial Drive, Cambridge, however a non-antagonistic X post from the case study using the aforementioned strategy can be seen in Figure 3.

Figure 3: Memorial Drive Rung 3 Antagonist

The inclusion of a #CambMA calls to a Cambridge, Massachusetts interest group (not a specific account as is the case with Rung 4 strategic antagonists), of which anyone who follows #CambMA can view and comment on the post. In Figure 3, #CambMA calls to the audience of that interest group (those that follow #CambMA) and bolsters the communication and dialogue between those who are invested in Cambridge, MA happenings. Although Figure 3 features an X user in favour of the Memorial Drive seasonal road closure, a Soft Antagonistic user would use the same online actions (call to interest group using a #hashtag in a public post) to discourage or defame the road closure.

Rung 4 - Strategic Antagonist

Rung 4 antagonists are strategic antagonists who perform at the highest tier of antagonism in the form of public asynchronous action (Milan, 2015). Strategic antagonists call stakeholders to the stage by identifying and assigning responsibility using the @ function, as is seen below in Figure 4. However, although the account is tagged, it does not ask a question that incites a conversation or a means to solve the issue that is posited by the antagonist. This form of strategic antagonism is performed within the bounds of social media employing as many methods as possible available that allow Rung 4 antagonists to be heard without negotiating with stakeholders or influencers.

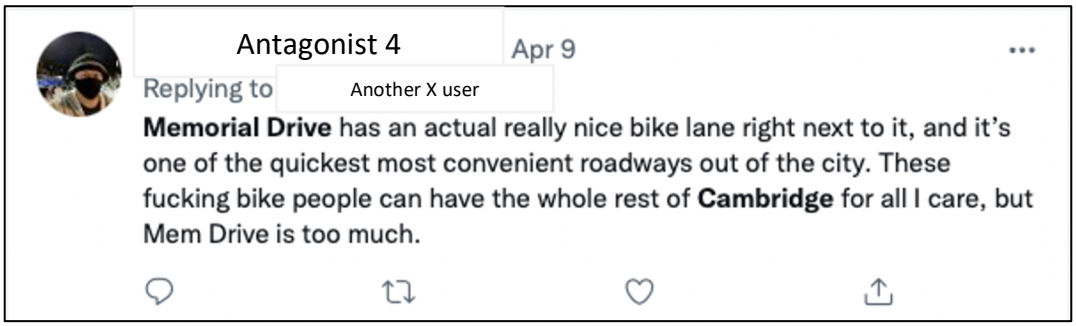

Figure 4: Memorial Drive Rung 4 Antagonist

Here, this strategic antagonist has replied to another X user using the "@" function, stating their position that the road closure caters to bicyclists and because Cambridge has ample bike lanes throughout the city, the road closure seems excessive. Since this post in April of 2022, Cambridge City Council has maintained its extended weekend closures (City of Cambridge, 2023). This form of strategic antagonism 'seeks to bring into being a counter hegemony but does so by moving outside of existing formal political institutions and protocols' (McAuliffe & Rogers, 2018, p. 223). Although this Rung 4 antagonists contributes to the momentum of online discourse, their approach is monological, limiting the value and application of their criticisms.

Rung 5 - Rigid Agonist

Rung 5 agonists signal the conversion of antagonist to agonist in this eight-rung framework. Where rigid antagonists reject plurality and cooperative political alignment, rigid agonists reject standalone, disconnected monologues to the point where they refer to stakeholders to increase proximity to their cause. Rung 5 agonists break the monological cycle by asking a question in their public post to incite a dialogue from other social media users, activists, and stakeholders. Although they may cite relevant stakeholders or groups, they do not tag the stakeholders account directly (example shown below) in Figure 5.

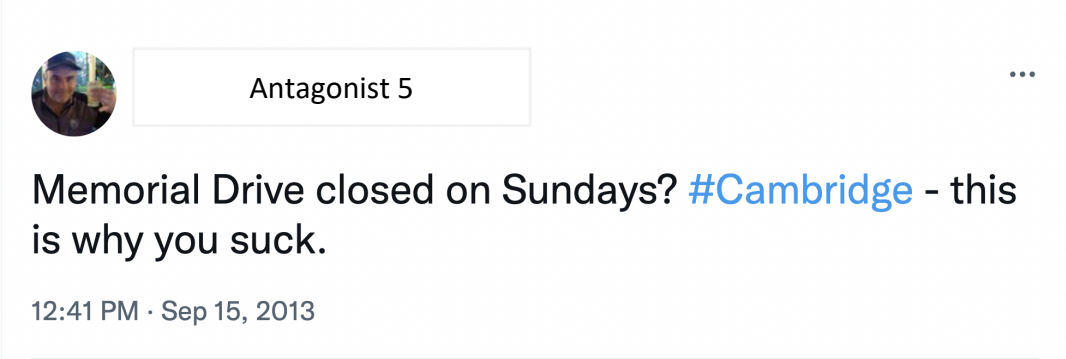

Figure 5: Memorial Drive Rung 5 Agonist

Here, Memorial Drive and the city of Cambridge is mentioned by this Rung 5 agonist, but no stakeholder is notified of the post because they are not tagged using the "@" function. In this way rigid agonists reject the formal structures in place to communicate with stakeholders, but still participate in productive discourse through their content, searchability, interest groups (#Cambridge) and questions. Asking a question, even without tagging an account, or being rhetorical, incites social media audiences to consider what is being asked (Milan, 2015). Contextually, Memorial Drive road closures in Cambridge were re-introduced briefly in 2013 for the first time since 1975; the closures increased in frequency despite the opposition seen in this post (City of Cambridge, 2013).

Rung 6 - Soft Agonist

Where rigid agonists avert formalized systems of communication on social media, soft agonists embrace these systems and engage with stakeholders to become further embedded in their cause. Rung 6 agonists do this by directly posing a question to a stakeholder and

tagging their account (e.g., using the 'post' or 'reply' functions on X) in a public post is one such example, as shown in Figure 6.

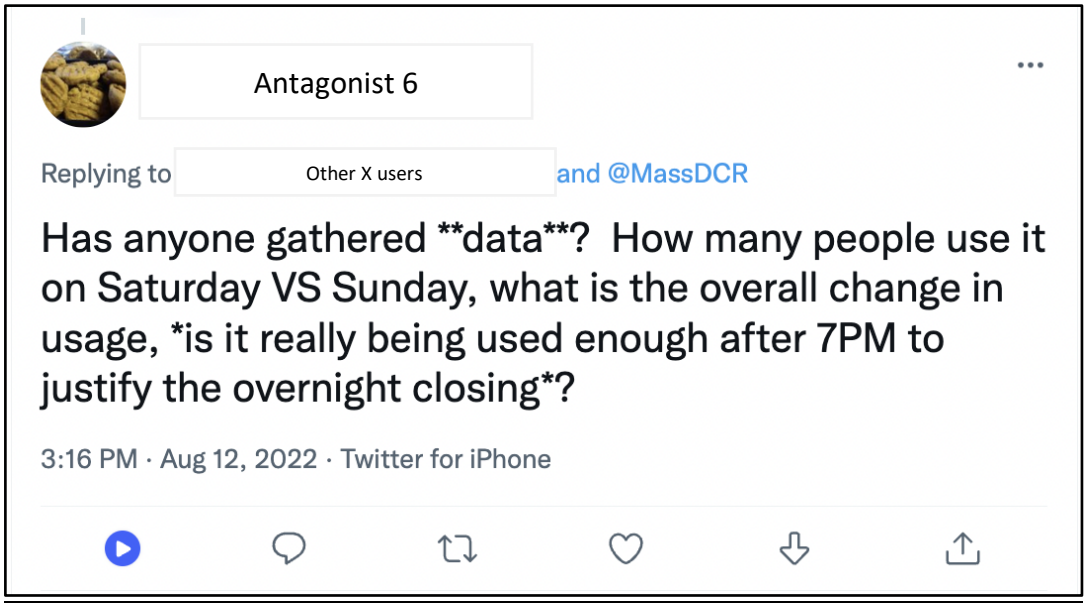

Figure 6: Memorial Drive Rung 6 Agonist

Here, the Massachusetts Department of Conservation & Recreation (@MassDCR) and two additional primary stakeholders are tagged, and the agonist poses a question that the public and the tagged stakeholder may engage with at any point in time. This X user calls for data to justify overnight closures in August of 2022, which remains a pending point offering an alternative 'co-presence' where 'activists [and stakeholders] can join in at their convenience' (Milan, 2015, p. 896).

Rung 7 - Strategic Agonist

Rung 7 agonists are strategic agonists, who, like strategic antagonists, use the maximum power available to them within the constraints of social media to push their agenda through a 1) direct call to an influential stakeholder, which 2) invites a *dialogue* and 3) assigns *accountability* to the mentioned stakeholder, as shown in Figure 7.

Figure 7: Memorial Drive Rung 7 Agonist

Not only do Rung 7 agonists initiate questions and tag respective stakeholders, but they harmonize their individual power with other agonists through synchronous actions. This Strategic Agonist is advocating for an additional road closure on Parkman Drive tagging the stakeholders responsible for the Memorial Drive road closure "@MassDCR". Supplemental modes of Rung 7 agonism in this case could be: attending a livestream hosted by stakeholder, and/or attending virtual panel discussions, events, or meetings. This type of agonism

represents the first step in 'revitalis[ing] existing liberal democracy' (Yamamoto, 2017, p. 391).

Rung 8 - Pure Agonist

Rung 8 agonists are the final step in the conversion to 'pure' agonism. Pure Agonists use social media as a tool to initiate virtual and in-person relationships and action like attend meetings and/or virtual events with local citizens and stakeholders. Rung 8 agonists are a single X user that organizes or incites online actions to political stakeholder(s) in the form of organized activism. These agonists may create and distribute digital petitions, and organize and attends virtual meetings outside of social media, though social media to may be used adjunctly to coordinate and inform their audiences.

Figure 8: Memorial Drive Rung 8 Agonist

The pure agonist shown in Figure 8 asks their audience if they live in Cambridge and asks if they think the Memorial Drive Road closure is a good idea, inviting their audience (or, "followers") to use the interactive link included in their post to take action on a different platform. It is worth noting that there may be a sarcastic tone to this post, which highlights the importance of scrutiny when using this framework in different cultural contexts. Further, Pure Agonists must play by the existing political rules. Agonistic or '...democratic' planning, cannot guarantee 'progress' above and beyond existing liberal democratic forms of planning to citizens' (Yamamoto, 2017, p. 397). Bridging these connections empower local citizens [to] act as 'users [and] co-designers', which has 'seemingly led to increased respect for and interest in the process and a feeling of responsibility' (Munthe-Kaas, 2015, p. 227). Rung 8 'Pure Agonists' unite the online and offline spheres, translating actionable change in the real world.

5.0 Discussion

The power of actualized citizen potential through social media rests on the threshold of agonistic antagonistic conversion. The selected X posts demonstrate the nuance of online actors and facilitate the conversion of antagonists to agonists. The framework introduced here offers key insights into the broader relationship between social media, planning, and agonism/antagonism. While the paper thus far has focused on members of the public and their interactions and debates, the role of the planner is also critical to consider here. It is the

planner who uses social media in their work: promoting revised zoning regulations, attracting support for a redevelopment plan, or pushing through a new school construction project. Posting, liking, sharing: these are part of today's professional planner's toolkit and are embraced for numerous reasons, one of which can be to avoid conflict (antagonism). By accepting the value of agonism, we have shown here that such social media use can be designed and implemented in ways that makes online conversations up our ladder towards greater and greater agonism, the planner need not avoid conflict, they just need to be cognizant of how the messages they are putting out (and the ones that are being independently generated) appear and what it might take to convert those messages more towards agonism.

The planners and other actors involved in these online discussions are linked through threads and sub-forums, but they may also be linked in-person. W X and Facebook identify posts and for a geographically bounded community, people will likely see each other at the market or elementary school assemblies. It is these real life encounters that provide motivation to move up the ladder towards an amicable agonism that can keep a community moving forward together (instead of being torn apart). But there is no doubt that the social media format and infrastructure tends to push debates down the rungs of the ladder, impairing relationships and souring discussion. Here the planners' role becomes a referee of sorts to keep the posts and messages at the agonism level.

The Online Conversion Framework might also include an additional assessment of an outcome from a particular policy process, prompting the question: does a post on X widely known to have little impact on a policy process still be able to convert antagonists into agonists in a significant way? While the revised zoning, redevelopment plan, or school approvals mentioned above might depend on public support, the planner can draw on the Online Conversion Framework to classify messages and shape their own responses. Such efforts may improve participation and move a community towards a decision on plans or regulations. That decision will not satisfy all parties, but if the process leading to the decision is perceived widely as open, deliberative, and agonistic, then strife can be avoided, and different actors will be more likely to engage again in future planning processes.

Further, this framework is applicable to social media broadly, where social media users funnel their personal opinions into quantifiable online actions, such as 'likes' 'shares' and 'posts'. The conversion process indicated in this typology is not a linear one, and users may fluctuate in their place along this. Threats to democratized online participation are automated, which means insentient online participants such as social media bots and algorithms can convolute and persuade online discourse.

Social media bot activity and engagement can also fluctuate along the rungs of the framework depending on the short- and long-term objectives of the bot(s) creator. At their simplest, bots may simply produce predetermined automated messages at set intervals. Hollander, Potts, Hartt, Situ, and Seto (2023) found this is to be common practice for news media outlets, realtors, and other communication and public relation professionals. However, social media bots have become much more sophisticated and bot creators are now able to use machine learning, artificial intelligence, and other advanced computing techniques to engage, debate, and even contort discourse in the online public sphere (Hollander et al., 2020). Such

advancements allow bots to roam the rungs of the online conversion framework freely in order to advance their underlying function, likely distorting or amplifying particular posts or users.

Of course, an automated social media account is not in itself undemocratic or overtly disruptive. In their review of automated bots in the urban planning X-verse, Hollander et al. (2023) found that the vast majority of bots were politically impartial and positionally neutral. Social media bots are analogous to an outside group bringing a host of friends to a public hall meeting to sway the outcome. Except instead of a small, noticeable, and identifiable vocal minority, social media bots can be scaled up almost indefinitely and do not have any social, or other, accountability. In that sense, instead of dozens of unfamiliar faces disrupting a public meeting, it could be hundreds, thousands, or millions of anonymous voices shouting out in the dark. Social media bots can have impacts at every rung of the framework from pure antagonist to pure agonist. A At the one end of the spectrum (pure agonist), bots have even been linked to instigation and coordination of real-world rallies and political movements, including events during the Arab Spring protests and Venezuelan 2012 election (Woolley, 2016). Nefarious bots deployed en masse in the online planning discourse could distort and even sway planning decisions away from the public good.

This framework does not go into detailed social media applications. As such variances and across social media platforms may present a challenge to this framework. Additionally, some scholars discuss in varying depth the "permanence" of online discourse/content and the potential that "the fact that action can be reproduced over and over again undermines its authenticity' (Milan, 2015). If there is a lot of re-sharing of content on social media, it may reduce or contort the message being shared. The quality and/or authenticity of the information shared in the X posts used as examples in this study is not examined in this study. Some literature contends that social media activism does not enact real-world change because it is "devoid of political potency" (Milan, 2015). Future research ought to investigate how notions of authenticity shape receptiveness to antagonistic messages and how impact these social media posts really are through empirical research.

This framework is exclusively derived from well-tested and contested theoretical frameworks and literature to create a well-balanced, empirically based approach to online agonistic planning. Current, real-world examples extracted from X further substantiate the applicability and relevance of this framework. Additional research can build on this work through the collection of large numbers of X or other social media posts to measure the sentiment of posts (Hollander, et al. 2016) and track how planning controversies unfold over time. How does the Online Conflict Conversion Framework look in the non-virtual world? In a typical real-world conflict, how many posts might be categorized at each rung? Do individual posts move up or down the rungs over the course of a real-world conflict? Massive, publicly available repositories of social media posts (particularly X) offer tantalizing answers.

6.0 Conclusions

The Online Conversion Framework was developed in response to a growing communications and engagement crisis in planning. The framework offers a new way for planners to consider conflict and avoid the conflict-avoidance approach so many planners rely on. Planners can

instead convert debates from being antagonistic to agonistic and open up space for meaningful and constructive input into important government decision-making.

Urban planners can learn much from the Online Conversion Framework introduced here. While theorists have struggled to understand what it takes to convert a person's actions from antagonism to agonism, this framework offers key insight for conceptualizing conflict in a digital participation context (the primary context for such engagement in cities today). Rather than suggesting that planners ought to resolve conflict, our Framework illustrates that social media engagement can occur across a continuum from antagonistic to agonistic. Arnstein's (1969) ladder remains one of the most influential ideas in urban planning exactly because it helps planners understand the range of ways in which participation can occur. The highly centralized, top-down public processes that Arnstein witnessed, and which provoked her to write her seminal paper are not today's central challenge. Instead, planners now face a fraught engagement terrain which is filled with antagonistic communication. The online sphere presents unique challenges and possibilities for planning, requiring a framework that addresses modal differences such as anonymity, group dynamics, and the perceived transience of digital action in offline spaces. Mouffe and Foucault's planning theories are a foundational springboard for the Online Conversion Framework, which expands existing planning discourse to include the digital conversation. The Online Conversion Framework offers a new way to overcome that challenging landscape and move towards community engagement that fosters productive, rules-based, agonistic dialogue.

7.0 References

Afzalan, N., & Evans-Cowley, J. (2015). Planning and social media: Facebook for planning at the neighbourhood scale. *Planning Practice & Research, 30*(3), 270-285.

Afzalan, N., & Muller, B. (2018). Online participatory technologies: Opportunities and challenges for enriching participatory planning. *Journal of the American Planning Association, 84*(2), 162-177.

Agostino, D., Arnaboldi, M., & Lema, M. D. (2021). New development: COVID-19 as an accelerator of digital transformation in public service delivery. *Public Money & Management, 41*(1), 69-72.

Allmendinger, P. (2017). *Planning theory*. Cambridge: Macmillan International Higher Education.

Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners, 35*(4), 216-224.

Bandy, J., & Diakopoulos, N. (2021). Curating quality? How Twitter's timeline algorithm treats different types of news. Social Media+ Society, 7(3), 20563051211041648.

Barry, J., & Legacy, C. (2022). Between virtue and profession: Theorising the rise of professionalised public participation practitioners. *Planning Theory*, 14730952221107148.

Bessi, A., & Ferrara, E. (2016). Social bots distort the 2016 US Presidential election online discussion. *First Monday, 21*(11-7).

Blau, A. (2022). Habermas on rationality: Means, ends and communication. *European Journal of Political Theory, 21*(2), 321-344.

Brachten, F., Stieglitz, S., Hofeditz, L., Kloppenborg, K., & Reimann, A. (2017). Strategies and Influence of Social Bots in a 2017 German state election-A case study on Twitter. *arXiv preprint arXiv:1710.07562*.

Calderon, C., & Westin, M. (2021). Understanding context and its influence on collaborative planning processes: a contribution to communicative planning theory. *International Planning Studies, 26*(1), 14-27.

Certomà, C. (2015). Expanding the 'dark side of planning': Governmentality and biopolitics in urban garden planning. *Planning Theory, 14*(1), 23-43.

Chin, Z. (2019). *Consensus is overrated: how agonistic pluralism and radical planning challenges the post-political city*.

City of Cambridge. (2023). Memorial Drive: Weekend Closures from Gerry's Landing Road to Western Avenue. Retrieved from https://www.cambridgema.gov/streetsandtransportation/memorialdrive#:~:text=The%20Cambridge%20City%20Council%20requests,Sundays%20due%20to%20staffing%20constraints.
City of Cambridge. (2013).

Memorial Drive Weekend Closure. Retrieved from https://www.cambridgema.gov/Departments/PublicWorks/News/2013/03/memorialdriveweekendclosure

Corr, K. (2022). Proposal to Limit Memorial Drive Weekend Closures to Sundays Sparks Resident Backlash. Retrieved from https://www.thecrimson.com/article/2022/5/27/memorial-drive-closures-debate/

Dahlberg, L. (2004). The Habermasian public sphere: A specification of the idealized conditions of democratic communication. *Studies in social and political thought, 10*(10), 2-18.

Edwards, C., Edwards, A., Spence, P. R., & Shelton, A. K. (2014). Is that a bot running the social media feed? Testing the differences in perceptions of communication quality for a human agent and a bot agent on Twitter. *Computers in Human Behavior, 33*, 372-376.

Einstein, K. L., Glick, D., Godinez Puig, L., & Palmer, M. (2022). Still Muted: The Limited Participatory Democracy of Zoom Public Meetings. *Urban Affairs Review*, 10780874211070494.

Evans-Cowley, J. S. (2010). Planning in the age of Facebook: the role of social networking in planning processes. *GeoJournal, 75*(5), 407-420.

Evans-Cowley, J. S., & Hollander, J. (2010). The new generation of public participation: Internet-based participation tools. *Planning Practice & Research, 25*(3), 397-408.

Evolvi, G. (2019). # Islamexit: inter-group antagonism on Twitter. *Information, Communication & Society, 22*(3), 386-401.

Farinosi, M., Fortunati, L., O'Sullivan, J., & Pagani, L. (2019). Enhancing classical methodological tools to foster participatory dimensions in local urban planning. *Cities, 88*, 235-242.

Fenton, N. (2018). *Digital, political, radical*: John Wiley & Sons.

Flyvbjerg, B. (1996). The dark side of planning: rationality and'realrationalitaet'.

Flyvbjerg, B. (2004). Phronetic planning research: Theoretical and methodological reflections. *Planning Theory & Practice, 5*(3), 283-306.

Forester, J. (2006). Making participation work when interests conflict: Moving from facilitating dialogue and moderating debate to mediating negotiations. *Journal of the American Planning Association, 72*(4), 447-456.

Forester, J. (2012). Learning to Improve Practice: Lessons from Practice Stories and Practitioners' Own Discourse Analyses (or Why Only the Loons Show Up). *Planning Theory and Practice, 13*(1), 11-26.

Foucault, M. (1982). The subject and power. *Critical inquiry, 8*(4), 777-795.

Foucault, M. (1988). The ethic of care for the self as a practice of freedom, in Bernauer, J & Rasmussen, D (Eds.) The final Foucault, Cambridge: Mass: MIT Press.

Fredericks, J., & Foth, M. (2013). Augmenting public participation: enhancing planning outcomes through the use of social media and web 2.0. *Australian planner, 50*(3), 244-256.

Friedberg, B., Lim, G., & Donovan, J. (2020). Space invaders: The networked terrain of zoom bombing. *Technology and Social Change Research Project*.

Graham, T., & Ackland, R. (2016). Do socialbots dream of popping the filter bubble? The role of socialbots in promoting deliberative democracy in social media, in Gehl, R.W. & Bakardjieva, M. (Eds.) Socialbots and their Friends: Digital Media and the Automation of Sociality, 187-206. New York: Routledge.

Grange, K. (2017). Planners–A silenced profession? The politicisation of planning and the need for fearless speech. *Planning Theory, 16*(3), 275-295.

Habermas, J. (1984). *The Theory of Communicative Action: Vol. 1, Reason and the Rationalization of Society.* (T. b. T. McCarthy Ed. Vol. 1). Boston: Beacon Press.

Habermas, J. (2006). Political communication in media society: Does democracy still enjoy an epistemic dimension? The impact of normative theory on empirical research. *Communication theory, 16*(4), 411-426.

Habermas, J., & Mccarthy, T. (1991). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. Cambridge: MIT press.

Healey, P. (1992). Planning through debate: the communicative turn in planning theory. *Town planning review, 63*(2), 143.

Healey, P. (1996). The communicative turn in planning theory and its implications for spatial strategy formation. *Environment and Planning B: Planning and Design, 23*(2), 217-234.

Healey, P. (2020). *Collaborative planning: Shaping places in fragmented societies*: Bloomsbury Publishing.

Hegelich, S., & Janetzko, D. (2016). *Are social bots on Twitter political actors? Empirical evidence from a Ukrainian social botnet.* Paper presented at the Tenth International AAAI Conference on Web and Social Media.

Hillier, J. (2003). Agon'izing over consensus: Why habermasian ideals cannot beReal'. *Planning Theory, 2*(1), 37-59.

Hillier, J. (2011). Strategic navigation across multiple planes: Towards a Deleuzean-inspired methodology for strategic spatial planning. *The Town Planning Review*, 503-527.

Hollander, J. B. (2011). Approaching an ideal: using technology to apply collaborative rationality to urban planning processes. *Planning Practice and Research, 26*(5), 587-596.

Hollander, J. B., Potts, R., Hartt, M., & Situ, M. (2020). The role of artificial intelligence in community planning. *International Journal of Community Well-Being, 3*(4), 507-521.

Hollander, J. B., Potts, R., Hartt, M., Situ, M., & Seto, A. (2023). The role of bots in US real estate development online communication. *Computers, Environment and Urban Systems, 99*, 101918.

Housley, W., Webb, H., Williams, M., Procter, R., Edwards, A., Jirotka, M., . . . Williams, M. (2018). Interaction and transformation on social media: The case of Twitter campaigns. *Social Media+ Society, 4*(1), 2056305117750721.

Huxley, M., & Yiftachel, O. (2000). New paradigm or old myopia? Unsettling the communicative turn in planning theory. *Journal of Planning education and research, 19*(4), 333-342.

Innes, J., & Booher, D. (2004). Reframing Public Participation: Strategies for the 21st Century. *Planning Theory and Practice, 5*(4), 419-436.

Jane, E. A. (2017). 'Dude… stop the spread': antagonism, agonism, and# manspreading on social media. *International Journal of Cultural Studies, 20*(5), 459-475.

Kahila-Tani, M., Kytta, M., & Geertman, S. (2019). Does mapping improve public participation? Exploring the pros and cons of using public participation GIS in urban planning practices. *Landscape and urban planning, 186*, 45-55.

Kühn, M. (2021). Agonistic planning theory revisited: The planner's role in dealing with conflict. *Planning Theory, 20*(2), 143-156.

Laclau, E. (1995). Subject of politics, politics of the subject. *differences, 7*(1), 146-164.

Laclau, E., & Mouffe, C. (2014). *Hegemony and socialist strategy: Towards a radical democratic politics* (Vol. 8). London: Verso Books.

Legacy, C. (2017). Is there a crisis of participatory planning? *Planning Theory, 16*(4), 425-442.

Lin, Y., & Geertman, S. (2019). Can Social Media Play a Role in Urban Planning? A Literature Review. *Computational Urban Planning and Management for Smart Cities 16*(1), 69-84.

Lin, Y., & Kant, S. (2021). Using social media for citizen participation: Contexts, empowerment, and inclusion. *Sustainability, 13*(12), 6635.

Lovan, W. R., Murray, M., & Shaffer, R. (2017). *Participatory governance: planning, conflict mediation and public decision-making in civil society*: Routledge.

Lowndes, V., & Paxton, M. (2018). Can agonism be institutionalised? Can institutions be agonised? Prospects for democratic design. *The British Journal of Politics and International Relations, 20*(3), 693-710.

Mäntysalo, R. (2002). Dilemmas in critical planning theory. *The Town Planning Review*, 417-436.

Mattila, H. (2020). Habermas revisited: Resurrecting the contested roots of communicative planning theory. *Progress in planning, 141*, 1-29.

McAuliffe, C., & Rogers, D. (2018). Tracing resident antagonisms in urban development: agonistic pluralism and participatory planning. *Geographical Research, 56*(2), 219-229.

McClymont, K. (2011). Revitalising the political: Development control and agonism in planning practice. *Planning Theory, 10*(3), 239-256.

Metzger, J., Allmendinger, P., & Oosterlynck, S. (2014). *Planning against the political: Democratic deficits in European territorial governance*: Routledge.

Milan, S. (2015). From social movements to cloud protesting: the evolution of collective identity. *Information, Communication & Society, 18*(8), 887-900.

Mouffe, C. (1999). Deliberative democracy or agonistic pluralism? *Social research*, 745-758.

Mouffe, C. (2000). *The democratic paradox*. London: Verso.

Mouffe, C. (2002a). For an agonistic public sphere. *Documenta 11_Platform, 4*, 87-96.

Mouffe, C. (2002b). Which public sphere for a democratic society? *Theoria, 49*(99), 55-65.

Munthe-Kaas, P. (2015). Agonism and co-design of urban spaces. *Urban Research & Practice, 8*(2), 218-237.

Mylonas, Y., & Kompatsiaris, P. (2021). Trolling as transgression: Subversive affirmations against neoliberal austerity. *International Journal of Cultural Studies, 24*(1), 34-55.

Neumayer, C., & Svensson, J. (2016). Activism and radical politics in the digital age: Towards a typology. *Convergence, 22*(2), 131-146.

Nicholls, W. J., & Uitermark, J. (2017). Introduction: planning/resistance. In (Vol. 38, pp. 512-520): Taylor & Francis.

O'Neil, C. (2016). Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. New York: Crown.

Özdemir, E. (2021). Rationality revisited: Politicisation through planning rationality against the rationality of power. *Planning Theory, 20*(4), 350-371.

Pantić, M., Cilliers, J., Cimadomo, G., Montaño, F., Olufemi, O., Torres Mallma, S., & Van den Berg, J. (2021). Challenges and opportunities for public participation in urban and regional planning during the COVID-19 pandemic—lessons learned for the future. *Land, 10*(12), 1379.

Pløger, J. (2004). Strife: Urban planning and agonism. *Planning Theory, 3*(1), 71-92.

Pokharel, A., Milz, D., & Gervich, C. D. (2022). Planning for dissent. *Journal of the American Planning Association, 88*(1), 127-134.

Purcell, M. (2009). Resisting neoliberalization: Communicative planning or counter-hegemonic movements? *Planning Theory, 8*(2), 140-165.

Roskamm, N. (2015). On the other side of "agonism":"The enemy," the "outside," and the role of antagonism. *Planning Theory, 14*(4), 384-403.

Rosol, M. (2014). On resistance in the post-political city: Conduct and counter-conduct in Vancouver. *Space and polity, 18*(1), 70-84.

Rosol, M. (2015). Governing cities through participation—a Foucauldian analysis of CityPlan Vancouver. *Urban Geography, 36*(2), 256-276.

Schweitzer, L. (2014). Planning and social media: a case study of public transit and stigma on Twitter. Journal of the American Planning Association, 80(3), 218-238.

Stanley, N. (2016). Public perceptions of unfairness in urban planning. *Justice and Fairness in the City: A Multi-Disciplinary Approach to'Ordinary'Cities*, 171.

Tambakaki, P. (2014). The Tasks of Agonism and Agonism to the Task: Introducing 'Chantal Mouffe: Agonism and the Politics of Passion'. *Parallax, 20*(2), 1-13. doi:10.1080/13534645.2014.896543

Tuters, M., & Hagen, S. (2020). (((They))) rule: Memetic antagonism and nebulous othering on 4chan. New media & society, 22(12), 2218-2237.

Van Assche, K., Duineveld, M., & Beunen, R. (2014). Power and contingency in planning. *Environment and planning A, 46*(10), 2385-2400.

Westin, M. (2022). The framing of power in communicative planning theory: Analysing the work of John Forester, Patsy Healey and Judith Innes. *Planning Theory, 21*(2), 132-154.

Williamson, W., & Parolin, B. (2012). Review of Web-Based Communications for Town Planning in Local Government. *Journal of Urban Technology, 19*(1), 43-63. doi:10.1080/10630732.2012.626702

Williamson, W., & Parolin, B. (2013). Web 2.0 and social media growth in planning practice: A longitudinal study. *Planning Practice and Research, 28*(5), 544-562.

Williamson, W., & Ruming, K. (2020). Can social media support large scale public participation in urban planning? The case of the# MySydney digital engagement campaign. *International Planning Studies, 25*(4), 355-371.

Woolley, S. C. (2016). Automating power: Social bot interference in global politics. *First Monday*.

Yamamoto, A. D. (2017). Why agonistic planning? Questioning Chantal Mouffe's thesis of the ontological primacy of the political. *Planning Theory, 16*(4), 384-403.

Yiftachel, O. (1998). Planning and social control: Exploring the dark side. *Journal of Planning Literature, 12*(4), 395-406.

Zamith, R., & Lewis, S. C. (2014). From public spaces to public sphere: Rethinking systems for reader comments on online news sites. *Digital journalism, 2*(4), 558-574.

Zeitzoff, T. (2018). Does social media influence conflict? Evidence from the 2012 Gaza conflict. Journal of Conflict Resolution, 62(1), 29-63.