Is Habermas on Twitter? Social Media and the Public Sphere

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Abstract

Jürgen Habermas's concept of the public sphere remains a major building block for our understanding of public communication and deliberation. Yet 'the' public sphere is a construct of its time, and the mass media-dominated environment which it describes has given way to a considerably more fragmented and complex system of distinct and diverse, yet interconnected and overlapping publics that represent different themes, topics, and approaches to mediated communication. This chapter argues that moving beyond the orthodox model of the public sphere to a more dynamic and complex conceptual framework provides the opportunity to more clearly recognise the varying forms that public communication can take, especially online. Unpacking the traditional public sphere into a series of public sphericules and micro-publics, none of which are mutually exclusive but which co-exist, intersecting and overlapping in multiple forms, is crucial for understanding the ongoing structural transformation of 'the' public sphere.

Introduction

The concept of the public sphere, first introduced by Jürgen Habermas in his seminal book *Strukturwandel der Öffentlichkeit* (1962), translated into English as *The Structural Transformation of the Public Sphere* (1989), has proven to be an influential model for our understanding of media and communication processes, especially in the political arena. Habermas described a significant structural transformation – the *Strukturwandel* of the German

title – which led to the replacement of the rational-critical public sphere of eighteenth-century coffeehouses and civic societies with a much more heavily mediatised public sphere at the dawn of the twentieth century, as a result of the arrival of mass-circulation daily newspapers and the growing popularity of radio. This largely transitioned political and societal deliberation to this mediatised realm, where it was now carried out by a range of state, civic, and commercial actors on behalf of the public, removing more direct forms of participation on such debate and deliberation from the public.

Habermas thus conceived of his *Öffentlichkeit* – the public sphere – as a space that is framed and structured by the operations of the mass media (primarily print and broadcast), and where "mediated political communication" is thus "carried on by an elite" (Habermas 2006: 416) composed of journalists themselves as well as of those public actors whom journalism affords an opportunity to speak; by contrast, ordinary people - the public - are cast in the role of audience members who for the most part are merely able to watch the events unfolding on this "virtual stage of mediated communication" (2006: 415).

In following this highly hierarchical, top-down model, the public sphere concept betrays its origins in the 1950s and 60s, at the height of the mass media age when a small number of mainstream media organisations – in Habermas's native Germany and elsewhere in Western Europe chiefly also including a handful of dominant public service broadcasters – were indeed positioned as highly influential, agenda-setting and opinion-leading institutions. The leading newspapers and broadcast news bulletins of the day could rightly claim to provide a "virtual stage" on which the daily drama of national and international politics was played out in front of a nationwide audience, creating a shared attention space that at least came close to the ideal public sphere described by Habermas. But the model thus also presupposes the existence of a media

sector that adheres to a strong public service ethic even amongst commercial media organisations, which are driven as much by their social and societal responsibilities as by their profit motives, and it assumes the presence of a politically engaged, rationally deliberating public.

Considering such implied preconditions, it is apparent that if critiques of the public sphere concept could be raised during the mass media age, then today there are even more significant challenges to our conceptualisation of the public sphere. Not least, the model's explicit focus on societal elites instead of ordinary citizens is not necessarily well-aligned with contemporary contexts. The processes of *Strukturwandel* which Habermas identified in the transition from the coffee houses to mass media did not stop there, but continued further beyond the mass media age, and the contemporary media ecology is thus considerably different from that of the 1960s: the dominance of a small number of public as well as commercial media organisations has declined substantially in most developed nations, while a range of readily available alternative media forms and platforms have emerged at local, national and transnational levels. Television audiences have dispersed across a growing range of broadcast and cable options, and are now increasingly also making use of streaming and on-demand online options: 2013 and 2014 data from the US, for example, points to an average ten per cent drop in year-on-year viewer numbers for conventional TV (Evans, 2015). Newspaper readership is similarly declining in many media markets: in the UK, for instance, 2014 figures show an average annual decrease of circulation figures of some eight per cent (Greenslade, 2014). While some of this shift away from traditional broadcast and print and towards online content constitutes a simple change of technologies, with viewers remaining loyal to established media organisations, many other users also end up exploring the wider variety of content options now available to them. This necessarily reduces

the dominance which leading media organisations enjoyed in a pre-digital era, when receiving broadcast or print content from outside of one's own geographical area was often prohibitively difficult.

Such changes have been driven to a significant degree by the emergence of the Internet and the World Wide Web as leading channels for the dissemination of news, amongst their many other functions. Since the 1990s, the Web has gained a substantial share of the news market, to the detriment of print and broadcast news and to the point that such conventional news organisations are now themselves using the Web as a key channel for the dissemination of the news; even more importantly, the instant global connectivity provided by the Web has fundamentally disrupted local news markets and forced regional and domestic news organisations to compete on an international level for audience attention. The more recent emergence of social media as even more connected, even more rapid, even more diverse spaces for the dissemination and discussion of news and public affairs, and for mediatising everyday life, has only served to increase the complexity of the contemporary media environment. This has further blended and merged the individual national public spheres that may exist into an increasingly global network of information flows.

News and public affairs reporting as it presents itself to the everyday user has thus transformed from a largely oligopolistic media environment, dominated by a few major public and commercial media organisations providing mass market news products for general consumption by a domestic audience, to a diverse, complex and even confusing media ecology. Here, mass and niche news services from all over the world compete for increasingly specific audience segments that are defined more by shared interests rather than by shared geographic origins or national identities. The concept of a unified domestic public sphere, then, must

necessarily be questioned. In the present environment, even the leading mainstream media outlets no longer command a truly "mass" audience: the "virtual stage" that each organisation continues to present is now watched by an ever shrinking subset of "the public", while the total number of available "virtual stages" available to these increasingly niche audiences has multiplied beyond counting.

Indeed, such trends towards a fragmentation of the national "public", posited as the audience observing and reacting to the processes unfolding in the public sphere, may have accelerated since the emergence of the Web as a mass medium. However, critics of the idea of "the" public sphere have long pointed out that the assumed unified nature of the public sphere as an all-encompassing space of public debate is an "explicitly idealist concept" (Webster 2013: 25) at any rate: even at the height of the mass media age, the public's attention to public matters was never uniform, as individual audience members exercised their own agency in selecting issues of interest from all of the themes and topics covered by the media. As Hartley and Green (2006) bluntly put it, "'the' public sphere is a convenient fantasy" (347).

If today the existing cracks in the idea of "the" public sphere have merely become more obviously visible, and if the public sphere concept in its original Habermasian formulation no longer appears to be able to fully represent the complexities of the contemporary global media ecology, then we are facing the question of how the public sphere concept may be adjusted to better describe present experiences, or in fact of whether the "public sphere" as an idea is still relevant at all. As Webster (2013) suggests, perhaps we are "reaching a time when we need … to consider abandoning the concept" (25)? This chapter explores these questions by examining some of the extensions and alternatives to 'the' public sphere that have been proposed in recent years, and by examining the evidence for the existence of such alternative structures which may

be established through empirical research especially on social media platforms such as *Facebook* and *Twitter*. It suggests that there may be a need to augment or even replace the Habermasian public sphere in its most orthodox formulation by embracing a more complex, dynamic, and multifaceted model that allows for connections and overlaps between a multitude of coexisting public spheres. In the second half of this chapter, we apply such conceptualisations to the extended network of Australian Twitter users (the Australian 'Twittersphere'): this examination of social media connections and publics, with a view to developing an alternative or adapted public sphere model, also acts as an example of how to trace and identify such aggregations, their overlaps, divisions, and interactions.

Calls for a critical reassessment of the public sphere idea, or even for its replacement by a model that inherently allows for multiple coexisting and competing public spheres at the same time, are not new, even if they appear to have grown more insistent as a result of the increasing importance of global and digital media spaces. Fenton and Downey, for example, point to "the rise of counter-publicity", resulting in multiple "counter-public spheres" (2003: 16). In doing so, they build on a rich tradition of research that examines the tactics of resistance by groups and communities that are marginalised in the predominantly bourgeois public sphere which Habermas describes. But as Calhoun (1992) notes in *Habermas and the Public Sphere*, a major collection of critical responses to Habermas's work that marked its translation into English, if such critiques are accurate, how do we understand the more complex structures we must now describe? He warns that "to say that there are many public spheres … will leaves us groping for a new term to describe the communicative relationships among them. It might be productive rather to think of the public sphere as involving a field of discursive connections" (37).

The Continued Structural Transformation of the Public Sphere

A reappraisal of the public sphere concept has always been a possibility: after all, Habermas's original work explicitly describes the structural transformation (*Strukturwandel*) of the public sphere towards its then-current state, rather than a stable, static, unchanging system. If the rise of the mass media saw a transformation towards a universal, nationwide public sphere – "the" public sphere, as Hartley and Green (2006) describe it –, then its subsequent decline simply signals a further period of transformation that may or may not result in a new, stable but temporary, equilibrium model.

It is important to state here that the point of this discussion, at least for our present purposes in the context of this volume, is not so much the continuation of Habermasian theoretical frameworks as such, as if they are somehow inherently more valuable than other, different models. Much contemporary media theory makes only very passing reference to Habermas's frameworks even when it explicitly uses the term "public sphere" itself; Fraser (1992) has lamented that such research "involves the use of the very same expression 'public sphere' but in a sense that is less precise and less useful than Habermas's" (110). Alternatively, a more positive perspective on this proliferation of the term, detached from its Habermasian origins, in media and communication studies is that "public sphere" itself has proven so productive an idea that it has given rise to a wide variety of competing conceptualisations, in the same manner as terms like "society", "culture", or "community", for example. Some of these variations on the Habermasian theme may be just as useful as the original public sphere model, even if they have relatively little in common with it. In the face of this divergence of streams of thought and theory on "the" public sphere, which utilise Habermas's own work as a point of departure to a greater or

lesser extent, then, this chapter seeks to review a number of the key contributions to reimagining public sphere concepts – including, indeed, some of Habermas's own recent work.

It seems obvious that the central feature of such a new model must be the fragmentation of the unified public sphere into a range of diverging yet potentially overlapping publics. In Habermas's Germany, mainstream media managed to attract truly mass audiences, and thus constructed what can genuinely be described as a unified, nationwide public sphere: in the 1960s, the prime-time public service television news bulletin *Tagesschau* regularly attracted more than 50 per cent of the total television audience (Launer, 1981), and major newspapers achieved comparable mass circulation throughout the country. But the gradual diversification of media channels and audiences, combined with fundamental technological and lifestyle changes (as on-demand access to news online has replaced the daily ritual of morning newspaper and evening TV news), has caused an irreversible decline in audience sizes: the growing number of news sources and media channels may still be able to attract their own publics, but these no longer join together to form a unified public sphere in the way that existing theory had imagined it.

Such publics may be defined at different levels of resolution, and it is useful to explore the diverse constructs of publics (and indeed, public spheres) that have been proposed by various scholars in recent years before we attempt to find any empirical evidence for them in social media spaces. First, at the most general level, a number of scholars envisage a separation of the public sphere into broad domain publics: Dahlgren (2009) and Webster (2013) both refer to the "political public sphere", while Hartley and Green (2006) also describe a "cultural public sphere" – and a range of other potential candidates for such subordinate spheres (the business public sphere, the sporting public sphere, and so on) readily come to mind.

Cutting across such broad domain publics are more technologically driven public spheres, defined by their chief medium of communication – Benkler (2006), for example, develops the idea of a "networked public sphere" that draws centrally on online communication platforms, and analogous partial public spheres defined by print, radio, or television may also be imagined; indeed, the existence of individual platform-specific public spheres is at least implied in terms such as the blogosphere and Twittersphere, encompassing all users of specific social media platforms, as well as their public communicative activities.

However, given the considerable overlap and interweaving between such different media channels, such technocentric definitions of specific public spheres may not be particularly productive. There may still be significant generational differences in media usage practices which result in somewhat divergent dynamics within newspaper and online publics, for example, but few everyday citizens will engage exclusively only in one or another of these technologically defined public spheres. Indeed, even users continuing to favour conventional mass media channels such as newspapers and television will increasingly access these news sources through Internet technologies, given the continuing shift towards on-demand and mobile access to content and the decline in subscription rates and live viewing. As the Internet becomes the chief backbone for any kind of media distribution, distinctions between networked and non-networked public spheres are increasingly meaningless.

A similar argument also applies, in fact, to the broad domain public spheres we encountered above: few participants are likely to be interested only in politics but not in culture, or only in business but not in sports; few news stories are clearly one or the other, rather than playing into a number of these domains. News about economic policy, for example, is clearly part of both the political and the business public sphere, while articles about sports fandom address both culture

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and sports. Thinking through a combination of domain- and technology-specific public spheres makes it especially clear that these deceptively simple models are anything but straightforward: a TV news report about a new government policy initiative may originate in the television and politics public spheres, for example, but be disseminated across the networked public sphere via social media, leading to discussions about its economic and social implications on online news sites and blogs (and thus entering those respective domain-specific public spheres) and in face-to-face conversations, thus once again transitioning from the online to the offline public sphere. These technology- and domain-specific public spheres merely constitute different overlapping sectors within the overall Habermasian public sphere, without substantially departing from the idea; most centrally, they also continue to assume that a society-wide conduct of current public debates is possible and even likely.

A second, alternative perspective emerges not from the segmentation of 'the' public sphere into a small number of relatively broad domain- or technology-based subsets, but from a much more specific and fine-grained observation of the temporary publics that emerge around particular themes. This is where a number of scholars situate "public sphericules" (Gitlin 1998; Cunningham 2001; Bruns 2008), described as "social fragments that do not have critical mass [but] share many of the characteristics of the classically conceived public sphere" (Cunningham 2001: 135). Such public sphericules no longer claim to reflect public discourse within entire domains back to society at large; rather, they address particular thematic debates within and across the broader domains, and in doing so draw on a smaller subset of participants with a specific interest in these themes. This reduction in size and reach may indeed improve the quality of the deliberation which takes place in such public sphericules, as a certain level of shared interest and knowledge amongst participants may be assumed. Given enough popular interest,

such debates may come to transcend their public sphericules and reach a wider, less directly engaged audience, but even where they fail to do so they are still likely to involve a narrow but inherently interested public.

Third, an even more specific and bespoke form of public debate may be conducted in the "issue publics" already envisaged by Habermas (e.g. 2006: 422) and explored in more detail by a range of other scholars. Such issue publics no longer serve as a "virtual stage" for the mass public, but in keeping with the metaphor instead represent studio spaces where specific debates between stakeholders are rehearsed amongst a smaller, self-selecting company of interested actors. Issue publics form especially around shorter-lived topics and events and are thus considerably more temporary and dynamic than some of the other formations we have already encountered – they "emerge, exist for varying durations, and then eventually dissolve" (Dahlgren 2009: 74) as public debate moves on. Issue publics are themselves thus related to, and arguably form subsets of, the wider public sphericules that exist around specific themes – but while a sphericule may address, for example, the overall longer-term challenge of anthropogenic climate change, the issue publics it contains would form around specific research reports, policy initiatives, and other short-term aspects that drive public debate on the topic. Nonetheless, public "attitudes are influenced by everyday talk in the informal settings or episodic publics of everyday society at least as much as they are by paying attention to print or electronic media" (Habermas 2006: 416).

The increasing specificity of debates which we are likely to encounter as we progress from broad domain-based public spheres through thematic public sphericules to narrow topical issue publics is likely to be reflected also in the range of media outlets that such subsets of 'the' public sphere draw on. Where the conventional public sphere model is largely predicated on the

hegemonic role of dominant mass media institutions, the lower-order publics are likely to be increasingly more reliant on specialist and niche media, in keeping with their own much more narrowly defined interests. This is also a transition from broadcast to interactive communication structures, and from mainstream to alternative and amateur media outlets, then: in this second and third tier of "the" public sphere, trusted non-mainstream voices engaging in what Castells (2009) describes as "mass self-publication" can, potentially, gain as much influence as professional journalists.

Finally, a further extension of conventional public sphere concepts must ultimately also challenge the very boundaries of what it means to be public. In many ways, issue publics may really be best described as issue communities, and today are most likely to gather in the spaces provided by online community platforms – including, centrally, social media sites such as *Facebook* and *Twitter*. Here, in particular, everyday social interaction between peers and public participation in issue publics overlap and are often inextricably intertwined, as users move seamlessly between interpersonal and public topics and registers of expression from one Facebook post to the next, and from one tweet to another: within the Australian Twittersphere, as will be seen later in this chapter, users cluster together in highly connected (but loosely thematic) groups around shared interests, with issue- and event-focussed discussions crossing over these overlapping assemblages as they are taken up by an audience beyond the specific context of the topic in question.

Indeed, Schmidt (2011; 2014) explicitly describes even the ego-centric networks – the collections of *Facebook* 'friends' or *Twitter* 'followers' – which exist around each social media profile as "personal publics"; similar such personal publics also exist in offline, face-to-face contexts, of course, and the complete personal public of any one individual thus encompasses the

totality of their personal connections across any and all such communications platforms and media. The multitude of personal publics, overlapping with each other as friendship connections are shared between individual users and thus enable flows of information that are determined by common sociodemographic identities, topical interests, and communication practices amongst users, in combination constitutes a global patchwork of interconnected micro-publics, tying together social media, face-to-face, and other communication forms and channels, that may be seen as the lowermost foundation of the overall public sphere.

Alternatively or simultaneously, the patchwork of personal publics also serves as a point of transition into what Papacharissi (2010) describes as the "private sphere": a liminal space where social media participants are afforded the opportunity to engage in "privately public" conversations that are neither conducted entirely behind closed doors nor inherently exist in full view of the public. As she describes it, "operating from a civically *privé* environment, the citizen enters the public spectrum by negotiating aspects of his/her privacy as necessary, depending on the urgency and relevance of particular situations" (131-2). What emerges from these observations is a considerable challenge to the very idea of a *public* sphere, then: although what is public and what is private has never been entirely clear, the fuzzy boundary between the two is being exposed as problematic even more strikingly by the current generation of social media platforms. These platforms actively reconfigure the criteria by which we distinguish public from private, and/or offer their users the tools to develop an individual and idiosyncratic range of transitional steps between 'fully public' and 'fully private'. Even if communication amongst friends on *Facebook* is not fully public, for example (in the sense of 'visible to an outside observer'), its dissemination across the patchwork of overlapping personal micro-publics may

nonetheless come to have widespread effects on public debate if it achieves sufficient reach and impact.

In more recent work, Habermas (2006) acknowledges the importance of this patchwork of publics as a foundation for 'the' public sphere at least in passing, in an update to his framework: he notes that "the public sphere is rooted in networks for the wild flows of messages – news, reports, commentaries, talks, scenes and images" (415). It is unfortunate that conventional public sphere theory with its persistent focus on the mass media only rarely acknowledges and investigates the network structures that enable this "wild flow" of information beyond the mainstream, which in the contemporary media ecology chiefly include the leading social media platforms: the impact of such many-to-many communications media as amplifiers of or correctives to the mass media, and the structures of public communication which they enable and support, thus remain comparatively under-theorised - at least from a public sphere perspective.

If we do take seriously the various public spaces which now emerge as successors to 'the' public sphere, then rather than as a unified, mass-mediated space through which public debate is conducted, the public sphere is thus revealed as a complex combination of multiple interlocking elements that sometimes counteract, sometimes amplify each other, and that each possess their own specific dynamics; the contemporary public sphere is "comprised of a vast array of interactional constellations, some relatively more permanent, others more fleeting" (Dahlgren 2009: 74). What becomes all the more important, then, is to study the operation of these individual elements, and to develop a better understanding of just how they interact with each other. As we will see, online and especially social media spaces provide a particularly useful environment for the empirical analysis of such processes.

An investigation of the various interlocking parts that constitute this new multifaceted public sphere may also serve as a useful antidote to fears of a fragmentation of public debate and deliberation in the wake of the decline of the deceptively simple and stable model of the mass-mediated public sphere. The abundance of publics in the contemporary environment, from elite discourse in leading mainstream media through niche debates in more or less short-lived issue publics to everyday interpersonal exchanges in face-to-face and online contexts, could be seen as lending support to dystopian scenarios of a multitude of "filter bubbles" (Pariser 2011) that are each caught in their own feedback loops of self-reinforcing 'groupthink' and actively defend against the intrusion of alternative, oppositional points of view. But while the "filter bubble" metaphor suggests that such bubbles are each hermetically sealed from one another, observable reality appears to point to a much greater degree of interpenetration through shared connections and information flows; our brief discussion of the horizontal patchwork of personal micro-publics, as well as of the vertically layered nature of issue publics within public sphericules within domain-based publics, already points to this perspective, and later in this chapter we further explore the extent to which such filter bubbles can persist, by examining the structural characteristics of an entire national Twittersphere. Indeed, Habermas (2006) himself suggests that as "a larger number of people tend to take an interest in a larger number of issues, the overlap of issue publics may even serve to counter trends of fragmentation" (422).

The "wild flows" of information that are enabled especially by the patchwork of personal publics may play a particularly important role in this context. Personal publics, in their relative disconnection from very specific themes and topics, can be seen as the conduits which provide for a – perhaps random and unintentional, but nonetheless real and important – exchange of information and ideas across issue publics and public sphericules. A focus on these crucial if

liminal spaces of communication and dissemination also substantially broadens the range of actors which are seen as contributing to public debate and deliberation, since personal publics in both offline and online forms present considerably lower barriers to entry for a larger number of participants. This, then, moves beyond the temporary restrictions, both in visible participation and in scholarly attention to such participation, that were common at the height of the mass media age, and once again moves to consider the public sphere (or its diverse constituent elements) as a space that a wide range of citizens engage in, rather than as something that is played out for them by elite actors on a "virtual stage".

As a comprehensive analysis of these liminal spaces in the offline world remains difficult, a focus on contemporary mass social media platforms such as *Twitter* and *Facebook* as imperfect reflections of wider patterns of participation is valuable and instructive for the further exploration of the changing internal structures and dynamics of the wider public sphere – not least also because, as Papacharissi (2010) suggests, "social network sites expand the number and range of individuals who may enter the privately public space of the private sphere" (140). Similarly, social media encourage different ways of engaging with or participating within public, civic communication, with "affective publics" (Papacharissi, 2015) bringing highly individual interpretations and framing to discussions, providing another dimension to ideas of 'personal' publics (Schmidt, 2014). Within these platforms, then, as well as across the range of private and public forms of communication they enable, it is possible to find evidence for the various post-public sphere constructs we have encountered so far.

Social Media Communication Structures as Reflections of Public Sphere Constructs

As widely adopted, versatile and global communication platforms, social media such as *Facebook* and *Twitter* enable an observation of the dynamics of many of the extensions and

alternatives to conventional public sphere constructs that we have encountered so far. This is possible most of all because these platforms offer Application Programming Interfaces that provide access to unprecedentedly large datasets on the public communicative interactions of their hundreds of millions of users – so-called 'big social data' (Manovich 2012) that constitute an in-depth and second-by-second trace of individual users' activities. Further, contrary to other research approaches, such data-driven observations of social media activities can be made without influencing user behaviours themselves: users remain unaware of the presence of the researcher, and communicative processes are unaffected by the data being gathered on them.

This also raises significant ethical and privacy concerns, however, which have been outlined in detail in recent scholarly literature (see e.g. boyd & Crawford's critique of 'big data' research in the humanities; 2012), and in the following discussion we are therefore refer only to aggregate and non-identifiable user activity patterns which relate to clearly *public* (rather than private or semi-private) forms of communication. For the same reason, we are also focussing on *Twitter* rather than on *Facebook* in the examples we discuss. The simple distinction between globally public and individually protected (private) accounts which *Twitter* has instituted, compared to *Facebook*'s considerably more complex system of graduated (and frequently changing) privacy options, allows us to assume that, in general, the decision by 95% of the global *Twitter* userbase to set their account visibility is set to 'public' demonstrates an awareness of the consequences of that choice.

For both *Twitter* and *Facebook*, however, it is possible to map the various layers and structures of public communication which we have outlined above onto specific communicative processes and functions enabled by the social media platforms themselves. We explore this here with particular focus on *Twitter*, drawing on a framework developed by Bruns and Moe (2014)

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that identifies a number of communicative layers on the platform that are enabled by its technological features and sustained by the unwritten communicative conventions developed over time by the *Twitter* userbase itself.

Central to both platforms are the profiles of individual users, of course, around which Schmidt's (2014) "personal publics" emerge; these self-selecting (and in the case of *Facebook* reciprocal) networks of 'friends' or 'followers' serve in the first place as an audience for the account around which they have formed, and the account owner is likely to be at least vaguely aware of the make-up and interests of that audience. Further, the personal publics of various individual accounts will also overlap to a certain extent, creating the loose networks of ego-centric publics that we have described as part of the patchwork of micro-publics which exists at the very foundation of the overall public sphere framework. These personal publics around each *Twitter* and *Facebook* account also complement and spill over into the personal publics that each individual draws on or performs to by using other media channels and platforms; in combination, the *Twitter*, *Facebook*, face-to-face, and other channel-specific personal publics thus form the complete personal publics for the individual behind the account.

Additionally, social media users are also able to bring into existence a narrower, more exclusive, temporary personal public by directly addressing other users – on *Twitter* for example by making a public @mention of other users' account names. This brings the @mentioning tweet to the attention of the addressee(s), and – if the tweet begins with "@user …" – is only visible to the sender and receiver as well as any other users who follow them both; it thus constitutes a more bespoke, dyadic personal public that is created *ad hoc* by the first user and persists only as long as both sides continue the conversation. By contrast, tweets which contain @mentions anywhere else in their text are visible to all followers of the sender; contrary to the first model,

which creates a common personal public that incorporates only the active participants and a shared subset of all of their followers, then, this second form of @reply conversation in essence encompasses the union of both their follower bases. Already, it is evident that such casual, *ad hoc* connections between the personal publics of individual users hold the potential to facilitate a wide range of liminal information flows at the very edges of 'the' public sphere.

A second form of social media communication that is particularly prevalent on *Twitter* transcends this liminality and moves further into outright and deliberately public communication. Drawing on the hashtag, a technological feature that makes it easy to advertise specific topics for participation by other users by prepending the hash symbol '#' to a thematic keyword (Halavais, 2014), any *Twitter* user can attempt to kick-start a discussion about the themes that interest them, while others can use *Twitter* search functionality to find and follow all tweets that contain the same hashtag. This is supported by apps and third-party software, such as Tweetdeck, which enable users to follow keyword and hashtag discussions as specific channels in addition to users' individual following feeds. Such hashtags have been shown to be crucial to *Twitter*'s response especially to breaking news events (Bruns *et al*. 2012), but also enable users to come together around common topics of interest or to engage in shared audience activities (Highfield, Harrington, & Bruns 2013; Page 2012).

The groups of users which gather around and engage in shared hashtags can be seen as a form of *ad hoc* public (Bruns & Burgess 2011; 2015), and especially where they relate to specific events and topics should be understood as the *Twitter* subset of the wider issue topics that accompany such phenomena. The lifecycles of hashtags as they are observable on *Twitter* provide important insights into the dynamics of issue publics more generally, and it may be possible to distinguish a wide range of dynamics that relate to the characteristics of the issues

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around which such publics have formed: in the context of breaking news, in which *Twitter* has been observed to act as an "ambient news network" (Hermida, 2010; Burns, 2010) can form very rapidly, peak at high levels of activity, and may dissolve just as quickly once the breaking news issue is resolved, while longer-term issues may result in less active, but longer-lived engagement. Indeed, very long-term hashtag communities may in fact be better understood as constituting the kernels for the formation of public sphericules rather than representing issue publics. In either case, it is important to stress again that such hashtag communities do not constitute *entire* issue publics of public sphericules, but only that subset of such publics which exists on *Twitter*, and which is connected with corresponding subsets in other communication channels through cross-platform interlinkages.

Evidence for the existence of public sphericules around broader themes within public debate can also be found by returning to the level of personal publics, but considering the network of such micro-publics in its totality rather than focussing only on the ego-centric networks around each individual user. As we have already noted, these individual networks interweave and overlap with each other, both within specific platforms such as *Twitter* and *Facebook* and from one platform to another, and as the creation of friend or follower links is likely to be based at least in part on shared backgrounds, attitudes, or interests, such overlapping personal publics may then also serve as an early stage in the formation of public sphericules: networks of like-minded friends in social media environments that group together to discuss certain themes that are of mutual interest. Commonplace processes of structuration in social networks, such as preferential attachment to the identified lead users, over time lead to the formation of network clusters around such shared themes, which constitute an increasingly solid basis for the operation of such sphericules, and the network structures which thus emerge come to influence and

structure the flow of information and communication across the network, facilitated on *Twitter*

for example through the retweeting of messages from one account to another. Retweets enable

users to pass on public messages that were posted by one of the accounts they follow to their

own network of followers, verbatim or with added commentary, and in many cases constitute an

implicit endorsement of the retweeted message as relevant and important to the personal public

of the retweeting user (this does not always signal agreement, however: messages may also be

passed on to encourage critical responses, for example). It is likely that the choice to retweet a

message is usually influenced by the retweeting user's picture of their imagined audience – that

is, by the network clusters they feel they belong to; retweets and other messages are thus

ultimately more likely to be directed at and widely disseminated through closely connected

clusters of users than to bridge the gap to other, more remote parts of the network.

Through the use of additional communication features offered by social media platforms –

such as *Facebook* groups and pages, and *Twitter* hashtags – the public interactions sustained by

such broader networks may also articulate at times to the issue public level, especially as specific

events and topics trigger a phase of more intensive involvement, and in doing so attract a

different subset of the overall public sphericule network; at the conclusion of the issue public's

lifecycle, users may then once again return to more general participation in thematic discussions

relation to their public sphericule. Once again, the existence of such structural formations within

social networks should not be seen as inherently supporting the idea of a "filter bubble" (Pariser

2011); instead, the vertical interrelationships between hashtag-supported issue publics and

follower network-based public sphericules on the one hand, and the horizontal overlaps between

individual hashtag publics or network clusters on the other, both make it less and not more likely

that information will travel between and across these formations. Only if the analysis of

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empirical evidence truly shows there to be practically no active connections whatsoever between individual hashtag communities or network clusters is it possible that 'filter bubbles' might exist on *Twitter* – and even then it would still be likely that outside information could reach those bubbles through cross-platform links which are not evident from the *Twitter* data alone.

Reviewing the Evidence: Public Sphere Structures on *Twitter*

A brief exploration of public communication structures as they can be identified on *Twitter* illustrates the observations we have made here. For this, we draw on the results of a long-term study that has focussed in the first place on determining the follower/followee network structure of the Australian Twittersphere (for more details, see Bruns *et al*. 2014) and by September 2013 had identified a total of 2.8 million Australian-based *Twitter* accounts. By using the force-directed Force Atlas 2 algorithm (Jacomy *et al*. 2012) to map the network connections of the most 140,000 networked accounts in this overall userbase – identified as those accounts whose combined number of followers and followees amounted to 1,000 connections or more – it becomes possible to discern a number of obvious clusters of highly mutually interconnected accounts within this overall network, and to determine the degrees of interconnection between these individual clusters; additionally, a qualitative review of the most central accounts in each of the clusters also enables us to identify the key themes and topics around which each such cluster has formed.

Fig. 1: The Australian Twittersphere (data current to Sep. 2013)

The overall clusters emerging from this map (fig. 1) can thus be understood as the *Twitter* components of broader public sphericules existing within Australian public debate, relating *inter alia* for example to politics, sports, and teen culture, while within these clusters a number of narrower subsets that may relate to temporary issue publics, or form the kernels of emerging public sphericules in their own right, can also be identified. The map also demonstrates the fact that few such clusters would fit the description of filter bubbles which are far removed and difficult to reach from the remainder of the network; it is perhaps unsurprising that the large teen culture cluster appears to be the most inward-looking and least interconnected of all significant clusters within the network, but even it is linked to the rest of the network by a common interest

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in popular and celebrity culture. Further, a comparison of this map with previous iterations produced by our project (e.g. Bruns *et al*. 2014) also shows the comparative stability of the overall structure of these network clusters and the thematic interests represented by them: while they may wax and wane in relative size (the teen culture cluster has emerged only since 2012, for example, and high turnover in the user base and in the identities of relevant cultural icons within a teen-oriented cluster would be expected in future mappings of the network), the public sphericules they reflect appear to be consistent.

While this overall network depicts the general structure of the patchwork of personal publics that exists in the Australian Twittersphere, which we have already argued is representative of the distribution of shared interests across the userbase, and by extension also of the public sphericules likely to exist in wider Australian society, it is also important to explore the day-to-day activities of Australian *Twitter* users as they relate to specific issues, topics, and themes, manifested for example in their participation of specific hashtags. For the purposes of illustration, we turn here to a dataset containing accounts which participated in the #qanda hashtag accompanying the popular political television talk show *Q&A*, broadcast by the Australian Broadcasting Corporation, over a period of several weeks in 2014, and indicate within the underlying network map the location of the most active accounts participating within the hashtag (fig. 2).

Fig. 2: #qanda hashtag participants over several weeks in 2014

Given the specific thematic focus of each episode, the *Q&A* audience can be considered to be the subset of *ad hoc* issue public forming around the topics addressed by the shared television text during each week's broadcast; the #qanda hashtag community constitutes a related and similarly *ad hoc* public whose composition overlaps with the television public to significant extent. Such activity is encouraged by the broadcaster, too, as ABC editors integrate and highlight tagged tweets on screen during each episode of *Q&A* (see also Given & Radywyl, 2013). The #qanda public and the television public are not entirely homologous, though: anecdotal evidence points to the presence of a number of *Twitter* users who respond only to the *Twitter* debate each week, *without* also viewing the television broadcast, while of course there

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will also be TV viewers who do not participate in the *Twitter* debate. In addition, we may also postulate the existence of other members of the public who are interested in and vocal (through other media channels) about the themes addressed by *Q&A* and #qanda, but participate in neither of these media texts. In combination, then, the *Q&A* audience, the #qanda users, and this third group of other non-present participants can be regarded as the complete issue public which exists around the topics discussed by *Q&A*.

Further, the subset of this issue public that is active on *Twitter* relates in interesting ways to the wider public sphericule around Australian politics. This is reflected in the structure of our overall Twittersphere map: while #qanda recruits its participants largely from the larger politics cluster within this map, it does so preferentially from certain sectors of the cluster (in the present case, mainly from that part of the cluster which represents more progressive political views, though this may be an artefact of the specific topics addressed by *Q&A* during the time we gathered our data). The layered nature of issue publics and public sphericules is apparent here, with the former constituting, at least to some extent, a smaller and more temporary outgrowth of the latter. At the same time, the #qanda hashtag also attracts involvement from users who are not usually an integral part of the politics cluster within the Australian Twittersphere: this, in turn, supports the view that issue publics are not simply a subset of wider public sphericules, but that their more specific topical focus may also enable them to attract participants whose day-to-day interests are more strongly focussed on the themes addressed by an alternative public sphericule. Issue publics may then also serve as bridges between public sphericules.

Even this description is necessarily overly simplistic, of course. Individuals are rarely simply part of one public sphericule, or just one issue public. These constructs are not mutually exclusive, and the accounts found in the Australian Twittersphere are similarly allocated to one

cluster or another by our algorithm because of their predominant network attachments, but may address a wide variety of themes in their day-to-day tweeting practices, similarly reflecting different motivations to participate. But such *caveats* also simply serve to underline the point that the structure of the public sphere, or of the various public spaces which have come to replace it as a result of the continuing structural transformations of 'the' public sphere following the decline of the mass media's hegemony, is today highly complex, dynamic, and changeable – more so than orthodox Habermasian public sphere theory can account for. As Dahlgren (2009) points out, "traditional perspectives on the public sphere do not help us understand how publics 'come alive,' … what their sociocultural dynamics look like" (74).

Conclusion

Revisiting the Habermasian concept of the public sphere for a media ecology featuring many-to-many channels including social media platforms, it appears that the idea of structural transformation can – and should – be extended beyond the public sphere as singular: a more complex system of distinct and diverse, yet inter-connected and overlapping, publics can be identified which represent different topics and approaches to mediated communication (from the explicitly political to the tangential and otherwise). The threat of cyberbalkanisation (Sunstein, 2008), wherein voices of a particular ideological viewpoint would cluster together and never become exposed to, or communicate with, opposing views, was used to criticise online discourse through the possibility of fragmented discussions; the multiple publics model, though, suggests that fragmentation does not necessarily beget isolation or complete separation. Publics exist at various levels, for different lifespans, from the long-standing topical clusters identified in the Australian Twittersphere in fig. 1 through ego-centric personal publics to more *ad hoc*

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assemblages and issue publics developing in response to particular stimuli, which, while relevant to specific topical publics, are not restricted in their scope to these groups.

As this chapter has argued, moving beyond the orthodox model of the public sphere to a more dynamic and complex system provides the opportunity to more clearly recognise the varying forms public communication can take online. Unpacking the traditional public sphere into a series of public sphericules and micro-publics, none of which are mutually exclusive but which co-exist, intersecting and overlapping in multiple forms, is one approach to understanding the ongoing structural transformation of the public sphere. It is also important to note that these publics may follow their own logics and norms, making use of affordances of social media platforms for their own purposes, which may differ from established practices. The various publics, whether issue or personal, might operate in combination, providing further prominence or activity for each other, but they might also work in opposition, counteracting one another. Similarly, participation in one public is neither a pre-requisite nor an implication that participating in another will result. The publics identified here both represent and bridge the macro-, meso-, and micro-levels of public communication on social media, as introduced by Bruns and Moe (2014), but participation remains a choice on the part of the individual. At the same time, it remains noteworthy that the sheer availability of this choice is a relative novelty within the mass-mediated public sphere model.

The transformation from public sphere to public spheres – and the spread of political and public debate across multiple actors, platforms, and publics – remains an ongoing process. This chapter has outlined a contemporary conceptualisation of the public sphere based especially on our extensive research into public communication on *Twitter*. The current mainstream and social media ecology, though, is not fixed; new platforms will arise and become adopted for public

communication in different forms, providing a further fuzziness around ideas of public, semi-public, and private discussions. It is worth remembering, too, that the traditional leaders and featured actors within public debate and the bourgeois public sphere (journalists, the traditional media, and politicians) are often slower to officially adopt newer channels for discussion, from the Internet in general to specific platforms such as blogs, *YouTube*, or *Twitter*. If and when new social media platforms emerge and are adopted by ordinary citizens for public debate, including as 'third spaces' (Wright, 2012) where political discussion is not the focus but develops alongside and from within other topics of conversation, further disruptions to the public sphere model may follow. Additional disjunctures between new and old, between different approaches to publics, are part of the process of an evolving social media ecology and the mediasphere; while further enabling debate and discussion, in different forms and with different affordances, they continue to complicate and challenge our conceptualisation of a 'public' sphere – whether in the singular or plural.

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