Studying media audiences via TikTok trends and hybrid social media methods

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Abstract

In this thesis, I explore what TikTok trends can tell us about users and their practices, from a media audience research perspective. Social media trends reflect user preferences and practices, thereby providing a window into what is important to users, and on TikTok, trends play an especially central role. I also examine the opportunities and limitations of using social media data, especially via a hybrid methods approach, to research media audiences.

Through this research, I make three original contributions to knowledge.

Firstly, I argue that trends provide a lens and platform for studying and enacting sociologically significant phenomena. In their interactions with other users and in their content creation, users engage in personally and socially meaningful practices around trends.

Secondly, I propose that TikTok trends are created and defined by an interplay of user and platform influences. Unlike existing research which typically highlights the role of either user or platform, I show that trends are shaped and defined by TikTok's curation and design, while user practices also play a key role in creating trends.

Finally, I argue that hybrid methods enable a layered and context-rich analysis of phenomena like TikTok trends, that captures broad patterns as well as nuanced, varied and detailed user dynamics. I show how, in my research, my use of hybrid methods enabled findings to be combined across scale and detail, thus producing a comprehensive representation of trends.

This interdisciplinary thesis contributes to digital sociology, media studies, and the social life of methods. I advance understandings of social media trends and of the uses of social media data for social research, particularly comments and social media videos (which Abidin et al 2020 and Highfield and Leaver 2016 (respectively) claim is needed). The thesis also advances social research methods, through empirical exploration of hybrid methods.

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Chapter I Research overview and context

1 Background and overview

The contemporary media landscape is ever-changing, continually bringing new and updated digital platforms and sources of data. With every change and development come new considerations for media audience researchers. Central within these continually changing dynamics are social media platforms, which provide settings for studying media audiences, what they are into, what they do, and how they participate in sociologically significant interactions and expressions of themselves and their lives. Social media research therefore provides opportunities to investigate media audiences in meaningful ways, yet these opportunities also come laden with methodological baggage which must be unpacked. In this section which introduces my research context, I discuss each of these elements in turn. I begin with the opportunities to study media audiences on social media platforms and then proceed to discuss methodological considerations.

Media audience research is important because it enables scholars and practitioners to understand how individuals interact with media content in complex and context-dependent ways. Livingstone (2013) argues that audience research provides invaluable insights into the decoding of media messages, the influence of cultural context, and the diversity of audience engagement, which are critical for the development of effective media strategies and responsible journalism. Furthermore, empirical audience research, as discussed by Johnson (2024), employs methodologically rigorous approaches to map audience behaviours across diverse demographics and platforms, enriching understandings of media consumption and informing both policy and practice within the rapidly evolving media landscape. Thus, media audience research stands as a pivotal influence in media and cultural theory, shaping how content creators, marketers, and policymakers respond to the dynamic expectations and needs of varied audience segments (Livingstone 2018).

Media audience research, and reception studies in particular, also provide critical stances which counter more deterministic ways of thinking about media audiences, including ways that imagine media as a one-directional force acting upon passive subjects (Hall 1980; Katz and Lazarsfeld 1955). Reception studies scholars insist that power does not solely stem from

texts, technologies, or institutions but emerges in uneven, contested relations between media, audience, and their social lives (Morley 1980, Ang 1985). Indeed, these critical perspectives involve a recognition that media audiences are not entirely knowable or homogenous entities. This counters and enriches considerations of media audiences beyond their traceable interactions with media texts, recognising the diversity of audiences and their experiences. Ideas within Majority World scholarship have been especially important in advancing these critical understandings of audiences, particularly toward establishing a more grounded, decolonial understanding of how media power is meaningful in practice (Das and Livingstone 2013). Therefore, media audience research also has an important critical role to play in fairly and democratically representing the individuals and societies which make up media audiences.

Social media platforms provide opportunities for media audience research. They are settings where the preferences, opinions, and behaviours of media users can be studied. Existing research into media audiences via social media has explored how fan communities engage with media through participatory culture online (eg Jenkins 2006) and how audiences discuss TV shows via social media platforms (Auverset and Billings 2016, Giglietto and Selva 2014, Highfield at al 2013). More broadly, since social media platforms themselves are contemporary media platforms, any research into their users could be considered a form of media audience research. Further, scholars have argued that there is a need to reconsider media audiences in relation to social media platforms (Das and Ytre-Arne 2018), including considering how methods of researching audiences need to adjust to capture media consumption and experiences in the increasingly platform-centric media landscape (Livingstone and Local 2017).

Digital platforms are central in these debates about media audiences. Platforms simultaneously occupy a position of infrastructural dominance and provide an unprecedented capacity for large-scale data capture and extraction (Gillespie 2018). As Livingstone (2018) notes, the audience data long sought by broadcasters and advertisers is now produced in abundance through everyday platform use, prompting claims that audience research has entered an “era of big data” (Athique 2018) or an “age of datafication” (Livingstone 2018). However, social media scholars caution that this abundance cannot be treated as neutral or epistemologically superior, since platform data are generated within commercial, proprietary systems that shape what can be captured, classified, and known, often in ways which are not

made transparent to scholars or the wider public (van Dijck 2014, Beer 2016).

While some scholars argue that the availability of large-scale audience data enables new ways of understanding how and why audiences consume media (Napoli 2012), critical scholarship warns against conflating scale with superiority or depth of understanding (e.g. Kennedy 2016, Livingstone 2018, Baym 2013), which I discuss further in the Literature Review chapter. Crucially, platform data are not raw traces of social behaviour, but are actively produced through metrics, algorithms, and categories designed to serve advertising and optimisation goals (Beer 2016, Gillespie 2014). Again, the lack of transparency in these processes is problematic as it gives further power to platforms in ways that are not open to critique within scholarship, due to platform opacity. As Livingstone (2019) and Baym (2013) argue, an over-reliance on such data risks privileging what is easily measurable over what is socially meaningful, reducing complex, context-rich media practices to abstract indicators. This turn in methods and platforms risks narrowing the conceptual horizons of media audience research and reception studies, further marginalising interpretive, qualitative, and critical approaches that have historically challenged deterministic models of media power (Livingstone 2019, Couldry 2012).

Within this thesis, I focus on TikTok trends as a media audience research phenomenon. Considering TikTok trends makes it possible to explore many of the procedural and critical concerns of media audience research. Trends reflect users' preferences and opinions, patterns in their behaviour on platforms, what users are widely exposed to online, and how information is widely disseminated to them (van Dijck 2013, Zhang et al 2016). Critically, social media trends are more than just popular objects or algorithmic outputs, they are also sociotechnical formations through which users encounter, interpret, and participate in platform-mediated culture (see van Dijck 2013, Zhang et al 2016).

From a media audience research perspective, this makes trends valuable for examining how popularity and popular content operate through the TikTok platform, while remaining attentive to the everyday practices, meaning-making, and participation which users engage in. By examining how trends are presented by TikTok, alongside how users engage with them, my study of trends situates trends as sites where the platform logics of visibility and popularity intersect with socially and personally meaningful user practices. Amplifying these points, the recognition that trends and TikTok are underexplored in social media research

(Zhang et al 2016, Abidin 2021), adds further urgency to the need to explore TikTok trends. Indeed, scholars have advocated for responding to these gaps in the research with consideration of TikTok and trends (Zhang et al 2016, Abidin et al 2021).

TikTok is a particularly interesting platform in relation to trends, as trends are integral to the platform and how content is presented to users. TikTok features and phenomena such as the Discover page (which presents trends), trending content, and memetic video production (which creates and encourages trends in user content and behaviour) are integral to the platform's design, as I explain further in the literature review and first paper. In the first paper, I further discuss this need for studying trends and TikTok, and further explore how TikTok presents trends.

Outside of the field of media audience research, it has been noted that social media has contributed to an abundance of 'qualitatively different' data (Kitchin 2017) for social researchers. Such data allows for phenomena to be studied without having to choose between detail and scale (Manovich 2012). With social media data, the two can be studied concurrently, in ways in which the boundaries and differences between methods are de-emphasised, and where qualitative and quantitative techniques can be combined within "traditional methods" (e.g. content analysis), and also within computational methods (e.g. social network analysis or text mining). With such mixed methods approaches, detail and scale can be studied within the same method (Moats and Borra 2018). These approaches are sometimes described as quali-quantitative or hybrid methods and are seen by some as offering new methodological opportunities, in contrast to traditional qualitative and quantitative data and methods which often remain distinct, serve separate purposes and involve different data (Savage 2013, Moats and Borra 2018).

These opportunities are especially significant for media audience research, a field long marked by tensions between qualitative and quantitative approaches and by the divide between academic and commercial paradigms (Ang 1991, Baym 2013, Livingstone 2019). Ang (1991) critiques dominant forms of audience research, particularly those aligned with commercial audience research, for reducing audiences to measurable aggregates and abstract preferences, such as what is popular or what "the audience wants," at the expense of understanding audiences as socially situated, meaning-making subjects. Subsequent scholars have echoed and extended this concern, arguing that quantitative approaches risk missing the

contextual richness and lived complexity of media experiences (Baym 2013, Livingstone 2019). These debates have been revitalised in the context of the contemporary abundance of audience data, which some argue intensifies the tendency to know audiences primarily through numbers, metrics, and large-scale patterns (Das 2019, Livingstone 2019). Situated within the context of these tensions, hybrid methods emerge as a particularly compelling methodological approach and consideration. These considerations create an intriguing context and backdrop for considering hybrid methods.

Situated within this wider context, TikTok trends are interesting phenomena for exploring media audience research concerns, and for applying hybrid methods. This research therefore responds to calls for studying a) social media trends (Zhang et al 2016, van Dijck 2013), b) hybrid methods (Moats and Borra 2018, Halford and Savage 2017), and c) media audiences on social media platforms (Livingstone and Local 2017). Therefore, this thesis centres on these two concerns, corresponding to the two research questions outlined below.

- **What can studying TikTok trends tell us about the users of this platform and their practices?**

- **What are the benefits and limitations of hybrid methods within social media research?**

This is an interdisciplinary thesis. By studying social media trends for media audience research, the research is primarily relevant across media studies and digital sociology. The methodological explorations also contribute to sociology more generally (especially via debate on the social life of methods).

In this thesis, I contribute to advancing understandings of TikTok and trends, responding to calls from scholars for their continued consideration in research (e.g. Abidin 2021 for TikTok, Zhang et al 2016 for trends). I also contribute to interdisciplinary concerns about the new forms of data which are produced by digital platforms, which scholars have called for continued consideration of (e.g. Athique 2018, Livingstone 2019, Savage 2013). Individual papers also respond to calls to consider particular types of data and methods in the wake of new and evolving forms of data, including comments in the second paper (eg Abidin 2020), videos in the third paper (eg Highfield and Leaver 2016) and considering computational

methods within discourse analysis approaches in the third paper (eg Manovich 2020, Kress and Bezemer 2023).

In this thesis, I make three key original contributions.

Firstly, users engage in personally and socially meaningful practices around trends, in their interactions with other users and in their content creation. Thus trends provide a lens and platform for studying and enacting sociologically significant phenomena. As such, my thesis simultaneously argues that trends are compelling research foci and important phenomena for users. I therefore argue that trends deserve to be studied, and offer an original approach to trends that bridges two usually separate concerns of valuing and exploring the popularity of trends and alongside their social meaning.

Secondly, TikTok trends are created and defined by an interplay of user and platform influences. While existing research typically aligns with either user or platform concerns, this research explores both concurrently, highlighting how trends are shaped by both platform curation and user practices. While TikTok influences trends through features like the Discover page and editing tools, users actively define and shape trends through their content and interactions. This interplay highlights the co-creative nature of trend formation on the platform.

Finally, this thesis demonstrates how hybrid methods enable a layered and context-rich analysis of TikTok trends, that captures broad patterns as well as nuanced, varied and detailed user dynamics. Hybrid approaches are still an emerging and developing approach, and this thesis contributes to calls to consider the uses of hybrid methods empirically within diverse studies (see Moats and Bora 2013, Savage 2013). In this research, hybrid methods enabled validation between methods, and for findings to be combined across multiple levels of analysis, combining scale and detail in order to produce a comprehensive representation of trends.

The structure of this thesis follows a ‘Thesis by Publication’ format. It includes three empirical papers, each of which involved exploring different aspects of trends, using different types of user data, and applying varying hybrid methods approaches. To briefly summarise the three papers:

The first paper is titled "*What's in a TikTok trend? Understanding what constitutes a social media trend, and why trends matter for social research*". Within this paper, I set the foundation for the proceeding research by exploring how trends are presented on the Discover page, and how users engage in trends within the captions that they write to accompany their trending videos. In the analysis, I combined data visualisation and content analysis to explore Discover page content, and text mining to explore user captions, in an approach which treated methods more separately than subsequent papers. In this paper I argue that TikTok trends are influenced simultaneously by platform curation and how users engage with the trends, and that users strive for popularity and visibility through trends. I also argue that the combination of methods enabled consideration of the widespread patterns that trends reflected, as well as the subtle differences between the topics of trends.

The second paper is titled "*Audiencing TikTok: TikTok comment sections as social spaces for media audiences*". In this paper, I explore user interaction within the comment sections of trending videos. I consider interactions from the perspective of 'audiencing', a concept which recognises the social circulation of meaning within audience members' interactions around a media text. Of the three papers, this is the paper which considers users as "audience" members in the traditional sense of users watching and engaging with a video. In the analysis, I combine social network analysis and content analysis, blending qualitative and quantitative approaches within each of these methods. I argue that users engage in personally and socially meaningful conversations in the comment sections of trending videos. By using hybrid methods, I was able to simultaneously explore broader networked characteristics of interactions, the characteristics of individual interactions and group discussions, and what conversations were about.

The third paper is titled "*Why do memes matter? TikTok video memes as vernacular creativity — A multimodal discourse analysis of TikTok videos*". In this paper, I study video memes using a multimodal discourse approach, and consider memes from the perspective of vernacular creativity. Each of these lenses enabled me to consider how both copying and innovation create and perpetuate video trends. In the analysis, I combined computer vision, content analysis, and text mining. The paper argues that through memes, users create content that fulfils important personal and social functions. What's more, they shape trends through a social content creation process. The hybrid methods enabled a simultaneous consideration of

conventions and innovations within videos which align with understandings of vernacular creativity (Burgess 2006). They also made it possible to situate considerations of widespread patterns within discussions of individual, context-rich, and highly personal examples.

In the two sections below, I discuss how each of the overarching research questions is approached within the three research papers that form the thesis. Then, in the section following these, *Thesis format and research timelines*, I explain the thesis by publication format, the timelines of when each study was undertaken, and how this timeline corresponds to changes in the TikTok platform over the five years of writing this thesis (2020-2025). Finally, I conclude by explaining how working alongside an industrial partner (a children's media researcher) and some aspects of my personal background and circumstances shaped my research.

2 How working with an industrial partner shaped my research

My PhD was part of the Data Analytics and Society Centre for Doctoral Training programme, funded by the ESRC, with an integrated MSc in Data Analytics and Society. On my programme, PhD students were part-funded by an industrial partner, and I collaborated with Dubit, a Leeds-based children's media agency. At the time of beginning to work with them in 2018, during my masters studies, they were primarily a research agency, and described themselves as such. Since then, they have moved towards providing commercial gaming products, and research forms a separate arm of their business, *Dubit Research*, which they describe as a "full-service kids and youth consultancy, established in 1999." (Dubit 2025).

I worked most closely with Dubit prior to 2020. During this period, we developed a mutual understanding and agreed on key aims. From 2020 onwards, once that understanding and trust had been established, I was entrusted to proceed with the research and had less frequent communications with Dubit; the pandemic, which limited institutional capacity, also contributed to this gradual reduction in contact. In 2019, I undertook an internship with Dubit for a module on my master's degree. For this internship, I was tasked with a data analysis project which aligned with Dubit's interests and priorities. I also maintained a relationship

with Dubit's research team and a presence within their office for the first two years of my programme. This experience, alongside my communications with Dubit, was instrumental in developing my understanding of some of the concerns of commercial media audience researchers, such as understanding what is widely popular among users and audiences and why, as I discuss in more detail below.

This PhD was a studentship, where the broad topic area of the research was pre-determined before I applied. The title of this project was "Studying media audiences in the age of big data". Within this topic, Dubit were mainly interested in the data that can be obtained from digital platforms, and the data analysis methods which are available for analysing this data at scale. This was an area that they were only just beginning to delve into, and until then, they had mainly used more traditional analysis methods on data from surveys and focus groups that they regularly carried out. They were already aware of the difficulties of focusing on children and young audiences within digital platform analyses, since demographic data is not usually made available to researchers by platforms. They recognised that the minimum age for joining these platforms is usually within the teenage years (TikTok's minimum age to join is 13), however through their own research they were aware that children younger than this were using these platforms anyway, and that young audiences made up a large part of the TikTok audience. Therefore they were interested in TikTok in general, accepting that focusing on young audiences in particular was difficult, but that studying trends and other phenomena on the platform would be valuable for their research aims.

The key methods which Dubit regularly used were a panel survey and qualitative observations of how children interacted with different products. Dubit's interests in social media data were mainly driven by the scale of the data and the ability it offers to study "actual usage data" rather than relying on reported media use. They found the latter was often unreliable due to parents appearing not to understand their children's interests and media use in survey responses, and children not understanding questions or being vague in their answers in focus groups. Their intentions for using social media data would primarily be to find out about a particularly popular product, piece of content, or other phenomenon.

While gaining this understanding from Dubit, I was beginning my reading for my PhD proposal. Understanding Dubit's priorities and practices situated some of my early reading on media audience research and the potential uses of social media research within this field.

Various conversations and experiences I had at Dubit echoed debates within the literature. This included the difficulty of solicited research for building an accurate picture on media use, and therefore the potential benefits of using unsolicited data (produced as a by-product of social media use) for studying media audiences (Procter et al 2015). In addition, the difficulty of focusing on particular demographics within social media research (Sloan 2017), and the commercial concerns of understanding the audience being discordant with typical academic interests on media audiences (Livingstone 2003).

Because of these parallels between the literature and context from Dubit, arriving at my research focus was an organic process. Dubit told me that a likely use of social media research for them would be to explore a popular product or trend which interested a client, in order to understand more about it and why users were interested in it. This resonated with Ang's (1991) statement that commercial researchers are concerned primarily with understanding broad audience preferences, (e.g. "the audience wants comedy!"). There were also academic motivations for studying trends, since they reflect what users are widely engaged with and exposed to online (van Dijck 2013), topics which are of interest to media researchers. Trends therefore provided a fitting overarching focal point for my research.

Considering topics and issues within this broader context of "big data", which was referenced within the PhD studentship project overview, the notion of hybrid methods within social media research seemed especially significant for media audience research. Within media audience research discussions, a divide between commercial and academic research and quantitative and qualitative methods is often emphasised (e.g. Ang 1991, Baym 2013), and so the notion of hybrid methods was compelling. Dubit had not considered the potential use of hybrid methods in social media research until I suggested it. Given that they conducted both quantitative and qualitative research, which relatively separate in terms of teams, resources and application, they found the idea very interesting. Therefore, my two overarching research questions about trends and hybrid methods were simultaneously influenced by my experience at Dubit and engagement with the literature.

3 Research timelines, format and personal contexts

I began my research in 2018, and the first two years ran concurrently to a master's degree. So by the end of 2020, I finished my master's degree and had a first draft of the first paper completed, as well as a PhD proposal. The Covid-19 pandemic caused disruption to my personal and academic life for the majority of 2020 and into 2021, as indeed it did for many people around the world. To accommodate for these difficulties, I applied for an extension period for my research of three months. In more happy circumstances, I also took a year of maternity leave between May 2023 and May 2024, and this fell roughly between conducting and finishing my third paper. I returned from my maternity leave on a part-time basis, which further prolonged finishing my thesis. It then took me until summer 2025 to finish my thesis, and now as I submit this thesis I am expecting my second child.

I present my research in a thesis by publication format. This thesis format is used within all of the PhD studentships within my Centre for Doctoral Training (Data CDT 2025). This format is also fitting for the context and timeline of my research, since social media and digital platforms are constantly changing. I wrote each paper in consecutive order, and therefore the papers reflect three particular periods within the last five years (from 2020-2025). This format allowed my research to remain somewhat dynamic to the developments on TikTok and social media more broadly, as well as enabling subsequent papers to be shaped by the findings and reflections from previous papers. For instance, the focus on memes in the third paper was partly motivated by developments to the Discover page in 2021 which introduced “memes” as a new type of trend on the page. In addition, moving on from the first paper, where I found users were not particularly descriptive about memes in their video captions, I focused on videos and comments in the subsequent papers, where I had seen more substantive engagement with trends and their meaning.

4 TikTok and its changes over time

While I have made some adaptations to my research according to developments in the TikTok platform and the literature, it is also important to acknowledge that things have

changed since writing the papers in this thesis. Since concluding the analysis for the third paper in 2022, some major changes have occurred on TikTok. In May 2022, the Discover tab and page were dropped from the TikTok platform (Finn 2022). I focused on the Discover page as the starting point for accessing trends for all of the papers, and it was central within my discussion of how trends are presented on TikTok. It was replaced by a Friends tab and page, which meant replacing a trends-focused Discover page with a page orientated towards showing the user content within their own network of connections, therefore constituting a de-emphasis of trends on the platform. Yet despite the lack of this central hub for presenting trends, links to hashtags and pieces of audio are still included in videos, and these link to video lists ordered according to popularity, which are the same kind of lists on which I based my research. From my own experience on TikTok, I still often see the same types of memetic practices that I discuss in the papers. Therefore, while the Discover page has been removed from the platform, many of the other trend-centred features and practices which I discuss in my papers remain important.

The removal of the Discover page was part of TikTok's broader move towards emphasising the search function in the user journey and concentrating on keyword searches (Hutchinson 2022). As I discuss in the first paper, the Discover page was formerly part of the user's search navigation. At the time of writing in June 2025, clicking on the search function in the top right of the TikTok app (a magnifying glass icon) now opens a search page with three lists; the user's recent searches, a "You may like" list of suggested topics, and a "Popular live" list. The "You may like" list seems like a combination of personalised recommendations. In my app I see a mixture of topics and accounts I've looked at recently and some popular topics which are new to me. Therefore, this search list still involves some aspects of trends, since it presents popular topics and popular live videos. Therefore, some of the features which have replaced the Discover page are also trend-orientated.

Other changes include TikTok increasing the maximum allowed lengths of videos and video captions. The first paper focused on video captions when they were limited to 300 characters. At the time of writing in 2025, video captions can now be much longer, as TikTok increased the character limit to 2,200 characters in 2022 (Duffy 2022). TikTok claimed that "[t]his allows you to express more details about your creations, describing what your videos show, giving you the opportunity to get closer to your audience, generating more engagement while becoming more searchable and better recommended by TikTok to viewers" (in Hutchinson

2022). This is significant given that the findings of the second paper highlighted that users did not create particularly descriptive captions, and instead used their captions to drive visibility and engagement. TikTok has also increased its video length limits over time. When beginning my first paper in 2020, videos could be up to one minute long, and this was the same when I began to analyse videos within the third paper in 2022 (Kapwing 2024, Descript 2025). Now, as I write this chapter in June 2025, videos recorded in the TikTok app can be up to 10 minutes long, and videos uploaded to the app can be up to an hour long (TikTok 2025).

In 2023, the TikTok API was introduced (I had completed my data collection and analysis by this point). When I began my research in 2020, TikTok was an underexplored platform relative to other major social media platforms (Abidin 2021). The introduction of the TikTok API has shaped the trajectory of TikTok research since then. Academics generally regard the TikTok Research API as an important development for social media research, because it provides official access to data on videos, user profiles, and engagement metrics, and the API supports stratified monthly sampling and offers granular data on user practices (Corso et al. 2024). This has enabled studies on the prevalence of viral hashtags, social trends, misinformation, and content virality (Corso et al 2024, TikTok for Developers 2023). Researchers have even used the API to analyse videos over several years (Corso et al. 2024). However, there are also significant limitations of the API, which enforces strict quotas, only allows access to a subset of public data, and excludes some regions such as Canada by default (Corso et al 2024, Entrena-Serrano et al 2025). In addition, its sampling process is opaque, so researchers cannot verify how random samples are generated, which limits transparency and reproducibility (Corso et al 2024, Entrena-Serrano et al 2025). Despite these challenges, the API has opened new research avenues on TikTok, and has facilitated an increase in the amount of research on TikTok.

Scholarship has consistently acknowledged that platforms should not be understood as stable or neutral research environments, but as evolving sociotechnical infrastructures whose constant modification reshapes what can be known about users, content, and participation (van Dijck 2014, Gillespie 2018, Plantin et al. 2018). This simultaneously reflects the changeable nature of TikTok, which I observed during the course of my research, and highlights why these changes are significant although not surprising. Interface redesigns and feature removals actively and continually reorganise content visibility and user participation.

From this perspective, the removal of TikTok's Discover page exemplifies how platforms continually recalibrate what counts as "popular," "trending," or worthy of exposure, thereby de-stabilising user practices and the empirical foundations on which media audience researchers rely on.

As the interfaces of platforms are redesigned, their recommendation systems altered, and affordances such as caption and video length changed, they also alter how users engage with the platform, and in turn the data that user practices generate. For media audience research, this highlights the need for reflexive and adaptable methodological approaches that acknowledge platforms as moving targets rather than fixed objects of study (Savage 2013, Marres 2017). Situating TikTok trends within this framework allows platform-change itself to be treated as analytically meaningful, reinforcing the value of studying trends, since trends themselves are dynamically shaped by both user practices and shifting platform infrastructures.

Chapter II Literature review

The emergence and continued growth of digital platforms, including social media platforms, have transformed the media landscape. Social media platforms are *media* platforms themselves, and for the study of media audiences, they provide a rich source of information on what is popular among users (Zhang et al 2016), the opinions and preferences of users, what users are exposed to online, and how information reaches them (van Dijck 2013). We therefore need to reconsider how media audiences and their experiences are researched (Livingstone and Local 2017). These conditions have led scholars to highlight that there is now an unprecedented abundance of data from these platforms on media audiences and their activities (Patriarche et al 2014, Livingstone 2018). This in turn has prompted both enthusiasm and scepticism about the nature of the data produced by platforms and the research that they facilitate.

While digital platforms generate vast, granular datasets that enable new ways of understanding how and why audiences engage with media (Patriarche et al 2014), this abundance of data has also reignited debates on the merits of quantitative versus qualitative approaches (e.g. Livingstone 2019, Baym 2013). Some commentators argue that the influx of data, and wider availability of computational methods to study large amounts of data, risk over-emphasising quantitative approaches at the expense of the context and detail which are important aspects of understanding media experiences (Baym 2013, Livingstone 2019). Das (2018) contends that these arguments are concerned about the removal of "the rich contextualization of real people's real, lived, voices from vast masses of, essentially, numbers" (p.124).

Meanwhile, others see opportunities for studying detail and context via platform data, arguing that platform data also provide rich and compelling *qualitative* data (eg Kozinets 2020), and that by accessing qualitative data on a vast scale, there is no longer a need to choose between focusing on scale or depth (Manovich 2012). Instead, through social media research and the methods facilitated by platform data, hybrid methods allow for qualitative and quantitative analysis and considerations to happen concurrently, some argue (eg Moats and Borra 2018, Savage 2013). The potential of these hybrid approaches to methods is significant in the context of media audience research, given the re-invigorated tensions between qualitative and quantitative methods in the wake of this influx of data from digital platforms mentioned above.

In this literature review, I critically examine how reconfigurations in data and methods are being addressed within media audience research and social media research. I begin by situating debates around the abundance of audience data within media audience research contexts, where there have historically been tensions between qualitative and quantitative, and academic and commercial approaches. I then consider the characteristics of social media data—especially regarding how they simultaneously provide and facilitate depth and scale—and explore how these elements provide new possibilities for studying media audiences in both commercial and academic contexts. Building on this, I consider key developments in social media methodological literature, particularly the emergence of hybrid methods, which provide opportunities to de-emphasise the qualitative-quantitative dichotomy and to combine techniques from both paradigms. Finally, I discuss the "Social Life of Methods" perspective (Savage 2013), which proposes a reflexive and explorative stance toward methods which

challenges the traditional boundaries between qualitative and quantitative methods, and therefore provides useful outlooks in support of hybrid methods.

1 Abundant media audience data, and the qualitative-quantitative divide

Digital platforms are often central within debates about abundant data on media audiences, since they provide relatively new and continually evolving media settings, and since user interactions on these platforms produce data which can be used in research. Livingstone (2018) highlights the significance of this abundance of data for the field of media studies, contending that 'the audience "data" desperately sought by the ratings industry since the early days of broadcasting is now abundantly collected' (p. vi). This abundance of data has prompted claims that media audience research has entered the 'era of big data' (Athique 2018) and 'the age of datafication' (Livingstone 2018).

This notion of abundant data is met with enthusiasm and scepticism. Napoli (2012) argues that this abundance of data and the methods which it facilitates enable ways of knowing 'how and why audiences consume media that were previously unknown' (p.79). Yet many have cautioned against these arguments which suggest that these new data and methods are superior to more established modes of media audience research (Livingstone 2019), especially since they risk over-reliance on numbers, metrics and broad abstractions (Baym 2013, Livingstone 2019). This influx of data and the development of methods to analyse larger datasets is not unique to media audience research. Instead, it is a methodological shift experienced across many fields. Responding to these phenomena, scholars have recognised a growing emphasis on "quantification" which involves a reduction of individuals and complex phenomena into measurable units (Kennedy 2016). In response, some have cautioned against over-emphasising the value of quantitative and computational approaches for studying media audiences, opposing such arguments with the criticism that these approaches reduce complex and context-rich media experiences to mere numbers and abstractions (Baym 2013, Livingstone 2019).

Quantitative methods are generally associated with commercial audience research, both of which are painted as reductive (eg by Ang 1991, Baym 2013, Livingstone 2019). Critics argue that

commercial audience research is primarily concerned with the size of audiences and understanding what content is widely popular, for example via ratings for TV programmes, social media metrics, and box office takings for cinema audiences (Ang 1991, Baym 2013). For instance, Baym (2013, p. 12) contends that 'there is a gulf between audiences as they are constructed in academia and industry', pointing to the commercial preoccupation with "measuring" the audience via quantitative methods in order to differentiate commercial and academic concerns. Baym (2013) also extends this to the context of social media research, by arguing that an emphasis on social media metrics provides a view of the audience which is too limited to satisfy academic interests. On the other hand, academic and qualitative, academic media audience research often studies what audiences feel and how they experience media, which critics often consider as fairer and more comprehensive ways to understand media experience (Livingstone 2019, Ang 1991).

Nevertheless, much of the debate which discusses this influx of media audience data aligns with long-standing tensions between administrative and critical traditions in media audience research. Early administrative research, such as that emerging within the uses and gratifications tradition, framed audiences as empirically knowable through systematic measurement, emphasising patterns of exposure, motivation, and effect in ways that were methodologically pragmatic and institutionally aligned with broadcasters and policymakers (Katz et al 1974). In contrast, critical scholars have long questioned both the epistemological assumptions and political implications of such approaches. For instance, Ang's (1991) critique of "audiencehood" argues that quantitative measures abstract audiences from their complex and context-rich experiences of media. More recently, scholars have revisited this debate considering datafication, noting that while digital platforms generate unprecedented volumes of behavioural data, these metrics often re-inscribe administrative logics by privileging what is easily measurable (i.e. clicks, time, engagement) over questions of interpretation, power, and context (Livingstone 2019).

The presentation of these criticisms suggests a polarised and oversimplified impression of quantitative vs qualitative, and commercial/administrative vs academic/critical media audience research. In reality, there is more variation in the methods used by each field. For instance, Baym's (2013) claim that '[m]easurement has many appeals, all of which stem from the needs of commercialism, rather than scientific interests' (p.3), can be countered by pointing to Ofcom, the UK media market regulator which measures audiences quantitatively in order to provide 'reference for industry, policymakers, academics and the general public'

and to ensure fair treatment for audiences by commercial bodies (Ofcom 2019). Indeed, there will be many such examples which could counter this oversimplified opposition drawn between these camps of research.

The tensions in media audience research highlighted by the arguments outlined above make the field an interesting setting for considering alternative methods, which I discuss below. These outlooks suggest that platform data simultaneously provide scale and detail, and therefore the abundance of platform data doesn't inherently prioritise the quantitative over the qualitative. Indeed, this point provides a useful bridge into my discussions in the proceeding section, which explore how social media data simultaneously provide detailed qualitative data as well as scale and numbers.

2 The characteristics of social media data

While this abundance of data for media audience research is facilitated by many digital platforms, such as streaming platforms and mobile apps (Baym 2013), social media platforms are central to the discussions about abundant data, due to the characteristics of the data that they produce. Social media platforms host extensive amounts of user-produced content, such as images and video content, and textual posts, which constitutes a simultaneously detailed and vast source of information on the opinions, lifestyles and interactions of users. These data provide opportunities for media audience research, in the phenomenon which can be studied using them, and in their dual characteristics of scale and detail. I discuss both of these opportunities below.

Social media data simultaneously provide scale and detail. This facilitates approaches that de-emphasise the need to choose between scale, usually a quantitative consideration, or depth, a qualitative consideration, within analyses. Kitchin (2017) argues that social media data are 'qualitatively different in nature' (p.28) from traditional forms of data, since they are simultaneously vast, fast and detailed. Due to these characteristics, Manovich (2012) contends that in social media research we 'no longer have to choose between data size and data depth.' (p. 3). Social media can be considered to produce what I refer to as *dual aspect*

data, data which are simultaneously vast and detailed, and which allow detail and scale to be considered concurrently. This notion of dual aspect data, and de-emphasising the distinction between the qualitative and the quantitative, is particularly interesting within media audience research, due to the tensions between quantitative and qualitative methods (e.g. Baym 2013, Livingstone 2019).

Social media data are also considered as a sociologically compelling source of data due to the phenomena that they represent. These include social interactions, expressions of preference and opinion, users making sense of their world, and more. It is claimed that social media platforms "*datify"* elements of the social lives of individuals that were not previously datafied (Kennedy 2016, Mayer-Schonberger 2013). It is worth noting here that I use this term "datify" cautiously, as it is closely associated with arguments that link this datafication of individuals' lives with a problematic emphasis on quantification, as per my discussions in the section above. It is a useful concept for highlighting how social media produce data on aspects of social lives which were not previously "datafied" (i.e. friendships, daily activities, expressions of opinion and interests, etc). However, I use it cautiously, because I do not intend to simplify or accept this "datafication" as unproblematic, due to the associated emphasis on relying on quantitative modes of enquiry, and all that datafication is recognised to over simplify, as I discuss below (see Kennedy 2016).

Van Dijck (2013) highlights the sociological value in these data since they reflect aspects of the lives of social media users, such as individuals' preferences, exchanges, and relationships. Others argue that social media data constitute a "potentially rich source of information about the social world including interactions, attitudes, opinions and virtual reactions to real-world events" (Quan-Haase and Sloan 2017, p.4). In the next section, I discuss the many applications within media audience research of these data and the sociological phenomena which they represent.

3 Considering the applications and limitations of social media research for studying media "audiences"

How can media audiences be studied via social media research? What data is available on

social media users? How can social media users be considered and approached as "audiences"? How can certain research foci and methods explore the audience, and what distortions emerge in studying users and phenomena via social media? Below, I discuss each of these considerations in turn.

In relation to the first issue of data availability, the data that are available to external researchers on social media include data about media content, such as images and videos, media titles and descriptions, and user interactions with platforms as well as other users, such as comments, views and likes metrics. Demographic data are limited, as these data are often restricted by platforms and not available to researchers (Sloan 2017). And yet, demographic data are traditionally important in both commercial and academic media audience research (Ang 1991, Baym 2013), so this is a limitation for media audience researchers.

Academic media audience research based on social media frequently uses the data produced by users' interactions on platforms, and studies the audience in terms of user interests (e.g. topics of discussion), and the constitution of social networks via discussions and interactions (e.g. networks of connections in discussions, and identification of prominent users). For instance, Highfield et al (2013), Giglietto and Selva (2014), Auverset and Billings (2016) and Vicari (2017) use textual analysis of the Twitter posts by TV and news audiences to study the topics of interest amongst them. Considering that user demographic data is restricted by platform APIs, studying media audiences through the topics they discuss (e.g. Highfield et al 2013, Vicari 2017), how they assemble to form networks of users (e.g. Highfield et al 2013, Giglietto and Selva (2014)), or what proves popular on social media (e.g. Zhang et al 2016), are some of the ways in which social media data can be leveraged to study media audiences. My research involves all these elements, and my focus is on what is popular on social media, in other words trends.

In terms of how social media users can be considered and approached as "audiences", labelling them as 'audiences' does not fully capture the role played by individuals who use social media. These individuals are more commonly described as *users,* a term which better acknowledges their more participatory role on these platforms (Sloan 2017). Bruns (2008) extends this label further, using the term 'produsers' to recognise the dual role of producer *and* user played by individuals on social media, since many social media platforms facilitate user-generated content where the user is also the producer of content (Sloan 2017).

Therefore, individuals on social media have multiple roles - audiences of the content that they see on the platforms, users who participate in the platform by engaging with a platform's features and content (i.e. commenting, liking, etc.), and producers or creators who create their own content, including images, videos and text-based posts (Bruns 2008).

The studies discussed above focus mainly on "audiences" of broadcast TV shows, which involves using social media data to understand audience views on content produced outside of the platform from which data is gathered. In contrast, within my thesis, I consider social media users' roles on platforms, rather than considering them as audiences of other media content. Therefore, I also approach users via the triple roles that they play on social media: user, audience, and creator. The first and third papers focus primarily on users as creators of video captions and video content, while in the second paper I consider how users interact within comment sections, where they have a dual role of audiences of the video and users interacting through comments.

Finally, with regard to research foci, methods and the distortions that emerge in studying users and phenomena via social media, distortions and biases associated with media audience research have long been debated in the field, particularly in relation to solicited research (Jensen 2013, Couldry 2012). Solicited research is research in which information is actively elicited from participants through researcher-driven instruments such as interviews, surveys, or focus groups. It produces responses shaped by the research design rather than occurring "naturally" – that is, in environments free from research influence (Jensen 2013). Within solicited research, participants can be influenced by social desirability bias. That is, they respond with what they believe is socially acceptable or expected rather than their authentic views (Livingstone 2004). The wording and framing of questions may also lead to response bias, and the power dynamics between researcher and participant can limit the expression of dissenting or complex perspectives (Couldry 2012). Moreover, the reliance on self-reporting and memory recall can result in inaccuracies, as participants misremember, rationalise, or selectively recount their media use (Jensen 2013). As Livingstone (2004) emphasises, solicited methods risk constructing a mediated and partial version of audience experiences, shaped as much by research design as by participants' everyday realities.

In contrast, social media data is a source of unsolicited data on media consumption. As such, it could result in fewer distortions (Procter et al. 2015). Unsolicited social media data may be

especially valuable for commercial research, which for decades has valued behavioural tracking technologies, such as people meters, ticket sales, website hits, due to the perceived reliability involved in recording "actual" rather than self-reported consumption and behaviour (see McQuail 1997).

However, whilst solicitation-based distortions are potentially lessened when using by-product social media data, social media data and research is associated with many of their own distortions which are important to consider. Technical and vernacular elements of platforms, such as character limits on posts and behavioural conventions, shape user behaviour and therefore the data that they produce (Van Dijck 2013). Indeed, a lot of research is dedicated to considering how the design of a platform influences the data it produces and user interactions (see Rogers 2013). Therefore, while user data extracted from social media platforms may not be influenced by being part of a research study, they *are* influenced by the platform, and all of the influences associated with this setting. So, for instance, the risk of respondents being influenced by perceived social desirability in their responses to research questions (Junco 2013, Miller et al 2017) is replaced by perceived social desirability relating to user interactions which are visible to others on social media platforms (Manovich 2011). Even count-based metrics such as counts of views, comments, or likes, which on the surface might seem less vulnerable to distortion, could be influenced by what the platform algorithm decides to put in front of the user (see Gillespie 2012).

Despite these platform-related distortions, there is value in social media research, because social media produces data on a wide range of sociologically interesting phenomena, as noted above. As with any research, the distortions associated with a particular form of data, method or setting must be considered and balanced against their benefits and affordances. Within many research contexts, these distortions may be preferable to those that emerge in solicited research. Indeed, these "distortions" may even be desirable influences in particular research contexts, where the characteristics of the platform and users' behaviour on it constitute the ecosystem of the platform or phenomenon being studied. For instance, in studies of "audiencing", which I discuss in the second paper, influences from the setting where user interactions take place are considered as interesting features of the environment and part of the ethnography of the setting and phenomenon (Fiske 1992).

Further, understanding how platforms influence user behaviour and what users are exposed to

online are also important research concerns in themselves (Rogers 2013). Studying media audiences via digital platforms creates opportunities for interrogating how platforms shape user experiences and the dissemination of information (Rogers 2013, van Dijck 2013), and how they exploit users, their data, and their creative labour for commercial gain (Das and Ytre-Arne 2018, Kleut et al 2017). Indeed, these issues are especially relevant when considering users in relation to trending content. This is because trends become commodities for digital platforms, and they reflect what users are widely exposed to online, due to their level of visibility.

Livingstone and Local (2017) argue that, since media content is increasingly consumed via platforms, media audience research must reconsider methods and measurement in relation to platforms. This is because media consumption is no longer exclusively tied to devices, and since platforms 'are themselves fast becoming the new intermediaries' (p. 73). For instance, if a researcher were to ask a participant what *TV programmes* they watch, this question might not capture consumption of television content when this is *streamed* on an iPad and not on the TV. This further highlights the value in studying media audiences via digital platforms.

4 TikTok, TikTok trends, and the value in studying popular content and user practices

TikTok is a video-sharing app. It was first launched in 2016 for the Chinese domestic market as Douyin, and then moved to the international market in 2017 as TikTok (Abidin 2021). In early 2020, TikTok was just less than 3 years old, was rapidly increasing in popularity, and a limited amount of academic studies focused on the platform (Abidin 2021). This made TikTok an interesting platform for considering how social media research can study media audiences. Again, this formed one of my motivations for studying TikTok.

Like other social media platforms, TikTok is an important and influential platform within the contemporary media landscape. It plays a significant role as a catalyst for driving the popularity of wider media forms, creators and individuals. Cunningham and Craig (2021) argue that TikTok creators are able to bypass traditional routes to achieving fame, which are controlled by centralised and elite gatekeepers, i.e. studios and record companies. Social

media's participatory culture creates successful creators and content, and users play a role in deciding who and what becomes popular. Similarly, Arty (2025) highlights that TikTok acts as a music discovery engine, noting that the app has played a decisive role in determining and predicting the chart success of music artists. Therefore on TikTok, users and creators drive and harness popularity, in a way that bleeds through into the wider media landscape by creating music hits, successful content, and celebrities. Indeed, within the platform design of TikTok and the user practices that proliferate on the platform, popularity plays an integral role.

Social media trends play an integral role on TikTok. Trends reflect popular content and widespread user behaviour on social media platforms. While the objects of trends vary (Zhang et al 2016), such that a topic, hashtag, video, or pattern in user behaviour may be considered as a trend, they are generally defined as phenomena that achieve widespread popularity and high engagement (Leavitt 2020). Zhang et al (2016) state that "[t]rends in online social media can be reflected by the popularity of hashtags, topics or even neologisms such as Internet slang" (p3). This recognises that the element of a trend can vary, as trends can take various objects such as a hashtag, video or image, or phenomena such as topics or neologisms as their target. For example, on Twitter the "What's happening" section presents users with "trending" hashtags and topics. On YouTube, the user is presented with the most popular pieces of video content within the "Trending" tab. On Instagram, the "Explore" tab presents the user with popular image posts within their sphere of interests. On YouTube, singular and distinct videos are also presented as trends, while on Twitter, topics that are created by widespread discussions are presented as trends. Again, this relates partly to different ways that the popularity of trends is operationalised, which I discuss more below.

The trends presented by platforms are not the sole version of social media trends, and there are phenomena outside of these direct presentations of "trending" content and topics by platforms which can also be considered as trends. Scholars highlight that phenomena such as widely used language, stylistic choices in videos and photos, social movements (e.g. Black Lives Matter), user challenges (i.e. ice bucket challenge, dance routines) and topics can all constitute social media trends (Kietzmann et al 2011, Leavitt 2020). Referencing a trend could involve sending a link to a trending video, or it could be a reference to a type of behaviour or manner of speaking that is widespread across lots of content and platforms. This has ramifications for how trends are found, understood and referenced by users and

researchers alike.

Another important consideration about trends is the extent to which they involve and represent "native" phenomena (Rogers 2013). Rogers (2013) uses the concept of "natively digital" to recognise phenomena and practices that originate on platforms and are specific to platforms, and uses examples such as retweeting on Twitter and tagging on Instagram as examples which are specific to these platforms and the digital world. Rogers (2013) uses this concept to consider how digital phenomena involve logics, affordances, and user practices that are distinct from those in the offline world, which he argues provides further reason for these phenomena to be studied. With trends emerging on platforms, and with their production enabled by platform conditions, to some extent they can be considered as specific to platforms, and can therefore be considered from this "native" perspective. Yet despite trends being produced, perpetuated, and circulated by platforms, often they are based on or incorporate influences from outside of a specific platform, for instance from other platforms or from the offline world.

TikTok trends often emerge organically from within the app, rather than being based on outside influences (Abidin 2020). Rogers (2013) argues that native phenomena especially motivate studies on platforms (i.e. since native phenomena can't be studied anywhere else). Extending this argument to trends, trends which are more native to a platform could provide motivation for studying them on that particular platform. In light of these arguments, I argue that it is important to consider how far trends can be considered as "natively" digital (e.g. Rogers 2013), and conversely how far they are influenced by outside influences.

Trends are also interesting from a media audience research perspective, since they reflect what is widely popular on social media platforms, what content lands with audiences, users preferences and opinions, what users are widely exposed to online, and how information reaches them. The first of these points satisfies a common concern in commercial media audience research - that is, to understand what lands with audiences. For instance, Ang (1991) argues that media audience researchers (particularly in commercial fields) are often concerned with understanding what is or what will be popular with audiences, so they can understand broad preferences within the audience which can be commodified for content planning purposes, such as "the audience wants comedy" (Ang 1991, p.49). Within a more academic context, trends can reflect important aspects of society, such as the opinions and

preferences of individuals, what individuals are exposed to online and how information reaches them, and the social interactions which unfold on social media platforms (van Dijck 2013). On TikTok, trends in how users create content, specifically through memetic production, which is based around users imitating each other to create widespread patterns in behaviour and content, are central to the sociality on the platform (Zuli and Zuli 2020; see Chapter VI).

TikTok trends are created by the interplay between algorithmic recommendation (Klung 2021) and the cultures of participation that flourish between users on the platform (Zeng and Abidin 2021). Trending content is more likely to be promoted by the platform, therefore rewarding users for taking part in trends with increased visibility, which encourages users to create content which uses trending hashtags, audio, behaviours and formats (Klung 2021). Integral platform features allow users to build on one another's content, e.g. sound reuse, duets, and stitches, which are editing techniques which allow users to feature the content of others in their videos. This fosters a participatory culture which contributes to creating and perpetuating trends (Zeng and Abidin 2021).

However, it is important to recognise that trends are not a neutral reflection of what has been popular among users, as popularity and visibility on platforms is heavily influenced by algorithms. As Gillespie (2014) argues, algorithms function as sociotechnical systems of relevance, as they actively shape visibility by embedding institutional values, commercial priorities, and assumptions about users into technical procedures that appear neutral. In this sense, popularity is not produced by user practices alone, but constructed through algorithmic mediation. While platforms periodically publish explanatory materials about how ranking works, these accounts tend to remain abstract and incomplete (Cotter 2019). The influence of algorithms permeates outside of platform design and presentation, shaping user practices. As Bucher (2012) describes, algorithms influence user behaviour via the so-called "threat of invisibility," in which users are compelled to adapt their behaviour to imagined algorithmic criteria, in order to remain visible. This aligns with critiques of algorithmic systems as opaque "black boxes," where complexity and proprietary protections limit accountability and external scrutiny (Pasquale 2015).

Taken together, this literature suggests that algorithmic definitions of popularity are not only non-transparent, but actively reshape how users perform and behave on platforms. Therefore,

social media trends are not a neutral reflection of user behaviour or what has been popular among users. While this is important to consider when studying trends, it does not lessen the importance of trends for studying users and their behaviour, since trends are still what users are widely exposed to online, as I argued above.

On TikTok, the Discover page was the main area where trends were presented and listed at the time of starting my research, but it has since been removed from the app. On this page, TikTok displayed trends as hashtags, audio, and more recently as memes, and the Discover page was one of the main content pages on the platform. While the Discover page was removed in May 2022, which was around the time I concluded analysis for the third paper, it was replaced by similarly trend-focused features. Even after the removal of the Discover page, links to trending hashtags and trending audio remained in video metadata such as captions and audio links. Therefore, while the Discover page was removed from the platform, many of the other trend-centred features and practices which I discuss in my papers remain important. I discuss the changes to TikTok's presentation of trends and content, and the critical ramifications of these changes, in Chapter I Section 4 "TikTok and its changes over time".

In summary, my motivation to study trends on TikTok is fuelled by their relevance within media audience research, and the fact that they are an underexplored social media phenomenon on a lesser-studied platform in comparison to other major social media platforms. Since this research is situated within a media audience research context, and one of my aims is to further highlight the sociological significance of trends as a user phenomenon, I am primarily interested in how trends reflect users and in the user practices which create and perpetuate trends. It is these user-orientated aspects of trends which are of primary interest for media audience and sociological research concerns. Trends reflect user opinions and preferences, how users are exposed to information online (van Dijck 2013) and interesting social interactions via participatory cultures (Zeng and Abidin 2021). Therefore, my first research question is:

"*What can studying trends on TikTok tell us about users and their practices?"*

5 Considering hybrid methods

As already noted, on one hand, the influx of so called "big data" (including social media data) on society comes with a growth in quantitative methods (see Livingstone 2019, Kennedy 2016). On the other hand, social media produces an abundance of rich and detailed *qualitative* data (Kozinets 2020) on various aspects of social life (van Dijck 2013). From this perspective, social media research can combine both quantitative and qualitative approaches within hybrid approaches, as I discuss in this section. As discussed above, these approaches could significantly advance media audience research, where there has been a longstanding debate about whether quantitative or qualitative approaches are better suited for studying media audiences (e.g. Ang 1991, Livingstone 2019, Baym 2013).

It has been argued that the dual qualities of scale and detail in social media data facilitate approaches where the boundaries between quantitative and qualitative methods can be reduced, and where there can be more seamless integrations of qualitative and quantitative methods (Manovich 2012, Moats and Bora 2018, Halford and Savage 2017). For instance, Manovich (2012) contends that:

> '[t]he rise of social media, along with new computational tools that can process massive amounts of data, makes possible a fundamentally new approach to the study of human beings and society. We no longer have to choose between data size and data depth. We can study exact trajectories formed by billions of cultural expressions, experiences, texts, and links. (p. 3)

These points provide a counter-argument to the concerns expressed by media audience researchers that the abundance of audience data risks an over-reliance on abstracting and oversimplifying media experiences (e.g. Baym 2013, Livingstone 2019, Couldry and Kallinikos 2017). Venturini (2024) argues that the qualitative–quantitative split, emphasised in these types of aforementioned accounts, rests on two simplifying strategies: situation (studying richly contextualised local interactions) and aggregation (studying large-scale patterns by abstracting from context). Non-binary methods, including those described in accounts of hybrid and quali-quantitative methods, break down these simplifying strategies. This is especially facilitated by digital environments and their data, where interactions are simultaneously local and global, situated and infrastructural, therefore muddying the waters

of traditional binary approaches which saw methods as separate. Digital traces, such as links, hashtags, platform interactions, or recommendation systems, are neither thick ethnographic accounts nor carefully curated statistical variables. They are partial, infrastructural records that invite methods that lessen the need to choose between depth or breadth. For instance, Perriam et al (2019) highlight how the hyperlink enables 'a text to be available for qualitative interpretation while at the same time placed in a structure of link networks that can be analysed with quantitative approaches' (Perriam et al 2019, p. 1).

Hybrid methods and quali-quantitative methods are phrases which are often used interchangeably (see Moats and Bora 2018). Both of these terms refer to the combination of qualitative and quantitative methods and approaches, in ways that are distinct from traditional mixed methods studies. Rather than triangulating separate methods, quali-quantitative and hybrid approaches use digital traces to explore how micro-level interactions and macro-level structures are mutually constituted (Venturi 2024). Therefore, a hybrid approach involves moving away from assumptions that 'quantitative and qualitative techniques are distinct or that they can be simply stitched together' as in traditional mixed methods studies (Moats and Borra 2018, p.14). Despite their interchangeability, I proceed with "hybrid" in order to better encapsulate the Social Life of Methods (SLOM) outlook which involves moving away from assumptions that qualitative and quantitative methods must be considered with rigid, type-cast boundaries and assumptions, or as inferior to one and other simply because they are designed for different purposes. I discuss this SLOM outlook in more detail in the section below.

Similarly, it is also important to discuss how my use of hybrid methods relates and contrasts to understandings of "digital methods". Although digital methods and quali-quantitative approaches are often treated as interchangeable, they differ in both epistemological orientation and methodological ambition. Digital methods, are defined by the principle of following the medium (Rogers 2013, Vicari and Kirby 2023) and so are a medium-specific approach. Rather than adapting conventional social science methods to online settings, digital methods repurpose platform-native devices, such as hyperlinks, hashtags, search engine rankings, APIs, and recommendation systems, as research instruments. In this sense, digital methods are methodologically grounded in platform infrastructures. Highlighting this, Rogers (2013) distinguishes between *medium* research, which focuses on the technical affordances and infrastructures of platforms, while *social* research is concerned with user behaviour,

cultural practices, and social dynamics that occur within or through platforms (Rogers 2013). Further, Vicari and Kirby (2023) argue that digital methods' focus on "following the medium" risks marginalising cultural meaning, interpretation, and audience context, which are fundamental within my research. So while the two traditions *practically* combine similar approaches, quali-quantitative approaches, by contrast, are less tied to specific media environments and more explicitly positioned as a critique of the qualitative–quantitative divide itself. There are many cross-overs between my approaches and digital methods, especially since the research in this thesis is based on a digital platform, However, I opt to frame this research within the less medium-specific arena of hybrid methods, to suit the broader media audience research perspective taken, and to suit my interest in both platform *and* user contexts and practices.

Some scholars emphasise the potential of computational methods for simultaneously considering wider patterns (sometimes referred to as macro level (Moats and Bora 2018) or infrastructural level (Venturini 2024)), as well as zooming in on closer detail and examples (sometimes referred to as micro level (Moats and Bora 2018) or situated level (Venturini 2024)). Social Network Analysis (SNA) is a good practical example of this in a single computational method, which allows networks of interactions between actors (i.e. users, or any other connected entity) to be mapped out visually and statistically (Knoke and Yang 2020). Within SNA, researchers can examine individual actors, small groups and the interactions they are involved in at a micro level, while also studying large-scale structural dynamics across the network at a macro level (Knoke and Yang 2020, Moats and Borra 2018). Another example of a computational method which facilitates a hybrid approach is text mining, where language patterns can be considered simultaneously to an analysis of context and difference, for example via explorations of phrasing and modes of expression.

The notion of hybrid methods within social media research is an emerging idea, and there are no set guidelines about how to implement this approach. Moats and Borra (2018) contend that the best way to advance hybrid methods is to use and consider them within ongoing empirical studies. Exploring and evaluating these approaches involves similar concerns, uses and limitations to those involved in more established mixed methods approaches. Therefore, I draw on understandings of the uses and limitations of mixed methods approaches.

Mixed methods research approaches, which can also combine qualitative and quantitative methods, can enhance the comprehensiveness of findings by capturing both overall patterns and deeper meaning (Greene et al 1989). Qualitative data can explain the "why" and "how" behind statistical relationships, while quantitative results can strengthen generalisability and provide empirical confirmation of qualitative insights (Johnson and Onwuegbuzie 2004). This complementarity is recognised to allow for more robust conclusions (Bazeley 2018), enhancing validity by comparing and supporting findings between multiple methods (Bryman 2006). It can also ensure that the quantitative phase is rooted in empirical, context-sensitive findings (Bryman 2006).

Despite these strengths, mixed methods research is also known to have notable limitations. Integrating findings from two distinct methodologies can lead to epistemological tensions, particularly when the interpretive assumptions of one paradigm conflict with the other (Sale et al 2002). Indeed, this is a significant consideration in the context of media audience research and social media research, where the literature emphasises tensions between qualitative and quantitative paradigms. Further, when integration is not carefully planned, qualitative and quantitative components may remain disconnected, undermining the coherence and utility of the mixed methods design (Bryman 2007). Therefore, while mixed methods approaches have considerable strengths in producing comprehensive, contextually grounded research, they also require careful planning to navigate these complexities.

6 The Social Life of Methods: Reimagining methods and exploring them empirically

Hybrid methods de-emphasise the boundaries between quantitative and qualitative methods. The Social Life of Methods (SLOM) perspective also rethinks the boundaries and juxtapositions between quantitative and qualitative methods. These ideas relate to methods more generally, not only social media research and hybrid methods. Like the discussions above, they are fuelled in part by the abundance of data across many fields which encourages a rethinking of methods.

SLOM scholars advocate for a general outlook to methods which moves away from critiques

of either qualitative or quantitative methods for not doing what they are not designed to do, or are not intended for (Savage 2013) . For instance, they argue against critiquing quantitative methods for missing out on context and detail, since they are designed to summarise wider patterns, and vice versa. Instead, they promote an overall outlook which embraces the fact that qualitative and quantitative methods are designed to do different things. This provides a counter-argument to the accounts where scholars problematise quantitative and computational methods for missing out on what qualitative methods can capture (e.g. Baym 2013, Livingstone 2019), which are common in media audience research and social media research, as I discussed above.

Therefore, SLOM scholars advocate for reconsidering and reshaping the rigid outlooks that dominant methodological literature has so often approached methods with (Savage 2013). This reshaping of outlooks to methods can apply to traditional methods, for instance in adopting alternative approaches, such as paying attention to anomalies and differences within quantitative analysis or considering frequent patterns within qualitative analysis. In particular, Savage (2013) argues that computational methods such as social network analysis, clustering models, text mining models enable a de-emphasis of the boundaries of quantitative and qualitative analysis. This is because computational methods do not solely emphasise scale, they can also be leveraged in exploratory and descriptive analyses—like social network analysis method described above. Further, computational methods can be used to study difference rather than just to pattern and trend. Thus computational methods have the ability to satisfy typical qualitative *and* quantitative concerns simultaneously (Halford and Savage 2017), which echoes claims made about hybrid methods.

Halford and Savage (2017) contend that computational tools can be used in exploratory and descriptive analyses led by the data rather than pre-defined research questions (Halford and Savage 2017)). Exploratory analysis is where the variables and patterns of interest are less pre-defined, and studies are led by patterns which emerge during analysis (Halford and Savage 2017). Descriptive analysis is more structured, focusing on identifying frequencies, distributions, or trends within data, in a way that is less open-ended than exploratory analysis (Halford and Savage 2017). The authors also caution that while computational methods offer powerful new ways to describe and explore social phenomena, sociologists must engage critically with these tools, and the interpretation of computational results should be guided by sociological concepts and understanding.

These arguments are situated within a broader SLOM perspective that advocates for the continued consideration of methods in general. As the name Social Life of Methods suggests, the SLOM outlook proposes that methods are deeply embedded in, and actively shape, the social world (Savage 2013). Since the digital era has introduced new methodological possibilities and computational approaches that are fundamentally altering how social research is conducted, Savage (2013) advocates for the continued consideration and investigation of methods. This is echoed in calls from many others across a range of disciplines, including in social media and media audience research. In particular, social media scholars (such as Moats and Bora 2018, Zeller 2015) and media audience scholars (eg Patriarche et al 2014) call for empirical consideration of methods, or the exploration of how methods perform in different contexts and how they actively study a range of phenomena (Savage 2013). Such consideration also allows for the reliability and replicability of results to be examined (Shadish et al 2002).

I intend for my research to contribute a response to these calls. As discussed above, I use the term "hybrid" methods to also encapsulate the SLOM outlook which advocates for a de-emphasis of the boundaries between qualitative and quantitative methods, and an acceptance of the fact that methods do different things and have different strengths and limitations. The term "hybrid" captures this, while "quali-quantitative" is more tied to the practical integration of methods and approaches. These methodological considerations are another key overarching research concern within my thesis, and therefore my second research question is:

"What are the benefits and limitations of using hybrid methods within social media research?"

In the next section I discuss the practicalities of how I applied hybrid methods within each empirical paper.

Chapter III Data and methods

In the previous chapter, I highlighted the need for academic consideration of the methods for studying media audiences on social media. In particular, I outlined my intention to consider the uses and limitations of a hybrid approach to methods, an overarching concern of this thesis. Therefore, methods play a key role in this thesis. Similarly, the literature review highlighted that the availability of data is a key factor when considering the usefulness of social media for media audience research. Likewise, there are important ethical considerations when undertaking social media research, since it involves secondary data which brings with it difficulties in obtaining consent and protecting users. I discuss each of these areas below.

As a reminder of the three papers before going into detail about data and methods; the first paper "What's in a TikTok Trend?—" explores how trends are presented on the Discover page and how users engage in trends in video captions, the second paper "*Audiencing TikTok—"* explores user interactions within TikTok comment sections, and the third paper "*Why do memes matter?—* explores video memes as a form of vernacular creativity.

1 Data collection and preparation

Across the three papers in this thesis, my data collection decisions were motivated by my overarching focus on trends and popular content. Therefore, all data collection approaches started with the Discover page, which serves as a gateway to trending content (discussed more in the first paper), and from here I selected trends. When a trend is clicked on, the user is led to a video list page, featuring all of the videos associated with this trend, organised in order of popularity. From these video lists associated with the selected trends, I scraped videos and video metadata, as I discuss more below.

In the first paper, I targeted multiple trends from the Discover page in my data collection, in line with my intention for establishing a broader understanding of how trends are presented on this page. Whereas in the following two papers, I zoomed in on a particular trend for each paper.

From the trends selected, I then continued being led by popularity in my sampling. From selected trends, I focused on collecting videos and relevant metadata from the most popular videos. In paper one I collected video captions, in paper two I collected comments, and in paper three I collected videos themselves as well as various pieces of metadata, as I discuss more below.

My sampling approach across all papers involved focusing on the most popular trends and/or content. This can be considered as a purposive approach, where "the sample is intentionally selected according to the purpose of the study" (Salmons 2017, p. 183). The purposive sample is driven by the research focus rather than by a need for findings to be representative of a "population" (Bryman 2006); in this context, population would refer to *all* content on TikTok, or *all* TikTok users. My sampling method is not intended to be representative of all content or users on TikTok, and is instead intended to focus on the most popular content, and the users which post it, aligned with my research aims. Similarly, more popular users have greater baseline visibility of their video content and in the data analysed in paper two, verified users appear first in comments. Therefore, it can also be assumed that my sample reflects content from more popular users, rather than necessarily being representative of the general TikTok user base.

While this focus on popular and trending content aligned with my research aims, it is important to recognise what this approach misses. Prioritising users, content, and behaviours associated with popularity and high engagement inevitably involves overlooking the content and experiences of less visible users. This is especially significant considering that trends are not a neutral reflection of what has been popular among users, as discussed above, since the popularity of trends is constructed through algorithmic mediation (Gillespie 2014, Burcher 2012, Pasquale 2015). Therefore, focusing on trends could make this research more heavily skewed by platform and algorithmic biases, which is an important reflection for all research on trends.

Since TikTok lacked an official API at the time of undertaking the studies, I used a scraper tool. Across the three studies, I used an open-source TikTok scraper from GitHub, which allows videos and their metadata (e.g. video captions, video links, likes, view counts, etc) to be downloaded. GitHub is an established code-sharing platform which many researchers rely

on. Its perceived reliability and trustworthiness are largely considered to be fostered by its contributors (Lima et al 2014, Sajadi et al 2023). To date, this TikTok scraper has been used by over 370 GitHub users and has 13 contributors, indicating a good level of reliability and peer-development. Within the analysis for each paper, I performed spot-checks on the data against the videos and video lists they represented on TikTok, to check for discrepancies between the videos and metadata scraped and what appeared on the video list itself. I rarely found any issues and therefore assumed this to be a reliable scraper and the best option in the absence of an official API. While the first and third papers were based primarily on this scraped data, in the second paper I combined this data with comments which were manual collection, as comments sit behind a sign-in wall and cannot be scraped.

All of the papers focus on trends which revolve around hashtags: various hashtags in paper one, #Hairtok in paper two, and #Tellmewithouttellingme in paper three. Discussions and content which are relevant to the theme of a particular hashtag may not actually use the relevant hashtag (Gerrard 2018, Deller 2011 and Mayr and Weller 2017). Therefore, it is important to recognise that hashtag-based data collection will miss out on some content where users are participating in a trend – that is, engaging in the user behaviours or themes which define a trend – yet are not using the relevant hashtag.

It is also important to recognise that studying media audiences via social media data, and indeed social media users more generally, misses out on important aspects of media experiences. This approach captures certain forms of user behaviour while missing others, and having fewer opportunities to explore context. As I touched on in the Literature Review chapter (Chapter II), many argue that platform data provides limited access to lived histories, social contexts, and biographical trajectories, which are dimensions that have long been central to qualitative and critical traditions of audience research (see Ang 1991, Livingstone 2018). Relatedly, critiques of big data have emphasised how datafication strips practices from the contexts in which they acquire meaning. For instance, boyd and Crawford (2012) identify the “context collapse” as a core epistemological problem of big data analytics, warning that scale and computational power are often mistaken for comprehensiveness. Indeed, this point is amplified since I utilise computational methods in this research, amongst others. Media experiences and user practices are shaped by prior experiences, social positioning, and interpretive frameworks that exceed what platform data can capture.

The acknowledgement of these partialities involved in my data collection decisions does not undermine the value of trend-based analysis based on social media data, but it situates trends as one analytic lens among others, acknowledging what they are useful for, particularly for the focal points that I am interested in (i.e. popular and trending content). Nevertheless, it is important to recognise how focusing on this data and sampling approach is limited in its capacity to account for the full picture of audience life.

I focused heavily on textual data in each paper. Even in the third paper, which studies videos, I performed my analysis on labels and transcriptions of visual, textual and audio material from within the videos. I reflect on this text-heavy focus as a potential limitation in Chapter VII Conclusion, but here I focus on the practicalities of this approach.

To study this data at scale, I used text mining in each of the three papers, which required data preparation to create some uniformity and allow patterns to be more easily and reliably represented. To prepare the textual data for analysis, I used the *tidytext* package in R (De Queiroz et al 2024) to create document-term matrices for each trend. This process converts each piece of textual data into a "bag of words," allowing for the frequency of individual terms to be counted. As part of standard text pre-processing, I removed common stop words (such as the, this, in, a, an), which typically carry limited semantic value (Feldman and Sanger, 2007). To explore two-word and three-word phrases, I applied R functions to count the occurrences of phrases across the dataset, and to present the most frequent. Below, I outline my data collection decisions and practical steps within each of the three papers.

2 Methods and hybrid methods approaches

I utilised two methods across all three papers, content analysis and text mining, but each of the papers also included methods which were unique to them. Within all of the three papers I employed hybrid approaches that integrated qualitative and quantitative techniques. In relation to the second overarching research question which explores hybrid methods ("*What are the benefits and limitations of hybrid methods within social media research*?", I used a combination of integrating qualitative and quantitative approaches, as I outline below.

In the first paper, I combined data visualisation and qualitative content analysis to examine how trends were defined and presented on TikTok, and text mining to study how users engaged with trends in their video captions. In the second paper, I combined content analysis, text mining and social network analysis to study audience interactions in TikTok comment sections. In the third paper, I applied hybrid methods within a multimodal discourse analysis approach, combining computer vision (computational tools to analyse the composition of videos), text mining, and qualitative content analysis to explore various modal dimensions of TikTok video memes (i.e. form, content, and function). I discuss the specifics of these approaches within each paper. Below, I discuss my overarching approaches to the two methods used across all three papers, content analysis and text mining.

2.1 Content analysis

I used content analysis within all three papers, combining elements of both qualitative and quantitative content analysis, in line with my overarching interest in examining hybrid methods. Across the papers, I used content analysis to explore: the meaning of trends via trend descriptions in the first paper; types of user interactions and discussions in the second paper; and elements of creative expression and the subjects within video memes in the third paper. As Shoemaker and Reese (1996) note, the purpose of content analysis within a media studies context is to "impose some sort of order on" the diverse elements of media content in order to "grasp their meaning" (p. 4). This involves identifying and focusing on the features deemed most significant by the researcher. Within quantitative analysis, this means summarising widespread patterns or "categories", and within qualitative analysis, identifying themes which the researcher feels are compelling, based on issues from the literature, themes observed within the data themselves, or drawn from the researcher's experience.

I adopted an inductive coding approach to content analysis, which involves iteratively identifying and refining patterns in the data into thematic categories (Drisko and Machi 2016, Bryman 2006). I did not use a pre-defined codebook as is typical with quantitative content analysis (Bryman 2006). Instead, I allowed categories and themes to emerge from the data, in keeping with qualitative research conventions (Mayring 2020). My coding decisions followed established stages in qualitative content analysis, beginning with immersion in the dataset (Miles and Huberman 1994), then developing codes to summarise key meanings (Schreier

2012), and finally refining these into broader thematic categories (Drisko and Machi 2016).

Within each content analysis in this thesis, I present results from this content analysis within a category count table, and discussed the categories in detail using descriptive, illustrative examples. My presentation of findings therefore also incorporated qualitative and quantitative approaches. Counts and categories are more traditionally associated with quantitative content analysis, where intentions are usually to summarise common patterns across the dataset (Bryman 2006). In contrast, descriptive examples, inductive coding, and building in context into coding decisions are usually used within qualitative content analysis (Bryman 2006). I combined all of these elements to allow me to understand patterns while also considering context and detail.

Considering all of these issues within this analysis enabled me to consider some of the context which quantitative analysis of social media phenomena can miss out on (Livingstone 2019, Baym 2013). Equally, understanding wider patterns was useful in each paper for building a broader understanding of trends and related user behaviour. Considering the trends in closer detail also enabled me to contextualise the wider patterns observed, to understand the user behaviour which underlie these patterns, and to consider interesting aspects of behaviour and trends which may not be widespread but are nevertheless significant and relevant. In addition, incorporating context within the coding decisions enabled me to be led by the wider context of the study, my familiarity with the videos and the overarching meme trend and understandings drawn from the relevant literature—and therefore not solely by patterns observed in the data.

As a practical note, during the content analysis, I sometimes assigned more than one category to a data point such as a video or a comment where this was fitting. Therefore, the counts of the categories presented in my content analysis findings should not be considered as proportional. In other words adding the counts together does not equal the total sample of videos or comments, since categories were overlapping.

2.2 Text mining

I also used text mining across all three papers, using a count-based analysis on the various data types that each paper explored: captions, comments, and video labels and transcripts. My approach involved analysing the most frequently occurring words and phrases in the textual data, whilst also contextualising results in relation to how certain words and phrases were used within the original data and videos. Computational text mining methods explore patterns, which enables the researcher to analyse the composition and structure of textual data (Ignatow and Mihalcea 2017). Common words and phrases can "represent in condensed form the essential content of a document" (Berry et al 2010). As Feldman and Sanger (2007) note, identifying high-frequency terms within a corpus can reveal dominant topics or concerns.

Since the study of trends necessarily involves investigating user behaviour at scale—given that trends are, by nature, widespread—text mining offered an effective way to capture these behaviours across a large volume of user-generated content. Across the three papers, I used text mining to explore how users engage with trends within video captions in the first paper, to understand what users discuss within video comment sections in the second paper, and to explore how video elements (translated and transcribed to textual data) and video topics were used across video memes in the third paper.

Count-based analyses of singular words can miss out on context and semantics (Srivastava and Sahami 2009). Exploring two and three-word phrases went some way towards considering the context that would otherwise be missed if only considering single terms, by considering more than just single word abstractions. To consider context and semantics around words and phrases in more detail, within each study I returned to the dataset of metadata or comments, TikTok itself, and video lists, in order to consider the common words and phrases within the contexts in which they were used. In the literature review, I noted that text mining is considered as an inherently hybrid method, because it observes patterns across rich qualitative textual data while simultaneously considering wider phrasing and contexts around single words (Moats and Borra 2018). I used this hybrid methods approach to enable interpretation of results in a way that considers detail and context.

3 Ethical considerations

As I have discussed above, the growth of social media platforms has created new and unprecedented ways for researchers to study users and their practices on social media. This raises complex ethical challenges that have been widely discussed in the literature. Key issues, which I discuss below, include obtaining informed consent, ensuring the anonymity of participants, and managing the sensitivity of data collected. Current ethical guidelines emphasise the need for context-aware frameworks that balance methodological rigour with participant protections (Williams et al 2017). For many of these issues, there are no perfect solutions, and the researcher must take steps to mitigate risks to users and individuals as far as possible, balancing risks with the utility and wider social good served by the research, such as contributing to knowledge, informing policy, or improving services (Elliot et al 2016). This is the approach that I took throughout my empirical papers, attempting to protect users from risks associated with being included in the research in a way that felt proportionate to the nature of the research, the nature of the risks, and the potential benefit in presenting particular findings and evidence in order to advance understandings within relevant fields. Below, I outline each of these ethical concerns and considerations, and the approaches which I took to protect users involved in my research.

A central ethical concern in social media research is the challenge of obtaining meaningful informed consent. Traditional consent models, which rely on direct interaction with participants, are often impractical when dealing with large-scale, publicly available data (Zimmer 2010). While social media users typically agree to platform terms of service, which often involve agreeing to their publicly available data – that is, data which is not set to private – being available to third parties, these agreements do not equate to informed consent (Fiesler & Proferes 2018). Such data is, therefore, often collected without the users' consent or awareness (Das, R. & Ytre-Arne 2018). Direct and informed consent is not obtainable for large-scale studies and this heightens potential negative impacts of users being identified, whether directly or indirectly, in the findings which then leads to adverse situations for the user. Since users are not aware of being included in research in these circumstances, they have not had the chance to consider the potential implications of being involved and to make the decision for themselves—including the decision on whether to be involved in the research

at all, or whether to adjust their behaviour or the information they share because they are included in the research. In many social media studies, neither the user nor the researcher has entered into an agreement where the contexts and risks of the research for the user have been explained or can be reduced.

Within the context of my research, some elements add further ethical complexity. These points relate to hybrid methods, sampling, and sensitivity of research focus. Firstly, there is a conundrum with hybrid methods research, in that it is difficult to obtain consent due to the scale of the study, yet if the research closely considers and presents user data, users are not afforded the level of protection that abstraction affords in typical large-scale, quantitative studies. In other words, large-scale studies are likely to only present findings which include overarching patterns and statistics, thus reducing the risk of identifying users (Elliot et al 2016), whereas hybrid approaches may zoom in on particular users or smaller groups, and present findings on them.

Further, my purposive sampling method potentially increases the risk of someone finding a user included in my research on TikTok. This is because my sampling method often reflected an order presented in a publicly available video list associated with the hashtags which I discuss in each study. From the hashtag I discuss, it may be possible to find a video list on TikTok and then the video or user discussed in my research more easily than if I had used a random sample of content. This risk is somewhat reduced by the dynamic and ever-changing character of these video lists and the time that has passed since conducting these studies and writing this thesis. Nevertheless, this risk is important to consider, especially if my approaches are replicated in future studies.

Given the issues discussed above, within the presentation of my research I attempted to anonymise and disguise the examples presented. This was not the case for aggregations and categories since these are generalisations (see Elliot et al 2016)). However, no approach is perfect when it comes to the anonymisation or pseudonymisation of social media data. Even when researchers attempt to disguise identities by removing names or usernames, the unique content of posts—such as distinctive phrasing or images—can potentially be traced back to the original user through simple online searches (Zimmer 2010). Therefore, I chose only to present examples of user content and data when I felt it was warranted to do so. This approach is in line with the data minimisation approach, which involves limiting use and

sharing of personal data so that it is proportionate to the a broader social good served by the research, such as contributing to knowledge, informing policy, or improving services (Elliot et al 2016). This is a key tenet of data protection and ethical use of personal data. This approach is not about striving for the utmost protection for users, but instead balancing risk mitigation with the wider benefit of sharing findings.

Practically, an example of this comes from the second paper, as I chose not to anonymise user nicknames (of commenting users and video creators) to a state where they would become completely unrecognisable. Users can input nicknames for their profiles which label them within comment sections and on their profiles, they are distinct from usernames as they do not have to be unique, and are not searchable (TikTok 2025b). The most risk-reducing anonymisation would be to transform nicknames to a series of random digits or letters, so that the nicknames would bear no resemblance to the original. However, I felt that the characteristics of the nicknames were interesting themselves, and I did not want to lose them. The nicknames reflected characteristics of the user and platform culture. For instance, one nickname was dark and hateful in nature, and the user posted hateful and angry comments. Therefore, nicknames could reflect user behaviour and add a dimension to the findings grounded in platform culture, more so than a completely anonymised username would.

Accordingly, I used a pseudonymisation approach. I made like-for-like swaps that replaced the names and the general sentiments expressed in nicknames, attempting to match assumed gender and culture (with Google searches to assist with names with which I was unfamiliar), in order to preserve some of the users' intentions and characteristics within their nicknames. So as an example, I replaced a unisex name of Irish origin with another unisex name of Irish origin. I also replaced interest-based nicknames with ones that were still related to that interest, so as a hypothetical example I would replace 'emilyloveshorses' with 'sarahlikesponies'. It would be hard to find this TikTok user only with this substituted nickname. However, with this "pseudonymised" nickname, combined with the hashtag to use as a search term, a user may be able to assume which user the comment reflects. This would involve several steps of searching, combing through videos to find one that fits my description, and then attempting to manually find comments via nicknames and sometimes several levels of nested replies. Therefore, I felt that this treatment and level of difficulty in re-identification was proportionate to the value of changing nicknames in ways which captured the essential characteristics of the nicknames.

This approach can be situated within the broader process of *fabrication* (Markham 2013). Fabrication recognises that research data are not neutral representations of social reality but are actively constructed through ethical and methodological decisions. From this perspective, pseudonymisation is not a distortion of "original" data but an intervention that balances analytic integrity with participant protection. Markham (2013) argues that fabrication is particularly necessary in digital environments, where complete anonymisation is often impossible, and where reproducing raw data can expose participants to unintended harm. By fabricating TikTok usernames, I dually prioritise contextual understanding and ethical accountability, by making my role in transforming platform traces into research material explicit.

This exemplifies my overall ethical outlook and steps that I took to mitigate risks, in ways which felt proportionate to the level of risk and the value in presenting examples. In addition, in the first paper, I did not include any examples which directly involved user data, only abstractions of common keywords and phrases from user captions. Since these are common phrases, they are relatively far removed from the original user data. This was primarily because the paper focuses on establishing the platform context behind trends, and therefore focuses more on platform data rather than user-generated data.

In the second paper, I presented examples of videos and comments. For the latter, I used the approach described above to swap users' nicknames with "like-for-like" terms and names. The videos themselves could be more easily found than the commenting users, via the video list associated with the hashtag. However, since video lists are dynamic and ever-changing, in reality it would be difficult to find a user based on an example presented. Nevertheless, I chose to describe videos rather than use screenshots, and I also described the user and their typical content rather than using their nickname. For the purpose of framing and contextualising their video content, the descriptions of the users (such as "hairdresser who makes hair content" and "content creator who shares appearance-focused videos") felt more relevant than nicknames, and the descriptions of the videos were sufficient for providing the necessary context. I felt that quoting the comments verbatim was justified by the research aim and proportionate to the level of risk involved. Further, comments are not searchable, and they sit various steps away from the data that I share (in this case, the hashtag), which I felt further justified this approach.

In the third paper, I described examples of particular videos but did not use nicknames, usernames, or screenshots, as these elements were not pertinent enough to the discussions to justify including them as examples. Since this paper involves considering video content, it may have been relevant to include screenshots, but as this was part of a *multimodal* discourse analysis, considering visuals, audio, and textual elements of the video, screenshots would have provided a limited representation of the videos. Therefore, given the ethical concerns involved, and since descriptions included in-depth representations of the video elements, it felt more appropriate to present my own descriptions of the videos. The videos I examine in this paper were included in video lists for the hashtag #TellMeWithoutTellingMe, and sharing a screenshot or username would make it easier to find the original content. Further, the themes in the videos related to cultural identity and ethnic background, which are sensitive topics, and so taking extra steps to protect these users was important.

Overall, the steps discussed above were appropriate to the context of my research, and achieved my intention of approaching studies with a data minimisation approach— limiting the use and sharing of personal data so that it was proportionate to the broader social good served by the research and the level of risks and sensitivity involved (see Elliot et al 2016). I say more about data, methods, ethics and analysis in my three empirical papers which follow.

Chapter IV What's in a TikTok trend? Understanding what constitutes a social media trend, and why trends matter for sociological research.

1 Introduction

Trends are prominent operational features on all the major social media platforms. Broadly, across social media platforms, the objects of trends vary to include hashtags, topics, photo and video content. A commonality in trends across platforms is that they involve things which have recently and quickly achieved popularity. Scholars have highlighted that social media trends play significant roles in society, reflecting personal and political preferences and opinions (van Dijck 2013), shaping both the flow of information online and the things to which users collectively pay attention (Zhang et al 2016). Yet trends are not widely studied (Zhang et al 2016). I intend for this and proceeding papers to show how social media trends matter for society and for sociological research, by exploring how they represent and enable sociologically interesting user phenomena, such as opinions and preferences, social interactions, and creative expression.

I contribute to existing debate that understanding trends requires recognising that they are not simply the result of user interest or creativity, nor solely the product of algorithmic curation. Rather, trends emerge through a dynamic interaction between users and platforms, where users seek visibility and platforms incentivise certain behaviours through algorithmic and design choices. The findings of this paper support this, highlighting that both the platform and users play key roles in defining, characterising and promoting trends and popularity, as I will outline in this paper. For this reason, my research simultaneously examines how TikTok's Discover page structures and presents trends, and how users engage with them. This is a fairly unique approach to consider both influences together, as usually research considers either platform or user phenomena and influences, as discussions of social vs medium research highlight in the literature review (see Rogers 2013). This feeds into my overarching original contribution which highlights that trends are created by an interplay of user and platform influences.

Another interesting question is the extent to which a trend can be considered native to the platform. Building on Rogers' (2013) concept of "natively digital" phenomena, by which he means phenomena that originate on platforms and are unique to them, in this paper I examine whether trends originate in the environment and user practices of TikTok, or are shaped by broader cultural and cross-platform influences outside of TikTok. This matters because the more a trend is embedded in the specific logics and affordances of TikTok and the practices of its users, the more it reflects the platform culture and user practices that are unique to TikTok.

The findings suggest that, on one hand, the Discover page is relatively curated, suggesting that TikTok influences what trends appear on the page and how they are represented, while on the other hand, users' influence on trends was also apparent in the findings. Further, trends and popularity seemed to be important elements for users, since their video captions often revolved around encouraging engagement and visibility for their videos. These findings motivated my proceeding research, highlighting how trends are simultaneously important for users and that user practices play an integral role in shaping and defining trends. The platform influences also provide useful background to reflect on when considering all of the user-related findings within this paper and the rest of the thesis.

As the first paper in my thesis, this paper sets the foundations of my research. Therefore, my first aims were to understand how trends are presented on TikTok's Discover page, a key page on the platform for presenting trends, and to examine how this fits within broader definitions of trends and how it compares to trends presented on other major social media platforms. I begin by reviewing the various ways that social media trends have been discussed within existing literature and the ways in which trends are presented on various platforms. I then present an empirical study in which I explored how trends are presented on TikTok and what they are about, and how users interact with them through captions on trending videos. Within the analysis, I used data visualisation to explore and represent the trajectories of how trends appeared on the Discover page, for instance the duration on the page and the growth in view count they experienced. I also used qualitative content analysis to explore trend descriptions and understand what trends were about, and text mining to examine patterns in video captions and what they suggest about how users engage with trends via video captions.

This paper focuses heavily on the TikTok Discover page, and so it is important to acknowledge that things have changed since conducting this paper and writing this thesis. This data collection was conducted in October 2020, when the Discover page was still present on TikTok. In May 2022, the Discover tab and page were dropped from the TikTok platform (Finn 2022). Yet despite the lack of this central hub for presenting trends that was formerly provided by the Discover page, links to trending hashtags and trending audio are still included in videos, and these link to video lists ordered according to popularity, which are the same kind of lists on which I based the video caption analysis. While the Discover page has been removed from the platform, many of the other trend-centred features and practices which I discuss in my papers remain important.

2 Literature review

When considering how major social media platforms present and approach trends, popularity is the common feature, whilst the objects of trends vary. Yet even within this common feature, there is variation in how popularity is operationalised by platforms. Popularity could mean something is viewed by many users, or something is widely used or represented by many users. I discuss definitions and versions of popularity below, but first of all, I discuss the varying objects and phenomena that constitute trends, since this provides a tangible basis for what follows.

2.1 Defining social media trends: Trends as objects and phenomena

Leavitt (2020) argues that social media trends often take the form of content, or clusters of content such as hashtags, challenges, formats, or viral videos, which receive high engagement and proliferate across platforms in short time frames. Similarly, Zhang et al (2016) state that "[t]rends in online social media can be reflected by the popularity of hashtags, topics or even neologisms such as Internet slang" (p3). Both of these accounts recognise that the element of a trend can vary, as trends can take various objects such as a hashtag, video or image, or phenomena such as topics or neologisms as their target.

For example, on Twitter the "What's happening" section presents users with "trending" hashtags and topics. On YouTube, the user is presented with the most popular pieces of video content within the "Trending" tab. On Instagram, the "Explore" tab presents the user with popular image posts within their sphere of interests. On YouTube, singular and distinct videos are also presented as trends, while on Twitter, topics that are created by widespread discussions are presented as trends. Again, this relates partly to different ways that the popularity of trends is operationalised, which I discuss more below.

The trends presented by platforms are not the sole version of social media trends, and there are phenomena outside of these direct presentations of "trending" content and topics by platforms which can also be considered as trends. Scholars highlight that phenomena such as widely used language, stylistic choices in videos and photos, social movements (e.g. Black Lives Matter), user challenges (i.e. ice bucket challenge, dance routines) and topics can all constitute social media trends (Kietzmann et al 2011, Leavitt 2020). Referencing a trend could involve sending a link to a trending video, or it could be a reference to a type of behaviour or manner of speaking that is widespread across lots of content and platforms. This has ramifications for how trends are found, understood and referenced by users and researchers alike.

Another aspect of trends is the extent to which they involve and represent "native" phenomena (Rogers 2013). Rogers (2013) uses the concept of "natively digital" to recognise phenomena and practices that originate on platforms and are specific to platforms, and uses examples such as retweeting on Twitter and tagging on Instagram as examples which are specific to these platforms and the digital world. Rogers (2013) uses this concept to consider how digital phenomena involve logics, affordances, and user practices that are distinct from those in the offline world, which he argues provides further reason for these phenomena to be studied. With trends emerging on platforms, and with their production enabled by platform conditions, to some extent they can be considered as specific to platforms, and can therefore be considered from this "native" perspective. Yet despite trends being produced, perpetuated, and circulated by platforms, often they are based on or incorporate influences from outside of a specific platform, for instance from other platforms or from the offline world.

TikTok trends often emerge organically from within the app, rather than being based on outside influences (Abidin 2020). Rogers (2013) argues that native phenomena especially

motivate studies on platforms (i.e. since native phenomena can't be studied anywhere else). Extending this argument to trends, trends which are more native to a platform could provide motivation for studying them on that particular platform. In light of these arguments, I argue that it is important to consider how far trends can be considered as "natively" digital (e.g. Rogers 2013), and conversely how far they are influenced by outside influences.

2.2 Defining social media trends: Popularity and platforms

Popularity is key to creating and determining social media trends. Platforms often determine that objects and phenomena which have recently had a steep growth in popularity are trending. Gillespie (2012) uses the term "acceleration" to capture the rapid growth in popularity which Twitter uses to identify trending topics and hashtags. Similarly, YouTube (2020) states that its trending videos are determined in part by what it describes as 'temperature', in other words '[h]ow quickly the video is generating views'. Therefore, trends often involve that which has had a spike in popularity recently, and therefore the trends that platforms present tend to be newly popular and relatively fleeting as they are quickly replaced by the next popular thing.

There are two different types of popularity involved in how platforms define and determine trends. Whereas YouTube places the videos with the highest quantity of user engagement (that is, likes and views) in their trending section, Twitter presents topics and hashtags which are most widely used. In their account of viral content, Alhabash and McAlister (2015) distinguish between these two types of popularity on platforms and define them as: (1) levels of audience engagement (e.g. liking and commenting, as with YouTube, and (2) propagation and content sharing (i.e. widespread use, sharing and exposure, as with Twitter) (p.1318).

Interestingly, the presentation of TikTok trends embodies both types of popularity. The platform recognises widespread trends in content, such as content styles, topics, associated hashtags, which resonates with Alhabash and McAlister (2015)'s propagation definition. At the same time, within video lists under it each trend, videos are ordered by engagement with the most popular videos appearing first. It is significant that on TikTok, trends incorporate singular pieces content (like YouTube) and collections of content (like Twitter) and that both

propagation popularity and engagement popularity underlie the creation and presentation of trends.

So far I have primarily discussed how social media platforms present trends, which has been necessary to set the foundation for the rest of the paper and overarching research. Yet, users also play a role in determining trends. van Dijck (2013) contends that popularity on social media is "engineered through algorithms that prompt users to rank things, ideas, or people" (p.25). As a result, trends, popularity and other online phenomena are outcomes of complex interactions between technological infrastructures and user practices (Rogers 2013). These user and platform processes are often closely entangled, especially on a platform like TikTok which is not explicit about its inner workings and algorithmic design, and has yet to be widely researched (especially in relation to trends) (Abidin 2021).

This paper focuses on how trends are presented on TikTok and on user behaviour within the captions that accompany trending videos. As such, it combines elements of both medium and social research. This is a unique approach, as often research aligns with either focus of platforms or users and related phenomena, but rarely both together. Highlighting this, Rogers (2013) distinguishes between *medium* research, which focuses on the technical affordances and infrastructures of platforms, while *social* research is concerned with user behaviour, cultural practices, and social dynamics that occur within or through platforms (Rogers 2013). Whereas van Dijk (2013) contends that it is "impossible to disregard the platform's organizational level from user practises" (p.25). So while I primarily focus on user practices within this thesis overall, my approach is always grounded in considering platform influences and contexts, as informed by my findings in the first paper, by considering TikTok's role in presenting and defining trends.

While so far my discussion of popularity has focused on how platforms determine trends via popularity, scholars also acknowledge that popularity plays an important role for users of social media, when users create content and when users view the content of others. Rodriquez et al (2020) contend that TikTok creators capitalise on trends in order for their content to be successful on the platform. Studies also suggest that users often evaluate the worth of content and creators based on popularity indicators such as engagement metrics (Burke et al 2009, Kim and Sundar 2012). Yet while users consider these metrics as important indicators of

value and status (Marwick and boyd 2011), it is also important to consider the role of the platform in fuelling the perception of value that users afford to these metrics.

Acknowledging this interplay between user and platform, van Dijck (2013) highlights that platforms commodify user interactions, creating a "social currency" where visibility, engagement and popularity are rewarded, which acts to incentivise users to engage in actions that maximise visibility and popularity. Therefore trending content is more likely to be amplified by TikTok's algorithm, which encourages users to participate in trends by adopting popular hashtags, audio, behaviours, and content formats, aligning their creations with what the platform is more likely to promote (Klung, 2021). Seeking popularity is therefore important for users as well as for platforms, yet it is important to acknowledge how platforms fuel this perceived value. Nevertheless, the sociological significance of trends extends beyond them being mere conduits of popularity, as I discuss in the next section.

2.3 The sociological significance of social media trends, and considering existing research into social media trends

Some scholars have recognised the role which social media trends as cultural phenomena play in making up and understanding society. For instance, van Dijck (2013) argues that social media platforms 'provide precious information on social trends and consumer preferences' by providing data on 'peoples' likes, dislikes, and interests' (p.35). As such, she highlights that trends play an important role in economic and social landscapes. Meanwhile Kennedy (2020) contends that the user practices and lifestyles reflected in TikTok trends provide a window into youth culture. Further, van Dijck (2013) highlights that trends play an important role in the diffusion of information to and about society. From these perspectives, trends have consequences for society, they reflect what matters to people within society, and what commonly reaches people in society. Therefore, from a sociological perspective, it matters what trends are about.

Yet relative to their sociological significance, there is limited sociological research about social media trends. Much of the existing research which focuses on social media trends is concerned primarily on popularity mechanisms, that is how a trend becomes popular (Zhang et al 2016), rather than what trends are about. This type of research is generally undertaken

from a computer science perspective, not a sociological one. For instance, studies have explored detecting peaks in the growth in popularity of trends over time (Zhang et al 2016), and the diffusion of trends amongst social networks of users (Rogers-Pettie and Herrmann 2015, Crane and Sornette 2008, Zhang et al 2016).

There are also plenty of sociologically motivated studies which focus on trending topics and hashtags, and indeed such studies are commonplace in relevant journals such as *Social Media + Society* (eg Guo and Liu 2022, Caldeira 2023, Taylor 2022, Gillespie 2012). However, these studies often do not directly recognise the topics or hashtags they discuss as social media trends, nor do they situate their discussions within the broader context of how social media trends emerge. Usually these studies concern socially significant trends, eg related to social movements such as #BlackLivesMatter or #StopAsianHate (e.g. Guo and Liu 2022), and in a sense they are cherry-picked because of their sociological significance. In contrast, my approach throughout this thesis focuses on solely because they are trends. For all of the reasons discussed above, I argue that they are important sociological phenomena to study. In other words, trends should matter to social researchers because they matter to users. Therefore, there is a need to research what is popular on the platforms as a starting point. This is where my research, in this paper and subsequent papers in my thesis, start.

3 Considering TikTok trends and the Discover page

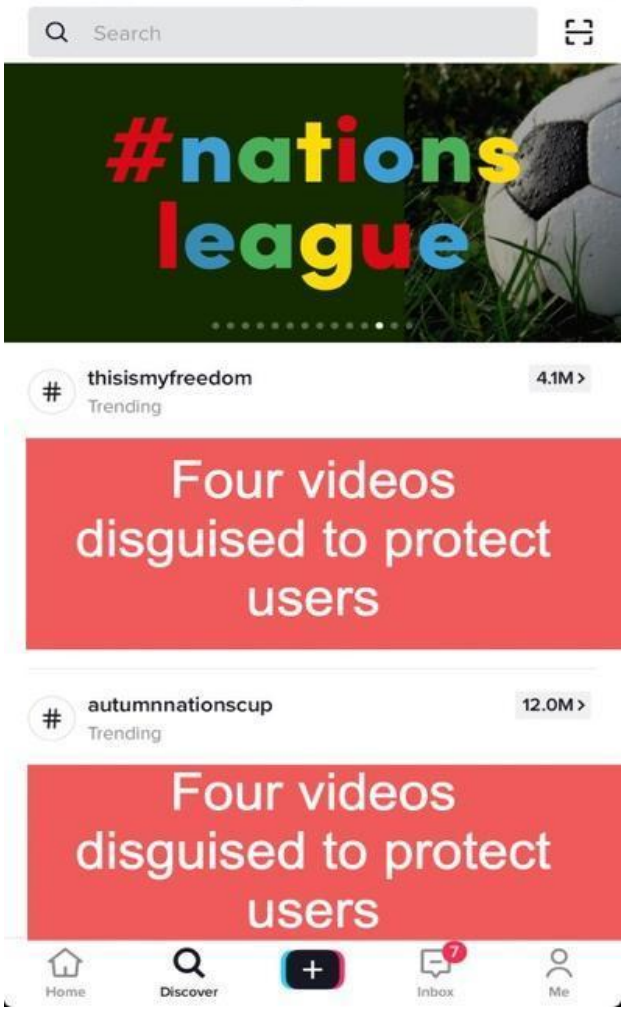
In this paper, I focus on TikTok's Discover page to analyse TikTok trends. At the time of my research, the Discover page was one of the two content lists on the TikTok platform, the other being the For You landing page. These pages present lists of video content from TikTok users. I chose the Discover page as a focal point for the study of trends because it presents popular content corresponding to particular digital objects such as hashtags and music tracks, with each hashtag labelled as "Trending" and each music track labelled as "Trending sound". TikTok labels these elements as trends, and they also fit the definition of trends discussed above. In comparison, the TikTok "For You" page, which is the central landing page on the app and a key place for users seeing content, also presents singular trending videos, but the content is personalised to each user, based on what they have engaged with on the platform previously (Kaye et al. 2022). Since I am considering and defining trends in terms of

widespread popularity, it was preferable to view trends which are made visible to a large audience, hence my choice of the Discover page over the For You page.

On the TikTok app, users access the Discover page by pressing its corresponding button on the main navigation bar, which is a magnifying glass icon (a cross-platform symbol for a search icon) with “Discover” written underneath it (Figure 1). The Discover button is one of only five buttons (the others are Home, “+” sign (to add content), “Inbox” and “Me”. The Discover page also holds the search feature of the app, with a search bar appearing at the top of the page. The use of a search icon for the Discover button emphasises the page’s role in searching and the central role which the page plays for users on the platform.

Figure 1 Screenshot of the Discover page on the TikTok app.

N.B. user videos (4 per trend) have been obscured for user privacy.



This presentation of trends on the Discover page shares similarities with how trends are presented on YouTube and Twitter. Like YouTube, the page presents thumbnails of the most popular videos (Ostrovsky and Chen 2020), and like Twitter these videos are organised topically underneath objects including hashtags, which is a similarity shared with Twitter, and audio tracks, which are unique to TikTok. The hashtags and music tracks, labelled and discussed as "trends" throughout this paper, are presented in a list format on the Discover page (see Figure 1). Each trend has associated metadata comprising:

- an avatar (a photo or symbol)
- view count of the overall trend
- screenshots of the three most popular videos (which play a snippet of the video when you hover over them)
- trend descriptions, presented under each trend on the Discover page as well as on the video list pages (see below)
- a "Trending" or "Trending sound" label for hashtags and music tracks respectively

Each trend on the Discover page can be clicked on to bring up a long list of videos (I call this a video list page) that use the trend hashtag or audio, with videos ordered in descending order of popularity and presented by their video thumbnail. Videos with the highest view counts appear first.

4 Research questions

Within the literature review, platform and user factors both emerged as influences on social media trends. In this paper, I focus partly on how the platform presents trends, and partly on how users engage with trends.

The first research question concentrates on how TikTok presents trends on the Discover page, by asking *"How are TikTok media trends presented on the Discover page? (RQ1)*. This aims to find out about how trends and the Discover page work on TikTok, responding to a gap in literature about how TikTok presents or defines trends. As discussed above, this is intended

to provide a necessary foundation to all of my proceeding research. To approach this question, I considered what types of trends appeared on the platform, how long trends appeared on the Discover page, when the Discover page was updated, how TikTok described the trends, and what the trends were about.

The second research question then turns to how users present trends in video captions, which is just one of the forms of user-generated content on TikTok. The second research questions asks "*How do users engage with social media trends within video captions? (RQ2)*". Out of all of the user-generated content on TikTok, I decided to focus on video captions within this first paper, as they provided a convenient and manageable preliminary exploration into user behaviour. Within the videos that appear on the video lists featured on the Discover page, there are three main sources of user-generated data; the video captions, the video itself, and the comment sections attached to the videos. The latter two are much more complex sources of data and so I concentrate on these within proceeding papers. Since this first study in my series of papers is already focused on the challenging task of setting the foundations of how the TikTok platform presents trends, it seemed appropriate to pair this analysis with the most straightforward of these user data.

Video captions provide a space for users to support their video with text, giving the user the opportunity to add description or context to their video, or to label the videos with hashtags. A user must provide a caption for a video in order to upload it. Snippets from the start of video captions appear across the bottom band of the video screen when a user watches a video, along with the username, and a user can click on "more" at the end of the snippet to expand the caption and read it in full. At the time of writing this paper, video captions on TikTok were limited to 150 characters.

5 Data and methods

I required two datasets for the study, one for each research question. I produced the first one by observing the Discover page over a period of two weeks, in order to understand how trends were presented on the platform (RQ1). Then, I selected trends to focus on within the next part of the analysis, which was the consideration of how users engage with trends within

video captions (RQ2). From these selected trends, I acquired a dataset of video captions using a TikTok scraper tool (darrowfly 2025) for the next stage of the analysis.

The analysis involved three types of methods. I used two of them, data visualisation and qualitative content analysis, to study how trends were presented on TikTok (RQ1) and the third, text mining, to focus on how users engaged with trends within their video captions (RQ2).

5.1 Data collection

I collected data for the study in two ways, with each of the two data collection approaches responding to a particular research question. First of all, I manually collected data from the TikTok Discover page over a two-week period in October 2020, noting metadata on the 34 trends which appeared on the page during this period. The data I chose for the study was intended to capture how trends are presented on the TikTok Discover page and what trends are about (RQ1). Each day I recorded the following for each trend: title, type (hashtag or audio), view count, and the trend description (written by TikTok). I recorded this data in a tabular format.

Focusing on a two-week period makes this a time-limited and time-specific study, which may not be representative of the TikTok Discover page throughout the year and over longer time periods. This is especially true considering that the findings involved events and seasonal trends that reflect the time of year that I collected data, such as Halloween, Black History Month, and returning to school. I deemed this as a suitable length of time for a study of this scale and focus, since this study intended to get a sense of how trends operate on the platform.

Further, after two weeks of manual data collection, I had a good understanding of how the Discover page operated, had identified some interesting results to address RQ1, and some trends to take forward to the subsequent analysis. After an initial period of four days where I recorded data three times a day, I decided that collecting data once a day was sufficient, as I observed that the trends list only changed once per day. View counts were updated more often throughout the day, but I was only interested in the minimum and maximum view count

over the two-week period for each trend to make view counts more easily comparable. Therefore, recording trends on a daily basis was sufficient.

For the second part of the analysis, I selected six of the trends from the earlier analysis to focus on: the three most popular hashtags and the three most popular music tracks. This enabled me to consider both types of trends that appeared on the page. Focusing on the most popular of each type aligned with my overarching focus on popularity. The trends which I focused on, and their trend descriptions, were as follows:

Hashtag trends (presented along with their TikTok trend descriptions)

- #gimmesometruth – "We're celebrating John Lennon's 80th birthday this week, so whether you're covering a song, or teaching us about his legacy, join the community and honor one of the greatest songwriters of his generation."
- #teacherlife – "POV: Back to school... but this time you're a teacher"
- #moveformentalhealth – "Now more than ever we need a global movement calling for investment in mental health. Whether you want to play sport, dance, go for a walk or come up with your own ways to move, this World Mental Health Day, let's all #MoveForMentalHealth."

Music track trends (TikTok does not provide descriptions for audio trends)

- Party Girl - Stay Solid Rocky
- Savage Love (Laxed - Siren Beat) - Jawsh 685 & Jason Derulo
- Say So - Doja Cat

For the second mode of data collection, I scraped video captions from the 10,000 most popular videos for each of these six trends, which created a total dataset of 60,000 video captions. The video lists under each trend are presented in descending order of popularity, so this sample reflected the first 10,000 videos in the video lists for each trend. Again, focusing on the most popular videos aligned with my overarching focus on popularity. Due to the lack of an official TikTok API, I used a widely adopted and peer-developed GitHub scraper called tiktok-scraper by user "drawrowfly" (drawrowfly 2025), which proved reliable through both community validation and manual data verification. As this study used purposive sampling focused on popular content, the findings are not representative of TikTok as a whole and should be interpreted with this in mind.

5.2 Methods of analysis

5.2.1 Visualising how TikTok trends are presented on the Discover page

To analyse how trends were presented on the Discover page (RQ1), firstly I used data visualisations to explore and present the popularity (view count) and duration (number of days) of trends varied over the two-week period. I present this in a four-dimensional graph below, distinguishing between trend type and view count increase via marker colour and size, with the x axis showing the duration that a trend appeared on the Discover page, and the y axis indicating the highest view count a trend achieved. This enabled me to explore how trends are presented on the Discover page and to easily make comparisons between trends.

5.2.2 Content analysis of trend descriptions

To conclude my examination of RQ1, I used content analysis to explore what trends were about. This contributed to understanding of how trends are presented on TikTok (RQ1). This analysis was only based on hashtag trends, as TikTok does not provide descriptions for audio trends. Further, my overarching research focus is on popularity, and audio trends were also much less popular than hashtag trends. As a result, I focus on hashtag trends in future papers.

Trend descriptions, by their nature, are designed to summarise what the trends are about. They involve a generalisation of the patterns in user behaviour across the collection of videos which are based on a trend. Therefore, whilst I performed a small-scale qualitative analysis of trend descriptions (for the 24 hashtag trends that appeared on the Discover page over the two-week period), it was based on descriptions which reflect wider patterns across the trends.

As discussed in chapter III, across all of the three papers, I use an approach to content analysis which combines consideration of common patterns and of context and detail. This involved iteratively distilling the patterns I observed into categories which summarised key themes (see Drisko and Machi 2016, Bryman 2010), building in additional context to my coding decisions by considering video content, and using descriptive illustrative examples to

support and explore the categories further.

5.2.3 Text mining of video captions

Finally, I used text mining to investigate patterns in how users engage with trends within their video captions (RQ2). Again, this was a method which I used across all three papers. I used a count-based analysis, exploring the most frequent words and phrases which appeared in the video captions, an approach which can reflect dominant topics or concerns across the collection of texts (Feldman and Sanger 2007).

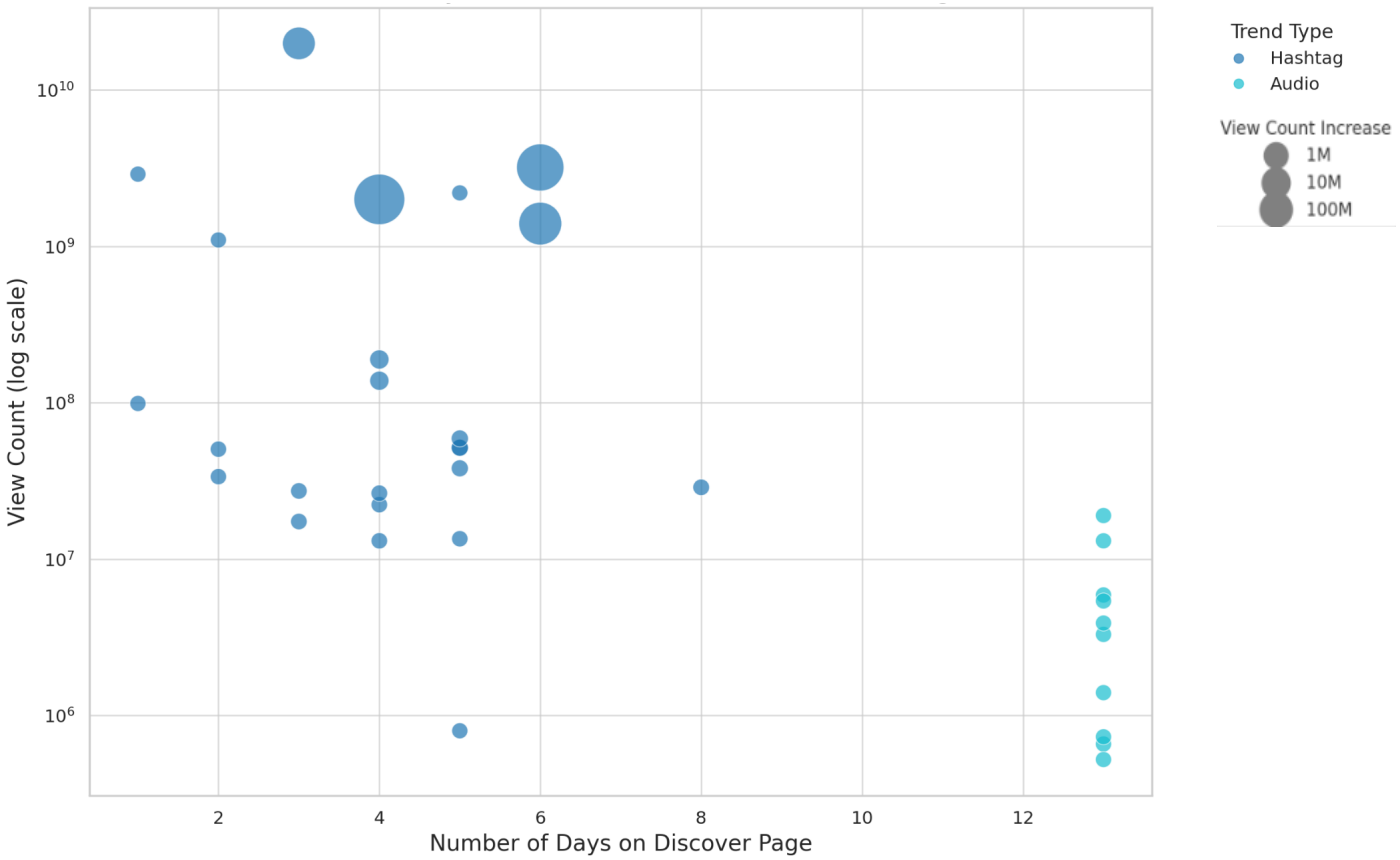
As well as the data preparation steps discussed in Chapter III, which involved removing common "stop words" and making the data uniform, for part of the analysis I also removed hashtags, as they dominated the findings initially. This allowed me to better explore the language elements of the captions, as I explain in the findings section.

6 Findings

6.1 TikTok's curation of trends

The presentation of trends on the TikTok Discover page suggests a curated collection of trends, where TikTok plays a key role in determining and defining trends which it makes visible. On the Discover page, there were differences in how hashtags and audio trends appeared and performed (Figure 2). Audio trends received significantly lower view counts, and they also experienced much less growth in view count over the two-week period. Yet whilst most audio tracks sustained a place on the Discover page for the full two-week period, hashtag trends were updated more dynamically, and generally appeared for 4-6 days before being replaced by other hashtag trends. These differences in the popularity and duration between audio and hashtag trends are evident in Figure 2. The vertical and horizontal clustering of hashtag and audio trends in this visualisation highlights the differences in duration and popularity (by view count) between hashtag and audio trends.

Figure 2: How trends varied in view count and duration over the two-week period



The visualisation in Figure 2 also highlights the high variation in view counts for the trends appearing on the Discover page. There were also four particularly high-performing trends which experienced high view counts and significant growth in view counts, indicated by their points on the graph being much larger than others (notice the log scale downscales this difference). All of the trends which experienced high growth in views were hashtag trends.

The trends list on the Discover page was generally updated once a day, with the view counts updated dynamically throughout the day. When I was collecting data three times a day at the beginning of the study, I observed changes to the trends list in my morning data collection at 10:00 GMT, although this update could have occurred any time between my evening and morning data collection (22:00 GMT and 10:00 GMT). This update saw at least one new hashtag appearing each day, generally replacing an existing hashtag, with at least one hashtag trend being taken off the page.

This consistency in the time of day and number of additions in daily updates of the Discover page could suggest that trends are selected editorially, since they are updated systematically (i.e. informed by choices) rather than dynamically (i.e. determined by changes in popularity). In other words, it suggests that TikTok teams could be cherry-picking trends each day to appear in the Discover page.

Other observations also seem to support this notion of a controlled and edited Discover page. New trends that appeared always had a description already attached to them, so I never observed a trend without a description. In other words, the Discover page seemed well controlled in that no hashtag trend appeared there before it had a dedicated description, and there seemed to be a steady-paced stream of updates. Further, the consistent proportion of hashtags and audio trends throughout the time-period, despite stark differences in view count and growth in view count, suggested that TikTok ensures a set proportion of hashtag and audio trends.

All of this points to a relatively curated page, rather than one which updates dynamically and sporadically according to what is most popular at a given time. So whilst YouTube and Twitter mostly present trends algorithmically and dynamically based on growth in popularity, albeit with some intentional curating and omissions of controversial trends (Gillespie 2012), the Discover page seems to present trends in a more gradual, regimented, and curated way. This is perhaps not an entirely surprising finding, as if the page updated dynamically with no intervention from TikTok, it would be a free-for-all of trending content where anything could appear. Considering the backlash which TikTok frequently faces over controversial and dangerous "challenges" emerging on the platform (see Zhang et al 2022, Amnesty International 2023), without some intervention, controversial content could be made more visible by the Discover page. Furthermore, this level of curation provides an opportunity for platform editors to provide trend descriptions to capture the essence of the hashtag trends.

The curation of the TikTok Discover page is significant in relation to the interplay between platform and user influences (Rogers 2013), discussed in the literature review. Although trends reflect user practices and behaviour, curation of the Discover page highlights the level of influence that TikTok has on how trends are presented on the platform. This finding that TikTok plays an active role in determining, editing and defining what trends are pushed to

users via the Discovery page provides important background for the rest of this paper and subsequent papers.

6.2 Trend descriptions and user practices

TikTok trends descriptions simultaneously capture and influence user practices within trends, while trends are ultimately characterised by meaningful and TikTok-native user practices. Trend descriptions provided explanations of what each trend was about, and most descriptions provide the user with instructional language on how to participate in the trend. The trend descriptions tended to use direct address, such as "you" and "your", and instructional phrasing was also used in the majority of trend descriptions. For instance, for the *#benditlike* trend (encouraging users share goal celebrations), the TikTok description explicitly explained the concept of the trend and provided instructions to users for using the hashtag:

> "Do you want to share your goal celebration with the whole world? Participate in #BenditLike. The concept is simple: Reproduce the celebrations of the best players in Ligue 1 Uber Eats: NEYMAR, MBAPPE, DEPAY, BENEDETTO, DELORT and more, then add your own! Show us your style!"

In a similar vein, TikTok provided instructions of how to get involved in the #Artober trend (art inspired by October): "Grab your pens and get drawing because #Artober is starting".

This instructional phrasing and addressing the user directly seems intended to encourage users to engage in trends in a particular way. This is interesting to consider in relation to how the platform influences user behaviour and shapes trends. Yet it is also important to acknowledge that by the time a trend comes to appear on the Discover page, it has already drummed up a high level of engagement and participation (as the findings in the section above highlight). Whilst it is likely that TikTok base their trend descriptions on existing widespread user behaviours—which have already emerged and been perpetuated within the trend—it also seems fair to assume that the TikTok trend descriptions influence how users engage with a trend after it appears on the Discover page, especially given their use of instructional phrasing and direct address. Therefore, this is an example of how platform and

user influences simultaneously shape, define and impact trends.

As with the findings above, this is important foundational context for the rest of my research. It highlights how the platform could shape user practices involved in trends, for instance in how users discuss and understand trends (the subject of paper 2) and create content within trends (the subject of paper 3). Yet equally, the fact that trend descriptions refer to how users can participate in the trend also emphasises the role that users play in how trends are defined, and how they will continue to play out on the platform.

Many of the categories I produced in the content analysis highlighted how trends can facilitate personally and socially fulfilling interactions for users. They suggest that trends create opportunities for users to express aspects of their identity, contribute knowledge, or engage with shared cultural references. For instance, *Learning and sharing* encourages users to offer advice or insights, fulfilling a social function of helping others, while *Appearance* and *Music* allow for personal expression and performance (Table 1). The categories *Event and seasonal* or *Celebrity* (Table 1) involve topics and interests which may be recognisable to many, enabling users to connect around a common topic. These categories suggest that trends centre on desires to relate, contribute, and belong, which are core motivations that underpin meaningful interactions. Another significant discussion in relation to the categories overall revolves around how far trends can be considered as "native" vs. how far they are shaped by influences outside of TikTok, and indeed there is an interplay of both native and outside influences across the trends, as I will discuss below.

Table 1: Count table of content analysis categories

Categories	**Count**
Event and seasonal	11
Scenario/scene setting	5
Learning and sharing	5
Appearance	4
Celebrity	3
Music	3
Sport and physical activity	3
TikTok feature / technique	3

The most popular category was *Event and seasonal,* which incorporated global awareness events (e.g. Black History Month and Mental Health Awareness Week), sport events, and seasonal and time of year events (e.g. Halloween, Autumn, and back to school). The count of *Event and seasonal* trends meant that a third (11 / 33) of the trends recorded over the two-week period were event-driven. In the literature review for this chapter, I argued that trends were relatively fleeting, since they are often determined by 'acceleration' in popularity (Gillespie 2012) (i.e. getting popular quickly and recently) and therefore quickly replaced by the next popular thing. This prevalence of event trends on TikTok supports this idea , especially since the trends pertained to events which reflect a relatively short period, such as Black History Month or Halloween.

It is also interesting that so many of the event-related trends respond to "outside" stimuli – that is, things which emerge and happen outside of TikTok, such as Halloween, John Lennon's birthday, back to school, Black History Month. As I discussed in the literature review, through his discussions of "natively" digital objects, Rogers (2013) highlights the value in studying objects and phenomena which are "native" to platforms, or which originates on a platform and are specific to that platform. Yet the prevalence of event-related trends highlights that many TikTok trends draw on outside stimuli, and issues which are relevant outside of the platform and the internet. I expected to see the findings more dominated by native trends, due to the strong association between TikTok and native "challenge" type trends (see Zulli and Zulli 2020). This is an important point, as so far, definitions of social media trends are not specific about how "native" a trend should be for it to be labelled as a social media trend rather than an outside phenomenon or topic.

However, while event-related trends formed the most prevalent standalone category, collectively the trends which were not event-driven made up a greater portion of the trends in comparison (22 of 33 trends). Many of these trends seemed specific to TikTok at the time of the study. Overall, this paints a fairly balanced picture of TikTok as incorporating natively and outside-influenced trends, yet it is still significant that the frequency of non-native trends exceeded my expectations.

The second most common categories which I observed were *Scenario and scene setting*, and *Learning and sharing* trends. Descriptions for the *Scenario and scene setting* trends asked

users to base their videos on certain scenarios, for example:

> #teacherlife: "*Back to school... but this time you're a teacher*",
> #thatonebeat: *'You're telling someone how it is, but everything flows to that one beat…'*
> #maincharacterchallenge: *"You're the main character of your story…"*

Learning and sharing trend descriptions encouraged the sharing of information and ideas between users, for instance:

> #onceuponastar: "*The Draconid Meteor Shower is peaking in the Northern Hemisphere - look to the skies, make a wish, and learn something new about space*".

> #beinspired for the international day of the girl: "*The International Day of the Girl is here, and we're celebrating incredible women. So whether you're a female entrepreneur pushing boundaries, or saying thanks to the women who made a difference in your life, tell us your inspirational stories, make a difference, and join the Malala Fund in commemorating inspirational women*."

It is noteworthy that both of these types of trends are centred on user practices, specifically acting, storytelling, sharing and learning. So whilst the trends each correspond to different topics or situations, all descriptions identify how users can participate in them through their own actions and involvement. This puts the power in the hands of users to perform, interact, interpret, and share information and stories, and involves TikTok emphasising the role of the user within the trend descriptions. So whilst the two learning trends illustrated above, #onceuponastar and #beinspired, relate to outside events – an astronomical event and the International Day of the Girl – the trend descriptions emphasise the user's role in interpreting and incorporating these themes into their own practices within their videos. Further supporting this point, the hashtags themselves are often based on the user practices involved in the trend, even when the trend is based on outside influences. For instance:

- #myroots for Black History Month encourages users to share their roots, with the trend description prompting them to share videos about their own cultures (e.g. family recipes, identities, hair care routines)

- #teacherlife to mark the back to school season encourages users through the hashtag and trend description to act out scenarios where they are teachers
- #gimmesometruth for John Lennon's birthday encourages users to share their truth, via a playful reference to John Lennon's song of the same name as the hashtag, prompting users to cover songs, share music, and teach about John Lennon's legacy

The examples above all involve a trend based on outside stimuli being labelled according to the user practices involved in the trend. For example, rather than #backtoschool, it is #teacherlife. Rather than #BlackHistoryMonth, it is #myroots. The outside events and stimuli are backdrops to TikTok user practices, with hashtags and trend descriptions centring around user behaviour. This constitutes a "TikTok-ification" of these influences, and makes them feel distinctly more "native".

Therefore, overall, user practices play a central role in how trends are defined, characterised, and labelled. In relation to my question about the presentation of trends on TikTok (RQ1), whilst TikTok plays a curating role in the presentation of trends, user practices also play a significant role in how trends are defined and presented. I discussed earlier that trends can be considered as trending content (i.e. trending videos) and topics (i.e. Emmys or #Britishcore), but also as popular trends in user behaviour (i.e. dance routines). In emphasising user practices within the descriptions of trends, TikTok seems to incorporate both within its trends. What's more, we can also see that TikTok emphasises user behaviour more so than the other major platforms do in their presentation of trends, as discussed earlier.

Further, regarding how far TikTok trends can be considered "native",` while there was a balance overall in native trends and outside-influenced trends, the way that trends were presented by the platform and navigated by users contributed to what I call a "TikTok-ification" of trends. This is because trends that drew from outside influences were labelled and defined according to the user practices they involved. This again centres user practices in how trends are defined and highlights the role that user practices play in characterising trends.

It is also significant that scene and scenario setting trends (and also to an extent the learning and sharing trends) seem facilitated by the nature of content production on the TikTok platform. As a video platform which allows users to film and edit videos relatively easily,

TikTok enables users to perform and tell stories via video. Therefore the prevalence of encouraging performance and storytelling in trends and their definitions is perhaps facilitated by the design of the platform being especially catered towards storytelling techniques. Further, the learning and sharing trends encourage users to look to each other to share, learn, and propagate information. Whereas other major platforms, like Twitter and YouTube, involve lots of outside content (e.g. from press and TV, see Orellana-Rodriguez and Keane 2018 and Burgess 2008), TikTok places more reliance on its users as creators of content and information.

With its accessible content creation features which allows smartphone users to easily create videos within the app, and with trends which emphasise user practice, TikTok emphasises user-generated content whilst other platforms that previously focused on user-generated content, like YouTube, increasingly move away from this form of content (Burgess 2008). The importance of non-event trends on TikTok also distinguishes it from a platform like Twitter which is recognised as a news-oriented (and therefore, event-oriented) platform (Orellana-Rodriguez and Keane 2018).

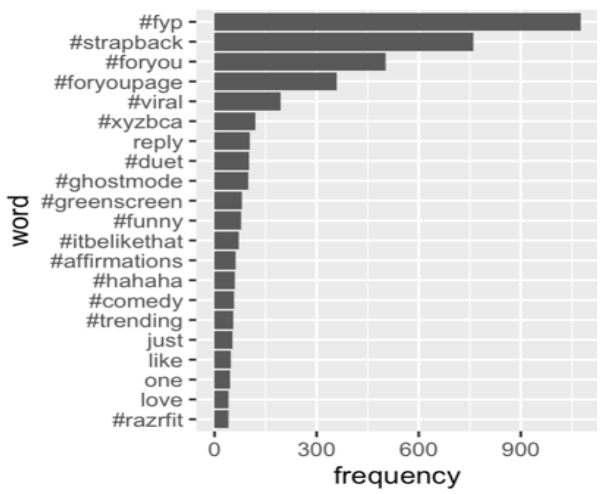
6.3 Video captions highlight that popularity and platform features are important to users

Hashtags were prevalent across the video captions, and this was true across all trends (see Figure 3). In particular, the #fyp hashtag was the most popular term across all six trends, and similar hashtags (#foryou, #foryoupage, #fypg, #fy) ranked highly in the most common terms. The hashtags are all variations that refer to the For You page. Haskins (2019) writes that TikTok users tag captions with these types of hashtag in the hopes of appearing on the For You Page. Similarly, hashtags such as #viral and #trending were also prevalent across the top 20 terms, with at least one of these two hashtags appearing in the top 20 terms for each trend.

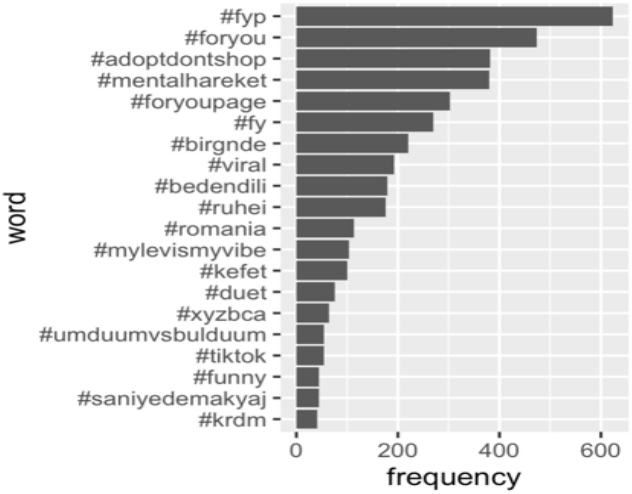
The prevalence of these types of hashtags in captions suggests that many users are striving for popularity and visibility. This highlights how captions are leveraged by users to try and get their video seen and to become popular. This finding highlights that trends and popularity are also important to users, not only to TikTok itself.

Figure 3: Top 20 most frequent terms (including hashtags) for each of the six trends

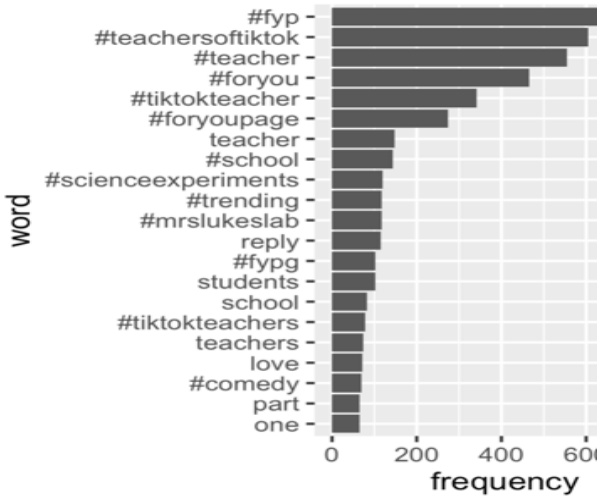
#gimmesometruth



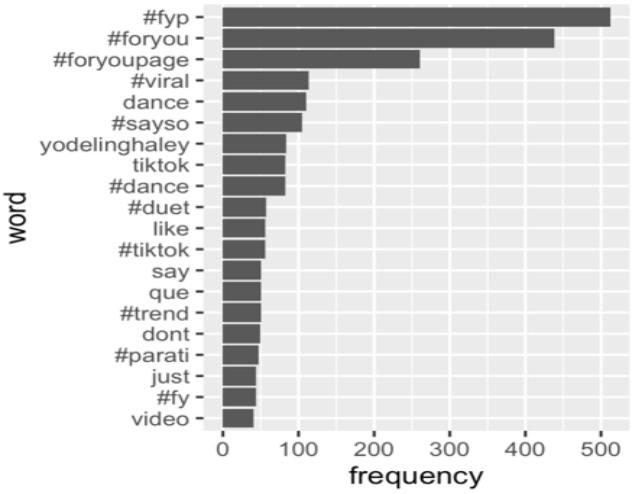
#moveformentalhealth



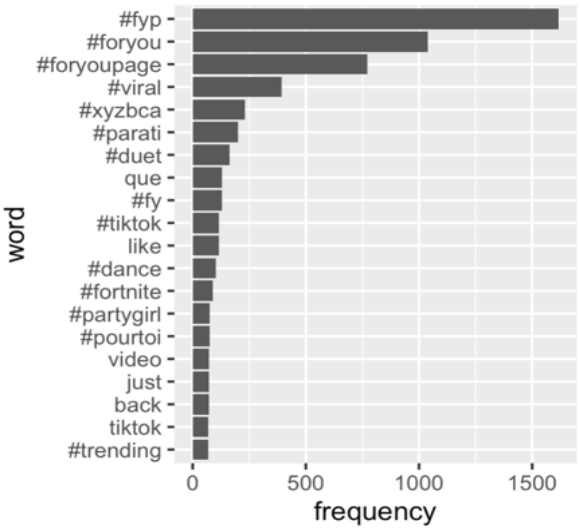
#teacherlife



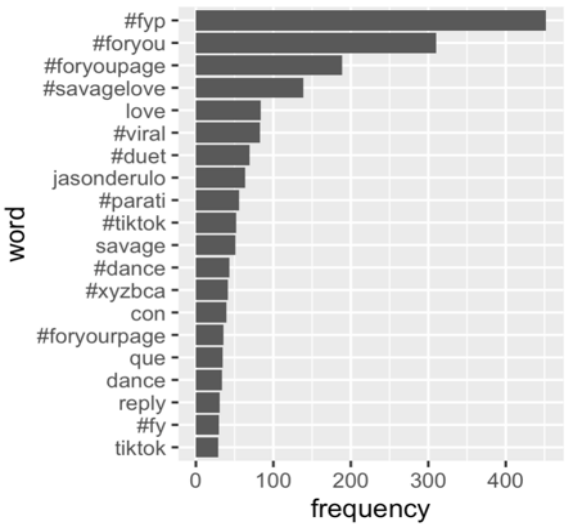
Say So (music track)



Party Girl (music track)



Savage Love (music track)



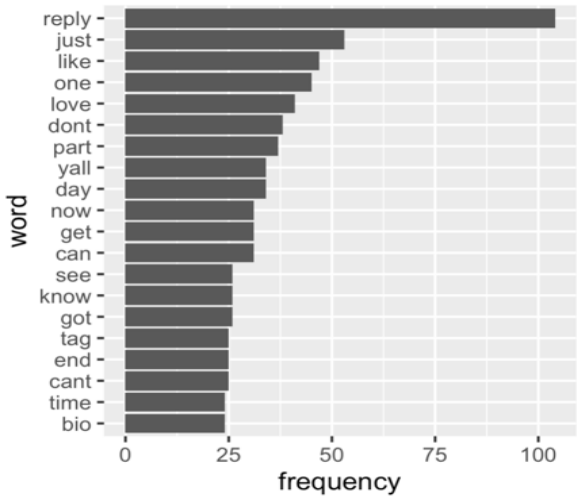
Video captions included hashtags and terms related to TikTok and its video editing features, such as editing techniques, effects and filters, including #duet, “duet”, #greenscreen, #ghostmode, #tiktok. This suggests that these elements are important for TikTok users, with regard to how users participate in trends, make sense of trends, and contextualise their video content. To return to considerations of the interplay between how users influence and how the platform influences trends, it is interesting that platform elements are significant for users, and that users acknowledge them regularly.

Since many of the same hashtags were prevalent in captions across all trends, and therefore were not particularly useful for distinguishing trends, I removed hashtags from the analysis to explore key non-hashtag words (see Figure 4). One prevalent finding across video captions for all of the trends was that the terms “reply” and “like” were common. These terms are also platform mechanisms and elements, and so they further support the notion that the platform plays an important role for users in how they navigate trends. Further, these terms relate to ways that other users can engage with the videos, and similar phrases aimed at encouraging engagement from other users were prevalent in multiple word phrases.

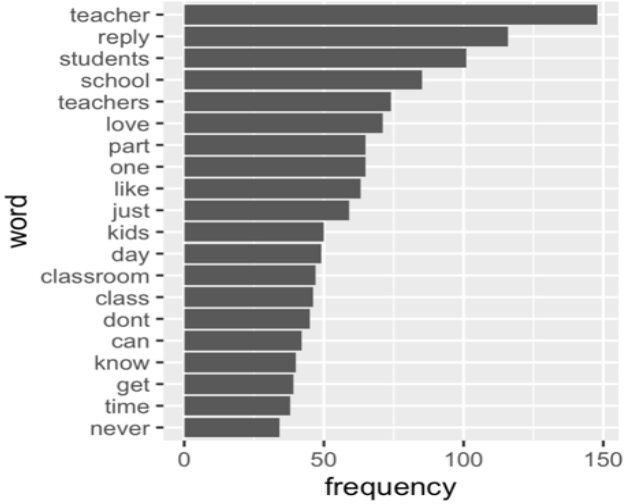
Across the video captions, the most frequent words were often not particularly descriptive about trends, although the level of descriptiveness varied between trends. For instance, comparing #teacherlife with #gimmesometruth, the #teacherlifetrend had many words that might be expected to appear in a school-related trend, such as teacher(s), students, school, classroom, whilst the most frequent terms within #gimmesometruth video captions were more ambiguous (don’t, part, day). Similarly, music trends each contained “dance” within their top 20 words, supports the notion that dance trends are prominent on TikTok (Kennedy 2020), and that music trends tend to be at least partly dance-related. Overall, many of the frequent terms across trends were either ambiguous or not particularly compelling. This highlights the need for consideration of more context surrounding the singular words, which motivated the proceeding analysis of phrases.

Figure 4: Most frequent 20 terms (excluding hashtags) for the six trends

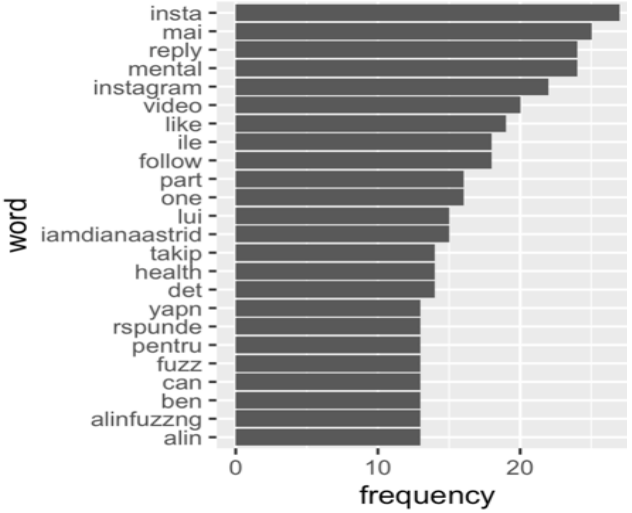
#gimmesometruth



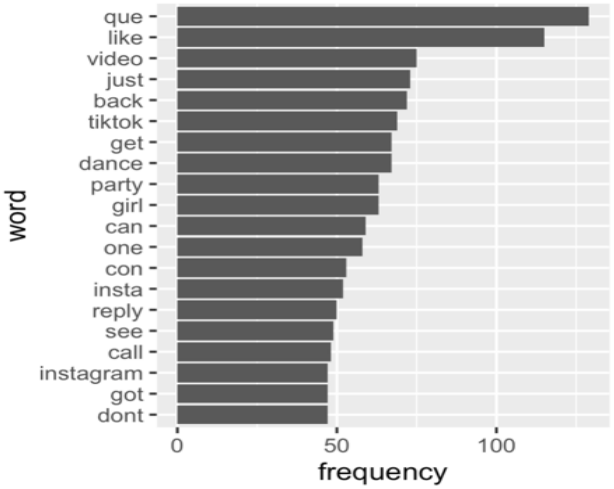
#teacherlife



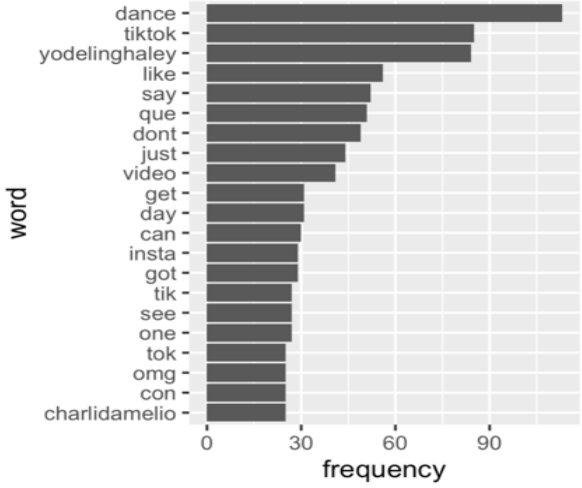
#moveformentalhealth



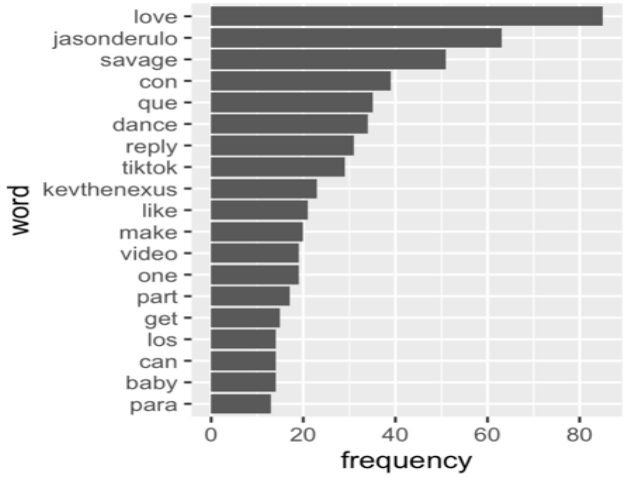
Party Girl (music track)



Say So (music track)



Savage Love (music track)



The most frequent two and three word phrases also contained language relating to user engagement. Such language is often used in the context of suggesting how viewers of a video can engage with the video. For instance, phrases such as “link bio” (or “link in bio”) and “wait till end” (“wait till the end”) were fairly prevalent across the top 20 phrases for the trends. Paired with the prevalence of hashtags related to popularity, visibility and becoming viral, it is interesting that users are encouraging and instructing users to engage with their videos within the captions. The literature review highlighted how user engagement such as likes, comments, view count contribute towards how platforms algorithmically determine popularity, and that popularity leads to greater visibility. Therefore, encouraging other users to engage with their videos is one way that users seek popularity within their video captions.

As with the most frequent words (discussed above), the phrases providing descriptions of trends also varied between trends. Again, the top 20 phrases for #teacherlife contained some meaningful suggestions on the content of videos, for instance “love job”, “true story”, “organizing classroom”, “student vs teacher”. Comparing this to #gimmesometruth, the top phrases for this trend were much less about the meaning of videos and focused on user engagement, such as “link bio", “wait till end”, and “stay tuned”.

Overall, video captions said more about users striving for popularity than they did about the nature or content of the videos within the trends. This could be partly the result of count-based text mining drawing out these common buzzwords, phrases and hashtags because they are written in systematic ways, in comparison to descriptive language where there is more variation. However, on manually reading the caption data, I also found that it was common for video captions to be solely made up of popularity focused hashtags such as #fyp, #foryoupage, #viral and often containing little or no descriptive language about the video itself. Therefore, in response to my second research question about how users engage with the trends in video captions, the findings highlight that striving for popularity and visibility is important ways in which users engage with trends. This was one of the key uses of the video caption. This suggests that trends and popularity are important to users, and that video captions are predominantly used for driving popularity and visibility, rather than for providing descriptions of content or engaging with a trend or content thematically.

7 Conclusion

This study aimed to explore how trends are presented on TikTok (RQ1) and how users engage with them in the video captions (RQ2), using a combination of data visualisations, qualitative content analysis (RQ1) and text mining analysis (RQ2).

Analysis of the TikTok Discover page and consideration of how trends are presented on the platform (RQ1) suggests that the Discover page is highly curated, and that trends are presented systematically rather than dynamically. The consistency in the timing of updates, the proportion of the types of trends presented (hashtag and audio) and the pairing of each hashtag with a trend description, all suggested that the page is curated by the people who manage TikTok. Further, high variation in levels of popularity between the trends suggested that TikTok teams could be cherry-picking trends each day to appear on the Discover page, rather than automatically and dynamically displaying the most popular content, as Twitter and YouTube do.

In trend descriptions, TikTok seeks to influence how users should engage with the trends, as they feature summaries of the trends which were often instructional in nature. It is very likely that these instructional descriptions will influence how users engage with the trend after finding it on the Discover page. So again, this suggests that TikTok plays an active role in shaping trends on the platform and provides one answer to my first research question, *"How are TikTok media trends presented on the Discover page?*. Yet while the role of the TikTok platform is evident in how trends were presented on the Discover page, the role of the users can also be seen in how trends were defined and labelled within these presentations.
User practices including performing, interpreting, storytelling, learning, and sharing information were central in how trends were labelled and defined. Indeed, even trends which were based on outside events and influences, such as John Lennon's birthday and Black History Month, had hashtags and descriptions which focused on the user practices that defined the trends, such as storytelling influenced by music, and sharing family and ethnic roots. This constitutes what I referred to as a "TikTok-ification" of outside phenomena, with users making these issues and events their own, using the outside influences as backdrops for their creative, informative and performative pursuits. Therefore, a further answer to my first research question *"How are TikTok media trends presented on the Discover page?* is that, user practices play a central role, given that TikTok focus their labels and descriptions on

user practices.

Discussions of what trends were about also provided some interesting reflections about how far trends are native to TikTok. Drawing together literature about trends with discussions about "natively digital" phenomena (Rogers 2013), I highlighted that there is no discussion on how far social media trends should be "native" to a platform or social media, i.e. originating on and unique to it. This is an important consideration, as Rogers (2013) argues that we should be especially motivated to study on platforms the phenomena which are native to them. Within the findings of this paper, while the most common single category was *Events and seasonal*, which focused on topics based on stimuli outside of TikTok (such as Halloween, John Lennon's birthday, and Black History Month), collectively the trends which were not based on outside influences and which might be considered native were slightly more common than trends which were. Interestingly, trends which were based on outside influences were shaped and defined predominantly by user practices. Therefore, user practices played a key role in reshaping these broader influences into trends which felt more native to TikTok, which is another compelling finding about users' role in shaping trends.

Further, if TikTok is dominated by native trends, as the findings suggest, it is therefore distinct from a platform like Twitter, which is widely recognised as a news-oriented platform (Orellana-Rodriguez and Keane 2018), and therefore one where outside influences and events play an important role. That TikTok trends are so different from Twitter trends is an important finding and contribution to knowledge, as much of the existing literature on trends and trending topics focuses on Twitter (e.g. Gillespie 2012, Taylor 2022, Rogers-Pettie, Herrmann 2015, Leavitt 2020).

Whereas other major platforms, like Twitter and YouTube, involve much outside content (e.g. from press and TV), TikTok places more reliance on its users as a key driving force on the platform, as creators of content and information. I suggested that this might be partly encouraged and facilitated by how TikTok makes video filming and editing videos widely accessible. All a user needs in order to create a video is a smart-phone with a camera, and the rest of the filming and editing can be managed in-app with features that are relatively easy for people to use and do not require specialist skills. (This is a topic which I explore in more detail in the third paper). By creating this accessible platform, and emphasising user practices, TikTok places user-generated content as central to how the platform works, whilst

comparable platforms like YouTube increasingly move away from this form of content (Burgess 2008).

Many of the trend descriptions also emphasised users turning to each other to share, learn, and propagate information, suggesting that trends centre around personally and socially meaningful interactions and themes. Trends provided users with opportunities to express their skills and identity, to share knowledge, to learn from each other, or to engage with widely recognisable themes. Overall, the prevalence of these themes suggests that TikTok trends are shaped by users' desires to relate to others, contribute to collective experiences, and establish a sense of belonging, which are meaningful ways to engage with TikTok, trends, and other users. I began the paper and this thesis with the proposition that trends matter for sociological research, as they may reflect important aspects of users' lives, such as preferences and opinions. Trends being based around these themes and user practices supports this idea, and goes a step further, highlighting that trends involve personally and socially significant topics, content and interactions. This feeds into my overarching original contribution that TikTok trends reflect personally and socially significant interactions and aspects of users' lives. This also provides a promising basis for the proceeding papers, which focus more on the meaningful interactions which users have while discussing content and creating videos related to trends.

In relation to my second research question regarding how users engaged with trends within video captions, the findings highlighted that users utilised captions to strive for popularity and visibility via hashtags, such as #foryoupage and #viral, and encouraging users to engage with their video, for example inviting them to watch to the end, like, comment. Trends are defined by high popularity, and popularity also seems as important to users, and not just to the TikTok platform. Indeed, users seemed to prioritise striving for popularity and visibility via their captions more so than providing description or context about their video within the captions. However, there was some variation in this, as the video captions within some trends were more descriptive than within others.

These findings suggest that it is important to study other data types on TikTok, data types which may reflect more about how user videos engage with trends thematically. It also highlights how the selection of trends within research is important, as user practices in relation to trends vary, with some trends were more dominated by users who prioritise striving for popularity and visibility over meaningful content. This finding informs my

proceeding papers, which focus on how users engage with trends in meaningful ways which move beyond attempts at popularity, within comment sections and within the videos themselves. In the proceeding papers, I purposefully conducted a preliminary exploration of the popular trends at the time of starting the analysis to ensure that the trends and data were not dominated by attempts to drive popularity.

Another significant finding was that platform-oriented terms and hashtags were prevalent in video captions, such as hashtags related to TikTok features and terms referencing platform mechanisms. This confirms the argument above that the TikTok platform plays a significant role for users in how they navigate trends. It also shows that users are aware of elements of the platform and aspects of video production, as seen in hashtags relating to edits and effects. In-app content production and editing plays a central role on TikTok, so it is unsurprising that users express awareness and acknowledgement of these elements. This also supports my earlier point that TikTok's facilitation of accessible content creation shapes how users engage in trends.

Overall, my findings have highlighted that trends on TikTok are popular phenomena driven in part by user behaviour, and that popularity is important to users in how they navigate trends. Many trends centred around personally and socially significant user interactions and themes, such as learning and sharing through content, creating and personal expression, and bonding over widely recognisable cultural themes such as music and celebrity. These findings suggest that TikTok in particular is an interesting platform on which to study trends, because trends and popularity are central to TikTok and important to its users.

This paper was reliant on data produced by TikTok editors rather than its users. It focused on one form of user-generated data which did not involve particularly meaningful thematic or expressive engagement with trends, and it found that there was lots of variation between trends, and this paper only. There are other forms of user-generated data where more meaningful interactions could happen, such as comment sections and the videos themselves. I proceed to explore these data in the proceeding papers. Furthermore, since hashtag trends were significantly more popular than audio trends in terms of view count, I focus the next papers on hashtag trends.

Chapter V Audiencing TikTok: TikTok comment sections as social spaces for media audiences

1 Introduction

Social media scholars have highlighted the sociological significance of comment sections and subsequent importance of studying them. Abidin (2020) argues that social media comments are valuable for researchers *and* social media users, yet at the time of starting this paper, comments had received less attention from social media researchers compared to other content such as posts and tweets. Therefore some scholars advocate for more research into social media comments (e.g. Abidin 2020, Schwartz 2015). I respond to this call in this paper.

Comment sections provide a gathering place for contemporary media audiences on digital platforms. Therefore, they can be considered as hubs for *audiencing*. In this paper, I explore TikTok comments from the perspective of this concept, audiencing, which Fiske (1992) defines the "social circulation of meanings" (p. 353) between audience members. In his use of this term, Fiske recognises the important role which social settings and social interactions play in how audiences create and process meaning in relation to media texts. Audiencing studies investigate these interactions in the social spaces where they happen - on TikTok, comment sections play this role.

Fiske's definition of audiencing (1992) also emphasises the role which these interactions play for the audience members themselves, and how these interactions can shape their experiences of media. For example, the Channel 4 Entertainment show *Gogglebox* (2013-) captures how *audiencing* interactions can be fulfilling and meaningful for audiences. The show features audiences gathered in their living rooms to watch and discuss TV shows together, creating entertainment for audiences by showing how other audience groups react to content and process it together in a social setting. The groups who feature in the show create comedy, family drama, empathy, and heartache, all while watching and discussing TV. Their interactions around the TV shows reflect the kind of interactions that happen in living rooms across the world while people watch TV. Audiencing interactions therefore involve users making sense of media content and the world together, discussing aspects of content and their lives while congregated around a media text.

While the concept of audiencing was originally coined in relation to in-person interactions about TV, such as conversations about TV in a living room or at the office watercooler (Fiske 1992), it has since been applied to Twitter discussions about TV shows (Highfield et al 2013, Harrington et al 2013). Within this paper, I extend the concept to TikTok comment sections, since the comment sections provide a social space where users have interactions centred on a TikTok video. TikTok comment sections are highly interactive spaces, which facilitate various types of interaction between users, and users utilise the space to interact with each other in meaningful ways - about the video content, but also about their lives more generally. As such, they provide an incredibly interesting setting to study audiencing. Indeed, the significance of comment sections was amplified at the time that I began this paper in early 2021, as the world was socially distanced during the Covid-19 pandemic, and online spaces were a key place where audiences could come together.

Considering audiencing within TikTok comments involves extending the concept to a new type of content and setting – that is, comments on TikTok about in-app content, rather than tweets on Twitter about TV shows which are broadcast outside of the platform. Audiencing in TikTok comment sections is different from audiencing on Twitter, in the closeness between content and discussion, in the temporal syncing between content and discussions, and in the power dynamics within the audience and discussion space. Each of these differences influences how audiencing interactions unfold on TikTok, and they also point to the importance of considering audiencing interactions on platforms other than Twitter, to fully understand platformed audiencing.

Whilst audiencing is orientated towards media audience studies, it is relevant to social media studies more generally, because it involves studying interactions between social media users. Therefore, this paper could have wider significance outside of audiencing or media audience studies.

2 Literature review

2.1 Considering a*udiencing* and how comment sections provide hubs for these interactions

Audiencing is the “social circulation of meanings” between audience members (Fiske 1992, (p. 353). The concept recognises the importance of social interactions between audience

members in their media experiences, and the important role that social settings and social interactions play in how audiences create and process meaning in relation to a media text. Audiencing studies investigate these interactions in the social spaces in which they happen. For Fiske, the physical setting of the living room (or lounge room in Australia) was central to his development of the concept .

For Fiske, studying audiencing involves considering in a wide variety of verbal and non-verbal interactions and characteristics – for instance, the decor of the lounge room and what the audience are eating, as well as their reactions to the television show content. In this sense, everything about a social setting where audience members are interacting with each other is important from an audiencing perspective. For instance, the audience eating pizza in a messy student flat contextualises the audience's reflections about their own background which they blurt out while watching the show (e.g. "gosh, she's as strict as my mum!"), as they revel in their newfound messy freedom from the rules of their family homes.

The concept of audiencing recognises how audiencing interactions can be meaningful to audiences. Fiske's definition of the concept (1992) emphasises the role which these interactions play for the audience members themselves, and how these interactions shape their experiences of media. Much like the Channel 4 TV show *Gogglebox* creates entertainment out of watching ordinary people gathered in their living rooms to watch and discuss TV together, audiencing encapsulates social interactions around media which are a valuable and gratifying part of media experiences for audiences. Interactions involve the audience members processing storylines, reacting emotionally to scenes and events, laughing together, creating family drama, sharing stories, relating to each other and to the content, expressing empathy and heartache, all while watching and discussing TV. Gogglebox highlights how audiencing interactions can be both personally and socially fulfilling and meaningful for audience members and interesting to the wider public (and indeed researchers). The concept of audiencing therefore serves to highlight some of the meaningful and social roles which media content plays in the lives of individuals.

Other literature also supports the notion that comment sections are important spaces for users, spaces where meaningful and entertaining interactions happen. Highlighting the significance of TikTok comment sections for users, bloggers writing on social media have claimed that TikTok comment sections have "ever-changing trends" of their own (Wei 2020) and that they have started to take centre-stage within the content by major creators (Docherty 2020).

Similarly, Abidin (2020) highlights that comments have become a distinct genre of user behaviour, and that comment sections themselves provide a source of entertainment for users. Indeed, Abidin (2020) highlights that this has been reflected by social media users within meme culture (e.g. Figure 5). This further highlights the significance of comments as a setting for audiencing and as a form of content in their own right.

Figure 5: Abidin (2020) Figures 17 and 18

Outside of comment sections specifically, earlier literature highlights that personally and socially meaningful interactions happen in other online text-based environments. For instance, forum studies (e.g. Baym 2000, 2015, Herring 2004) demonstrate that shared

meaning-making, negotiation of social norms, humour, and emotional response can occur in forums. Forums have parallels to comment sections as they are also persistent, text-based environments. Further, forum studies treat forums as a primary form of cultural production, rather than being merely supplementary to another media text. From this perspective, Abidin's conceptualisation of comment sections as genres of content in their own right becomes more justified, as it highlights users' tendencies to create meaningful social spaces in the text-based interactive spaces that bring users together.

2.2 Considering settings for audiencing, and extending the concept to new social media formats

Audiencing was coined as a TV-related concept, and whilst Fiske (1992) defined and studied audiencing in a TV loungeroom environment, more recent studies have applied the concept to Twitter, focusing on discussions of TV shows (Highfield et al 2013, Harrington et al 2013). Similar "second screen" studies (e.g. Giglietto and Selva 2014) and "social TV" studies (e.g. Auverset and Billings 2016) have become popular in the past decade or so. Although they do not focus as explicitly on audiencing or the social circulation of meaning, they are focused on social interactions about TV on Twitter, and therefore are relevant to audiencing. For instance, Auverset and Billings' study (2016), which they label as a "social TV study" found that conversations about the TV show *The Walking Dead* involved users discussing "scene interpretation, emotional reactions to characters and scenes, and […] their anticipatory feelings about the upcoming episode" (p.3). I consider all of these to be 'audiencing related studies', which is how I refer to them throughout the rest of this paper.

In this paper, I extend the concept of audiencing to study TikTok comment sections, an extension in content as well as setting, given that they focus on in-app content, rather than posts on Twitter about TV content broadcast outside of the platform. Users utilise comment sections to discuss TikTok video content. For instance, in a study of TikTok comments, Valdovinos Kaye et al (2020) found that users utilise TikTok comment sections to discuss the authorship of audio files used in videos, indicating that TikTok comment sections provide a space for users to take an active role in navigating TikTok content and the community that surrounds it. Therefore comment sections are a fitting place for studying *audiencing*

There are many differences between audiencing on Twitter and within TikTok comment sections. At the time of conducting this study, videos on TikTok were limited to 60 seconds,

much shorter than TV shows. Audiencing-related studies on Twitter often find that scenes, events and temporal elements of TV shows shape user discussions, and the majority of studies focus on discussions that happen live during a broadcast (e.g. Auveret and Billings 2016, Highfield et al 2013, Gigletto and Selva 2014). In comparison, when discussions happen in relation to the content is not as straightforward in TikTok comments, as comments are not attributable to a particular point in the video unless the user expressly mentions one within their comment, for example by quoting a moment in the video or referring to a particular event that occurs in the video.

TikTok also provides a different sort of social space for audiencing than Twitter. Since the comment sections of TikTok videos are located within the same space as the videos themselves, they eradicate the need for a "second screen" (see Giglietto and Selva 2014). This provides more direct access to the social space for the users, one which requires fewer steps to access, in comparison to second screen audiencing where a TV audience member must open another device and access Twitter. Therefore, TikTok comment sections are more directly accessible to the audience than Twitter is to TV audiences, and therefore more likely to be accessed by a larger portion of the audience. TikTok also provides a designated and more contained place for social interaction around the video. Whereas on Twitter a user could feasibly use a TV hashtag without actually reading what others have to say, or getting a sense of the "crowd" of users of a particular hashtag, on TikTok a user is presented with the comment space as they write their comment.

On Twitter, Auveret and Billings (2016) found that while some tweets about the TV show *The Walking Dead* addressed other users, they more often addressed an imagined audience of users "who might also be engaged" (p. 9). Since TikTok provides a designated and directly viewable crowd space, this could mean that users interact in a different way, since the user does not have to imagine the audience. Therefore, the TikTok comment section creates a hub for audiencing which is closer to the content, and is a contained space where users can readily see the interactions of other audience members. It is therefore closer to a TV loungeroom (as in Fiske 1992) than the environments available to audiences via Twitter (as in Auveret and Billings 2016, Highfield et al 2013, Gigletto and Selva 2014)

TikTok is a more egalitarian space for content production and discussion in comparison to TV and Twitter respectively (Abidin 2020). Twitter studies have found that elite users such as TV networks, journalists, actors and performers play prominent roles in the networks of

discussions about television (see Auveret and Billings 2016, Harrington et al 2013). As a result, many audiencing-related studies explore the power and social dynamics formed by user interactions. This shift in power dynamics poses another departure from studies of TV audiencing on Twitter.

When it comes to the production of content, TikTok makes video production relatively accessible to ordinary people, who need a free account and a smartphone with a camera to make video content via the app. This is a significant departure from the production of broadcast television which is dominated by production companies. While there is also lots of professional content on TikTok, from brands, celebrities, and professional creators, in comparison to TV, it is still more accessible to ordinary creators without specialist skills or prominent positions. Indeed, in my research, discussions of the nature of video production and presentation on TikTok were common. These types of departure from Twitter could shape how audiencing interactions unfold.

2.2 Technical and platform influences on TikTok comment sections

It is important to consider how the technical and platform characteristics of the TikTok comment section may shape user interactions. On TikTok, each video has its own comment section attached to it. The TikTok comment sections exclude users who are not signed into the platform, comments not approved by the creator if the creator has turned on the approval feature, and comments reported and removed for violating the platform's terms of service. Comments with higher levels of likes and replies appear at the top of comment sections, and comments from verified users and the video creator are also prioritised. TikTok comments are limited to 150 characters.

These features no doubt impact how users can and do interact with the comment section and each other. For instance, users may truncate their comments, write in short sentences, or avoid posting their true feelings if they might be deemed offensive and therefore reported. Further, the comment sections may be screened by video creators who turn on an approval feature. These factors are features to consider about the setting of my study, and it is important that overall interpretations of the findings presented in this paper are considered within this context.

The types of social interaction in TikTok comments are diverse, as users are provided with various opportunities to interact with others. Users can reply to existing comments, and replies are nested underneath the original comments (see Figures 6 and 7). Throughout the paper I refer to these comments as "original comments" and "replies" respectively. Replying comments also have a "Reply" hyperlink underneath them, but there is only one level of nested replies in the comment section so that any "replies to replying comments" do not become more nested but instead include a "@" mention to the user who posted the reply. Users can also use this same "@" anywhere in the comment section to mention any other user on TikTok, and this tagged user will receive a notification that links to the video. Arranged in this way, the comment sections facilitate and encourage various types of interaction between users, rather than being a space for standalone comments.

Figure 6: A reply thread nested under an original comment by a verified user (user nicknames pseudonymised, as per Ethics chapter)

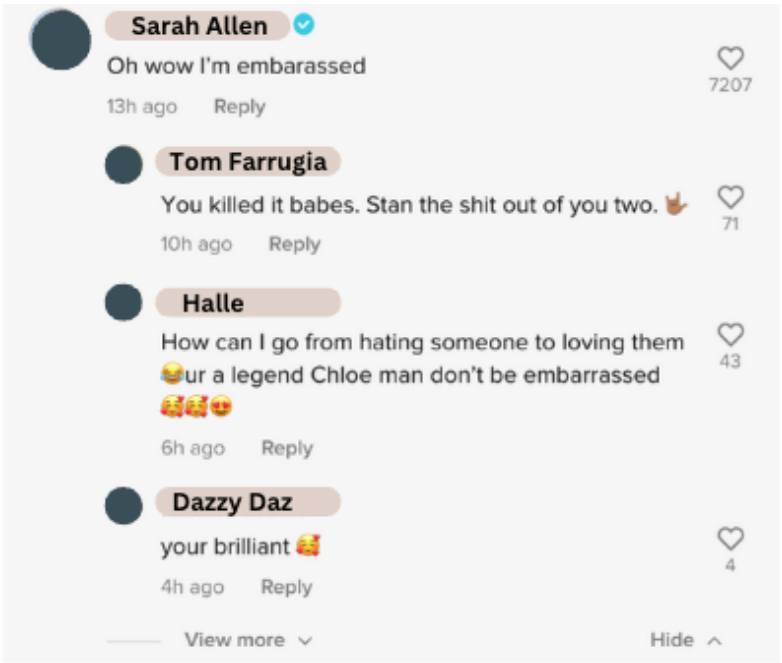
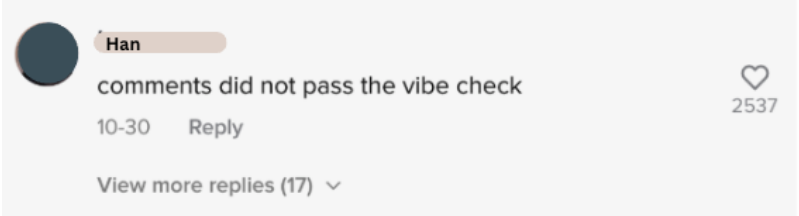


Figure 7: An original comment with a "View more replies" hyperlink below (user nicknames pseudonymised, as per Ethics chapter)



Within the comments, I found that users can interact with a user or a group in ways which do not make use of a TikTok feature. These types of interaction were often clear in the language used, for instance users choosing to address one user directly by name (rather than by username, e.g. “Patricia” rather than @patricialoveshorses), or to interact with a group by contributing to an ongoing theme within a comment or reply thread, or to reference a group specifically (e.g. “all the hairdressers here…”). These types of interaction can be more implicit than those discussed in the paragraph above and therefore trickier to identify and interpret, but they are important nonetheless.

Morris and Ogan (1996) categorise user interaction on the internet into four categories: one-to-one, one-to-few, one-to-many, and many-to-many. Considering this in relation to the types of interactions which are possible in TikTok comment sections, comments can include:

- one-to-one communication (albeit within a public forum), through users tagging or addressing a single user or replying to a comment when no one else joins in,
- one-to-few communication, where users tag or address multiple users or engage in a smaller group discussion within a reply thread
- one-to-many communication, whenever a user either directly or indirectly addresses wider groups in the comment section, and many-to-many considering that many users join big group discussions and engage with the public forum which is the comment space.

This variety further highlights that TikTok comments can be highly interactive spaces with diverse types of interactions occurring within the same comment space.

3 Research questions

In the literature review, I highlighted how audiencing is considered the “social circulation of meaning” (Fiske 1992) around a media text. Within this definition, and considering how existing studies have approached audiencing interactions, there are two main elements of interest. Firstly, audiencing captures the social dynamics within these settings and how audience members interact with each other. Secondly, audiencing is interested in what users actually discuss within these interactions. Therefore within this paper, I consider audiencing

in a two-pronged approach according to these two elements of interest. Firstly, I consider how the practical act of interaction between users creates and arranges social spaces within the comment sections, and secondly, I consider what users actually discuss and the significance of these discussions. These concerns correspond to the two research questions below.

RQ1 How are the social dynamics within TikTok comment sections arranged? What does this tell us about audiencing in TikTok comment sections?

Existing audiencing-related studies on social media have highlighted how there are many possible arrangements, shapes, and power distributions within the social spaces created by audiencing interactions (e.g. Highfield et al 2013). The same might be true within TikTok comment sections because, as I have discussed above, multiple modes of interaction are possible between vast networks of users within TikTok comment sections. The arrangement of these social dynamics is important to explore, since a comment section dominated by group discussions would involve a very different social structure to one dominated by one-to-one conversations, for example.

Therefore, it is important to understand the characteristics of the social spaces created by users within the TikTok comment sections, especially since characteristics of the setting of audiencing interactions are important within the audiencing concept. This research question therefore considers the main modes of interaction present in the comment spaces (i.e. one-to-one conversations, replies, addressing the crowd) and how these interactions connect audience members and distribute power and influence amongst the users in the social space.

RQ2 What do audience members discuss in the TikTok comment section? What does this tell us about audiencing in TikTok comment sections?

Since audiencing relates to the social circulation of meaning, it is also important to consider what the users actually discuss within their interactions. This is perhaps more obviously suggested by the concept definition of "social circulation of meaning", and therefore fairly self-explanatory. Fiske coined the concept of audiencing by observing discussions between audience members and interpreting what they discussed, and similarly, audiencing-related studies which extend the concept to social media have commonly focused on the subject and tone of audience discussions. Therefore, I approached this research question to capture both

the subject of the interaction (i.e. hairstyles, compliments, sharing advice) and the tone of the interaction (i.e. argumentative, helping others).

These two research questions often overlapped within the analysis and discussion of findings. For instance, group discussions were interesting to consider in terms of the make-up of the social space (RQ1) as well as what the group discussions are about (RQ2). Therefore, I approached both questions via multiple and overlapping research methods, as I discuss in more detail below.

4 Data and methods

4.1 Data collection and preparation

As mentioned above, within this paper I continue to analyse TikTok trends and popular content. In this study, I selected videos which were tagged with the #Hairtok trend, which was the most popular trend on the Discover page on the day of my data collection. The hashtag "#hairtok" is fairly self-explanatory; the hashtag (and all of the videos I worked with) relates to hair and hairstyling, and the TikTok description is "Welcome to HairTok 💇🏾". From the #hairtok trend, I worked my way through the trend's video list from the top. Again, this sampling approach involves focusing on trending and popular content, as video list pages are organised by descending order of view count. I determined the sample size based on comments rather than videos, which was appropriate since the study focuses on comments. My aim was to collect 1,000 comments, as this number would provide sufficient scale for the quantitative element of my hybrid approach, while remaining realistic for considering comments in closer detail as part of the qualitative approach.

The number of comments varied greatly between videos. I capped the number of comments which I collected per video to 200, in order to ensure that my sample was not dominated by videos with a larger number of comments, as three of the seven videos had over 1,000 comments. I collected replying comments as well as original comments in order to capture different types of interaction. Since TikTok presents comments according to popularity (seemingly algorithmically determined by a combination of likes and comments), collecting the first 200 comments involved focusing on the most popular comments and their replies. In situations where I reached the count of 200 comments whilst inside a reply thread, I continued collecting all comments in that reply thread to avoid superficially truncating it,

meaning that I sometimes collected more than 200 comments per video. This meant that my final sample size was 1,026 comments, representing the comment sections of seven videos.

This sampling method purposefully focused on the most popular content and users, in line with my overarching research concerns. I reflect more on ramifications of these sampling methods in Chapter VIII Conclusion. Further, if I came across any non-English language comments, I skipped these ones and moved on to the next comment, as translating other languages was outside the scope of this study. Again, this is a limitation of the study to keep in mind when interpreting the findings, which I reflect on in Chapter VIII.

To collect the comment data, I took screenshots which captured the comments and the commenting user's nickname for the 1,000 comments in my sample. This manual approach was necessary as the TikTok app does not facilitate copying and pasting. I was not aware of any TikTok comment scrapers at the time of conducting this study. As I discussed above, I worked with an industry partner on my PhD. As a commercial media research agency, and they do not use TikTok comment scrapers as they go against the TikTok user agreement which prohibits the computational collection of data from the platform for commercial purposes. Whilst I am not using data for commercial purposes, I decided to use an approach which my partner company or anyone without access to a scraper can use in future.

After taking screenshots, I used R to automatically transcribe the text from the screenshots, consisting of users' names and comments, into textual data, using the Tesseract package. Some manual data preparation was required to tabulate this data consistently, as Tesseract would not always recognise spaces and special characters correctly, and the varying amounts of words and linebreaks in usernames and comments made computationally tabulating the data difficult. During the process of manual data preparation I became familiar with the data, which was helpful for building in context within the qualitative content analysis, as I discuss below.

Within TikTok comment sections there are two ways in which users are referenced. The "nickname" of the user denotes the author of the comment, whereas a mention uses the unique username. For example, my username could be @emilycoupland while my nickname is "emily loves TikTok". TikTok explains that a "nickname is the name visible to users on your profile" (TikTok 2021) whereas the username is the unique identifier of a user, in other words what "other TikTok users can use to tag or find you" (TikTok 2021). In order to ensure

that users who were present as both mentioned users and commenters were recognised as the same user, I manually checked whether mentioned users were present elsewhere in the dataset, and when appropriate I altered the username to the nickname. Since nicknames are not necessarily unique, I also had to check for instances where different users had the same nickname, which was particularly important where nicknames were more generic, for instance a single emoji or a common first name.

As I discussed in my Data and Methods chapter, since nicknames were frequently used in interesting ways, they were intriguing data. I opted to pseudonymise the nicknames to protect the users, which was important because I was quoting full comments from users. However, I attempted to maintain some of the character of the nickname, for instance I might substitute a nickname like “Patricia likes ponies” for “Victoria loves horses”. This involved switching names and sentiment for like-for-like substitutes, still capturing things like gender and nationality, for example swapping a unisex Irish name for another unisex Irish name, and reflecting similar interests or sentiments.

4.2 About the #Hairtok videos

I worked with the seven videos ranked highest on the trends video list. This ranking seems to be algorithmically determined. There was no obvious ordering based on just one of the popularity metrics such as view count, like count, or number of comments, but the counts for each of these metrics was very high, so the videos seem ordered by a measure of popularity. This sample of videos are also the most visible within the trend, since they are presented first in the trend lists. For ease of discussion, while also protecting the TikTok users, I assigned each video with a name that summarises what it was about. , and I will describe each video below:

- **Rainbow colours:** A video from a hair product brand, featuring a woman at the hairdressers who has her hair transformed from blonde into rainbow colours in a salon. The video features before, during and after shots of her posing, filmed in a “selfie” style. The video has no dialogue.
  Metrics: 1,543 likes and 97 comments

- **Sports hairstyles:** A video from a girl's football brand, featuring a young girl (appearing to be aged between 8 and 11) modelling a sports hairband, and text on the video reveals that the hairband is from their brand. The video transitions between different sports hairstyles for the model, including a messy bun and plaits. The video has no dialogue.
  Metrics: 1,558 likes and 35 comments

- **TikTok live styling:** A video of a musician showing herself getting ready and on-screen text accompanied by a voice-over reveals that she's getting ready for a TikTok live. The video transitions between shots of hair and beauty products and appliances and the process of her getting ready (washing hair, drying hair, applying make-up).
  Metrics: 4,910 likes and 141 comments

- **Anxious hairdresser:** A video from a hairdresser and content creator who mainly creates hair tutorials (the user is not verified but has a large following). On-screen text introduces the video as "anxious hairdresser thoughts" and the video contains funny performances of awkward scenarios which hairdressers face. The video has dialogue as the user performs different scenarios.
  Metrics: 550.6k likes and 1570 comments

- **Greasy hair:** A video from a content creator who mainly creates hair and make-up transformation videos (the user is not verified but has a large following). On-screen text introduces the video as "3 hairstyles for greasy hair" and the video transitions between the user showing off different hairstyles. The video has no dialogue or voice-over.
  Metrics: 296.2k likes and 1354 comments

- **Night-time haircare routine:** A video from a content creator who mainly creates videos containing hair care advice (the user is not verified but has a large following). On-screen text introduces the video as "night-time hair care routine (pre-shower)". The video transitions between shots which demonstrate steps such as applying jojoba oil and massaging the scalp. The video does not contain dialogue or voice-over.
  Metrics: 2.8m likes and 11.9k comments

- **Eid make-over:** A video from a content creator who creates a range of videos, all of which often emphasise appearance (e.g. dancing and flicking her hair around, henna tattoos and make-up) as well as her culture (Arabic weddings, henna tattoos, Arabic music, etc). (The user is not verified but has a large following). This video is introduced with on-screen text "Come glow up with me Eid edition" and the video transitions between the user getting various salon treatments done (e.g. eyebrows, hair and nails).
  Metrics: 92.3k likes and 275 comments

The selection of videos predominantly involved users showing off different hair and beauty looks and routines to their audiences. There were some variations on this. *Night-time haircare routine* has more of an advice-sharing tone and gives instructions for a healthy hair care routine, rather than focusing on styling. This tone of advice and information sharing was also present in some of the styling-oriented videos too, with on-screen text denoting the hairstyle or part of their routine in an informative manner. *Anxious hairdresser* is an exception, as it is a comedy video where the user performs several awkward and funny hairdressing scenarios and interactions with clients. The styling-orientated videos *Rainbow colours* and *Sports hairstyles* are from brands who are promoting products, hair dye and a hairband respectively. Apart from these two, all other videos in the sample were from ordinary users, not celebrities or brands, who were not verified users on TikTok ("verified users" are prominent users who have their identity verified by TikTok to prove legitimacy) but nevertheless had large followings. All videos were all about hair, with make-up and beauty also involved, forming an overall focus on styling and appearance.

4.3 Social network analysis

I used social network analysis to explore my first research question about social dynamics (RQ1) primarily. Social network analysis involves studying structural relations between entities (Knoke and Yang 2020) and it is a common tool for social media research. Social media brings large networks of people together in an interactive space, and social network analysis enables researchers to map out the connections and interactions between these users. In this study, I used social network analysis to study the interactions between users in the comment sections of the videos in my sample. In social network analysis, a "node" refers to a

graph point representing an entity and an "edge" refers to a line representing a connection between the entities (Knoke and Yang 2020). In my study, nodes represented users and edges represented an interaction between them (I explain interactions in section 4.3.1 below).

As I discussed in Chapter III, social network analysis is recognised as a hybrid method, which aligns with my overarching research aims. This is because, as Knoke and Yang (2020) explain, it allows researchers to examine networks at both micro and macro levels—either focusing on individual nodes or the structure of the whole network. This is what I did in my analysis, focusing on individual users, groups of users, and considering the overall levels of interaction across networks, as I discuss below.

4.3.1 Types of interaction

The types of interaction which I considered within the social network analysis were mentions, replies, and addressing users or groups within the text of the comment. While mentions and replies are features of the TikTok platform, interpreting modes of address within the comment text relied on my own judgement. Many users addressed other users or groups without using replies or mentions, or within reply threads where the intended recipient was more ambiguous since there is only one level of nesting in the reply thread. There were also instances where a user would seem to be addressing other users, for example using a pronoun or continuing a theme, within a standalone comment, yet no TikTok features such as replies or mentions were used to make it clear who they were addressing. To decipher who a comment was addressed to, I used the content of the comments and the surrounding context. This involved looking at the subjects of comments, for example, asking if they were continuing a subject from a certain user or group, looking for pronouns, and considering the comment in relation to themes in the discussions happening in the space surrounding the comment.

Often it was obvious who a comment was intended for, but sometimes it was ambiguous, especially in group discussions. When the target was ambiguous, I treated this as an open address and therefore intended for the wider group or general crowd. In some cases it was also clear that users were intentionally addressing the crowd (for example, "She looks like Bella Hadid, tell me I'm wrong" propositions all users in the crowd to agree or disagree). Due

to this multifaceted nature of interaction within comments, often a single comment would have multiple targets.

This is a reason why using content analysis in conjunction with SNA was useful, and I discuss more about the content analysis below. It would be misleading, distortive, and computationally expensive to consider the targets of a crowd or open address as all users in the comment section. However, I instead captured these types of interaction within the arm of the content analysis which focused on mode of address (as discussed below in the *Content analysis* subsection). Similarly, whilst every comment could arguably be considered as intended for the creator of the content (since this the comment section of their video), I felt that labelling this as such would be distortive and difficult. It would make the creator dominate the social network analysis, making the interactions between audience members (those which are more important from an audiencing perspective) less visible. Therefore, I restricted using the creator as target to instances where a user is more directly addressing the creator ("you're beautiful", "love your look", "how did you do that" etc.).

4.3.2 Visualising social networks

I used R to create social network graphs for each video in the sample. The interactions between users in the dataset (and the TikTok comment section in general) are *directional*, as *user x* can interact with *user y* without this necessarily being reciprocated by the other user. In other words "one actor initiates and the second actor receives" (Knoke and Yang 2020, p5). I presented this visually with arrows representing the direction of the interaction between nodes. The arrows point from the sender to the receiver, and where there is a bi-directional arrow this indicates a reciprocated interaction (that is, user a mentions user b, and user b responds). I also used a weighted network, where the *weight* value reflects the number of times an interaction happens. So for instance, a weight of 4 from source *user x* to target *user y* would indicate that *user x* interacts with *user y* four times. To present this visually, I scaled the edges according to the weight variable, reflected in their shade and thickness. This made it possible to distinguish between more sustained and more fleeting interactions.

I also scaled the node sizes to reflect each node's *total degree centrality*. Total degree centrality is in-degree centrality and out-degree centrality added together. *In-degree* centrality measures "the extent to which a node *receives* relations", and *out-degree* centrality "indicates

the extent to which a node *sends* out relations or nominations" (Knoke and Yang 2020, p. 11). I chose to use the *total* of these two measures, because I consider both measures to be significant from the perspective of audiencing. This is because I consider both high sending activity and popularity as a receiver as important, because I am interested in all forms of interaction between users and combining them better facilitated comparisons between multiple videos.

As well as scaling node size according to total degree centrality, I added labels to nodes with total degree above n (where n was a value I chose for each network as a benchmark of high engagement) to highlight the most prominent users in each network. The labels reflected pseudonymised nicknames of the most prominent users within the networks. In the findings section, I discuss the prominent users in the networks, as well as exploring group discussions (which tended to create prominent users via repeated interactions). It was therefore useful for illustrative purposes that these interactions created prominent users who could be labelled within networks. I also added colour coding to each node to represent community membership, in order to visually highlight the group discussions in the network. To do this, I used a community detection algorithm in R which computes communities according to distances between nodes.

It is also worth noting that since there was variation in the sizes of comment sections, there are visual differences between many of the networks. Some have much fewer nodes than others and therefore a smaller network size, reflecting the different sizes of the comment sections.

4.3.3 Interpreting social networks

Considering the whole network, visually and via summary statistics, allowed me to analyse how interactive the networks of users were overall. I examined whether networks were dominated by subgroups or prominent users, and the kind of formation in which users were arranged. For instance, a network arranged like a giant mass of connected nodes in which everyone is more or less a "friend of a friend" by their interactions would suggest a very different kind of social space than one where there are many dispersed subgroups, or one with many isolated nodes. I used summary statistics to consider the levels of connectedness across the networks, and the amount of groupings, connected pairs and isolated nodes in the

network. This enabled me to quantify some of the shape features of the network, facilitating better comparison between networks. The social network statistics I used were as follows:

- Nodes and groupings
    - **Number of nodes:** Total number of nodes present in the network. Allows for comparisons between the different networks in terms of size.
    - **Number of isolates**: Total number of isolated nodes (nodes with no interaction with any other node).
    - **Number of triangles:** Total number of triangles (triangles are where there is a connection between three nodes)
    - **Number of components:** The number of components (a subset of nodes within a network that are all connected to each other, either directly or indirectly, but disconnected from other nodes in the network). For this, I include separate counts for components which are weakly connected (i.e. fewer connections between nodes) and strongly connected (i.e. more connections between nodes).
- Edges
    - **Number of edges:** Total number of edges present in the network
    - **Edge density**: The ratio between the number of edges (interactions) and the number of possible edges (total interactions that there could have been if all nodes in the network were connected)
    - **Percentage of edges which are reciprocated:** The percentage of reciprocated ties (i.e. interactions which go both ways, where the receiving user also interacts with the sending users) as a percentage of the total amount of ties.

I paid particular attention to the presence of groups and considered how well connected they were. Looking at subgroups in social network analysis can "indicate the extent to which small, cliquish, and cohesive groups exist within a larger network" (Knoke and Yang 2020). From an audiencing perspective, this is important as groups could provide places for more sustained audiencing conversations to happen. A sustained group interaction would be closer to Fiske's conceptualisation of audiencing than a more fleeting interaction between a pair of users. The significance of group discussions was also highlighted in the content analysis. I looked for the presence of these subgroups in the visualisations, through the colour coding of nodes and the general shape of the network and in the statistics, the number of components and triangles also highlighted how many groups there are in each network, with components

highlighting cliques who are cut off from the rest of the network.

I examined who the prominent users were in terms of popularity and significant roles played within groups – that is, whether they were centrally placed within a group or network. Looking at how connected a user is can suggest its level of "power, influence, visibility, or prestige" (Knoke and Yang 2020, p. 6). At a (macro) network level, a network dominated by one or more prominent users could suggest a less democratic and equal space than one where all users exhibit a similar level of interaction and connectedness. At a (micro) user level, determining who dominant users are is interesting, in terms of understanding who the key drivers and subjects of conversation are.

4.4 Content analysis

I used content analysis to understand the tone and subject of discussions to help me answer my second research question about what audience members discuss in comments and also to understand who was addressed within comments, to help me address my first research question. Other scholars have also used content analysis in audience-related studies to understand common message types communicated between audience members (for example Auverset and Billings 2016 and Giglietto and Selva 2014). As discussed above, using content analysis to categorise who a comment addressed also allowed me to summarise modes of interaction which were difficult to capture in the social network analysis.

Content analysis "allows researchers to classify their data into meaningful categorizations" (Rasmussen and Pennington 2016). As discussed above, my approach to content analysis combined quantitative and qualitative techniques as part of a hybrid methods approach. I began by inductively producing and counting categories to summarise interaction types—a process aligned with quantitative content analysis (Bryman 2016; Rasmussen Pennington 2016). I did this without a pre-defined codebook, as is typical in qualitative approaches (Mayring 2021). In addition to these categories, I developed qualitative themes based on patterns I felt were significant from an audiencing perspective, even if they were not the most frequent. Since comments were short, I also often examined the context surrounding the comment, such as in the wider comment section and the video itself.

I created separate category lists for capturing who the comment addressed (in relation to

RQ1) and the nature of the interaction (in relation to RQ2). Categories summarising modes of address (RQ1) included: *addressing another commenter*, *addressing creator or performer,* and *addressing a group.* Categories summarising the nature of interaction (RQ2) included: *sharing hair care advice*, *relating to another user's comment*, *argument*.

4.5 Text mining

I also applied text mining methods to explore common words and phrases. The findings of this method supported and validated some of the categories and provided some insight into how these categories were commonly used within the language of users. It also enabled me to explore whether other patterns in language were frequent across the comments, to further explore the content of discussions at scale. This was a method which I used in a similar way across all papers, discussed at length in Chapter III – that is, using a count based analysis, exploring the most frequent words and phrases, an approach which can reflect dominant topics or concerns across the collection of texts (Feldman and Sanger 2007). I now turn to the findings.

5 Findings

5.1 Comment sections as highly interactive social spaces

Comments involving interaction with others were much more common than comments involving no interaction. In the content analysis, I coded 10% of comments as involving no interaction at all, which was markedly less than the counts of the comments involving addressing another user or a group (see Table 2). Replying was equally as common as making an original comment, since 51% of comments in the dataset were replies. The content analysis also suggested that addressing another commenter was more common than addressing the creator or performer (Table 2). This highlights that comment sections are interactive spaces. Contributing towards answering RQ1, this finding suggests that the arrangements of the social spaces within the TikTok comment sections are highly interactive, and that audience members interacting with each other is the dominant mode of interaction

within TikTok comment sections. This confirms that comment sections provide social spaces for audiences to interact with each other. This level of interactivity could mean that TikTok comment sections involve more interaction between audience members than Twitter does. Comparatively, Auveret and Billings (2016) found on Twitter, tweets involving interaction between audience members were less common than tweets involving no interaction. This is significant because Twitter has been a prominent place for studying audiencing and second screen practices.

Table 2: Recipients addressed within comments

Recipients addressed in comments	Percentage of comments
another commenter	55%
creator or performer	20%
group within a comment thread	27%
crowd address	12%
no interaction	10%

It was visually noticeable in the social network graphs that some of the social networks for the comment sections were more dispersed than others. (Figure 8). For instance the networks for *Anxious hairdresser* (Figure 8d) and *Night-time haircare routine (*Figure 8f) have many nodes located within groups or connected to at least one node, indicating a high level of interaction between many of the users, whereas all other networks appear much more circular with independent nodes and components dispersed throughout the network, therefore involving less interaction. This is supported by the summary statistics (Table 3), since *Anxious hairdresser* and *Night-time haircare routine* both contain a lower percentage of isolated nodes than any other network, meaning that users were more connected in these networks than others. It could be significant that the tone of these two videos differs from other videos in the sample, since *Night-time hair routine* is an advice sharing video and *Anxious hairdresser* is a comedy video. This could suggest that certain genres of video encourage more interaction between users, prompting different types of social spaces to form in their comment sections (RQ1).

Figure 8: Social network graphs for the comment sections of each video

Figure 8a. Social network graph for TikTok live styling comment section (141 comments)

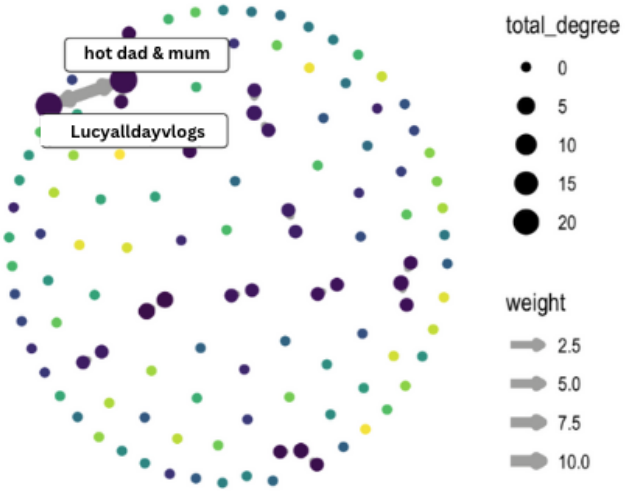


Figure 8b. Social network graph for Sports hairstyles comment section (35 comments)

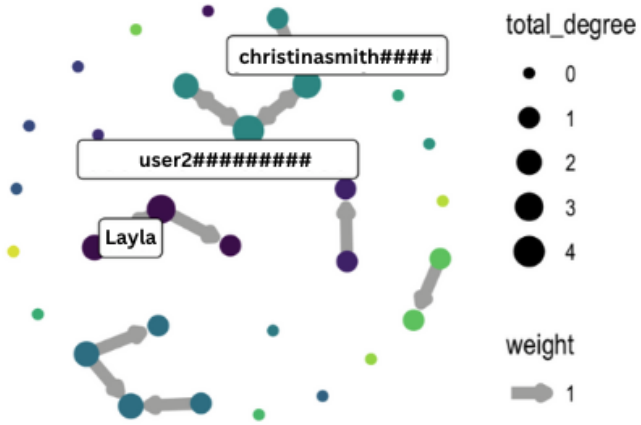


Figure 8c. Social network graph for Rainbow colours comment section (97 comments)

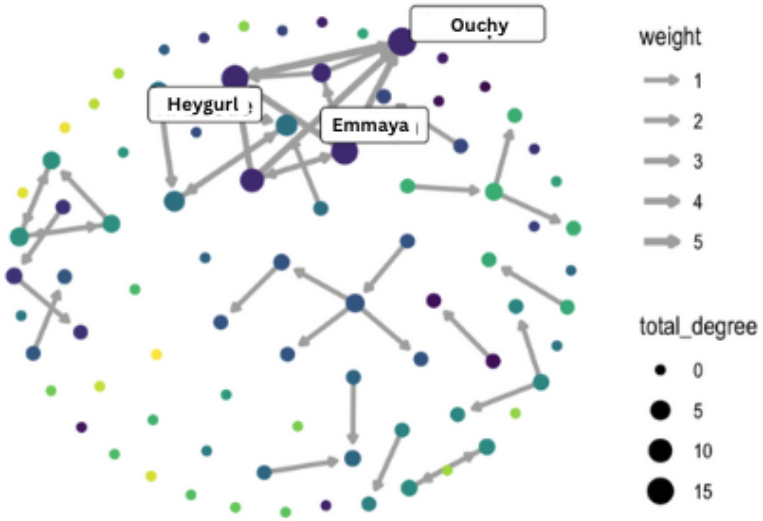


Figure 8d. Anxious hairdresser (1570 comments)

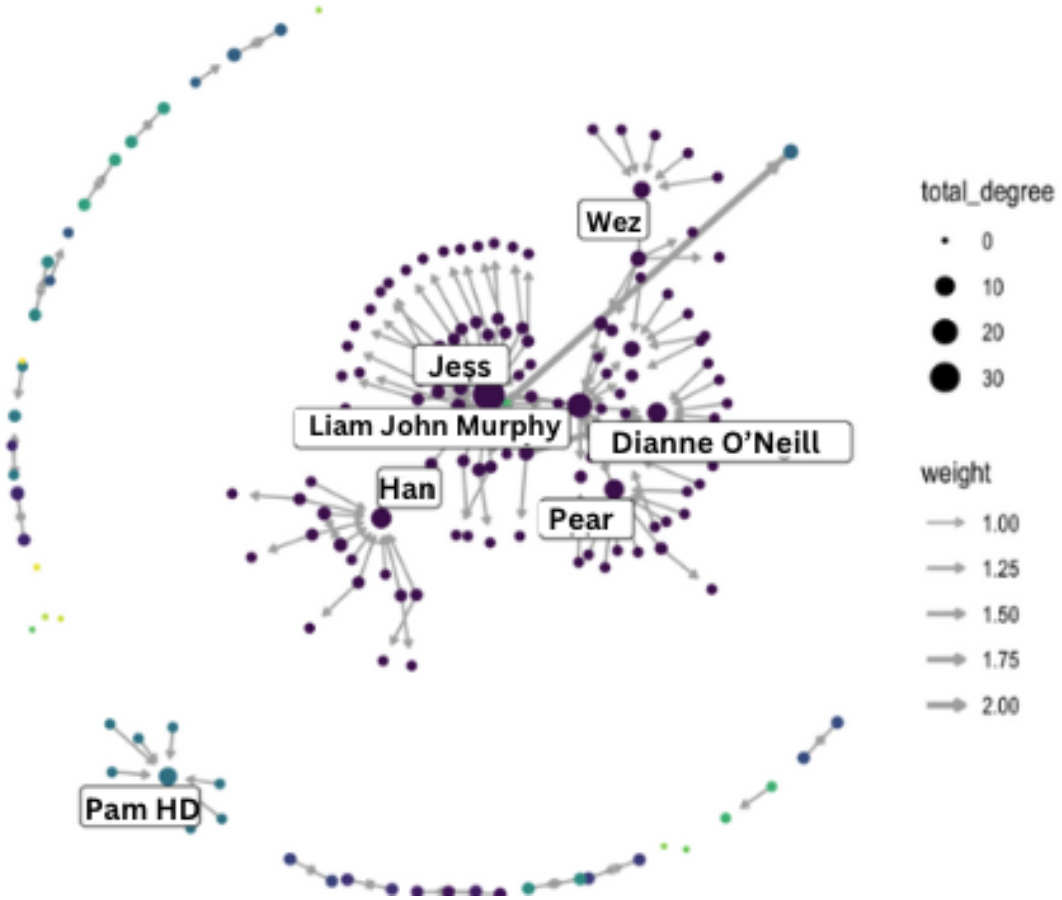


Figure 8e. Social network graph for Greasy hair comment section (1354 comments)

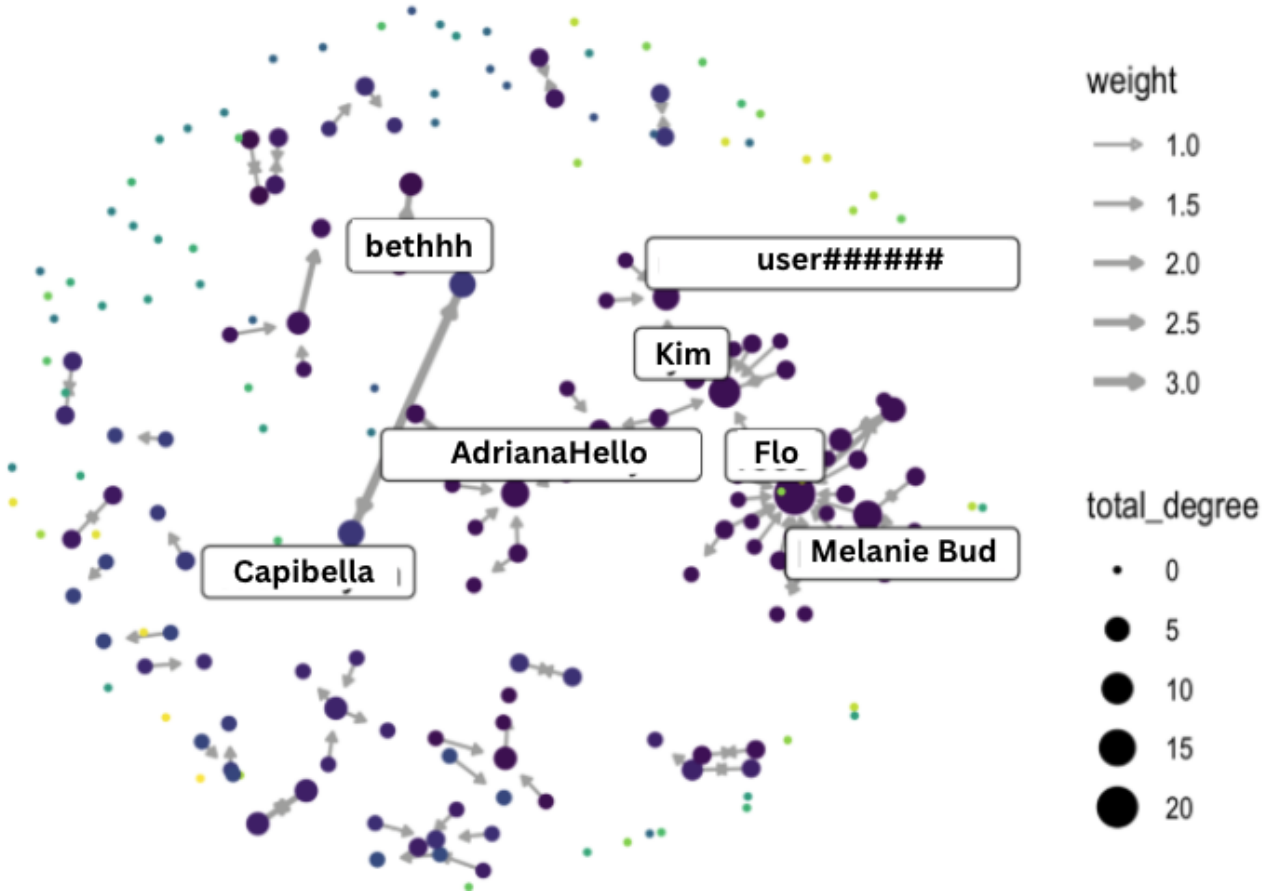


Figure 8f. Social network graph for Night-time haircare routine comment section (11.9k comments)

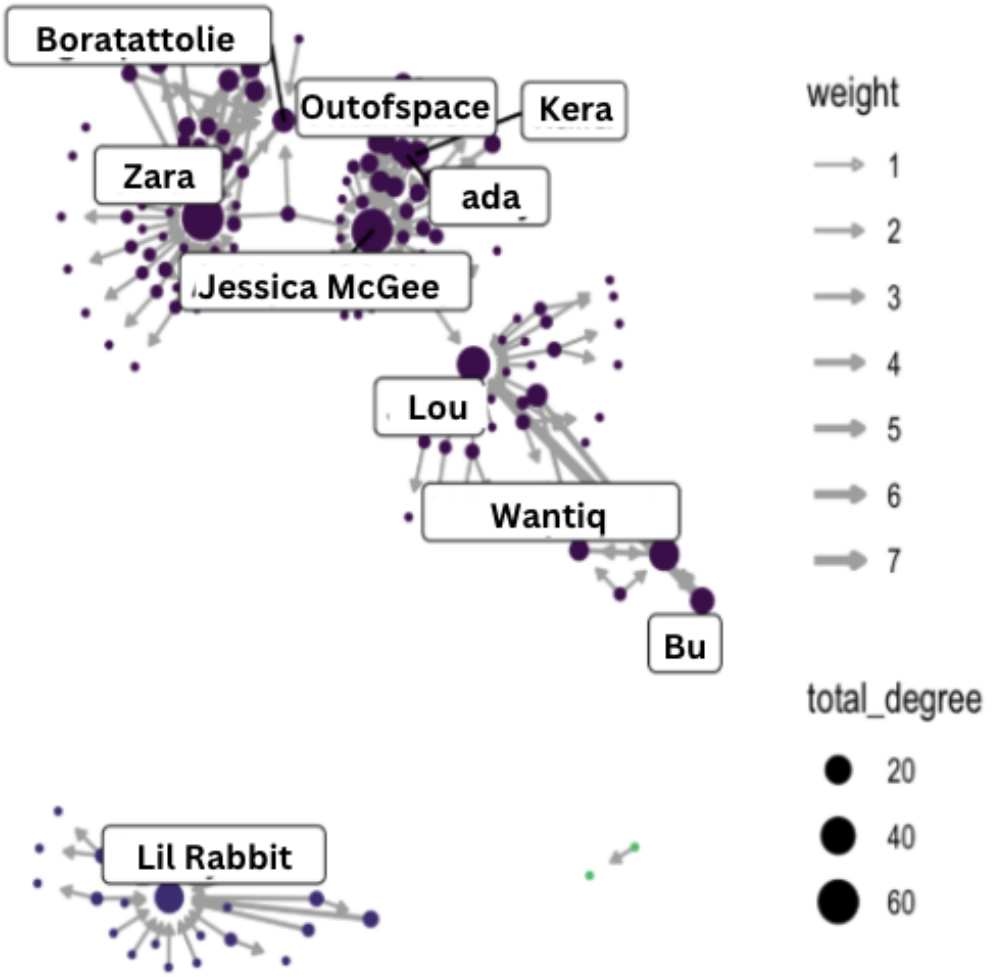


Figure 8g. Social network graph for Eid make-over comment section (275 comments)

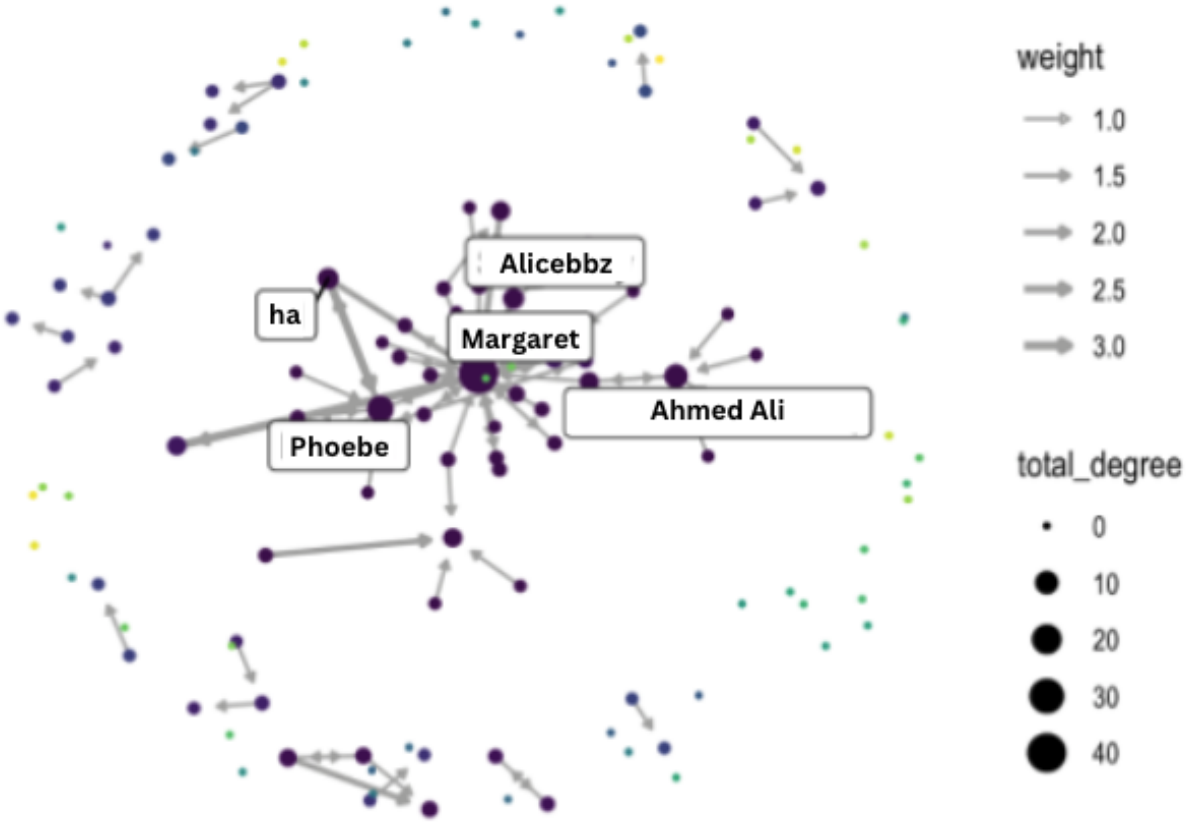


Table 3: Summary statistics for social networks of the videos

		Nodes			Groups and structures			Edges		
video	number of comments *	number of nodes	isolates		number of triangles	number of components		number of edges	edge density (ratio)	% of ties which are reciprocal
			no. of isolates	% isolates in network		weak	strong			
Rainbow colours	97	83	39	47%	27	53	75	66	0.010	29%
Sports hairstyles	35	32	16	49%	5	21	30	13	0.013	43%
TikTok live styling	141	118	89	75%	12	99	116	41	0.003	13%
Anxious hairdresser	1570	178	10	6%	987	28	160	178	0.006	13%
Greasy hair	1354	196	78	40%	278	106	179	124	0.003	22%
Night-time haircare routine	11900	180	0	0%	2881	8	160	318	0.010	8%
Eid makeover	275	125	49	39%	300	65	101	108	0.007	61%

N.B. the maximum comments in the network is around 200 comments due to sampling choices, see Methods section

The social network statistics in Table 3 provide valuable data on the structure and dynamics of user interactions across the comment sections of different TikTok videos. These networks vary considerably in size, density, and the extent of interaction between users, revealing differences in how audiences engage within comment sections.

As discussed above, there is a chance that because of my sampling method, videos with more comments could appear to be more connected, because they have more comments overall and TikTok ranks comments with engagement and interaction more highly, therefore comment sections with more comments are likely to also involve more interactions. This was true for *Night-time haircare routine* (Figure 8f), the video with the highest number of comments (11,900) and a high number of nodes (180) (Table 3), yet with no isolates—indicating that every commenter interacted with at least one other person in the network. This video also produced the highest number of triangles, i.e. three users connected (2,881) (Table 3) and a high number of strong components, i.e. groups who are tightly connected (160) (Table 3), again suggesting a highly interconnected and cohesive network of users who formed multiple sustained group interactions. Similarly, the *Anxious hairdresser* comment section (Figure 8d), with a large number of comments (1,570) and a high node count (178), shows the lowest proportion of isolates (6%) (Table 3). It also generated substantial group interaction, with 987 triangles and 160 strong components. This suggests a very active and interactive discussion environment, where users engaged frequently with one another. These videos were also the most popular two videos within the sample in terms of likes and comments, with Night-time haircare routine receiving 2.8 million likes and 11,900 comments, and Anxious hairdresser receiving 550,600 likes and 1,570 comments.

In contrast, the networks for videos with fewer comments were generally less interactive. *TikTok live styling* (Figure 8a) shows a very fragmented network, with 75% of its 118 nodes classified as isolates (Table 3), meaning that most users did not engage in any interaction beyond posting their comment. This video had a relatively low number of triangles (12) and edges (41) (Table 3), suggesting limited group formation and minimal back-and-forth interaction. Similarly, *Sports hairstyles* (Figure 8b) also displayed high isolation (50%) and low interaction, with only 13 edges and 5 triangles (Table 3). These findings suggest that while the videos may have attracted attention, they did not foster much user-to-user dialogue. In combination with the findings discussed in the paragraph above, this supports this notion

that the higher the number of comments, the more interactive the top 200 comments will be. These were also some of the less popular videos in terms of likes and comments, in comparison to the rest of the sample of videos.

This is not merely a bias introduced by the sampling or algorithmic ordering of comments, although this is important to acknowledge too. That the top 200 comments that I collected from each video are also the most visible comments for users who are viewing the comment sections is also a significant finding. Therefore, for users, videos with more comments create more readily accessible and highly interactive spaces. In relation to my overarching considerations of popular content, it is significant that more popular videos create and present more interactive spaces to viewing and commenting users.

The network for *Eid makeover* (Figure 8g) presents a unique pattern. Although the network contains a relatively high number of isolates (39%) (Table 3), it also has a high proportion of reciprocal ties (i.e. connections which are reciprocated) (61%) (Table 3)—the highest among all videos. This indicates that although fewer users interacted overall, interactions were more likely to be reciprocal and mutual. Considering this in relation to the visual network graph (Figure 8g), the network shape involves one cluster centring around the creator of the video, Margaret. Looking at the original comment data and the content analysis results, this user had lots of interactions with commenting users, often replying to comments in positive (for example, thanking users who compliment her) and defensive ways (for example, defending herself or belittling users who criticise her). These interactions suggest that positive and negative reactions seem to drive interactions and make users more likely to respond.

These findings highlight a spectrum of interaction patterns across the comment sections of the TikTok videos. Overall levels of interaction between users were high. With the exception of one video (*TikTok live styling*), the networks were made up of under 50% isolates (users who did not interact with anyone) (Table 3), indicating that generally more than half of the commenting users within each network had some level of interaction with others. Of all the videos with a sample of 200 comments (*Anxious hairdresser, Greasy hair, Night-time haircare routine, Eid makeover*) there was a high number of triangles, ranging from 278 triangles in *Greasy hair,* to 2881 triangles in *Night-time haircare routine*. This high number of triangles indicates that group discussions (involving two or more users) were common, and indeed, findings from other methods highlighted the prevalence of group discussions, as I will go on to discuss. Similarly, when it came to components—which are groups of nodes

that are well-connected within the group but cut off from the rest of the network—across all videos, strongly connected components were more common than weakly connected ones, again supporting the idea that interactions between groups were common. Therefore, I argue that comment sections are interactive spaces, where the majority of users interacted with another user, and many group discussions occurred.

5.2 Prominent users in the comment space

In the social network graphs (Figure 8), some networks contain users noticeably larger in node size than the rest of the users in the network, indicating that these users are involved in more interactions than others. The networks with these prominent users are *Rainbow hair*, *TikTok live styling*, *Greasy hair* and *Night-time haircare routine*. In *Rainbow hair colours* and *TikTok live styling,* users involved in arguments, characterised by much back-and-forth and retaliation, are prominent in the network. For example, in *Rainbow colours,* "hi bestie" makes an innocent comment quoting the "London look" Maybelline slogan, and "I'm in pain" belittles them by poking fun at their young age. The argument gets quite personal, both calling each other names, and a handful of other users get involved to debate about their follower numbers. In *TikTok styling*, replying users come together either to defend or agree with a sarcastic comment. Again, there is an extended argument between two users which gets personal, involving accusations of drug use and belittling comments.

However, not all prominent users are involved in arguments. In *Greasy hair,* the prominent users each commented that the creator looks like Bella Hadid (a celebrity fashion model) and many other users replied in agreement. In *Night-time hair routine* most of the prominent users left comments which prompted long group discussions based around sharing advice (I discuss this more below). So whilst two networks featured argumentative users as their most prominent users, there were also two networks where more supportive discussions and interactions created prominent users.

So far, I have highlighted that argumentative and supportive discussions both created prominent users, and that comedic and advice-sharing videos created more interactive comment spaces. Together, these findings could suggest that strong feelings towards a comment or video, whether positive or negative (e.g. agreement, disagreement, support,

gratitude, and humour) could make users motivated to comment. In turn, videos which encourage more interactive social spaces in their comments facilitate more audiencing interactions. Social spaces differ in their levels of interaction, depending on the tone of the video and tone of the original comments. This is also something which I discuss further in the next section of this paper.

In the videos *Eid make-over, Greasy hair* and *Anxious hairdresser*, the creators (Margaret, Flo, and Liam John Murphy, respectively) engaged frequently with other users by replying to their comments (see figures 10g, 10e, 10d). In the networks for these videos, the creators were quite centrally placed, and the creators were well connected, as reflected in the size of their nodes. Each creator had many singular connections with other users, which reflects that their interactions predominantly involved replying to original comments. For *Eid make-over* and *TikTok styling*, the creators' interactions mainly involved expressing gratitude for compliments and answering specific questions about the styling and techniques used in their video, for example hair colour/salon or use of bobby pins. Some of Margaret's interactions with commenters (within the *Eid make-ove*r comment section) involved her retaliating in the defence of negative comments (mostly along the lines of "you don't even look that different"), but this was less frequent than her more positive responses (that is, answering questions and saying thanks for compliments). Liam John Murphy's interactions with commenting users (within *Anxious hairdresser* comment section) most frequently involved him relating to the awkward situations expressed by commenters, and laughing along with humorous comments.

As discussed earlier, audiencing-related studies on Twitter have found that social networks are dominated by elite users, such as television networks and famous actors and performers (Highfield et al 2013 and Auveret and Billings 2016). In contrast, the social networks within TikTok comment sections were not as dominated by elite users. Creators played active roles in their networks, but these creators were more ordinary. None of the creators had the verified tick which would suggest an official profile, but they had large followings (Margaret - 16.2K, Liam John Murphy - 58.8K, Flo - 203.5K). Overall, the power dynamics within TikTok comment sections are much more balanced than the social space provided for audiences on Twitter. From an audiencing perspective, this suggests that TikTok comment sections are perhaps closer to the power dynamics of a "loungeroom" (where Fiske's 1992 audiencing studies focused) than Twitter, creating a more equal and balanced social setting.

5.3 Users interact with each other in personally and socially meaningful ways

The categories which I produced in the content analysis (Figure 9a) suggested that users interacted in comment sections in ways which were social, personal, and meaningful. Users interacted for arguments and debates, for supporting and building understanding, and to relate to each other. The meaning of these interactions often extended far beyond the video content itself, as interactions became personal (for example, arguments and discussions about real-life experiences), involved gratifying social interactions with others (such as compliments, relating to one another), and built knowledge that users can apply to their daily lives (sharing advice and routines).

Figure 9a: Most common broad categories of discussion

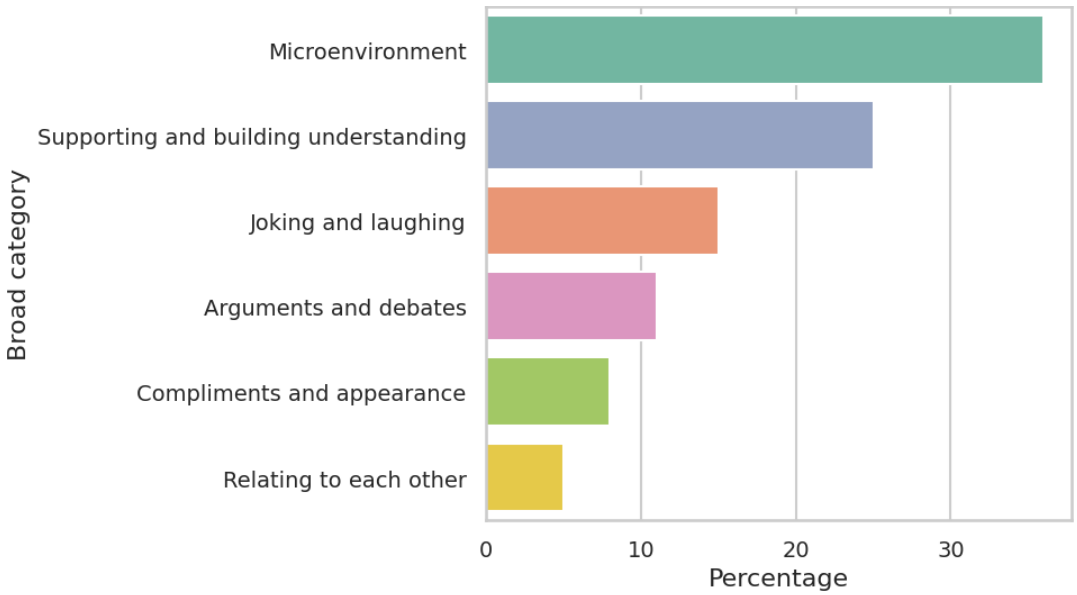
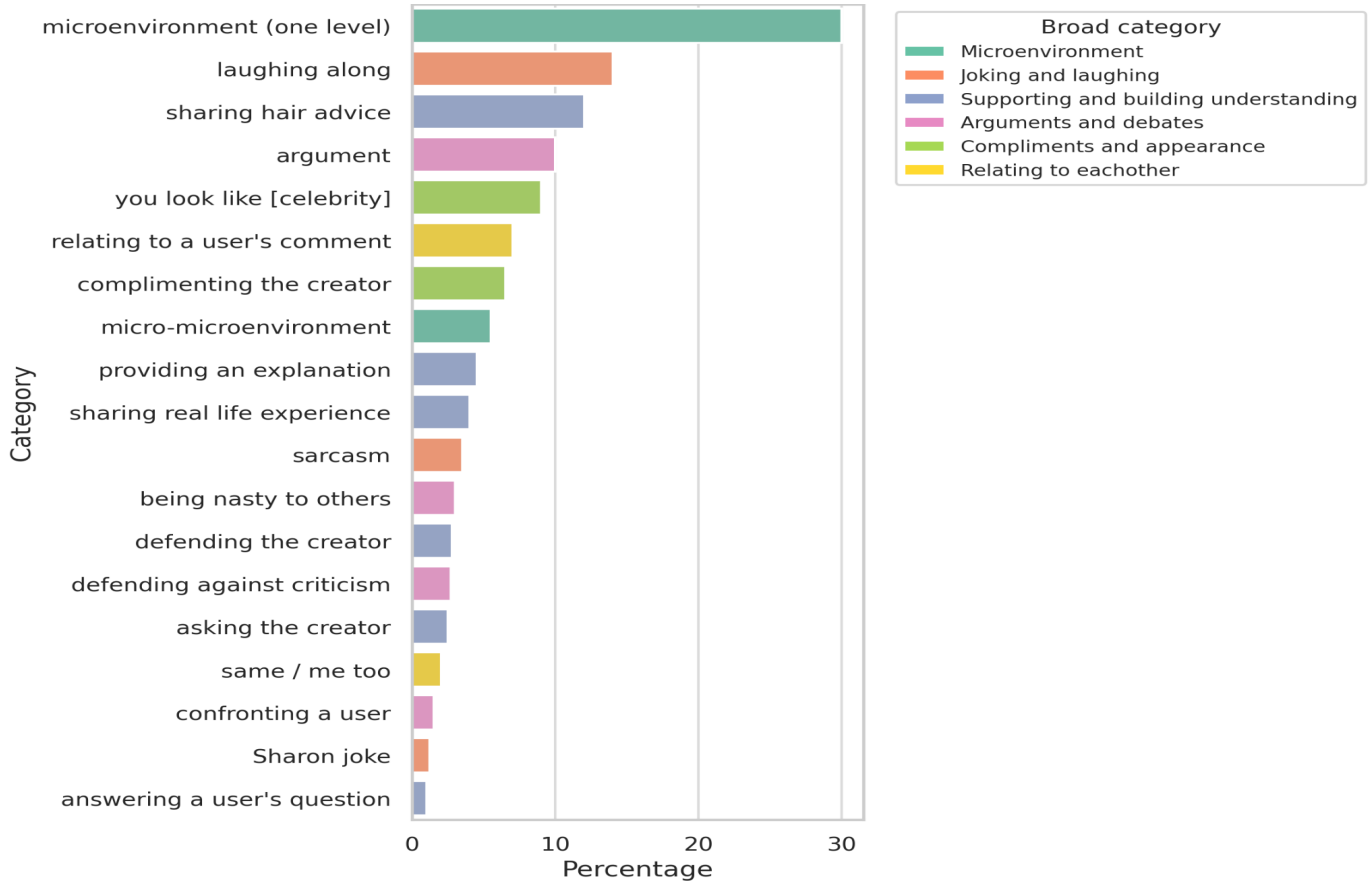


Figure 9b: Most common categories of discussion (colour coded by broad category)



The reply threads of comments often contained sustained and meaningful group discussions that transcended the video. They became like threads on a forum site, as they had almost no association with the video. In these discussions, users most commonly interacted with the group and not the video or the creator. I used the *microenvironment* category to label these discussions, choosing this term to reflect the self-sufficiency and the separation of these conversations from the wider comment environment. This *microenvironment* label was the most common broad category in the analysis (Figure 9a), and the prevalence of these discussions further highlighted the significance of the TikTok comment section as a social space for audiences.

These discussions involved users collectively making these social spaces their own and moulding their own discussions there, regardless of the video content. Much as the students discussed their own family backgrounds when watching TV in Fiske's (1992) study, here the categories highlight that audiences of TikTok videos used the comment sections to discuss

personal lives and everyday experiences. Audiencing involves the "social circulation of meanings" around a media text. Therefore, since audience members were having discussions which were personally and socially significant, audiencing happened regularly and meaningfully in TikTok comment sections.

Yet while there were many "microenvironment" discussions which extended beyond the themes of the video, common categories also pertained to direct reactions to the content itself. The *Joking and laughing* category was common (Figure 9b), which encapsulated subcategories which predominantly involved sharing an emotional reaction to a particular part of the video. For instance, the *laughing along* subcategory related to users participating in shared laughter about the video, and the *Sharon joke* category involved users laughing at a particular joke in *Anxious hairdresser* where the hairdresser screams a client's name. Commonly, comments were as short and simple as "SHARON!", "😂". Thus users also used the comment section to express emotional reactions to the video. This is further supported by the prevalence of emojis in the computational textual analysis, discussed below. Much as users would laugh loudly together in reaction to a film in a cinema auditorium, users express their shared laughter in comment sections.

I also noted that categories varied between videos and video genres. So for instance, considering where the categories (Figure 9b) were most common:

- "Sharon joke" comes exclusively from *Anxious hairdresser* (and referencing a joke suits the comedy genre of this video)
- "sharing real life experiences" was most common in *Anxious hairdresser* (suiting the scenario-sharing format of the video)
- "you look like [celebrity]" was most common in *Greasy hair*
- "sharing hair care advice" was common in *Night-time hair routine* (suiting the advice-sharing tone of this video).

This further evidenced that the comment sections were used for reactions to the video content itself. Many social TV and second screen studies focus on how users react to particular scenes or themes in a television show on Twitter (e.g. Highfield et al 2013, Giglietto and Selva 2014). TikTok is also a place for these kinds of studies to happen, where users have

interactions which discuss the videos themselves and what happens in them. Thus the video's genre and content impact the type of interactions in the comment section. Nevertheless, there were also overarching categories which were common across all videos. Despite some differences in the genre of videos under the trend, *Compliments and appearance* was one of the common broad categories across all videos (Figure 9a), which is perhaps unsurprising since all videos relate to a hair trend.

Exploring keywords and phrases supported some of these categories from the content analysis, as many of the common words and phrases related to some of the categories. The phrases "look(s) like", "looks like Bella" and "Bella Hadid" were common (Figure 11), and words within these phrases were also among the most common words (Figure 10 and Figure 11) and these relate to the "you look like [celebrity]" category (Figure 9b). Similarly, phrases such as "beautiful" and the 😍 emoji could be associated with the "complementing the creator category". This suggests that patterns in user language and discussions are broadly relevant to the subject of the trend (#hairtok). This also relate to some of the categories discussed above (i.e. *Compliments and appearance* (Figure 9a) and c*omplimenting the creator* and *you look like [celebrity]* (Figure 9b)), providing further validation and building on the categories with context from the language patterns (i.e. words and phrases).

Figure 10: Most common words across all comments

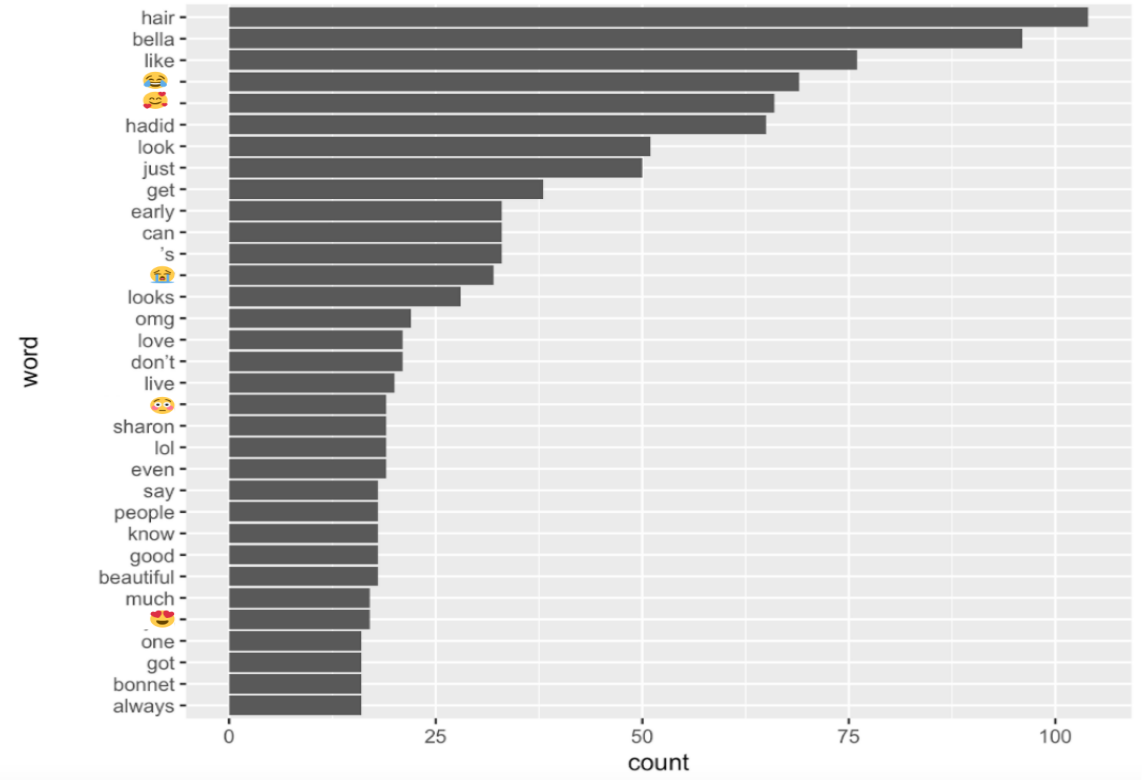
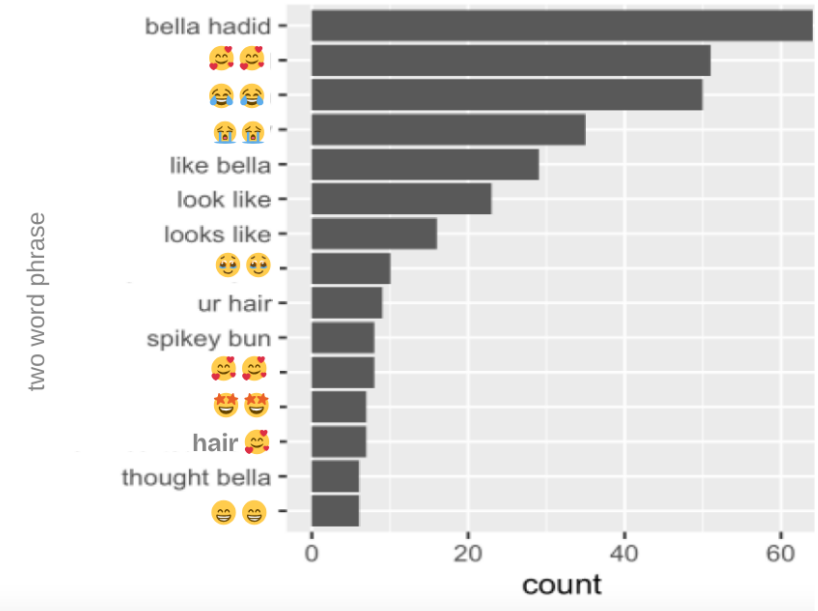


Figure 11: Most common two word phrases across all comment sections



Emojis were also common within this data. I noted during my content analysis that many comments contained *only* emojis and no other text. These emoji comments have some parallels to the shared laughter reactions discussed above, since they imply emotional

reactions to the video, or add emotional context to the comment's text. I also found that on occasion emojis were sometimes used sarcastically or ironically, for instance a 🥰 emoji after an argumentative comment directed at another user. Similarly, Auveret and Billings (2016) found that emojis were prevalent within social TV discussions on Twitter, and often contradicted the emotions expressed in the text of the comments. In their study, Auveret and Billings (2016) encouraged further study into emojis, and I would echo this for interactions within TikTok comments too.

5.4 The prevalence of group discussions and microenvironments

Group discussions became significant at various points of the analysis. As discussed above, the *group within a comment thread* was frequently the recipient addressed within comments (Table 2), and microenvironment was the most frequent broad category (Figure 9a). Well-connected groups in the social networks were also often coded with the *microenvironment* category within the content analysis, reflecting that these types of discussion create relatively siloed groups within networks.

For instance, *Night-time haircare routine* contained several well-connected components, and the discussions which created each of these components were all labelled as microenvironment discussions. The group discussions in the comment section for this video are also good illustrations of my earlier argument that discussions between audiences are meaningful and personal. As sustained interactions between multiple users, group discussions are also important from an audiencing perspective. They provide hubs for audiencing, with similarities to the TV loungeroom settings where the concept was coined and where audiences have sustained interactions over a period of time. Because of the significance of group discussions and microenvironments in the analysis and for audiencing, they warrant more discussion.

I used the microenvironment category to label the many group discussions which existed in their own bubble. The term microenvironment refers to an ecosystem which is self-sufficient and a habitat unto itself. In my use of the term, the video and wider comment environment are almost inconsequential to microenvironment discussions. These types of discussion

became forums in their own right, drawing relevance, meaning and topics from sustained user interactions, rather than from the video content itself. Like earlier research within forum studies, this highlights meaningful interactions between users occurring in text-based discussion environments, and like forums these discussions exist in their own siloes. Users contributing to microenvironment discussions want to contribute to the group discussion and to interact with the users involved in it, rather than reacting to the video or acknowledging the wider comment section. The comment sections contained long and sustained comment reply threads where users shared their own real-life experiences, debated important issues such as religion, and had arguments which became very personal. Even when these discussions had some parallels with the video content - for example, religious debates in the *Eid makeover* and sharing hair salon experiences in *Anxious hairdresser* - the significance of these discussions extended beyond the video and indeed the TikTok platform.

The microenvironment category is an umbrella category, recognising a type of group discussion and social space which can involve any topic of discussion. Microenvironment discussions concerned various subjects, listed below in Table 4. These categories further highlight that microenvironments are interactive spaces, since many of the microenvironments involve sharing advice and stories, relating to one another, having arguments, and helping others to build their knowledge and routines.

Table 4: Most common types of interactions within the microenvironment group discussions

Most common categories of discussion within microenvironments	Count
sharing hair care advice	61
relating to a user's comment	43
argument	42
providing an explanation	41
same / me too	39
sharing real-life experiences	26
sharing approaches and routines	24

Group discussions, and microenvironments especially, are significant from an audiencing perspective. In Fiske's (1992) definition of audiencing, he emphasised that audiencing

involves audience members discussing media in relation to their personal lives and backgrounds, especially in group scenarios. So within meaningful audiencing discussions, the discussion extends beyond the content itself, to the personal lives of the individuals involved. I argue that microenvironment group discussions served this purpose on TikTok, and provided spaces for the most meaningful type of audiencing interactions that occurred within the comment sections. I consider these types of discussions to be hubs for audiencing interactions, since they involve audiences interacting with each other in particularly meaningful and personal ways. I propose that users created these highly interactive social spaces where they could have meaningful and interactive discussions, as the prevalence of these discussions and social spaces within the comment sections demonstrates.

The comment section for *Night-time haircare routine* contained many microenvironments involving various subjects, and each of these discussions corresponded to components and prominent users within the social network graph (see Figure 8). The subjects of these discussions also encompassed many of the most prominent categories from quantitative content analysis, such as argument and debate, sharing haircare advice, joking and laughing. Below, I consider examples of some of these discussions, using their central and prominent users to label each discussion, and pointing to its corresponding formation in the social network graphs. These examples each illustrate that the discussions involved interesting and socially significant interactions and exemplify some of the patterns which I observed during this study. Since I am quoting full comments, to protect the users I purposefully avoided starting with the original comment of the thread, which would have made these segments much easier to find in the comment section. Instead, I focused on segments which were intriguing and illustrative and located reasonably far down the reply thread.

5.4.2 Microenvironment discussion case study: Sharing haircare advice in a supportive discussion

An interesting example of a microenvironment group discussion involved users sharing advice in a supportive environment (Figure 12). The original comment involved a user asking for recommendations about how and why to wear a hair bonnet, and multiple users got involved to ask their own questions, opening up a forum for advice and question exchange between a large group of users. So stemming from one open question, a distinct and diverse

social forum was created, which provided a space for users to build their understanding and help others. This is a great example of how TikTok reply threads can provide meaningful and useful social forums, where users feel that they can contribute to the space to serve their own purposes and ask their own questions which digress from the original comment. It was also an inclusive and egalitarian environment, where those users with hair care expertise can answer questions, and those with less expertise can ask their own questions in a supportive setting.

Figure 12: Segment of a microenvironment discussion where users ask and answer hair care advice questions

kaila	@ck.beautyofficial has great bonnets, | have longer hair and the size is great for me. You can get reversible ones from them too :)
user###	THANK YOY!!! 😄
-microwavelightssometimes	i put it in a loose bun, sometimes I braid it, and sometimes i just stuff it all in.
Sara	From where
I 'kin Light Raggedy	Do bonnets make your hair greasy overnight?
urmom	wrap it then get a net and then put a bonnet for better results
I'm an alien	no i don't think so, as long as you don't sweat during the night!
Kim 💋	What bonnet do you recommend? I don't know anything about hair care?
kaila	I have the reversible bonnet and it works great for me 💗
Kim 💋	Thank youuu

It is also significant that users often contributed advice via explanations of their own hair care routines, e.g. "i put it in a loose bun, sometimes I braid it, and sometimes I just stuff it all in" (Figure 12). This highlights that TikTok comment sections create a space where any user can contribute expertise solely based on their everyday experiences and approaches. In comment sections, much like in TikTok videos themselves, ordinary people who are not haircare professionals can assume the role of the expert by sharing their own everyday experience. This is significant in relation to RQ1, as it highlights how the social spaces in TikTok comment sections can be very inclusive and supportive, and also significant to RQ2, since it highlights how users contribute to discussions in ways that suit their expertise and experience. The creation of this open forum where users of all abilities can contribute also

has parallels to social media platforms more generally, since social media allows everyday users to contribute to the wider landscape of online advice, information and inspiration.

Figure 13: Segment of a microenvironment discussion where users relate with each other through shared humour and self-critique about their own minimal haircare routines

🦎	Haircare people probably cried reading this
Tabitha Arneson	good
Be urself	FRRR 😭😭
Ed	i don't even use conditioner 😭
Irmaikas	meanwhile me : just shampoo 😂😂😂
Artist	I had a stroke reading that 💀
Kristina	yes! | was just asking what protective style she sleeps in!
Black Mage	yas. so jealous with these hairs 🥺
Kate	SAME & I get a haircut like twice a year Imaoo
Maika dionne	Girl same [hand]
Reanna	Girl I get a haircut once a year- by my DAD @. 😭✋
rotta	I get mine from my mom 😩
Reanna	My mom is in jail so I can't 😩
rotta	Oh..
Reanna	prison*
Anonymous	I only put shampoo 😭😭
rotta	ME TOO
alexis	@rileywynnn
katie	@mOlly.ox @jess.txo
🍒🌸	Samee
ser696342907 6308	Most of the time I forget to condition tho...

bella	omg same

In the discussion featured in Figure 13, users related to the original comment which proposes a scenario along the lines of "you ever just think there's people like this and you just use shampoo". This original comment prompted a reply thread where many users related to the minimal approach described in this scenario. Contributions to this group discussion ranged from short statements of agreement, "ME TOO", "FRRR 😂😂" (FR stands for "for real"), to longer comments where users related to each other by sharing their own minimal hair care approaches in a humorous tone. This even extended to sharing details about users' personal lives and backgrounds when a discussion about parents cutting hair led to Reanna divulging "My mom is in jail so I can't [get my hair cut by her]". Again providing an example of how personal lives came up incidentally in discussions, in this case in almost a jarring way considering the joking tone of the thread.

While the video itself shared a fairly extensive haircare routine, within this group discussion users congregated to laugh along with each other at the expense of their own minimal (and non-expert) hair care routine. Therefore the group discussion digressed from the tone of the video, and users who are likemindedly alternative in their views and approach came together to relate to one another. This exemplifies how the comment sections provide a space for users to band together in like-minded groups to have discussions which contrast to the sentiment of the video and wider comment section, and again that users with less expertise in the subject matter can still feel able to contribute to comment sections for videos about advice and expertise.

Like the asking for haircare advice discussion in Figure 12, the self-criticising haircare routine group discussion in Figure 13 also involved users sharing their own hair care routines and approaches, but for different purposes and in a different tone. So whilst the conversation about haircare advice in Figure 12 involved users sharing hair care approaches for the purpose of providing advice to others, the self-criticising haircare discussion in Figure 13 involved users sharing them for comedy.

The group discussions also involved emojis being used in complex ways. In Figure 13, users included the 😭 emoji in the context of humorous self-deprecation and self-criticism, and in

other group discussions I noted that arguing users included ironically placed smiley emojis, suggesting an air of sarcasm. Both of these points further highlight the importance of considering context in the analysis of TikTok comments, since tone and meaning are context-dependent when it comes to topics and emojis. The inclusion of mentions within the reply thread also further highlights the importance of comment sections as social spaces for users, as they suggest that the comment and reply thread is share-worthy to users.

This section has illustrated how group discussions, specifically those labelled as *microenvironments* involve rich, emotive, and personally and socially significant interactions among users, reflecting how meaningful audiencing discussions occur within comment sections. This is a key finding of this paper, and one which builds on findings from the previous paper which highlighted how the definitions of trends centred around personally and socially meaningful themes and interactions (i.e. learning and sharing, storytelling, and sharing personal experiences).

6 Conclusion

TikTok comment sections are settings for audiencing interactions to happen and to be studied by researchers. They provide spaces which bring audience members of a video together to discuss a video in a social setting, facilitating many types of user interaction. This study has highlighted that TikTok comment sections are highly interactive spaces, where users have discussions which were personally and socially meaningful, which are about and inspired by the TikTok videos, therefore engaging with the 'social circulation of meaning' (Fiske 1992).

My findings suggest that TikTok comment sections are highly interactive spaces, with there being more comments which involved interaction between users than comments that didn't. There was variation in the levels of interaction between videos of different genres and tone, with genres and discussions that prompted strong feelings, such as agreement, disagreement, support, gratitude, and humour, facilitating higher levels of interaction and creating closely connected social spaces. This variation highlights that TikTok comment sections and discussions within them can provide differing types of settings for audiencing, something that could be explored further in future studies. I found that TikTok comment sections involved

more interaction than comparative studies found in relation to audiencing tweets on Twitter (e.g. Highfield et al 2013, Giglietto and Selva 2014). This further supports my proposition that TikTok comment sections provide an intriguing setting for audiencing studies.

The categories which I produced in the content analysis highlighted that discussions involved reactions to the content, but they also transcended the video and its themes to become conversations about the everyday lives of audience members, where users were often more concerned with contributing to the group discussion than reacting to the video. Much like in Fiske's (1992) study where college students discussed their own family backgrounds, loosely inspired by scenes in the TV show, in this paper I have highlighted that audiences of TikTok videos use the comment sections to discuss their personal lives and apply themes of video content to their everyday experiences.

Many of the categories of discussion highlighted that users interact in comment sections in ways which are social, personal, and meaningful. Users interact with each other to discuss and process their feelings, laugh along together, discuss their personal lives, to support each other, and to argue and debate. *audiencing* constitutes social interaction between audience members, in settings where audience members have meaningful and personal conversations about media. As such, TikTok comment sections provide a place for audiencing to happen and to be studied. TikTok is a compelling setting for future studies of audiencing, and indeed an interesting setting to study media audiences more generally.

Considering the social dynamics between users, and the power distribution of the social networks created by user interactions, the social space of TikTok comments was mostly egalitarian and dominated by ordinary users as opposed to elite users. It was more common for commenting users to address another commenter than the creator, and the creators were mostly ordinary users – that is, none-verified users with no celebrity status - with the exception of two brands. Further, the ordinary users in the comment sections found a way to contribute regardless of their own level of expertise or knowledge. For instance, in discussions where users shared advice, even users without any expertise or advice to share found ways to contribute, by asking further questions and sharing their own everyday experience. These power dynamics are a departure from Twitter audiencing discussions, which scholars have found tend to be dominated by elite users such as celebrity actors and media producers (Highfield et al 2013 and Auverset and Billings 2016). The power dynamics

within TikTok comment sections are more balanced in comparison. This is significant from an audiencing perspective, as the arrangement of the social space is closer to the power dynamics of a loungeroom than Twitter, creating a social setting where users are relatively equal and have equal opportunity to become visible within discussions.

The nature of the TikTok comment section influences audiencing interactions. Many users acknowledged TikTok and its features, such as mentioning the For You page and other content relating to the video on which a user was commenting. Therefore TikTok features formed an important discussion point for users, and the TikTok setting of these discussions was central rather than merely incidental. The character-limited and text-based nature of discussions within the comment sections shaped how discussions unfolded, such as in arguments where the tone of comments was open to misinterpretation, and in how users addressed imagined groups and the crowd in a type of interaction facilitated by the nature of comment sections. Thus I argue that the design of TikTok plays a role in shaping discussions. This echoes findings from my previous paper about users including TikTok-related hashtags in video captions and being influenced by how TikTok presents and defines trends.

As well as users in TikTok comment sections being physically closer to the content they discuss (in comparison to Twitter and broadcast TV), I have also argued that video creation on TikTok is made relatively accessible and easy for most TikTok users. This therefore seems like another unique characteristic of TikTok audiencing, that users can engage with the settings and features of TikTok and TikTok video production more so than TV audiences might with the production of TV shows, which they know comparatively less about as this is a specialised and less transparent industry.

Overall, the findings suggest that audiencing involves personally and socially meaningful and significant discussions and interactions. I conclude that TikTok comment sections are a compelling setting for audiencing interactions to be enacted and studied. This is an original empirical contribution into the nature of audiencing in TikTok comment sections. The significance of the types of interactions within the TikTok comment sections could extend beyond considerations of audiencing, and even outside of media audience studies or media studies. Studying arguments, advice sharing, and sharing details of users' personal lives could be compelling topics in wider fields and for many research purposes. Therefore, the findings in this paper could also provide a basis for studies in other fields.

My findings suggested that there were differences in the level of interactivity and the types of interaction between videos, and videos of certain genres. Future studies could compare different genres or types of video, or focus in more detail on a specific type of video. Many of the types of interactions discussed in this study highlight that sociologically interesting interactions occur within TikTok comment sections. Future studies could examine what their interactions within these spaces mean to users of TikTok comment sections, and why they interact in the ways that they do. Comments also frequently contained emojis, and many comments *only* contained emojis, including seemingly sarcastic or contradictory uses. Future studies could consider emojis in TikTok comments in relation to theory about emoji use.

Overall, the key argument of this paper is that comment sections of trending videos provide settings for personally and socially significant interactions between users, where users mould comment sections into spaces to learn from each other, to share advice, to debate, and to discuss their personal lives, often in ways that transcend the topic of the video and where the setting of the comment section becomes merely incidental. This builds on the findings in the previous paper where trends were characterised by meaningful user practices.

Further, this paper also builds on the argument from the previous paper that trends were shaped by an interplay of user and platform influences, and that aspects of the TikTok platform influenced how users engaged with trends (i.e. including #foryoupage in video captions). This therefore feeds into my overarching contribution that trends are created and shaped by an interplay of platform and user influences. In this paper, TikTok features were also referenced by users within comments, with users acknowledging the TikTok environment (i.e. the arrangement of videos around the one they were commenting on), and with discussions being influenced by the character-limited and text-based nature of comments.

So far, the first two empirical papers have explored how trends are presented, how users interact with trends via captions, and how they interact within comment sections. In the next paper, I focus on the actual content of videos, which is important, as videos play a central role on TikTok. Further, building on the findings thus far about trends and comments involving personally and socially meaningful topics, practices, and interactions, in the proceeding paper I focus partly on how memetic TikTok videos serve personal and social functions.

Chapter VI Why do memes matter? TikTok video memes as vernacular creativity: A multimodal discourse analysis of TikTok videos.

1 Introduction

If you have spent any time on TikTok, chances are you have encountered a video meme. A TikTok meme is a short, often humorous video that follows a recognisable format, and is widely shared and imitated. These memes often include recurring visual and performative formats such as lip-syncing, gestures, reaction shots, or catchphrases. They might also reflect a relatable situation or a point of view. TikTok memes sometimes come about through what is known as a TikTok "challenge", where other users are invited to copy, and this is framed as a challenge.

This culture of copying is so ingrained and influential within the culture of TikTok, that TikTok has become associated with controversial challenges, which challenge users to engage in dangerous actions such as holding their breath until they pass out in the "blackout challenge" (Phillips 2024) or inserting metal objects into laptops to start fires (Notopolus 2025). Yet this culture of copying can also be safe and fun. Other well-known memes include "I'm just a baby" which reused a viral sound of a toddler saying this catchphrase, with users humorously using the phrase to excuse immature behaviour or to capture something cute and innocent (Venn 2022), and the "That's Not My Name" meme which uses a 2008 pop song while listing all the names or labels people go by (such as "Mom", "Madame", "babe", "Principal"), highlighting issues of personal identity through humour and repetition (TikTok 2025).

The prevalence of memes on TikTok has also been recognised in academic literature. TikTok has been described as a "memetic" platform (Zulli and Zulli 2020), because it enables and promotes a culture of copying, whereby users reuse and replicate aspects of video storytelling from the videos of others. These practices often create memes, which are characterised by conventions relating to effects, audio, subjects, gestures, and routines (Zuli and Zuli 2020). While the recycling of conventions is integral to the creation and maintenance of a meme,

users also innovate while using these templates of conventions, so that they offer their own subjects and variations in storytelling and technical devices. Therefore, memes "mix the familiar with the unfamiliar" (Murru and Vicari 2021, p. 2423). Users place their own scenarios and variations within a meme template, for example moulding the "That's not my name" meme to their own lives and identities, and sharing their own scenarios within the "I'm just a baby" meme.

These widely replicated characteristics of memes resonate with understandings of *vernacular creativity*, which recognises that conventions in content arise in everyday user content generation (Burgess 2006). Vernacular creativity is the everyday, often informal and non-professional form of creative expression that emerge on participatory digital media platforms (Burgess 2006). The concept also recognises how creative expression involves the social and collective process of ordinary users creating conventions in creative content production while also leaving space for innovation. This applies to memes, which simultaneously involve imitation and innovation. Vernacular creativity therefore provides a useful lens for considering memes in relation to my focus on trends and user practices.

While vernacular creativity is a guiding concept in this paper, I approach memes practically via multimodal discourse analysis, and therefore I also consider memes as a form of *discourse*. Considering memes as a form of discourse likens the collective and cyclical shaping of memes to how language about a phenomenon comes to shape understandings about it (Rose 2021, Hakokõngäs et al 2020, Gal et al 2016). As I highlight above, this captures the key mechanisms that characterise memes and vernacular creativity: users collectively create and maintain conventions while also creating content which is innovative and personal.

In this paper, I focus on the #tellmewithouttellingme meme, which is a popular TikTok trend that invites users to communicate something indirectly, using the prompt "Tell me [something] without telling me [something]" (where "something" is an aspect that users demonstrate, and which can vary, for instance "Tell me you're a fitness freak, without telling me you're a fitness freak). This format encourages participants to imply something without explicitly stating it, relying instead on visual, performative, or linguistic cues. I selected the meme because it embodied many characteristics of memes from the literature, and therefore met expectations based on the literature. It exemplifies both the structured conventions of

TikTok memes as templates for collective participation, as well as the creative flexibility users are afforded to innovate and make the meme relevant to what they wish to express. The meme creates space for personal expression and collective, social content creation, and therefore serves as a site for vernacular creativity and discourse.

I argue that users utilised accessible and creative techniques to skilfully craft videos which were familiar through their conventions while also engaging through innovation, while encouraging others to participate in the meme. As such, memes can be considered as a form of vernacular creativity. Users made content about intimate and meaningful aspects of their personal lives within their videos, and these subjects and the ideational and interpersonal functions they play suggest that the meme may fulfil meaningful personal and social roles. This echoes findings from the previous two papers that trends and their associated interactions facilitate and involve practices which are personally and socially meaningful to users, such as learning and sharing with others, telling stories about personal lives, sharing emotional reactions, and arguing and debating.

Memes are a particular type of trend which are characterised and shaped by user practices in content creation, which makes them appropriate to study in relation to the overarching focus of this thesis on what trends reflect about user practices. In the time between writing the first paper and beginning this paper in early 2022, TikTok had begun to label some trends as "memes" on the TikTok Discover page. TikTok itself had also begun to recognise and label meme trends, and they were included on the Discover page. They are also a good focal point for hybrid methods, particularly in relation to considering vernacular creativity. This is because memes are characterised by conventions (i.e. patterns) and innovations (i.e. exceptions, difference, and individual contexts), which hybrid methods are well-positioned to examine.

This paper advances existing literature on memes by examining TikTok video memes as patterned (i.e. convention-recycling) yet flexible and innovative practices of vernacular creativity. Fundamentally, I highlight how memes can fulfil personally and socially significant roles for users. While foundational work has conceptualised memes in terms of replication, remix, and spread (e.g. Shifman 2014, Milner 2016), and explored their ideological and political dimensions (e.g. Gal et al 2016), in this paper I shift attention to how users engage in sharing intimate, meaningful, and social details of their lives in ways that

open up to others, asking other users to relate to them and to join in via the conventions of shared and social creative expression.

2 Literature review

2.1 TikTok, memetic production, and video memes

A meme is a unit of cultural expression that spreads through imitation and variation, particularly across digital platforms. Originally coined by Dawkins (1976) to describe how cultural information replicates and evolves like genes, the concept has been expanded to encompass a wide variety of online content formats, including images, videos, phrases and challenges that are shared, remixed, and adapted by users (Shifman, 2014).

Social media memes are shaped collectively through user participation and reflect both personal and cultural meanings (Milner, 2016). On platforms like TikTok, memes often take the form of recurring audio clips, visual templates, or hashtag-based trends that users recreate with their own spin, enabling widespread engagement while fostering individual creativity. As such, a meme is defined by its commonalities and conventions, which might see users adopting the same dance routine, lip syncing to the same song, using the same phrase, or creating videos around the same or similar skits, narratives or scenarios (Zeng et al 2020). Therefore, Cannizzaro (2016) defines memes as "copying units" (p. 562).

Memes can be fun and also meaningful, often involving users navigating aspects of their personalities and lives via playful and social content creation. In the "I'm just a baby" meme, users recycle audio of a toddler's squeaky protest and turn it into a hilarious excuse for everything from skipping chores and dodging responsibility to proclaiming innocence in different scenarios. It is the internet equivalent of throwing your hands up and saying, *"Don't blame me, I'm adorable and clueless!"* Similarly, in the "That's Not My Name" meme, using the upbeat defiance of the 2008 pop song of the same name, users navigate identity roles via a fun roll-call format. Within the video memes, users list their names or labels, from "Mom" and "Honey" to "Boss Lady" or "Nurse", before rejecting them all in favour of their own name.

This culture of copying that leads to memes is facilitated by elements in the design of TikTok. Zuli and Zuli (2021) draw attention to the buttons on video lists which prompt users to "Use this sound", "Join this hashtag", and more recently "Use this effect" (Zuli and Zuli 2021). On videos, key elements including audio, hashtags, and effects are all clickable, and clicking on these elements leads to a corresponding video list page, which also includes buttons prompting users to reuse these elements. These video list pages include the trend descriptions discussed in the first paper, which often contain suggestions or instructions on how to engage with the meme trend, discussed in Chapter IV, which further encourages users to imitate each other when joining in with the trend. The app also includes the 'Stitch' and 'Duet' tools which allow users to include videos of other users in their own videos, which facilitates the direct reuse of others' videos, and which users demonstrate awareness of in their references to them in comments and captions.

There are also video elements which are not embedded in the design of TikTok, but are replicated in users' memetic production. Rintel (2013) likens the way that language elements are reused in memes to *snowclones,* which are adaptable phrases commonly used within memes, such as "grey is the new black" (p. 258). These phrases can be lightly adapted by users yet remain widely understood and recognisable, for example, "grey is the new black" could be adapted to "bread is the new black" which means that bread is the new "in" thing. This applies to other features of memes which are adaptable while remaining familiar and widely understood. Non-language elements can also be reused and remixed, including gestures and tone of voice, styles of editing and camera work, and narrative and storytelling devices.

These replicated elements have varying levels of visibility on TikTok. Some are embedded into the TikTok platform design and are made obvious through labelled elements within the video interface (such as audio and effects), whereas others are more subtle and dependent on the user's performance (such as hand gestures, tone of voice). The rigour with which the video elements are copied and replicated within memetic production can also vary. For instance, while dance routine memes are often based on users dancing the exact same routine to the exact same song, memes which involve users inputting their own scenarios or experiences within the template of a meme are more open to innovation, since these memes are based on users putting their own spin on things. For instance, within the #TellMeWithoutTellingMe meme, which I focus on in this paper, users input their own

phrase within this template, moulding the meme into a video to represent relatable scenarios or traits, such as “Tell me your wife is Latina without telling me your wife is Latina”.

For example, one trend labelled as a meme at the time of starting this paper was the #putyourfingerdown trend, where users adopted the gesture of holding up a hand of five fingers, and then shared various scenarios or traits in the audio (either reusing another user’s audio, or speaking their own), with the featured user then putting a finger down when they could relate to the trait or scenario most recently mentioned. For example “put your finger down if you’ve ever eaten pizza in Italy”, “put your finger down if you’ve cried at the doctor’s office”. Another example is the #youtootrend which was based around users filming acted scenes, usually between two people, when one character mistakenly says “you too” when it doesn’t make sense to say this. So for instance, one video has a cinema customer accept a ticket from a cashier at the ticket stand, the cashier says “thanks, enjoy your film!” and the customer responds “thanks, you too!” while cringing at their response, and then the video cuts to comic scenes of the cashier and customer enjoying watching the film together. The top 10 videos for this meme shared similar scenes based on different scenarios, all using on-screen text rather than dialogue, and all using the same song and a similar sequence pace. This meme provides an example of how many elements can be reused (scenes, dialogue delivered in on-screen text, audio, sequence pace) while also leaving space for innovating, with users focusing on a diverse range of scenarios and settings.

In this paper, I focus on #TellMeWithoutTellingMe, a trend from the Discover page which TikTok labels as a meme (Figure 14). Before selecting a trend, I conducted a preliminary exploration of TikTok trends labelled as memes and found variation in how they balanced innovation with convention (as I explain below), as well as in the range of video elements involved. I chose the #tellmewithouttellingme trend because it was rich in variation and incorporated conventions across multiple video elements, making it well-suited to both the theoretical focus on memes and the multimodal discourse analysis approach. Further, from an initial exploration of this meme, I could see that it involved users creating content which pertained to meaningful aspects of their personal and social lives, which provided further motivation for studying it in relation to discourse, as I discuss more in the sections below.

Figure 14: #tellmewithouttellingme banner as listed on the TikTok Discover page

TikTok includes a description of the meme on the trend's video list page, which is "Tell me something about you... without telling me". Thus users are tasked with demonstrating something about themselves without actually saying it, and this is what the findings of this paper mostly highlight. Even from looking at a small handful of videos in a preliminary exploration, it was clear that this meme trend involved more variation in storytelling techniques and video elements than #putyourfingerdown and #youtootrend, since in these memes users predominantly used the same filming and editing techniques, gestures, and approaches to audio/captions. In all three examples the key changeable element and area for innovation is the subject matter, as users can input their own scenarios and topics, such as life experiences, personality traits, job.

2.2 Why do memes matter? Considering memes as vernacular creativity and discourse

In order to explore the sociological significance of memes, I approach memes via two key concepts: *vernacular creativity* and *discourse*. These concepts provide useful perspectives for exploring how memes operate as a form of collective cultural expression that is shaped by, and shapes, everyday user practices. *Vernacular creativity* draws attention to the everyday, participatory, and often spontaneous forms of user-generated content production that emerge within digital platforms such as TikTok, and which shape genres of content production, including memes, via the collective creation of conventions and encouragement of innovation. Meanwhile, the *discourse* highlights the ways in which such forms of expression construct shared meanings, enabling users to communicate, interpret, and reframe experiences within a wider cultural context. Examining memes through these concepts allows for a deep understanding of memes as meaningful social artefacts. The research questions that guide this paper therefore focus on how memes can be understood through the lenses of vernacular creativity and discourse, as I explain below.

2.2.1 Memes and vernacular creativity

Burgess (2006) uses the concept *vernacular creativity* to recognise the creative dynamics which occur within everyday user content production like those on TikTok, which are distinguishable from commercial and elite media environments, such as those controlled by media production companies, studios, broadcasters, the press, celebrities. Burgess's definition of vernacular creativity refers to the "creative practices that emerge from highly particular and non-elite social contexts and communicative conventions" (2006, p.206) and she recognises the democratising power of vernacular creativity in disrupting the otherwise commercially and elite-dominated media landscape. Just as elite producers in media genres collectively craft and circulate old and new conventions of genre, vernacular creativity sees ordinary users creating their own conventions and practices within their everyday content production. These conventions are circulated and perpetuated through collective watching and making, which for elite media producers occur via streaming platforms, broadcast channels and film festivals, and for ordinary content creators occur on social media platforms such as TikTok, since these settings provide a space for collective and participatory watching and creating. Of all the forms of everyday content production, memes are particularly relevant to vernacular creativity, as they are created and characterised by users collectively creating and maintaining conventions.

The concept of *vernacular creativity* simultaneously highlights the importance of innovation. It is equally interested in adherence to convention to create familiarity *and* innovation to create something new and engaging. In her account on vernacular creativity, Burgess (2006) claims that vernacular creativity:

> "is the process by which available cultural resources (including both 'material' resources—content, and immaterial resources—genre conventions, shared knowledges) are recombined in novel ways, so that they are both recognizable because of their familiar elements, and create affective impact through the innovative process of this recombination" (p.206)

The examples of memes discussed above and the findings discussed in this paper highlight that TikTok video memes often simultaneously involve users adhering to meme conventions while also creating new and innovative content. Created content is diverse in elements such as tone of voice, subject, and style, and users are able to represent their own experiences and situations, while still participating in the social act of meme creation by reusing the meme conventions. Murru and Vicari (2021) also equate memes with vernacular creativity, since memes "mix the familiar with the unfamiliar" as part of a social process where "memes are created with awareness of each other" (p. 2423). Therefore, memes involve users creatively and collectively crafting content which feels familiar through its conventions, yet equally engaging and fresh through innovation.

Understandings of social steganography and affective coding can also add further significance to this development and recycling of conventions. These concepts recognise how meaning-making and expression amongst social media users is not always transparent or open. Instead, through agreed but secretive conventions, social media users can communicate meaningfully with intended audiences while remaining opaque or illegible to others (Marwick and boyd 2011, 2014). This means that groups of users can "hide in plain sight", an example of this being teenagers using coded language to hide true meaning from parents, which can happen in both playful and deceptive ways. What is being encoded within forms of expression can range from information (as in Marwick and boyd's debates) to more subtle expressions of emotion and mood (Das and Hodkinson 2020). This is especially relevant in the context of the #TellMeWithoutTellingMe meme, which in its very definition and utterance is based around telling, without telling, i.e. demonstrating through codes and inferences which are more subtle, and more coded, than directly "telling".

The collective memetic creation process, based on users imitating and replicating conventions, is central to how sociality on TikTok unfolds. This is different to the sociality that other platforms facilitate, which is more focused on "interpersonal connections" (Zulli and Zulli (2022, p. 2). Through the process of vernacular creativity, TikTok users simultaneously participate in the social act of meme creation whilst also expressing themselves and their creativity (Ditchfield and Vicari 2025). Therefore, in this paper I explore memes from the perspective of *vernacular creativity*. In the next section, I discuss memes as discourse, which involves considering how memes involve, enact and express both

personal and interpersonal meanings and functions.

2.2.2 Memes as discourse

Through vernacular creativity, memes become a kind of language formed and used by a collective of individuals, with its own conventions and shared understandings. This has parallels with understandings of *discourse.* Scholars have made this connection between discourse and memes, recognising that memes create discourse (Hakokõngäs et al 2020, Gal 2019), or examining memes analytically via discourse analysis (Hakokõngäs et al 2020). Rose (2021) explains that "discourse is a particular knowledge about the world which shapes how the world is understood and how things are done in it (p. 187). For instance, Bryman (2016) argues that discourse about mental illness comes to shape how society understands and treats people suffering from mental illnesses.

Therefore understandings of discourse often acknowledge the active role which modes of expression (such as art, language or photographs) play in shaping society, our understandings, and how we process and express things about the world. Just as discourse is a collective language continually shaping itself, memes are created and maintained by users participating collectively in a mode of expression, and the memes they create then come to feed into the cycle of moulding further developments of the meme.

Considering memes from the perspective of discourse also highlights the role which they play in shaping online dialogue between users, and more broadly in shaping understandings of the world, online and offline. Discourse acknowledges the functional roles played by language, and the important personal and social roles which modes of expression can play for creators and audiences. Some discourse analysis scholars highlight that modes of expression model meaning through ideational ("representing our personal experiences to each other") and interpersonal ("enacting social relationships") metafunctions (Halliday and Matthiessen 2014). With a third metafunction of textual "organising these functions within modes of expression" encompasses the practical act of expressing these ways of modelling meaning, such as within meme creation.

In the context of TikTok videos, these functions involve users, as creators of videos and

audiences of the videos of others, making sense of their worlds and interacting with others through creative expression. These functions also highlight the potential for memes to play important personal and social roles in the lives of individuals, in making sense of the world and having meaningful interactions with others. While it is difficult to explore how meaningful content and interactions are to individuals without asking them directly, discourse analysis provides a mechanism for considering the personal and social functions which are involved in creating and maintaining discourse and memes. Therefore, discourse analysis is a suitable approach for considering memes, and one that I utilise in this paper.

In the first two papers I suggested that trends and the user practices and interactions which they involve are personally and socially meaningful. However, this is difficult to verify, without asking users directly. Yet within the confines of studies which are based on the secondary "by-product" data available on social media, discourse analysis provides a perspective to consider how modes of expression serve ideational and interpersonal functions without talking to users directly. Using discourse analysis enables me to achieve my overarching research aim for this thesis; to consider the uses and limitations of this by-product social media data, discussed above.

To approach memes practically as a mode of discourse, in this study I use a multimodal discourse analysis approach, inspired by Hakokönga̋s et al's (2020) multimodal discourse analysis of memes. Memes often involve various modes of expression (Hakokönga̋s et al 2020) including visuals, audio, sequence, gesture, effects and text, and have therefore been described as multimodal (Katz and Shifman 2017). Hakokönga̋s et al (2020) therefore recommend multimodal discourse analysis for studying memes, since this approach recognises how memes "comprise all [their] elements, for example, a juxtaposition of images and accompanying text" (p.4). Hakokönga̋s et al's findings are presented and discussed as broad themes, such as *Humour* and *History*. Rather than approaching each mode (i.e. visuals, text, audio) as separate entities, they consider the memes in relation to *content, form,* and *function*. These are elements which I consider within my multimodal discourse analysis, and they are defined as follows:

- *Form* relates to the formal elements which the meme is constructed of (e.g. photographs, paintings, graphics, videos, text) and how these are practically and technically assembled (Hakokönga̋s et al's 2020).

- *Content* broadly summarises the *framing, subject* and *tone* of the memes.

  For instance, Hakokönga̋s et al (2020, p.9) develop the following themes in relation to memes "history, humor, mythology, symbols, news, and mottos". (Within my study I develop themes inductively so I do not use these particular themes, however they serve to illustrate aspects of *content*).

- *Function* considers the roles performed by the memes

  To break down the consideration of function, I draw on Halliday and Matthiessen's (2014) metafunctional theory, which considers the function of discourse in relation to how it "models" and creates meaning. Their theory breaks this down into the following categories:

  - Ideational meaning is "representing our experience to each other" (Forrey and Sampson 2017)

  - Interpersonal meaning involves "enacting our social relationships" (Forrey and Sampson 2017)

  - Textual meaning is the "organising our enactments and representations as meaningful text" (Forrey and Sampson 2017).

    This meta function mostly recognises the act of assembling these first two meta functions as a text, therefore it is more of an implicit and all-encompassing consideration of the paper, and not something I directly reference in the findings.

Building on these foundations, I now turn to the specific research questions that form the basis of this study.

3 Research questions

Within the research, I explore the characteristics of video memes on TikTok and consider them from the perspective of discourse and vernacular creativity. I focus on the case study of the meme #TellMeWithoutTellingMe.

As I have discussed above, I approach this study as a multimodal discourse analysis, and I focus the first three research questions on *form, content,* and *function,* per Hakokõngäs et al (2020). I approach function specifically from the perspective of ideational, interpersonal, and textual meta functions, as per Halliday and Matthiessen's framework (2014), as I also defined above.

RQ1 How are the videos constructed through elements of *form*? How are these elements of form used to replicate conventions and to innovate?

Within the first research question, I focus on *form* (the formal elements which the meme is constructed of) by considering how the videos are constructed in relation to audiovisual and technical elements, (i.e. objects and people who appear, sequences, phrases in text and speech). The literature review highlighted how creating conventions within elements of form is central to how memes are created and defined, and that understandings of vernacular creativity recognise simultaneous innovation and adherence to conventions in order to create content which is recognisable and familiar yet also engaging. Understanding these conventions and innovations in form within the videos is important for understanding the meme and the interesting user dynamics which produce and maintain it.

RQ2 What themes are involved in the *content* of the videos?

The second research question focuses on *content.* As I outlined above, Hakokangas et al (2020) use *content* to capture the framing and tone of videos (i.e. humour and politics), and *content* therefore considers what the videos are about, how they are framed, and the tone that

they convey. I take a similar approach, considering the subject (i.e. relationships, identity) and tone (i.e. comedy, relatability) of the videos.

Within the discussion of memes in the literature review, I highlighted how the content of memes is a key area where users innovate to make their content specific to them, their experiences, and personality, and therefore *content* is an important and meaning-rich part of the videos to consider.

RQ3 What do these findings tell us about the *metafunctions* of the videos?

The third research question considers the findings from the first two research questions in relation to the metafunctions of discourse. As outlined above, metafunctions consider the ideational meaning "representing our experience to each other" and interpersonal meaning "enacting our social relationships" within texts.

While the first two research questions consider what memes are made up of, in terms of their technical elements, audiovisual elements, and subjects, this question focuses on the personal and social roles played by and within the memes. As discussed above, considering function is an important aspect of discourse analysis. It also facilitates the consideration of memes in relation to their dynamics which make them important. For instance, considering the personal (ideational) and social (interpersonal) roles played by memes is important for considering their significance in the everyday lives of users (i.e. Burgess 2006), and the dynamics of the unique form of sociality which they involve (i.e. Zuli and Zuli 2020).

RQ4 What do these findings tell us about vernacular creativity within TikTok video memes?

As I discussed above, vernacular creativity recognises the significance of the creativity which emerges through collective action of ordinary creators, and how these practices are

sociologically interesting as they constitute users democratising the media landscape and making sense of their lives through the creative and collective act of content production.

The final research question considers the findings and discussions from the previous three questions in relation to vernacular creativity. Each of the first three questions have some relevancy to vernacular creativity; in considering how conventions and innovations proliferate in the social space of collective meme creation, through elements of form and content, and in considering the personal and social significance of memes by considering metafunctions.

The first two research questions (RQ1 and RQ2) are addressed under their own headings in the findings sections, and the second two research questions (RQ3 and RQ4) are discussed throughout the findings section. This is because the first two research questions involve primary analysis of the video content, whereas the second two research questions involve interpreting the output of these primary analyses.

4 Data and methods

This section is organised in chronological order, beginning with a discussion of how I selected trends and videos and collected data, proceeding with a section on how I used the computer vision tool, which constitutes something between a data collection and preparation step, and then moving on to outline my hybrid approach to methods, followed by a discussion of each analytical method and how I applied them.

4.1 Trend focus and video sampling

As I outlined in my first paper, selecting a trend from the Discovery page means choosing a popular trend which is being actively pushed by the TikTok platform, which is in line with my overarching research focus on trends and popular content. As with the examples discussed above, within the trends labelled as “meme” by TikTok, there was variation

between in levels of innovation and convention, and in how many video elements were involved in the memetic production. For the purpose of this study, I wanted to select a trend which was rich with variation and where conventions spanned various elements. Not only would this suit the discussion of memes and the points of interest in the above literature review, this also suited the multimodal discourse analysis, since this approach aims to focus on the video as a whole rather than focusing on one particular video element (such as visuals).

These motivations led me to choose the meme trend #TellMeWithoutTellingMe. From a preliminary exploration of the meme, watching 30 videos, I could see users reusing various video elements, including phrases in audio and on-screen text, forming sub-topics within the trend through variation and innovation, and reusing and remixing various elements such as scenes and sequences. Therefore this meme was a good fit for the study.

From the #TellMeWithoutTellingMe trend, I downloaded and scraped the 1,000 most popular videos and their metadata, using the TikTok scraper (drawrowfly 2025) which I used in both previous papers. I stored this metadata within a spreadsheet. This sampling method of focusing on the top 1,000 videos emulates the approach I took in previous papers, again focusing on the most popular content within a trend.

This sample of 1,000 videos is the same sample size used in my preceding paper, and is intended to provide a sufficiently large dataset to use and explore computational methods, while also being realistic for the manual analysis and the multimodal discourse analysis in the study. For the manual analysis, I focused on a sample of the most popular 100 videos, which I considered adequate to explore widespread elements and themes.

4.2 Computer vision processing and data preparation

The first step of the analysis was to undertake computer vision processing. Computer vision provides tools for recognising what an image or video contains, identifying and labelling objects (e.g. person, cat, vehicle), the emotions of people who appear in a video, and on-screen text (Manovich 2020, Chen et al 2021). This step enabled familiarisation with the videos and data and a necessary pre-processing for the computational analysis, since the

computational methods I used utilised textual data. Manovich (2020) advocates for the potential of computer vision for studying images at scale, for purposes including "automatic detection of image content, artistic styles, photographic techniques, [and] genres of TV and video" (p.11). I applied the computer vision tool for the "automatic detection of image content" (Manovich 2020).

The computer vision tool that I used was Amazon Rekognition (Amazon Web Services 2025). I opted to use an "out of the box" computer vision tool, rather than building my own, as the level of data, skills, and time required to build my own was beyond the scope of this study. Amazon and Google both provide computer vision tools (Amazon Rekognition and Google Vision AI). These tools make computer vision accessible for social researchers, and users may access the tools for free up to a certain threshold (1000 minutes of video each month), and as such it is also more widely useful as a replicable example, since this tool is accessible for other researchers to use.

Running the videos through Amazon's Rekognition tool produced the following data:

- Labels of objects, emotions and events (e.g. person, dog, bride, guitarist, wooden spoon, wedding, happy, angry)
- Transcribed on-screen text (where present)
- Transcription of spoken language in the audio (where present)

I added this output to the spreadsheet alongside the video metadata, produced from the steps described in section 4.1. I manually checked a random sample of 40 videos and their Rekognition output data, for mistakes and omissions, and also to add anything that might not be machine-recognisable. This validation is important when working with these tools, given that video is a complex format with various elements and moving parts (Ajanki 2021)

Since computer vision tools are relatively new for social research, it is important to consider their limitations. This is especially important because the tools are often designed by commercial actors, and their design is black-boxed, so it cannot be fully understood by researchers. There will always be a margin of error with these tools, such as an incorrect label or an object missed (see Ajanki 2021). I found that mistakes were not common, although I did not check all 1,000 videos. In the sample of 40 videos that I did check, I noted 11

mistakes in visual labels, and 7 mistranslations in audio. Considering that each of these 40 videos had an average of 75 visual labels and had one or two sentences of transcription, this was not a significant quantity of mistakes.

Mistakes which I noticed included mislabelling such as a houseplant labelled as a tree, a dog labelled as blanket, and some mistranslation of audio ("have" as "of", "goal" as "girl"). There were many labels per video, around 500, and these labels had varying confidence levels – that is, percentages which indicates how certain the model is in the accuracy of this label. The labelled aspects also appeared for varying amounts of time in the videos. With the visual labels, the more frequently appearing objects were correctly labelled, probably due to there being more time for the tool to analyse the object. As I discuss below, I eventually filtered the visual labels to the ones which appeared most often, and had higher confidence levels, reducing (but not eradicating) the chance of analysing erroneous labels.

There was an imbalance in the amount of data which the Rekognition tool produced across the different formats within video (visual, text, audio). Visual labels and on-screen text transcriptions were produced proportionally to their time on screen, which created multiples of the same label and phrase. There were also many visual labels, as even things which featured in the video momentarily were labelled by the tool. Having significantly more data for visuals or text would skew the analysis to favour a particular format, which would not be in line with the multimodal intentions of the study. Therefore, I developed solutions specific to each format to tackle these issues.

For visual labels, I performed some counting of the labels in Python and retained only the top 30% of labels, which I found through exploration of the videos and data was a suitable benchmark. For the sake of accuracy and to further narrow down the visual labels, I limited the scope of the labels to only focus on labels with a 60% confidence level or more. During the earlier checking stage of the Rekognition output, I found that most mistakes in the labelling were under a 60% confidence level, so I decided this benchmark was appropriate. Vvisual labels could be relatively insignificant or unintentional, such as the incidental presence of a pot of utensils in the background of a kitchen scene. The steps described above were my attempt to focus as much as possible on the labels which were most significant and reliable.

The data preparation was more straightforward for the data which was transcribed from on-screen text. In Python, I was able to identify and remove repeated phrases relatively easily. This meant that on-screen text would not be favoured over audio text, as the output of both would only contain one version of each phrase which appeared or was spoken.

I also conducted some standard data preparation in Python, which was necessary for computational text mining and topic modelling. This included transforming all text to lowercase, removing punctuation, removing stop words (words with little meaning such as "i", "you", "and", "or"), and tokenising, which involves separating textual data into single words for counting purposes. These steps are standard preparation for computational text mining methods (Silge and Robinson 2017). I then analysed the data produced through this computer vision process using the following analytical methods.

4.3 Methods

I used various analytical methods to explore the elements which multimodal discourse encompasses: content, form and function. In my introduction chapters, I highlighted that one of my overarching research concerns is to consider the uses and limitations of hybrid methods. I also intend for this paper to respond to calls from various fields for researchers to consider methods from other paradigms to those more strongly associated with their field. These calls come from discourse analysis (Bouvier and Machin 2018), visual methods (Highfield and Leaver 2016), and cultural analytics (Hall 2013).

A hybrid approach is useful for discourse analysis, as discourse analysis scholars have highlighted that the infrequent can be just as important as the frequent (i.e. patterns and common features) (Hakakongas et al 2020, Manovich 2020). A hybrid approach is also useful for considering memes, where conventions, innovations and particular contexts are interesting. Within this study, I considered overall patterns and conventions via computational and quantitative methods, while qualitative content analysis provided an opportunity to consider context, exceptions, innovations, and less common patterns.

Each of the methods I used had their own benefits and limitations, and together they made up for the shortcomings of other methods. For instance, computer vision tools are susceptible to

error, and cannot understand elements of context and intention. Visual labels produced could be for insignificant or unintentional objects, the tools do not understand aspects such as tone of voice and context, especially since transcribing audio to text involves reduction and misses out on non-language elements. Some videos used sarcasm, which would be difficult to detect based solely on the outputs of the computer vision tool and my subsequent analysis of common words and topics. Combining these methods with qualitative content analysis which considers context and intention more closely, provided a reliable and well-rounded analysis for this study.

Firstly, I conducted what I refer to as the "manual" arm of the study, to recognise that it did not involve any computational methods. This involved watching a sample of 100 videos, and developing themes which summarised aspects of content, form and function, using content analysis. Secondly, I conducted what I refer to as the "computational" arm of the study, performing a computational text mining analysis which produced common words and phrases, and topic modelling which explored the latent topics involved in the videos. Below, I discuss each of these methods in turn.

4.3.1 Text mining

I applied computational text mining methods on the video labels and transcripts (outputs from the computer vision stage) to understand what elements appeared often within videos, and what words and phrases appeared frequently in the audio and on-screen text. These were of interest primarily for the research question about form, what a video contains (RQ1), but also for the question about content, the tone of a video and what a video is about (RQ2) as the findings also had some relevance to video subject. This was a method which I used across all three papers, which I discuss at length in the main Data and Methods chapter. To summarise, I used a count-based analysis, exploring the most frequent words and phrases which appeared in the video captions, which can reflect dominant topics or concerns across the collection of texts (Feldman and Sanger 2007).

A recognised limitation of count-based analyses is that they separate words from their context, and so semantic information can be lost (Turchi et al 2013, Srivastava and Sahami 2009) which can make analyses vulnerable to misinterpretation (Zhong et al 2012). This was

especially true when combining data from visual labels, audio transcriptions and on-screen text, and these issues were amplified with single word analysis, since there were no co-occurring words to provide context or suggest the source of where the words appeared. For example, it was difficult to know whether the word "woman" meant the visual label of a woman, or someone speaking about a woman.

Initially I planned to include visual labels within the computational text mining analysis, which I thought would be interesting for a multimodal approach, for instance for exploring how the most common visual labels and words within audio and on-screen text commonly appear together. However, in practice the labels were limited in ways described above, and the non-visual language phrases from audio and text dominated anyway. Therefore, I made the decision to exclude visual labels from this analysis. In the presentation of findings, I do not include a word count graph for the most common words across all videos, as the results of this analysis were not significant and lacked context. However, I did provide some counts of keywords (such as "person" and "pet") alongside key themes identified in other parts of the analysis.

4.3.2 Content analysis

In the manual content analysis, I inductively assigned categories to summarise what was featured in videos for considerations of *form*, and also summarised elements of *content*. As discussed above, within this analysis I was simultaneously interested in widespread overall patterns, as well as in detail, examples, and exceptions. As discussed Chapter III, I use an approach to content analysis which combines consideration of common patterns as well as considering context and detail, iteratively distilling the patterns I observed into categories which summarised key themes (see Drisko and Machi 2016, Bryman 2010), building in additional context to my coding decisions by considering video content, and using descriptive illustrative examples to support and explore the categories further. By combining these approaches, I was able to consider scale and detail simultaneously, for instance, understanding how common a convention or pattern was across the videos and the context of the pattern and how it was used, and how users innovated within their content production.

4.3.3 Topic modelling

In the computational arm of the study of *content*, I performed topic modelling to understand latent topics across the videos, in order to analyse subject matter (as an aspect of content, RQ2) on a large scale across all 1,000 videos. Topic modelling involves analysing a collection of textual data based on the distribution of words, to form topics which summarise the latent topics across the data. The topic modelling method I used was based on Latent Dirichlet Allocation. Latent topic modelling involves analysing the semantic structure of a corpus of textual data using hierarchical Bayesian analysis (Blei et al 2003). The Latent Dirichlet Allocation (LDA) method analyses the posterior distributions of words within a corpus of documents (in this case, videos) and generates topics which summarise these distributions (Blei et al 2003). To do this, the model takes each word and calculates the probability that this word would belong to each topic group (Silge and Robinson 2019). The LDA method 'treats each document as a mixture of topics, and each topic as a mixture of words' (Silge and Robinson 2017, p. 6). Therefore this method produces overlapping topics, rather than distinct groups, where each topic is characterised by its distribution of words (Blei et al 2003, p. 996).

From the results of the topic modelling process, I interpreted each topic in relation to its most salient words, and by watching some of the videos which were assigned to each topic. Salience is a measure of the likelihood of individual words belonging to a given topic (Chuang et al 2012). The most salient words for a given topic are those which have the highest probability of being assigned to that topic. Therefore, considering the most salient terms involves considering the words which are most strongly associated with each topic.

I originally intended to present the saliency graphs of each topic, but I felt that it left too much to interpretation, especially given that I also intended for them to be compared with the content analysis results. Instead, I presented the topic results in a table where I summarised my interpretation of each topic, which I based on the most salient words, and my interpretation of some of the videos associated with each topic. Again, this approach involved considering context within the interpretation of the results of computational methods, in line with my hybrid approach to methods.

4.3.4 A note on the presentation of findings

The findings of the topic modelling and the manual content analysis are presented separately, which was necessary as the presentation of themes from the manual and computational analyses look different due to the nature of their production. Since the manual analysis was on a smaller scale and more intentionally assigned and interpreted, the themes are not overlapping, and as such they have more straightforward labels and descriptions. In contrast, by design, topics produced by the topic modelling analysis were overlapping, and therefore often encapsulated more than one sub-theme which were loosely related. Therefore it was necessary to summarise and present these themes with more description. To navigate this is in the discussion of the findings, I use two different terms to refer to the findings which relate to the subject of videos, for the topic modelling - ”topic” refers to the raw topic groupings which is the output of the topic modelling, and I use “theme” and “subtheme” in relation to the labels which I assigned to interpret the topics manually, and also to refer to the themes and subthemes produced from the manual content analysis.

5 Findings

5.1 Replicating conventions and innovating with aspects of form to create global conventions, subgenres, and people-centric videos

Elements which were most commonly used and reused in the meme #tellmewithouttellingme were phrases, video sequences and modes of video storytelling. Given the fairly open template of “#tellmewithouttellingme”, users could have chosen only to copy and reuse this central “tell me without telling me” phrase, since this is the characteristic element of the meme. Instead, users reuse and replicate many elements of form, creating and maintaining conventions, which were evidenced in the widespread elements of form which I observed in this analysis.

Some of these elements of form were common globally across the full samples of videos, whereas others were common on smaller scales, highlighting how users commonly utilise

global level conventions in form, while also varying other elements. Innovation and adherence to convention happen simultaneously, in line with definitions of memes and vernacular creativity in the literature. As an example of a global level convention, almost all of the videos in the manual study began with the proposition “tell me x without telling me x” (98%) (Table 5), and in the computational analysis “without telling” was the most common two word phrase, with over 1,000 instances of the phrase across the full sample (Figure 14).

After this consistent opening phrase followed variation in elements of video storytelling, such as footage, scenes, and video sequences, yet even within this variation there were forms which were widely used. Within the manual analysis, I summarised these common forms of footage and sequence as: a candid filming style (18%), an acted scene (18%), a guided demonstration sequence (such as a house tour, car tour, or demonstrating a tool or object) (12%), and storytelling to camera (12%) (see Table 5). The transition between the opening phrase and the shots or camera work which followed was sometimes framed as what I labelled a “reveal sequence” (15%) (Table 5), for instance by opening a door onto a family member, by panning up or rotating the camera to move onto the subject, or cutting to the next scene that reveals something new.

These findings suggest that users are commonly reusing elements of form so that they become overall conventions, while also reinventing and innovating so that varying conventions emerge, which are themselves then reused and replicated so that subgenres of convention emerge. The common modes of video storytelling also highlight some of the ways that users are highly creative in their approaches. Users utilise a variety of storytelling methods, and some of these are relatively specialised, such as acted-out scenes, or camera work and editing techniques cleverly assembled to imply a “reveal”. This is especially interesting from the perspective of vernacular creativity, as it highlights that users are skilled and savvy creators who expertly use conventions to create content which is coherent and recognisable for users, while innovating to offer something new and interesting.

Table 5: Most common elements of form from manual analysis (in more than 10% of videos) and equivalent findings from computational analysis (#TellMeWithoutTellingME videos)

Element of form	Manual analysis	Computational analysis	
	% of videos containing this element	% from computer vision labels	Corresponding text mining figures
"Tell me x without telling me x" phrase (or similar) *	98%		See figures B1 and B2
How this phrase was delivered:			
Within selfie-style shot	61%		
On-screen text	51%		
Computer generated voice	14%		
Featuring a person	91%	95%	
Visual aspect of interior	71%	57% (e.g. "plant pot", "kitchen", "bed")	
Selfie filming style	73%	38%	
"I'll go first" or "I'll start" phrase	22%		See figures B1 and B2
Candid filming style	18%		
Acted scene	18%		
Reveal sequence	15%		
Reply/remix of another video	13%		
Guided demonstration sequence	12%		
Storytelling to camera	12%		

** (where "x" is a placeholder for a something which users proposition themselves and others to demonstrate (see paragraph below)*

There was also variation within the global conventions, so that conventions which were relatively consistently used, such as the "tell me without telling me" phrase (TMWTM), were applied fluidly and creatively, bending to the preferences and styles of the users. Sometimes the exact wording of the TMWTM phrase varied, for instance "tell *us x* without telling *us* x", "tell me x without actually telling me x", and whether the "x" is repeated or not (some phrases just said "tell me x without telling me". For the sake of counting, I grouped these phrases together. The technique for delivering this phrase also varied (Table 5). Most users said this to the camera within their selfie style shot (61%), although many others used on-screen text to deliver the phrase (51%), and some used a computer generated voice (14%).

There was also variation in the "x" element within user phrases, as users tailored this to something they could relate to and demonstrate to viewers. For considerations of form, this serves to highlight that there are variations in what users express and how they express it. This is significant from the perspective of vernacular creativity, highlighting that even when adhering to conventions, users tailor their approaches to fit their styles, skills, experiences, and preferred modes of communication. Thus I argue that users approach their practical creation of video memes creatively, using different techniques while adhering to a widespread convention.

Figure 15: Most common two word phrases in #TellMeWithoutTellingMe videos

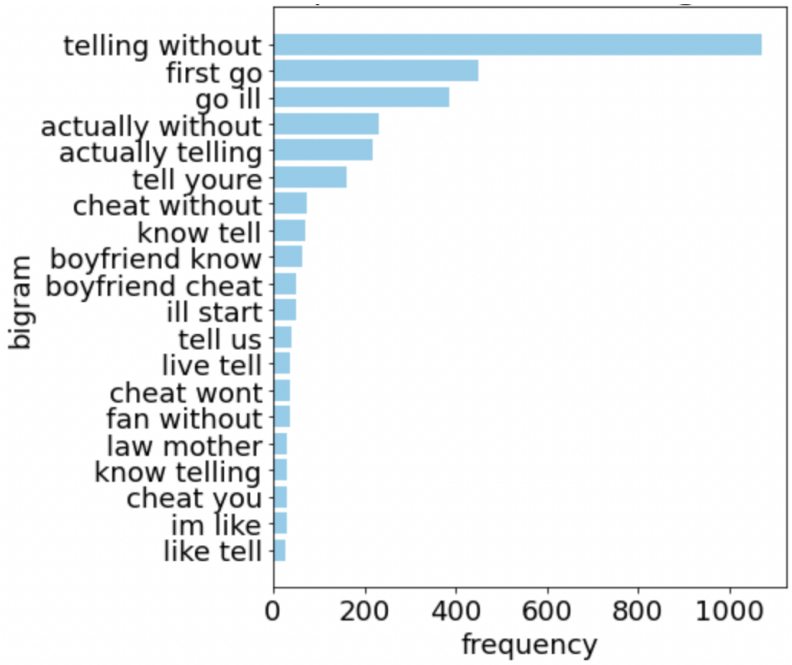
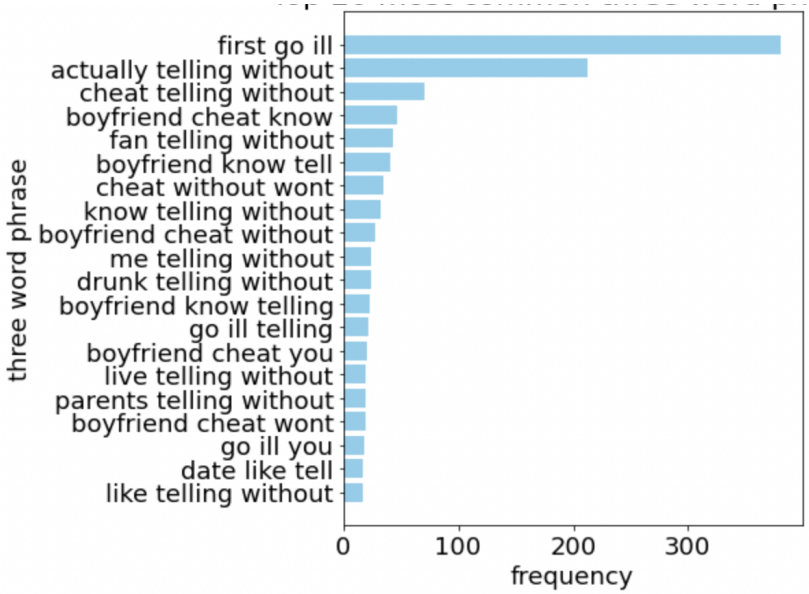


Figure 16: Most common three word phrases in #TellMeWithoutTellingMe videos



Outside of the TMWTM phrase, there were also other phrases which were commonly used, such that they became conventions within the meme. Examples of a common phrase used were “i’ll start” or “i’ll go first”. These phrases were used in 22% of videos in the manual analysis (Table 5) and the phrases appeared in the ten most common two and three word phrases, with over 400 instances of “go first”, over 40 instances of “ill start” (Figure 15) and over 350 instances of “ill go first” (Figure 16). These phrases involve users implying that

their videos and topics are intended for others to emulate, which acknowledges the social process of creating memes (as discussed in *Encouraging participation* below). As such, they demonstrate both vernacular creativity and the interpersonal metafunction of discourse. There were also common phrases used within subthemes within the trend. Often these phrases were used within the TMWTM phrase, for instance "tell me your boyfriend won't cheat…", "tell me you're married", "tell me you're Mexican". For considerations of form, the presence of these phrases again highlights how users adapt conventional aspects of form to suit their approach and the subjects of their videos.

People were a key element of expression and storytelling across the videos. The majority of videos featured people, 91% in the manual analysis and 95% in the computational analysis (Table 5). Further, in the manual analysis, 73% of videos used a "selfie" filming style, where the person featured is holding the camera to film themselves (see Table 5). Therefore, people featured heavily within videos and were also central storytelling devices. Within videos which in the content was labelled as being about pets (see section below, Table 6), 87% featured people. People-centric modes of expression and storytelling were also common, for example a selfie filming style, guided demonstration sequence (where a user shows us around a place or object), storytelling to camera, or acted scene (see Table 5).

5.2 Creating personal and social memes through aspects of *content*

A key finding of this paper is that many of the video themes concerned aspects of the personal lives of the users. Users commonly made videos about the dynamics of relationships and home life, aspects of self and identity (such as nationality and sexuality), and hobbies, careers and preferences. Users are representing and making sense of intimate and meaningful aspects of their personal lives through the videos. Given an open suggestion of "tell me x without telling me x", users created a space where meaningful content about personal lives was widespread and popular. From the perspective of considering the metafunctions of discourse (RQ3), the content of videos fulfils both ideational functions, because it enables making sense of the world, and interpersonal functions, because it involves an enactment of social relations.

The space that is created by this meme is filled with personally and socially meaningful content from everyday users, in everyday settings, and about everyday issues, such as family relationships, home life, and aspects of identity and personality. Vernacular creativity recognises that the creativity of ordinary people, and so it is significant that so many TikTok video memes involve ordinary users creating videos about ordinary aspects of their lives, albeit on subjects which are personally and socially significant. It seems reasonable to assume that this subject matter might fulfil important personal and social roles for users, especially through the lens of the metafunctions of discourse. Below, I discuss each key theme in turn.

Table 6: Topics and assigned themes and subthemes from the computational analysis

Topic	Video count	Broader themes assigned	Sub-themes	Subject examples
1	269	● Relationships and family	● Homes, home routines, and home decor ● Family relationships ● Identity (religion)	● Making the best/right choice about things related to home life and family… e.g. daycare, house, home decor ● Home routines e.g. school and workday mornings ● Living in particular types of family household (e.g. white Christian)
2	272	● Relationships and family ● Personal identity, background and preferences	● Personality traits and hobbies, especially family orientated	● Being in your twenties and living with your parents ● Being married/single ● Having a kid in pre-school / school / college ● Having a wife/girlfriend spends too much money ● Your child is a dancer ● Being married to a person of a certain nationality
3	480	● Personal identity, background and preferences	● Fandom and what you (or a relation of yours) watch / listen to ● Personality traits and preferences, especially of females and girlfriend/wife	TMWTM ● That you're a queen fan ● That you watch Grey's Anatomy ● That your wife/girlfriend is obsessed with a certain show/shop ● That you're a "white bitch" / "pretty bitch" / "frigid bitch" ● That your wife/girlfriend won't cheat
4	582	● Relationships and family ● Personal identity, background and preferences	● Family life, home life and relationships ● Identity and personality traits (especially life periods / ages)	● Being a girl mom ● Safety at home ● Being in twenties, being aged nine years / months being ages eight years/months, mid life crisis ● Being an old gay / cool gay / gay brother
5	473	● Relationships and family ● Personal identity, background and preferences	● Romantic relationships ● Family / romantic relationships ● Identity (nationality) ● Preferences (TV and fandom)	● Having a clingy baby ● Watching lots of certain shows/channels (e.g. Disney channel and its shows) ● Husband/boyfriend won't cheat ● Girlfriends/boyfriends green flags ● Being a certain nationality or partner/spouse being a certain nationality (Haitian, Nigerian, Russian)
6	432	● Relationships and family ● Personal identity, background and preferences	● Family relationships and home life ● Identity (especially British nationality) ● Identity (Place you're from) ● TV	● Growing up with British parents ● Aspects of British childhood (homes, pets, food) ● Watching British kids shows (especially on cbbc)

Table 7: Themes from manual content analysis

Theme	Subtheme (if any)	Percentage of videos
Creating comedy		54%
Creating relatability		49%
Encouraging participation		40%
Personal identity, background and preferences (29% of total videos)	Place you come from	12%
	Being a fan of something	9%
	Job	8%
	Ethnic background	5%
	Hobbies	5%
Relationships and family (family/friend/romantic) (24% of total videos)	Family members	11%
	Partner / Spouse	10%
	Friendships	3%
Pets		15%
Promotion or advert		6%

5.2.1 Relationships and family

A common theme across the videos was *relationships and family*, and I observed this theme in the findings of both the computational and manual arm of the analysis. Videos commonly concerned relationships, primarily between spouses, partners or family members, but also friends.

Relationships and family was a common theme in the manual arm of the analysis, with 24% of videos involving this theme (Table 7). In the computational findings, all topics produced contained some aspect of relationships and family, with some variation in the element and type of relationship each topic concerned (Table 6). This highlights how widespread this theme was across the videos, and how much variety there was in subthemes related to the theme. Below I will explain how each topic related to this theme:

- Topic 1 related to family relationships in terms of home routines and types of family household
- Topic 2 related to particular personality traits, preferences and nationalities of relations (e.g. dancer, [nationality], pre-school kid)
- Topic 3 included preferences specifically of a wife or girlfriend, especially about certain TV shows and shops, and the scenario "tell me how you know our girlfriend/wife won't cheat" (which after watching some videos generally varied between being about personality traits of the girlfriend or wife, or the strength in the relationships between the creator and their wife/girlfriend)
- Topic 4 included being a "girl mom" and focused mainly on aspects of relationships between mother and daughter (e.g. day to day interactions) or aspects of life having daughters, (e.g. having pink decor and toys around the house).
- Topic 5 also included personality traits of family members, spouses and partners, but more generally to topic 4 (which focused on mother-daughter in particular). This included having a clingy baby, a partner or spouse being of a certain nationality, and "green flags" in the personalities and actions of girlfriends and boyfriends
- Topic 6 zoomed in specifically on British families and aspects of growing up in British households, including aspects of relationships such as watching TV together and awkward interactions with parents

To give a taste of how users brought relationships and family life into the meme, here are some standout examples. One popular video opened with "Tell me your wife is Latina without telling me," and cut to a lively scene of the creator's wife dancing and belting out lyrics to Latin American music while scrubbing the kitchen, full of energy, joy, and cultural pride. In another example, a brother kicked off a familiar tune with "tell me you have a younger sister without telling me…" and, like clockwork, his sister picked up the rest of the song from another room off-screen. These videos were playful, funny, and rooted in the ordinary, but they also offered glimpses into real relationships, cultural identities, and everyday dynamics that resonate far beyond the screen. By using their respective "tell me x without telling me x" phrases detailed above, each example involves users framing their videos, and the aspects of relationships which they share, within abstractions to broader cultural backgrounds and relationship dynamics which many others on TikTok are likely to share and relate to (i.e. having a Latina wife, having a wife/husband, apologising, having a sister).

From the perspective of the metafunctions of discourse, the videos serve both ideational and interpersonal functions by making sense of relationships between the family members and spouses (via everyday activities shared in the family home), and the social function is amplified by the social emphasis in the framing of this video (i.e. within the abstraction to cultural background, with the social proposition involved in the TMWTM phrase which encourages participation). For the users creating these videos, they are not only making sense of their relationship (interpersonal), and creating content which expresses an element of their personal life (ideational), they are also opening this up within a social space and asking if others relate to it, which in itself creates further opportunity for the users, as well as others, to interact socially about this subject and make sense of it together.

Relationships are an important and intimate aspect of peoples' lives and are a fundamental part of the dynamics of society. When considering that discourse shapes ideas about topics within society, as discussed in the literature review, it is significant that a widespread theme is about such a key element of users' lives. The subthemes and examples highlight how the videos concern a range of issues related to identity, personality traits of relations, home life, and relationship dynamics. From the perspective of the metafunctions of discourse, videos within this theme predominantly involved both ideational and interpersonal aspects, highlighting that they embody two meaningful functions.

From the perspective of vernacular creativity, it is significant that the videos within this theme take place in everyday environments, primarily in the home, and concern everyday interactions. The videos are not about newsworthy topics or stories that you would find in the mainstream media, but they *are* about things which make up the fabric of the lives of the users who create them. This embodies vernacular creativity, as users are creating videos about everyday things that matter to them, which are filmed in everyday environments, and based on topics which are made as widely accessible to others as possible.

5.2.2 Personal identity, background and preferences

Another key theme was *personal identity, background and preferences*. In the manual analysis, this was the most widespread theme that related to the subject of videos (as opposed to the tone or framing of videos), with 29% of videos involving this theme (Table 7). This

encapsulated the following subthemes (in order of popularity, see Table 7): ‘place you come from’ (i.e. being from the ‘South’ in the US, being from the UK, or being Canadian, ‘being a fan of something’ (i.e. being a Queen fan, being a fan of Legally Blonde), ‘job’ (i.e. being a teacher, a nurse, etc.), ‘ethnic background’ (i.e. being Latina, Haitian, Asian, to name a few), and ‘hobbies’ (i.e. being a dancer, being a foodie).

In the topic modelling analysis, this theme was also widespread, with relevant subthemes spanning five of the six topics (topics 1-5, see Table 6). In the topic modelling findings, most of the topics contained some relevance to this theme, again with some variation between the subthemes of each topic. Below, I explain how each of the five topics related to this theme:

- Topic 1 was only slightly related to this theme, there were some videos related to living in a white Christian household, but this resonated more strongly with the other theme of *Relationships and family*
- Topic 2 related to the identity and characteristics of family members or spouses/partners (e.g. “Tell us you’re married to a Latina…”, “Tell us your child is a dancer”
- Topic 3 involved fandom and preferences in TV and music (“Tell us you’re a Queen fan”) and (similarly to topic 2) also involved the identity and characteristics of women and particularly wives/girlfriends (e.g. “Tell us how you know your girlfriend won’t cheat”, “Tell us that you’re a Queen fan”)
- Topic 4 related to identity such as age, household and family conditions (“Tell us you’re a girl mom”, ‘Tell us you’re in your twenties and living with your parents”)
- Topic 5 related to where you’re from, nationality and background, particularly being British and growing up around British influences (i.e. British parents and British kids)

Here are some examples of how users brought humour and identity into the meme trend with creativity and charm. One viral video kicks off with “Tell me you’re Canadian without actually telling me you’re Canadian,” and the user immediately launches into, “I’ll go first—no, sorry, you go first—sorry!” Poking fun at the classic Canadian politeness stereotype, the video cleverly flips the meme’s “I’ll go first” format into part of the joke itself. Another user jumps in with “Tell me you’re a dermatologist without telling me,” and proceeds to layer on an almost comical number of skincare products—cleansers, serums, sunscreens—before donning gloves and sunglasses for a drive, flashing a knowing smile that says, “Yes, I know

it's a lot." Then there's the wholesome chaos of "Tell me you're a girl dad without actually telling me," which cuts to a dad on the couch mid-glow-up, his hair full of tiny pigtails, courtesy of his daughter behind him in bright pink jeans, while he cradles a baby (also in pink, also sporting mini pigtails). Each of these videos is light-hearted and funny, but they also offer authentic glimpses into personal identities, professions, and everyday family moments that audiences connect with and celebrate.

Despite the breadth of subject and topic covered by these examples, again the commonality is how they each share their experiences in relation to the broader groups they belong to, groups including other Canadian people and other girl dads, and indeed this was something that many videos did (with other wider groups being those which related to certain professions, hobbies, nationalities, etc.) Like the *relationships and family* theme, this involves users abstracting their experiences to broader groups that they identify with. Although these are framed as aspects of themselves and their own identity, they are aspects which many users who also belong to that group may relate to. So whilst on the surface a theme of *personal identity, background and preferences* may be expected to be self-involved and specific, users instead create content about themselves which figuratively opens its arms to other users with similar backgrounds and tastes.

These example videos, and indeed the broader theme itself, most obviously involve the ideational metafunction of discourse ('representing our experience to each other"). In moulding these "personal experiences" to be open and relatable by others, perhaps this emphasis on the social takes away somewhat from the personal, in that it involves users potentially simplifying or generalising their true experience for the sake of creating relatability with others. Yet in doing so it also amplifies the social element of this representation of self and individuals, emphasising the "to each other" over the "our experience" in this definition of the ideational metafunction of discourse.

The theme also involves aspects of the interpersonal metafunction (enacting social relationships), because of the social framing of the content via creating relatability (as discussed above) but also more literally in representing relationships within content, and in creating content about the identity, background and preferences of others (i.e. of family members and partners/spouses - see Table 6). This association with the interpersonal metafunction is naturally weaker than it was with the relationships and family theme, yet it is

significant that this theme, which encompasses topics which could just as easily involve users being self-involved, actually involves users opening up their experiences to the participation of others. It serves to suggest that the social setting is also significant to users, as they actively recognise it and engage with it within their content decisions, by creating content which is tailored for group belonging and relatability by others.

As with the *relationships and family* theme, this theme of *personal identity, background and preferences* again highlights how users create videos about everyday, important and intimate aspects of their lives. The topics mostly involve aspects of people's lives which are likely to be significant in how they live their lives and identify themselves (i.e. ethnicity and cultural background, parenting and family, job and hobbies, fandom). As with the *relationships and family* theme, this again suggests the importance of the role played by creating and watching these videos for TikTok users.

This theme is intriguing from the perspective of vernacular creativity. The discussion of this theme has highlighted how users make sense of themselves and their lives within memes, and share important details about both of these things within the social space of collective content creation, where they actively encourage the participation of other users who share these traits and experiences. This embodies vernacular creativity, since it involves users making and engaging with content about their everyday lives, and where the social act of content making and content proliferation among everyday users fuels this making sense of the world, by creating opportunities for sharing experiences and relating to each other.

6 Conclusion

Existing literature recognises TikTok as a "memetic" platform (Highfield and Leaver 2016), and TikTok recently began labelling some trends as "memes" at the time of beginning this study. Memes are characterised by conventions and innovations, which are created and perpetuated through the culture of copying which occurs on TikTok (Zuli and Zuli 2020). I situated these discussions within the context of discourse and vernacular creativity, since these concepts recognise how collective expression comes to shape forms of expression and creativity.

These practices and the user-generated content which emerges from them are sociologically significant, as they involve users making sense of their lives through the creative and collective act of content production (Burgess 2006) and establishing and sustaining conventions in content, which contribute towards trends. Memes can be considered as discourse (Hakoköngäs et al 2020, Gal 2019) as they involve modes of expression shaping themselves and our understandings through the collective and cyclical involvement of those who engage with them. Considering memes as discourse also highlights the important personal and social functions that they serve in organising personal experiences and enacting social relationships within modes of creative expression. Indeed, the metafunctions of discourse recognise these important roles, via the labels of ideational metafunction (representing personal experiences to each other) and interpersonal metafunction (enacting social relationships).

The findings suggested that users were highly creative in their approaches, collectively creating content which was coherent through its use of conventions, while also innovating in ways to suit their styles, abilities, and preferences. While users made widespread use of global conventions, there was variation in how these elements were delivered and presented, for instance in exact wording, mode of delivery, and mode of storytelling. There were also smaller conventions which I referred to as sub-genres, which emerged from variations then being replicated so that they also become relatively widespread conventions in form. Sub-genres included variations in modes of storytelling (i.e. acted scene, guided demonstration

sequence), filming styles (i.e. candid filming style, reveal sequence), and video subject. Because of this co-existence of convention and innovation, I argue that the creation of memes is a form of vernacular creativity, since users collectively and simultaneously create familiarity through convention, and create engaging and fresh content through innovation. My findings also support that memes are a form of discourse, since the meme is shaped cyclically through the collective creation and maintenance of conventions.

Vernacular creativity also recognises that modern settings for user content creation facilitate ordinary users to create content, and that this process and these settings enable a democratisation of the media landscape for ordinary creators. I found that users skilfully crafted videos which are technically and creatively engaging, using methods that are relatively accessible to all users of TikTok. Videos were mostly filmed in everyday settings, using editing and storytelling techniques which are widely accessible, for instance ordinary people being key drivers of storytelling; many videos simply included a user telling a story in a selfie-style shot. Some techniques were more specialised, for instance acted scenes involved some basic level of acting skill. Whatever skills and tools were in their arsenal, users creatively crafted videos using a variety of engaging techniques, for instance editing together footage into reveal sequences and to create comedic juxtaposition, telling stories to the camera in an engaging manner, and acting out scenes.

The dual use of convention and innovation also created sub-genres in the subject of videos, one of the aspects of content considered for my second research question. Various subjects of videos, which often encompassed many related sub-themes, were identified across the videos, with *relationships and family* and *personal identity, background, and preferences* the most significant. These themes show that users represent and make sense of intimate and meaningful aspects of their personal lives within their videos. In discussing how these video subjects fulfilled both of the metafunctions of discourse that the study considered (RQ3); ideational (representing personal experiences to others) and interpersonal (enacting social relationships), this again highlighted video subjects as being personally and socially meaningful. This key finding builds on findings from previous papers which show that trends are characterised by personally and socially meaningful user practices, and that personally and socially meaningful interactions happen within comment sections.

I argue that many elements of form and content are conducive to the sociality of memes.

Firstly, users utilised modes of communication to directly address the audience and encourage their participation, often pairing the instructional proposition “tell me x without telling me x” with “i’ll start” or similar phrases. Users also crafted the content of their memes to promote social dynamics, by creating relatability and encouraging participation in the subjects of their videos. Even when videos were about aspects of their lives which could be intimate and self-involved (having a Latina wife, being a girl dad, being Canadian), users ensured that videos remained widely relatable, opening up their content to the social space of the meme. In doing these things, users sought to make the subjects and experiences represented in the memes understandable and relatable, they strived to make viewers laugh via the tone and modes of communication used, and they actively encouraged others to join in with the meme.

In summary, I argue that memes are a compelling form of vernacular creativity, within which users create personally and socially meaningful content about their personal lives. As such they have sociological significance. The argument of this paper builds on the key arguments from the previous papers. Trends are characterised by personally and socially meaningful user practices (such as learning, sharing, collaborating and storytelling about personal lives). Users’ comments on trending videos provide settings for personally and socially significant interactions between users; users mould comment sections into spaces to learn from each other, to share advice, to debate, and to discuss their personal lives.

This concludes my empirical papers, and I proceed to discuss and reflect more on these key findings in the next chapter.

Chapter VII Discussion

In this thesis, I focused on TikTok trends as a way of studying media audiences and their practices on TikTok, using hybrid methods. I argue that TikTok trends reflect how users behave on digital platforms and what they care about, and therefore they can offer a useful entry point for understanding user preferences and practices. My research contributes towards advancing understandings of how social media research can be leveraged to study media audiences. I also argue that using hybrid methods is important for studying phenomena like trends, which are characterised by overall patterns as well as context-rich and nuanced user behaviour. Doing this overcomes tensions between qualitative and quantitative paradigms that have shaped debate within the field over several decades (e.g. Ang 1991, Baym 2013, Livingstone 2019).

In the thesis I have addressed two central research questions:

- "What can studying TikTok trends tell us about users and their practices?"
- "What are the benefits and limitations of using hybrid methods within social media research?

In relation to the first research question, I argue that users engage with trends, content and each other in socially and personally meaningful ways, and that trends reflect important aspects of users, their preferences, and their lives. Trends reflect what is important to users (through the themes and content that become popular) and aspects of their personal and social lives (including personal identity, relationships, and interests). Users congregate around trends, within the various social settings that trends inhabit and create (in comment sections, and through users coming together to engage in collective and social content production). In these spaces meaningful interactions happen—users learn from each other, teach each other, dance and sing with each other, process personal stories in a communal space, and hear personal stories of others. Trends therefore provide a lens and platform for studying and enacting sociologically significant phenomena. Trends are therefore compelling research foci and important phenomena for users.

The curated nature of TikTok's Discover page suggested strong platform involvement in what is trending, while user practices also played a key role in defining the characteristics of

the trends. Trends, as with many social media phenomena, are shaped by an interplay of user and platform influences. Even while TikTok seemed to carefully curate the presentation of trends, it was how users shaped the trending content that determined how trends were ultimately defined and characterised. Trends were based around user practices such as sharing advice, storytelling, learning and dancing. User practices also played a key role in what I referred to as the "TikTok-ification" of trends that were based on outside influences. This serves to further highlight the role of user practices in shaping trends—since the outside context became a backdrop, while trend hashtags and descriptions centred on these user practices. Within users' video content and interactions, TikTok often played a cameo role, with users referencing and acknowledging elements of their platform-bound surroundings within their content and in their discussions with each other. What's more, users expressed an active interest in trends and popularity, and attempted to drive the visibility of their videos accordingly, further showing that trends are important to users, and that users value and participate in TikTok's popularity cultures and mechanisms.

In relation to the second research question on the benefits and limitations of hybrid methods, the hybrid methods approaches proved valuable for studying trends and the user practices which they involved and facilitated. They allowed for the exploration of broad behavioural and thematic patterns alongside the more detailed, context-dependent ways that users expressed themselves. By using a hybrid approach, I was able to explore macro-level patterns and micro-level detail concurrently, enhancing the comprehensiveness of findings and understandings. This was particularly relevant in the contexts I explored, for exploring the overall patterns and intricacies of user behaviour that characterise trends, and for exploring conventions and innovations in content simultaneously. Combining multiple methods, including traditional methods which blended quantitative and qualitative techniques and computational methods, facilitated cross-validation between methods and levels of analysis. Using hybrid methods also posed challenges, such as reconciling differing outputs across methods, and navigating the tendency of some computational tools to prioritise surface-level patterns. As a result, the results of hybrid methods require careful interpretation and critical awareness of their limitations.

The findings of my research are relevant beyond these particular research contexts. They highlight that trends can provide spaces for studying sociologically important user practices, in how users express their identity, share details of their personal lives, explore their interests,

preferences and opinions, and interact meaningfully with others as part of their everyday digital lives. In addition, a hybrid approach to methods could have far-reaching relevance and applications across many fields, beyond the ones in which my research is situated. These approaches enabled meaningful engagement in both micro and macro levels of analysis, facilitated validation across methods, and supported a dynamic, context-aware approach.

Below, I discuss the key findings in relation to each of the overarching research questions in more detail, bringing together the literature and the findings of each paper. In the first section, I summarise what studying trends tells us about users and their practices, bringing together findings from the three empirical papers. In the second section, I reflect on the second research question, which considers the benefits and limitations of hybrid methods. As I outlined in Chapter I, in this chapter I process and discuss the benefits and limitations of the hybrid methods approaches, whereas for the prior research question, much of the discussion of findings has already happened in the papers. Therefore, the second section is longer than the first.

1 What can studying trends on TikTok tell us about users and their practices?

Trends reflect what is widely popular among users and what users are frequently exposed to on social media, thereby reflecting user preferences, opinions, and interactions (van Dijck 2013), as well as the nature of the dissemination of information and content via social media platforms (Zhang et al 2016)). My motivation for studying trends was grounded in the relevance of trends to commercial *and* academic media audience research, in understanding widespread popularity (and therefore commercial viability) but also because trends play a role in the flow of content and information to individuals in society, and shape individual and collective media experiences which extend into the everyday lives of individuals (van Dijck 2013). Situating my research in the context of media audience studies, I have been primarily interested in the user practices that create, sustain and revolve around trends, and in what trends reflect about users. This focus is supported by van Dijck's argument (2013) which highlights that trends are shaped by and reflective of user behaviours, including how users encounter content and engage in social interaction online.

Overall, my findings demonstrated that trends function as meaningful reflections of cultural and creative expression, representing what users value, how they connect with others, and how they engage with digital environments. This shows that trends hold significance not only for researchers—as windows into user behaviour and characteristics—but also for users themselves, serving as tools for gaining visibility, participating in social interaction, and expressing themselves creatively through shared content formats and practices. Further, TikTok trends are multifaceted and dynamic, shaped through the interplay between platform design and user activity.

Together, my three empirical papers contribute findings about user practices in relation to trends, focusing on a different setting and content form in each paper. I began with a broad conceptual and platform-level analysis in the first paper, and progressed toward more user-centric explorations of trends, focusing on the user practices that trends involve and facilitate in the second and third papers. The first paper laid the foundations for the thesis and proceeding papers, by mapping how trends are presented and defined on TikTok, exploring platform mechanics and how users engage with trends via video captions. The focus then shifted fully to the user practices in the second paper, specifically the social interactions unfolding in comment sections, which, I argued, are hubs for "audiencing". Here, I argued that users negotiate meaning collectively through their interactions with each other, akin to how media audiences come together in living rooms and discuss TV shows. Finally, the third paper zoomed in on memes as a distinct form of trend. Here, I argued that users collaboratively reproduce conventions and innovate within meme trends to create socially and personally meaningful content.

Below, I will discuss these considerations and findings within each paper in more detail, discussing each paper in turn.

1.1 "*What's in a TikTok trend?—*". TikTok trends are influenced by platform curation but defined according to personally and socially significant user practices, while users also strive for popularity and visibility through trends.

In the first paper, "*What's in a TikTok trend?—*", I established the foundational context for the thesis by exploring how social media trends are defined and presented across social media

platforms. This started with a cross-platform discussion of social media trends before zooming in on the specific focus of TikTok. I engaged with broader literature on social media trends—summarising that within academic definitions and platform presentations of trends, while the specific objects of trends vary across platforms (e.g., hashtags, sounds, topics), they share a common feature of rapidly and recently gained popularity (Gillespie 2012). I also contextualised these definitions within academic debate that highlights the sociological significance of trends, arguing that trends play significant roles for society—reflecting personal and political preferences and opinions of individuals (van Dijck 2013), as well as shaping the flow of information online and what users collectively pay attention to (Zhang et al 2016).

Further, I identified a gap in the literature on social media trends, as there is a lack of sociological studies which take the popularity of trends as the primary motivation and starting point for their study. Instead, most existing research on social media trends is either aligned with computer science (concentrating on mechanisms of trend diffusion and popularity (Zhang et al 2016, Rogers-Pettie and Herrmann 2015)), or cites the sociopolitical relevance of a trending issue as the main reason for investigating it (e.g. studies of #BlackLivesMatter). I argued that studying coincidentally popular and more mundane trends (i.e. trends that are not inherently sociopolitical in topic) are just as important to study in sociological research, for all of the reasons discussed above.

The key findings from this first paper related to the interaction between platform mechanisms and user practices in the development and presentation of TikTok trends. The findings suggested that the Discover page is fairly curated, which would imply that TikTok plays a role in shaping which trends are surfaced and how they are presented. At the same time, user practices (such as storytelling and sharing information) seemed to contribute meaningfully to how trends were labelled and described within the trend descriptions provided by the TikTok Discover page. I discussed how many of the trends had a "digitally native" feel, recognising that they were defined by the user behaviour they involved and not by events or topics from the outside world, which again centred user behaviour in the presentation of trends on TikTok. For instance, while there were also some trends which originated from wider, "outside" cultural events (i.e. John Lennon's birthday, back to school events), the descriptions of these trends mainly used these topics as a mere backdrop for TikTok user behaviour such as storytelling and sharing information and opinions. This further centralised

user behaviour within the definitions of trends. Therefore, the presentation and operation of trends on TikTok seemed dually shaped by platform and user influences.

Another important finding from this study was that users mainly used video captions for driving popularity and engagement, suggesting that popularity and visibility are also important to users and not only to platforms. This was a significant user-related finding, which further supports the notion of popularity and trends being important phenomena, since they play important roles in how users navigate TikTok. Within the video captions, the level of description and meaningful engagement with trends varied between each trend I explored. Therefore, as a segue into the subsequent two papers, I surmised that more substantive and thematic user engagement with trends may be found in videos and comments data, which motivated the focus on these data (and concepts related to them) within the subsequent studies.

1.2 "*Audiencing TikTok—*". Users engage in personally and socially meaningful conversations in the comment sections of trending videos.

In the second paper, "*Audiencing TikTok—*", I explored how users interact with each other in the TikTok comment sections of trending videos related to the #HairTok trend. I grounded this exploration within the concept of *audiencing* (Fiske 1992) which recognises how audiences circulate meaning within social spaces via their interactions about media content. Out of the three papers, this paper was the most far removed from the actual trending content itself, as while both other papers focused on trending videos and their metadata (i.e. video captions), in this paper I focused on the comment sections associated with trending videos. However, in focusing on comments from users who had viewed a video, out of the three papers this was the one which approached users as "audiences" in the most traditional sense, in the sense that commenting users were the audience of a video. I used a two-pronged approach in the analysis, firstly examining the structure of user interactions to understand how social spaces were formed and arranged (via social network analysis), and secondly analysing the content of discussions to explore what users talked about (via content analysis and text mining).

The findings highlighted that comment sections were highly interactive spaces. The networks

that these interactions created varied between videos, but generally the networks were well-connected (statistically and visually) and involved various forms of interaction, including replying to other commenting users, engaging in group discussions, and users referencing imagined groups (i.e. "all the black mamas out there"). These interactions often involved personally and socially meaningful discussions, where users shared personal experiences and details of their personal lives, supported and shared advice with others, and debated and argued. Many of the most sustained discussions involved many users and extended beyond the immediate topic of the video, highlighting how user interactions created their own social spaces—or what I referred to as "microenvironments" of discussion—where the discussions within reply threads seemed to extend beyond the topic or tone of the original video or even the original comment, with users creating their own collective discussions to discuss their personal lives, tell stories, and share advice. This emphasised the power of user interactions in defining and shaping the social spaces within the comment sections, and highlighted how trending videos provided a basis for sustained and meaningful interactions between users.

These findings therefore supported the notion that TikTok comment sections are places where compelling audiencing interactions occur. They also highlighted that TikTok trends and trending content create and facilitate interactive social spaces where users can engage in personally and socially meaningful conversations. This therefore supported the overarching finding that trends provide a lens and platform for studying and enacting sociologically significant phenomena, as I will discuss more in the summary section, after discussing the third paper below.

1.3 "*Why Do Memes Matter?*". Through memes, users create content that fulfils important personal and social functions, and shape trends through an inherently social content creation process that blends convention and innovation

In the third paper, "*Why Do Memes Matter?—*", I focused on *memes* as a particular type of trend. Drawing on literature that frames memes as "thematically and formally replicated trends in online behaviour" (Rintel 2013, p.254), I considered memes as a meaningful form of trend-based participation, where users follow shared formats to create expressive content which fulfils personal and social functions (i.e. by representing personal themes and by enacting social relationships and interactions). This definition recognises how memes are

created and defined by trends and commonalities in user behaviour when creating videos. By focusing on the #TellMeWithoutTellingMe meme (which TikTok labels as a meme trend) I explored how users participated in meme trends by mimicking stylistic, audio, and narrative conventions, while also introducing their own creative variations and innovations. This highlighted how memes function as templates that are produced and sustained by user practices within content creation, familiar enough to promote shared creativity, but open-ended enough to invite personalisation and individual creativity.

This resonates with understandings of vernacular creativity, a concept which captures how ordinary users collectively generate and remix content conventions within everyday social contexts to create crowd-sourced content genres (Burgess 2008). This supported my proposition that I began the paper with, that memes can be considered as a form of vernacular creativity. Vernacular creativity encapsulates an interplay between users following established conventions while also introducing creative innovations, making content feel familiar yet fresh. In my discussion of the findings, I highlighted how TikTok video memes exemplify these dynamics, with users creatively using templates provided by trends to share personal experiences and participate in the social dialogue of collective content creation. Meme trends therefore enable individuals to express their unique perspectives within a shared cultural framework, while fostering a sense of community and belonging as users collaboratively shape and evolve memes.

The findings of this paper again involved trends providing a basis for users to engage in personally and socially meaningful practices. Given the fairly open-ended proposition of "tell me x without telling me x", users created content about their personal lives, personal identity, ethnicity and background, and relationships and family. I therefore argued that this user-driven content creation contributed to a form of creative content production that was both personally and socially meaningful and reflective of the everyday lives of users, again supporting the notion that trends provide a lens and platform for studying and enacting sociologically significant phenomena. This simultaneously highlighted trends as compelling research foci and as important phenomena for users. Further, the findings highlighted how trends can be created and sustained by patterns in user behaviour, again emphasising the role of user behaviour in creating and shaping trends.

1.4 Summary of TikTok trends and their reflections on user practices

Together, my findings highlight that TikTok trends are complex, meaningful, and dynamic phenomena. They suggest that trends are not just ephemeral bursts of popularity, but meaningful cultural artefacts that reflect what users care about, how they interact with others, and how they participate in digital life. My research highlights that trends hold value not only for the reflections and representations that they provide researchers, but also that trends are valuable to users—as mechanisms for navigating visibility and popularity, as settings for meaningful social interactions, and as settings and templates for interaction and creativity.

My research also found that trends are influenced and curated by the TikTok platform. TikTok trends seemed to be created and defined by an interplay of user and platform influences. While the TikTok platform curates and describes trends, user practices also play a key role in characterising and shaping trends. Within the scope of this study, it was also difficult to know whether the user behaviour or the TikTok summary of it came first, or the extent to which trend descriptions shape user interaction with the trends. It is important to recognise these limitations when interpreting these findings, and indeed they form the basis of my suggestions for future research.

In my thesis I asked *"What can studying trends tell us about users and their practices?"* I found that trends reflect important aspects of the personal lives of users, and facilitate important personal, social and creative functions. Users engage with trends and each other in meaningful ways—ways that involve users representing aspects of their lives and identity to others, joining in with meaningful social interactions about personal topics, and navigating the platform's visibility and popularity mechanisms to reach more users. Overall, this supports the proposition that I based the thesis around, that trends provide a lens and platform for studying and enacting sociologically significant phenomena. This simultaneously highlights trends as compelling research foci and as important phenomena for users. Indeed, the applicability of trends as a research focus has wide-reaching relevance when it comes to fields of research, as I will discuss more in the conclusion chapter.

2 What are the benefits and limitations of hybrid methods within social media research?

As the second research question, I explored the benefits and limitations of hybrid methods within the context of media audience research based on social media platforms. My focus on this question responded to calls to move beyond the separation of qualitative and quantitative approaches in the wake of the abundance of social media data on media audiences and the approaches that these data facilitate (Moats and Borra 2018, Savage 2013). The literature highlights that social media data are uniquely positioned for hybrid approaches, as they provide rich, contextual qualitative data at a large scale (Manovich 2012). By blending qualitative and quantitative techniques, hybrid approaches to traditional and computational methods make it possible to simultaneously explore structure, pattern, difference and detail. This is appropriate for analysing social media trends, which are simultaneously characterised by widespread patterns and varied and context-laden user behaviour. Rather than treating qualitative and quantitative methods as oppositional or sequential—as is often the case in traditional mixed methods designs—hybrid approaches combine them in more fluid and integrated ways. They do not require separate analyses or data sources. These opportunities are particularly compelling in media audience research, a field that has historically been shaped by methodological debates over how best to study audiences, which often juxtapose qualitative and quantitative methods, comparing the value and limitations of each (e.g. Livingstone 2019, Baym 2013, see also Ang 1991).

Overall, by taking a hybrid approach, I was able to move fairly seamlessly between macro and micro levels of analysis, considering overall patterns and closer detail, and cross-referencing patterns against context, and vice versa. This approach also facilitated cross-validation between methods and supported a flexible, context-sensitive approach—where I could draw insights from multiple methods and on broader contextual understanding from the literature, the TikTok platform, and its content. This approach allowed for the identification of overarching behavioural patterns alongside the nuanced, context-specific creative and personal expressions within user content and interactions. However, integrating manual and computational methods also required care, given their differing outputs and structures. These differences were not inherently problematic, they also highlighted the complexity and overlapping nature of themes within the content. Nevertheless, the differences posed

challenges for direct comparison and required careful interpretation. As hybrid methods, especially those involving computational tools, are still exploratory (Moats & Bora 2018), it is important to remain critically reflective of such issues and limitations when using them.

Whereas my discussion of the first overarching research question took a paper-by-paper approach, since each paper approached trends differently, in this section I separate discussions according to the various hybrid approaches I adopted. This is fitting for the consideration of this research question, as my approaches are better distinguished by the levels of integration between methods and the dimensions of the analysis (i.e. qualitative and quantitative), as I will explain below.

2.1 On the hybrid approaches explored: varying the level of integration between methods and dimensions of analysis

The trajectory of the three empirical papers involved a gradual progression in the level of integration between methods. In the first paper, I adopted a more compartmentalised approach, using data visualisation, content analysis, and text mining as distinct methods to address separate research questions related to duration, subject matter, and user engagement around trends. In the second paper, methods were more interlinked, as I used social network analysis to map audience interactions, and content analysis and text mining to examine the content of these interactions. By the third paper, the methods I used—computer vision, content analysis, and text mining—were even more closely integrated as part of a multimodal discourse analysis, which I used to explore the different but closely linked dimensions of content, form, and metafunction.

Therefore, I mainly used three types of hybrid approaches, using all of these hybrid approaches in each paper. Firstly, I used singular computational methods (text mining, social network analysis, and topic modelling), which are recognised as inherently hybrid due to their capacity for simultaneous micro and macro level analysis (Moats and Brora 2018). Secondly, I adopted a hybrid approach to the more traditional method of content analysis, by combining typically quantitative and qualitative techniques to content analysis within an integrated approach. Finally, I combined computational methods with content analysis,

bringing together the findings from each method. I also considered context from the original data, original videos, and the wider TikTok environments when interpreting findings.

As well as being useful for studying trends in general, a hybrid approach was also relevant for the individual phenomena and concepts that I explored in each paper – that is, the presentation of trends, audiencing in comments and vernacular creativity in TikTok memes. I also intentionally varied the degree of methodological integration according to the focus of each paper, as described below. These variations in levels of integration and "hybridisation" were both a practical and conceptual choice, shaped by the nature of the data and research questions in each study.

In the first paper, I kept methods relatively distinct, with each method addressing different research questions—using data visualisation to explore the presentation and performance of trends (for example by duration, view count, growth in popularity), content analysis to explore what trends were about via trend descriptions, and text mining to explore how users engaged with trends via video captions. In the second and third papers, I integrated the methods more closely, in line with the research focus of each paper. In the second paper, on one hand, a qualitative approach is fitting for the context in which audiencing was coined, where every detail of conversation and setting was considered within an "ethnographic" observation (Fiske 1992). On the other hand, since on social media interactions between audience members happen over a vast scale, a quantitative approach is needed to capture these vast networks of discussion. The research questions in this paper were more closely related than those in the first paper, with both exploring different aspects of audience interactions – that is, the social dynamics created by audience discussions, and the nature of their discussion. Therefore, a more seamless integration of methods was suitable. I used social network analysis to map audience interactions, and content analysis and text mining to examine the content of these interactions. I frequently moved between the findings from each method to consider the discussions that created particular network features, and vice versa, as I discuss below.

A hybrid approach was also justified by the concepts and analysis frameworks in the third paper. Firstly, hybrid methods allowed me to approach each dimension of multimodal discourse (form, content, metafunction) with an appropriate method. Since these dimensions are closely related, and each dimension takes all of the modes of expression within the videos

into consideration (that is, audio, visuals, text), the closeness of the concerns of this paper therefore suited a more integrated approach between methods. Therefore, the methods I used—computer vision, content analysis, and text mining—were even more closely integrated as part of a multimodal discourse analysis, where the methods explored different but closely linked dimensions of discourse (content, form, and metafunction). A hybrid approach to methods was also appropriate to the research focus on memes in this paper. I considered memes as a form of vernacular creativity, which recognises both conventions (patterns) and innovations (differences and detail) within users' content creation. Further, within the various methodological fields from which I drew inspiration and methods (such as multimodal discourse analysis and cultural analytics), there are calls for the consideration of alternative methods (quantitative or qualitative) to those traditionally associated with each field (Hall 2013, Bouvier and Machi 2018). There are also calls within discourse analysis to consider the affordances of computational methods in particular (Bouvier and Machi 2018).

2.2 Considering the benefits of hybrid methods

Across the three papers, I also built in considerations of context from the original data, TikTok, and the literature when interpreting findings. Each of these approaches had benefits, which I will address below.

2.2.1 The benefits of a hybrid approach to combining methods: Bridging findings across multiple methods for enrichment, validation, and building in context

A hybrid methods approach allowed me to bring together the findings from multiple methods, to validate findings, clarify and contextualise patterns, and build a more comprehensive picture of the phenomena and concepts explored in each paper. Consistency between findings across multiple methods suggested greater credibility to the findings, while also highlighting complementary context (Bryman 2006). This commonly involved bridging findings across computational methods and content analysis. Content analysis, as the "manual" (i.e. not computational) method which I used across all papers and one which reflected the thematic characteristics of user practices, often provided context by explaining

the “why” and “how” behind the patterns identified in the computational methods (see Johnson and Onwuegbuzie 2004).

This was especially significant for validating or contextualising computational findings which sometimes suffered from ambiguity, incidental findings, or lack of understanding of tone, such as sarcasm. Combining computational methods such as social network analysis and text mining) with manual methods like content analysis helped to reduce the impact of the limitations of each method. Pairing computational methods with manual content analysis provided a more accurate understanding of elements such as intent and tone. Likewise, pairing content analysis with computational methods allowed for the analysis of patterns at a large scale, across the entire sample of videos and comments.

For instance, in the second paper, I was able to observe how argument discussions were simultaneously a common category in the content analysis and also prominent within social network graphs. Accordingly, when considering particular examples of arguments, I was able to consider example discussions in terms of the social dynamics of the discussions in the social network graphs – that is, levels of connectedness, shapes of groups, prominent users in the discussion - as well as categories from the content analysis that summarised the key themes of the discussion. This allowed me to understand that argumentative discussions created highly sociable and well-connected group discussions which received high engagement across the network. Without the context from the content analysis, I might have assumed that a sustained interaction in the social network meant a friendly conversation was happening, when actually it was an argument. Likewise, the interactions which created prominent users in the social network analysis were varied in nature, including arguments, advice sharing, as well as joking and humour—and context from the content analysis enabled me to understand the differences behind these social network features.

In the third paper, bridging findings produced by the topic modelling and content analysis enabled me to better interpret the complex topics which involved overlapping themes. For instance, some of the topics produced by the topic modelling involved elements of more than one related theme produced by my content analysis, such as topics involving elements of both identity and relationships – for example, “being a girl mom”, “being a girl dad”, “having a Latina wife”. Comparing the findings of the content analysis and the topic modelling highlighted this overlap in themes, and reflected the multi-faceted nature of the thematic

content of the videos, which was in itself a useful finding. Without bridging the findings between topic modelling and content analysis, I may have missed out on identifying the multifaceted thematic nature of videos, and as a result, I would have failed to interpret the themes according to the various contexts that they presented themselves in within the topic modelling, and vice versa. This is especially significant considering that a limitation of text mining results which are based on considering individual words within textual data (as LDA topic modelling does) is that it can miss out on vital context (Turchi et al 2013, Srivastava and Sahami 2009). Bridging findings between methods enabled the findings of computational methods to be considered in relation to more context-sensitive findings (i.e. from content analysis) (Bryman 2006).

Observing patterns in findings from multiple methods also enabled me to identify how widespread patterns were, and to consider them in different dimensions. For instance, in the second paper, bringing together the findings from the content analysis and social network analysis highlighted that "microenvironment" discussions were common. Doing this contributed to one of the most important findings in the paper, that close-knit and sustained group discussions were frequent and significant. Observing these types of discussion across multiple dimensions enabled me to observe that these types of discussions created relatively siloed groups within networks, to understand their impact on the wider social dynamics across the social networks, and to recognise that the themes of the discussions often veered away from the content of the video itself to focus on sustained personally and socially significant interactions (such as sharing stories of user's personal lives, sharing advice, and arguing). Each of these findings (i.e. network shapes and themes and nature of interactions) was interesting from the perspective of audiencing.

2.2.2 The benefits of a hybrid approach to individual methods: Layering considerations of pattern, detail and context

Across the three studies, I took a hybrid approach within individual methods, including within computational methods and within content analysis. By combining quantitative and qualitative techniques within each method and bridging fairly seamlessly between "macro" and "micro" dimensions of analysis, I could consider scale and detail simultaneously, in a

more “like-for-like” fashion than when combining distinct methods. These hybrid methods enabled a layered analysis of TikTok trends, capturing wider patterns, scale, context and detail within the same method.

For example, in the second paper, taking a hybrid approach to social network analysis allowed for structural and statistical examination of social dynamics at a macro level as well as interpretive, visual, and close exploration at a micro level. Explorations at a macro level enabled me to consider the overall connectedness of networks (that is, how interactive comment sections were), and whether users were engaging in dispersed, loosely connected interactions, or forming smaller, tight-knit groups. Considering networks at a micro level allowed me to zoom in on particular groups and users, and examine the nature of group discussions (that is, whether groups were made up of lots of interactions directed at one or a small group of prominent users, or more collaborative and egalitarian). By combining visual analysis of the networks with statistical measures—such as levels of connectedness, number and shapes of subgroups (components and triangles), and presence of isolated nodes—I was able to compare social dynamics across different comment sections via more easily comparable statistics, while also performing closer analysis that allowed for more interpretive work of the network features. This combination of perspectives enabled me to simultaneously understand widespread patterns in interactions and overall levels of interactivity across comment sections, while also considering the social significance of group formations, types of interaction, and prominent users—which were all relevant considerations for audiencing.

For instance, on a macro level, I could see that comment sections overall were highly interactive, involving lots of collaborative and reciprocated interactions across the board, albeit with some variation between the comment sections of different videos. On a micro level, I observed that there were many collaborative group discussions, as well as sustained interactions between smaller groups. Within the context of studying audiencing, both of these dimensions were useful for considering the sustained and collaborative nature of group discussions, which resonate with the group discussions that the concept was coined to refer to (Fiske 1992), how widespread these types of discussion were overall, and the overall levels of interactivity across comment sections.

Similarly, using a hybrid approach within content analysis enabled me to capture overall patterns as well as deeper, context-rich findings. In the second paper, I used content analysis

to assign categorical labels that summarised overall patterns (such as who was being addressed in comments, and the topic of discussions and content), and also to capture more subtle and complex themes related to tone and intention (such as creating comedy, advice sharing, creating relatability). In the third paper, I used a hybrid approach to content analysis to capture widespread conventions in video content while also recognising variations, subgenres, and instances of innovation. This was especially useful for considering memes within the context of vernacular creativity, since this concept simultaneously recognises widespread conventions and individual innovations.

I used text mining (topic modelling and count-based analysis) in each paper to summarise patterns across large collections of textual data, including TikTok video captions, comments, visual labels, and transcripts of audio and on-screen text), while also grounding those patterns in the qualitative interpretation which textual data facilitates (as inherently qualitative data). The Latent Dirichlet Allocation (LDA) model enabled me to group words and phrases thematically, based on their distribution across the dataset, producing overlapping topics that reflected the underlying semantic structure of user content. Through a hybrid approach, I could consider computational outputs in relation to my interpretations of meaning and intention from the areas and data types that provided more context. I did this by interpreting each topic through its most salient words (that is, those most statistically associated with each topic), reviewing example videos tied to each topic, and considering common phrases associated with each word. This proved useful for summarising broad thematic trends across the vast collections of textual data, while simultaneously allowing for a more nuanced understanding of the context surrounding words and phrases, including how they were expressed, what words and context surrounded them, and how uses of the words varied.

Indeed, for all methods I used across all of the three papers, building in context from external sources, surrounding content, and the platform environment enriched my analysis. In the first paper, my interpretation of trend descriptions involved drawing on contextual knowledge from TikTok videos and their broader cultural references (such as Oasis, John Lennon, Halloween), as well as consulting articles to understand the meanings and strategic use of certain hashtags, like #foryoupage. In the second paper, understanding the short user comments often depended on considering them within the broader comment thread and in relation to the content of the video itself, which allowed me to make informed coding decisions that accounted for tone, reference, and audience. Similarly, in the third paper,

considering context was essential for interpreting the tone of content. This was particularly important where topics such as identity or ethnicity were treated humorously, something that could be easily missed or misrepresented by the findings of computational methods in isolation.

Examining context throughout my analysis therefore helped to ensure that meaning was interpreted in a way that was grounded in the social and cultural settings in which it was produced. While building in context is not inherent to a hybrid approach, as traditional quantitative analyses may do the same, it was facilitated by the hybrid methods I used, since the overall approach was fluid and open to integration and moving between methods to interpret findings on more levels. Combining qualitative and quantitative techniques and macro and micro levels of analysis, meant considering both scale and detail, and it was relatively seamless to also integrate consideration of additional outside context.

2.3 The limitations of hybrid methods: difficulties in moving beyond surface-level patterns, and navigating the incompatibility of findings

There were also limitations to a hybrid methods approach, related to the difficulty of moving beyond widespread, surface-level patterns in computational methods (specifically count-based text mining), and difficulties in bridging together and comparing findings between methods when the approaches and findings were not similar or compatible. It is important to acknowledge that I identify and discuss fewer limitations than benefits in relation to hybrid methods. This may be because, in conceptualising and designing my research around hybrid methods, the approaches I selected were appropriate for the research questions which I asked, and the approaches were carefully designed and implemented, in ways that were tailored to these contexts. Secondly, it is important to consider my own biases, as I began this thesis with the idea that hybrid methods may be valuable for the overarching aims of the thesis as well as for the research questions in each paper. My positive opinions about these approaches may influence my interpretations of limitations.

One limitation emerged from the use of count-based text mining methods, particularly in the early stages of analysis. By design, these methods surface the most frequent and popular words and phrases. As a result, text mining may have obscured less frequent but potentially

meaningful patterns in the data. As such, it does not fulfil the intentions I had to consider pattern and detail concurrently as part of a hybrid approach. This was most significant in the first paper, when count-based text mining was the only method I used for analysing video captions, and the results were dominated by hashtags and phrases seemingly intended to drive visibility and popularity of content. While these popularity-oriented patterns were dominating the findings, it was difficult to explore user engagement with trends in more descriptive or meaningful ways. Even after working to refine results, for example by removing hashtags, widely used words and phrases related to popularity and visibility were still common.

Further, even when considering phrases, which provided more context than single words, popularity and engagement based phrases such as “watch til end” and “like for like” dominated the findings. This could be due to these being common stock phrases on social media, which involve less variation than natural language based terms. For instance, “like for like” is a common stock phrase used across social media platforms, and is therefore more standardised than a phrase such as “i like horses”, which might involve more variation e.g. “i love horses”, “horses are life”, “horses are great”. While these phrases have similar meaning, they would appear as distinct phrases in count-based text mining results, unlike a templated phrase like “like for like”. This is a significant limitation of text mining within social media research contexts, where stock phrases are common, as the third paper, which considers the meme “Tell me x without telling me”, highlights.

Text mining is considered to be an example of an inherently hybrid computational method (Moats and Borra 2018), because it can simultaneously consider overall patterns while also allowing for consideration of detail in qualitative, textual data. However, in the example above, count-based text mining findings can be limited to only the most common patterns, and so by one type of user behaviour. Nevertheless, in the proceeding papers, I continued to use text mining and did not experience the same issues. This issue may be therefore dependent on the data type and phenomenon studied. This limitation might also have been less of an issue in the studies where text mining was combined with other methods, where the findings could be considered in relation to the findings produced by other methods. This example highlights a limitation in the hybrid capabilities of text mining, while also highlighting the value in combining methods within a hybrid approach, in order to compliment text mining with context and findings produced via other methods.

It is also important to note that the limitation discussed above applies only to *count-based* text mining. Discussions of hybrid methods within the literature tend to consider text mining in general, which also includes methods such as sentiment analysis and topic modelling. Alternative text mining techniques, such as topic modelling, could have been more suitable for exploring the thematic ways that users engage with trends in video captions. Topic modelling may have done a better job at sorting popularity-focused terms into topics and therefore allowing other less common topics to be represented. However, this method can also be vulnerable to over-representation of very frequent terms (Kaya 2022). Instead of considering alternative methods, I continued to consider this limitation when using text mining in the proceeding papers, and this limitation was less of an issue when pairing text mining with the methods used in proceeding papers.

A further limitation I noted within the hybrid methods approach related to the interpretive and presentational differences between manual and computational methods. This issue was most significant when pairing more similar methods, such as content analysis and topic modelling in the third paper, since both methods have a somewhat similar aim of summarising topical patterns, yet they are likely to produce different findings. The themes I produced within the manual content analyses were more narrowly focused and precisely labelled, reflecting the smaller scale of this method, and it involving more intentional assignment and interpretation of categories. In contrast, topic modelling inherently produces overlapping topics, often in loosely related sub-themes within a single topic.

In isolation, the outputs of each method have their merits and benefits, but when it came to considering the findings of each method together, there were some practical implications. For instance, in the second paper (Chapter V) I had identified the distinct themes *personal identity, background and preferences,* and *relationships and family* within the content analysis. In contrast, in the topic modelling results, the topics were overlapping, so that some topics combined elements of identity and relationships (eg. being a girl mom, growing up in a white Christian family). In some ways, this was insightful in itself, highlighting that some common topics of video belonged in multiple themes, but nevertheless, this was something to work around practically in the presentation of findings, which required more elaboration and layered interpretation in the discussion. While this is not a significant limitation, it required practical consideration, as findings are not necessarily "like-for-like" when using a hybrid approach. This in turn limits the direct comparability of findings.

2.4 Conclusion: Summary on the benefits and limitations of a hybrid methods

Hybrid methods produced findings which enabled valuable analysis across micro and macro and qualitative and quantitative levels of analysis, provided validation between methods, and facilitated a fluid approach to methods where I could build context into analysis, from other methods, as well as from the literature and TikTok and its content. These approaches had many uses for studying trends and the various concepts I explored. They enabled the exploration of overall patterns in behaviour and content along with the intricacies of user behaviour, intention, and tone-specific expressions of personal and social meaning.

A hybrid methods approach also required careful navigation across the differing analytical outputs. These differences, while not necessarily flaws—since they provided valuable insight into the overlapping character of themes within content—required interpretive and discursive work, and sometimes limited the direct comparability of findings across methods. Since hybrid methods are still emerging, and scholars highlight that hybrid approaches should be considered exploratory (particularly computational methods, see Moats and Borra 2018), it became apparent in my use of count-based text mining, particularly in the first paper, that it is important to remain reflective and critical when applying hybrid methods. Nevertheless, combining multiple methods with text mining, and also applying topic modelling, helped to work around some of these limitations of text mining.

Chapter VIII Conclusion

1 Contribution to the research

The main contribution made in this thesis is that users engage in personally and socially meaningful practices around trends, in their interactions with other users and in their content creation. Within video content, captions, and comment sections that emerge around and involve trends, users make sense of their personal lives together, and engage in meaningful social interactions including sharing advice and knowledge, telling stories, and debating. Trends therefore provide a window into what is important to users and what makes up their digital lives—important concerns for media audience research and indeed wider fields. Thus trends provide a lens and platform for studying and enacting sociologically significant phenomena. As such, my thesis simultaneously argues that trends are compelling research foci and important phenomena for users.

Therefore, trends matter and we should study them, and not dismiss them. As I explore in the literature review, so far trends research has mostly followed two paths: research within media studies and digital sociology which tends to cherry-pick trends that are inherently sociologically or politically interesting, therefore not primarily motivated by their popularity, and computational research, which focuses on popular trends but only analyses how they spread, not what they mean or why they matter. My research has bridged these two approaches, simultaneously considering and valuing trends as popular phenomena, and what they mean for users and reflect about users. This is an original approach and contribution, which paired with the points above highlight this as a compelling approach for studying trends in future research.

Another key contribution of the thesis is that TikTok trends are created and defined by an interplay of user and platform influences. Highlighting the impact of platform influences, the findings of my research suggest that TikTok seems to closely curate the trends which appear on the Discover page, and TikTok features (such as editing tools and the arrangement of content on the platform) play an important role in how users discuss and frame trends and create trending content. Yet simultaneously, the findings highlight that users play an important role in creating and shaping trends, as trends are defined by TikTok as a result of

user practices. Thus user practices also play a central role in determining the behaviours and content conventions that create and shape trends. While it is common for research to be primarily concerned with either platform or user phenomena and influences (as Rogers (2013) highlights in his discussion of medium vs social research), I instead consider these influences simultaneously within my research, which feeds into this as an original contribution to recognising the interplay between user and platform influences on trends.

A further contribution of the thesis is that it demonstrates how hybrid methods enable a layered and context-rich analysis of TikTok trends, one that captures broad patterns as well as nuanced, varied and detailed user dynamics. Hybrid approaches are still an emerging and developing approach, and this thesis contributes to calls for considering the uses of hybrid methods empirically within diverse studies (see Moats and Bora 2013, Savage 2013). In this research, hybrid methods enabled validation between methods, and for findings to be combined across multiple levels of analysis, combining scale and detail in order to produce a comprehensive representation of phenomena. A prime example of this was provided in the second paper (Chapter V) with the use of social network analysis alongside content analysis and text mining, whereby combining findings from these methods I was able to understand the various types of discussion that drove close-knit and sustained group discussions and their associated features in social network graphs.

This was an appropriate approach for considering trends, since they are defined by widespread patterns in popularity, and shaped by user behaviour which simultaneously innovates and conforms to widespread patterns in content. Within the context of media audience research, the thesis demonstrates how hybrid methods can be used to study audiences at scale while remaining attentive to meaning, context, and lived social experiences. Against the backdrop of long-standing tensions in media audience research between administrative, metrics-driven approaches and critical, interpretive traditions, these reflections on hybrid methods highlight how qualitative and quantitative modes of enquiry can be merged. Through these approaches, each paper painted a picture of the audience, and each paper's respective phenomenon, that was both detailed and vast. By analysing TikTok trends, comments, and video memes, the research combined computational techniques, such as text mining, social network analysis, topic modelling, and computer vision, with interpretive frameworks drawn from audiencing, vernacular creativity, and multimodal discourse analysis. This allowed broad patterns of popularity, visibility, and interaction to be

examined alongside close, context-rich interpretations of how users make meaning, relate to one another, and represent their identity.

Broadly, the SLOM perspective recognises that methods have consequences for society, since they shape the research, information and knowledge that is used to make decisions on how societies are run and how people in society are treated. Therefore this adds significance to these findings on hybrid methods, particularly since they support the notion that hybrid methods approaches provide an altogether different way of researching phenomena, one which negates the need to choose between scale and depth. In relation to hybrid methods in particular, the SLOM outlook enables us to move away from rigid understandings of quantitative and qualitative methods, embracing more fluid approaches to and understandings of qualitative and quantitative approaches, and towards approaches where these two formerly separate traditions are combined seamlessly. The findings support this notion, highlighting how scale and depth can be explored simultaneously in relation to various audience and media phenomena, as discussed above.

This thesis responded to calls for research studying TikTok, social media trends, hybrid methods, and methods for media audience research more generally, coming from scholars across various fields and disciplines. Therefore, the original contributions in this thesis are relevant across a range of disciplines and debates.

At the time of beginning this thesis, TikTok was not as widely researched as other platforms, and scholars argued that it should therefore receive more attention (Abidin 2021). Although several years have passed since starting this thesis, and research into TikTok has grown and progressed (e.g. Zhao and Abidin 2023, Entrena-Serrano 2025b, Faltesek et al 2023), since social media platforms are ever-changing, continued research into them is important (Quan-Haase and Sloan 2017). Therefore, this thesis contributes to advancing understandings of TikTok. Similarly, relative to their sociological importance and prevalence on platforms, trends had received little attention, and accordingly, scholars advocated for their sociological examination (Zhang et al 2016). Indeed, there is still a gap in the research at the time that I write this chapter in 2025, and the thesis contributes towards advancing understandings of trends.

The thesis also contributes to interdisciplinary concerns about the new forms of data and methods which are produced and enabled by digital platforms, which have potential uses and ramifications across a range of disciplines, and which scholars have called for continued consideration of (Athique 2018, Livingstone 2019). Individual papers also respond to calls to consider particular types of data and methods in the wake of new and evolving forms of data, including comments in the second paper (eg Abidin 2020), videos in the third paper (eg Highfield and Leaver 2016) and considering computational methods within discourse analysis approaches in the third paper (eg Manovich 2020, Kress and Bezemer 2023).

2 Limitations

The findings of this thesis should be considered in relation to several limitations, primarily stemming from the nature of the TikTok platform, practical methods-related choices and approaches, and the scope of the study.

Firstly, my research focused on the most popular content and prominent users, which means the results are not representative of all TikTok content or the broader user base, nor are they intended to be. This sampling approach was intentional and aligned with my overarching research aims relating to popularity and trends. Nevertheless, prioritising users, content, and behaviours associated with popularity and high engagement inevitably involves overlooking the diversity of content and experiences of less visible users. Additionally, focusing mainly on textual data across all three studies does not fully capture the multimodal and video-centric nature of TikTok. The exclusive focus on English-language content further narrows this scope, and may limit the applicability of findings to non-English speaking users and communities on the platform.

Another limitation relates to the interpretation of personal and social meaning expressed in the user data. As I relied on unsolicited social media data, the likelihood of the meanings I inferred actually aligning with the creating or commenting users' intentions, or capturing the significance of content for individual users, is lower than if I had used solicited research methods which involve direct communication with users. While the metafunctional theory I employed in the third paper provides a valuable framework for studying expressions of

meaning, it cannot account for the full complexity of personal and social dynamics, particularly in the context of creative and personal expression.

Further, while I explored the role of TikTok platform design in shaping user behaviour and trends in the first paper, it is difficult to disentangle user behaviour from platform influences. In each paper the findings showed users acknowledging TikTok features such as effects and video editing tools (for example, stitch and duet), the For You page, and the organisation of TikTok content—which suggests that these features may play an important role in how users engage with the platform. Further, since some of these elements facilitate the presentation of trends (the For You page) and memetic production (duet and stitch both allow users to reuse the content of others), they are likely to have some bearing on how users engage with trends and memetic content production. While this interplay between users and platform was an interesting finding in itself, as discussed above in the Contributions section, it is also important to acknowledge that any interpretation of user practices is not separate from platform influences. Therefore users' content, interactions, and practices, will all be influenced by the setting of TikTok and the platform's design and features.

Thus, while this thesis provides important contributions on the user practices that occur around trends and popular content, my findings represent only a segment of the broader TikTok ecosystem. Further, these limitations and boundaries highlight some areas that future research could address, which I discuss below.

3 Opportunities for further research

Trends can reflect significant aspects of the personal, social, and digital lives of users, who are also individuals in society. As such, they have broad sociological significance. Further, hybrid methods could also have wide-reaching applications across social media research, media audience research, and sociological research more broadly. The hybrid approaches I used facilitated valuable analysis across micro and macro and qualitative and quantitative levels, provided validation between methods, and facilitated a fluid overall approach to methods where context could be built into considerations. These affordances could benefits many fields, especially those where there are tensions between qualitative and quantitative

methods, and where sources of dual-aspect data facilitate analysis of scale and detail. Therefore, considering trends and using hybrid methods could be valuable for future research across diverse fields.

Future research could also address the limitations discussed above, to expand the scope of studying trends and TikTok users, and to better explore and understand user intentions and platform influences. Some of these limitations were associated with focusing on popular content, widespread behaviour, and secondary data from social media. While such boundaries could be valuable for future studies, depending on the context of the research, it is also important to consider trends and hybrid methods in other contexts, and by using different approaches.

It is difficult to know whether my interpretations of user content align with users' original intentions or emotional experiences while engaging with TikTok and other users. This is an issue in the use of unsolicited and secondary social media data, where meaning is inferred rather than directly articulated by users (Markham et al 2018). It may be valuable, therefore, for future studies on TikTok trends to adopt approaches that include user interviews, surveys, or ethnographic engagement to explore how users themselves understand and experience the circulation and creation of trends and trend-based content. This could provide more direct reflections on users' motivations and perceptions around TikTok trends, and allow researchers to compare and refine interpretations of research based on secondary data (like mine) against self-reported user perspectives.

In a similar vein, it would be valuable to understand more about how platform features and design shape user interactions with and on TikTok, which it may also be useful to explore by asking users directly. While the first paper acknowledged the influence of platform affordances on the creation of trends and content, the extent to which platform influences actively shaped user decisions was outside of the scope of the study. Future research could investigate this directly by asking users about their experiences with TikTok features and trends: *Do users feel compelled to use trends to achieve greater visibility and popularity?, Are users' content creation decisions driven by creativity, visibility, or conformity?* Addressing these questions could help to understand the relationship between platform design and user behaviour on TikTok, which is often unclear in the algorithmically driven environments where user data is produced via interactions with the platform. Digital methods

approaches (see Rogers 2013), which interrogate platform and algorithmic design and influences on platform data, could also be useful for understanding more about the relationship between these influences.

Additionally, future research could focus on video content, not its transcription, especially given advancements in computational tools for studying visual data at scale. In addition, it may be valuable for future studies to explore refining text mining approaches, or using alternatives to count-based models, such as topic modelling or sentiment analysis, to overcome the difficulties I experienced in moving past the most common pattern within the text mining findings in the first paper.

My sampling strategies throughout this thesis focused intentionally on the most popular content, in line with my overarching research interest in trends and popular content. However, this foregrounded content that had already succeeded within TikTok's visibility logic, which meant overlooking other content and behaviours. Future research could extend this work by including less visible users or niche content. This could provide useful counterpoints to findings relating to popularity, and allow for a more pluralistic understanding of creativity, participation and social expressions on TikTok.

As well as the limitations of my research, my findings also point to possibilities for future research, outside of the realms of trends and hybrid methods. Firstly, the second paper highlighted how strong expressions of agreement or disagreement prompted sustained user interactions and the formation of group discussions. Understanding more about the dynamics at both ends of the spectrum of emotional response could shed more light on how user interaction is driven. Future studies could explore the role of emotional intensity in fostering sustained user interaction, examining how strong feelings of agreement or disagreement contribute to the formation of extended discussions and the visibility of prominent users. Secondly, while emojis were frequently used in comment sections, as noted in paper two, I did not explore their meaning or expressive functions in depth, as this was outside the scope of the study. Future research could engage with existing theories of emoji use and analyse their role in user interactions within TikTok comment sections, where emojis were common.

Lastly, all papers highlighted notable variations across different types of trends—variations in the descriptiveness of video captions, in the level of interactivity in comment sections, and in the dynamics of content creation and vernacular creativity within video production. Future

studies could examine trend-specific differences more systematically, to better understand how user practices and engagement vary by trend type, content form, or topical focus.

4 Final considerations

Overall, this thesis has made a contribution to our understanding of TikTok, social media trends, and hybrid methods within media audience research. It shows that trends serve as meaningful sites of user engagement, expression, and interaction, and that hybrid methods can provide a powerful lens for capturing both the scale and complexity of user practices.

While the limitations I have outlined point to the need for broader and more participatory approaches in future research, they also open up avenues for expanding and deepening this field of enquiry. Building on the contributions from this thesis, future research can continue to advance understandings of social media trends and hybrid methods, by including users' perspectives, expanding the sampling scope of studies, and critically interrogating TikTok algorithms and design to understand the interplay between users, content, and platform design.

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