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Do Algorithms Re-standardise the Life Course? The Role of Social Media for the Third Age in China.

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The Role of Social Media for the Third Age in China.

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ABSTRACT

Against the broad backdrop of global population ageing and the digital revolution, this study focuses on algorithmic public social media. It examines how the algorithm and platform reshape the identities of China's third age and how, in this process, they reproduce and even intensify social inequality.

The thesis builds an integrated theoretical framework to address the core research question, the study adopts a multi-level mixed-methods design. At the macro level, the study finds that algorithmic platforms, acting as curators, reshape a standardised ideal third age narrative centred on successful ageing. At the meso level, it shows that users' digital practices are deeply structured by offline cultural capital. The study proposes the algorithmic cave metaphor to describe the structural information predicament faced by the latter under low algorithmic literacy and high algorithmic dependence. Mechanism analysis not only verifies the conversion pathway of digital capital but also identifies media format thresholds in different format creation. Further micro analysis reveals that the third age cultural landscape on platforms arises from a dual mechanism of capital barriers and platform discipline: high-visibility content is produced strategically and in templated forms by creators with significant capital advantages to compete for scarce attention.

In sum, the thesis constructs and validates a cyclical model of the reproduction of inequality, showing how capital, algorithms, and user agency act together to shape age identity construction and social stratification in the digital era. The findings deepen the understanding of the third age, offer new theoretical tools and mechanistic explanations for digital inequality, and carry practical implications for platform governance and digital inclusion policy.

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Chapter 1: Introduction

1.1 Interdisciplinary Positioning and Background

Over the past two decades, human communication has undergone unprecedented technological change. Internet access has become part of daily life, and various platforms have become digital infrastructures, pervading all aspects of individual daily life.

However, this transformation is not a neutral process of technological adoption but a profound social reshaping. In this process, individuals are not always able to choose whether to use digital technologies. They often enter the digital world under structural social pressures. More importantly, a new social force, which is algorithms, is rising. It has begun to reshape core social meanings across many aspects of life, including this study's focus, the third age. We are entering what Zuboff (2023) describes as an era of "surveillance capitalism", in which human experience is treated as free raw material to be captured for predicting and steering behaviour in the service of commercial interests. At the same time, as Fourcade and Healy (2024) argue, an ordinal society is taking shape. Individuals and their experiences are continuously measured, ranked, and classified in digital space. These classification situations exert a profound influence on people's lives.

In response to this transformation, digital sociology has emerged as a new sub-field of sociology. Meanwhile, population ageing has become a major challenge for many countries globally. This study is situated at the intersection of digital sociology and gerontology, specifically its sub-field of cultural gerontology. It aims to explore how, in the context of the wave of digitalisation, social media is not merely a tool for socialising for older people but also a powerful field. Within this field, the cultural meanings of ageing are renegotiated, new forms of the life course are shaped, and existing social inequalities are reproduced and reinforced in new ways.

The urgency of this research stems from an ever more obvious paradox. On the one hand, older people are integrating into the digital world with unprecedented speed and depth. On the other hand, the scope of academic research has failed to keep pace with this social change.

Older people are quickly integrating into the digital world. Since their inception, social media platforms have been predominantly youth-oriented; however, with their rapid popularisation in real-life social networks, social media platforms are attracting new older users, while existing users are also ageing. In the United States, for example, the proportion of people aged 65 and over using social media surged from 11% in 2010 to 45% in 2021 (Pew Research Center, 2021).

This growth is global, particularly pronounced in China, where its scale and speed are

even more striking. According to the Statistical Report on China's Internet Development published by the China Internet Network Information Centre (CNNIC), before the COVID-19 pandemic in 2019, internet users aged 50-59 constituted 6.7% of the total, and those aged 60 and above accounted for 6.9% (CNNIC, 2019). By 2023, however, these proportions had soared to 16.5% and 14.3% respectively (CNNIC, 2023). These figures clearly reveal that in just four years, particularly with the acceleration catalysed by the COVID-19 pandemic, the proportion of middle-aged and older people among China's internet users has grown dramatically. They are no longer a marginal group in the digital world but have become a large and continually expanding core component. More importantly, older people long regarded as passive social media users have begun to engage actively in online interaction and content creation. Taking Chinese TikTok (Douyin) as an example, its 2020 report showed that the number of its older users, as well as their volume of posts, views, and interactions, all increased by over 300% compared to the previous year (Douyin & Juliangsuanshu, 2020). This indicates that a growing number of older users are not limited to basic functions such as browsing and interacting; a portion of them are also engaging as content creators.

As social media becomes a digital infrastructure with a vast user base of older people, exploring and understanding its role in later life is indispensable for our comprehension of the social lives of contemporary older adults. In particular, how the application of this digital technology among older people will affect and reshape the older life course

and its social meaning. However, existing research has three interrelated limitations that collectively contribute to an insufficient understanding of the complexities of older people's digital lives.

1.2 Overview, Innovations, and Contributions of this Thesis

Although the three perspectives that have received wider attention and discussion offer useful entry points and have important practical relevance, focusing only on these established views risks confining researchers to a partial understanding of older people's use of social media technologies. Consequently, this study will move beyond the discussion of access. It will focus on public social media, and adopt the perspectives of social age and the life course to conduct an in-depth investigation of the social media experiences of China's third age population, aiming to fill this significant academic gap.

To fill the above gaps, this thesis responds to these research gaps and makes contributions at three levels: theory, methodology, and social practice.

In terms of the theoretical contribution, the study constructs and empirically examines an integrated analytical framework. The framework is not a simple juxtaposition of classic sociological ideas. It extends Goffman's (1959) theory of self-presentation, via Hogan (2010), into a micro-level theory of social media exhibition, situates this under

Foucault's (1977) mechanism of discipline, and ultimately traces it to Bourdieu's (1986) structure of capital. Through this integration, the study constructs a dynamic, multi-level explanatory model for understanding how offline social inequalities are reproduced, converted, and intensified in the digital world. Furthermore, it understands this digital world through the logic of surveillance capitalism (Zuboff, 2023) and the social logic of ordinalisation (Fourcade & Healy, 2024). For cultural gerontology, the study extends discussion of the third age from offline cultural and consumer contexts to demonstrate how this life stage is being re-ordered and re-sorted by algorithm and platform. For digital sociology, it offers robust empirical evidence on how platform power and social structures interact, and how this structure influences and reshapes a group, the third age, their identity construction and lifestyles, how they practise within such a digital society, and the inequalities that result.

In terms of the methodological contribution, the innovation lies in a multi-level mixed-methods design grounded in the philosophy of critical realism and tightly aligned with the theoretical framework. The design systematically links macro, meso, and micro levels, unifying description of phenomena with explanation of mechanisms.

At the macro level, I combined the quantitative features of network analysis with the qualitative features of thematic analysis and designed a hashtag co-occurrence network analysis. It visualises the cultural landscape of older people on public social media and, drawing on Hogan (2010), uses the visualised data to reveal the algorithm's role as a

curator. At the meso level, a survey provides reliable data to test user stratification and mechanisms of capital conversion. At the micro level, in-depth qualitative visual analysis decodes the production logic behind high-visibility content. This integrated design offers a rigorous and replicable pathway for future research in digital ageing studies and social media.

In terms of practical and social significance, the findings have clear real-world and policy value. The metaphor of the algorithmic cave (Chapter 6) warns digital inclusion policy that provision of technical access is not sufficient. It highlights a deeper danger: in an era of surveillance capitalism seemingly neutral platforms may function as means of behavioral modification (Zuboff, 2023), shaping the perceptions and choices of vulnerable groups. Therefore, policy must address not only information constraints but also the power asymmetries inherent in algorithmic systems. The observed media format thresholds (Chapter 7), namely that short-video creation relies less on cultural capital than other content formats, point to actionable directions for targeted digital literacy programmes, such as encouraging and supporting lower-educated older groups to create short videos. This can thereby enhancing opportunities for digital participation. The analysis of algorithmic culture and discipline (Chapters 5 and 8) challenges platform neutrality and provides theoretical support for urging platforms to assume greater social responsibility and to build a fairer and more transparent algorithmic ecosystem. By showing that the polished online image of third age is a standardised ideal narrative that diverges from lived realities, the study also helps to deepen public

understanding of the complexity of older people's digital lives.

To ensure depth and focus, the scope of the study is clearly delimited as follows.

At the level of population, the core focus is the third age, namely younger older people who are retired yet able to live independently. By defining this group as agents engaged in identity practices, the study examines their processes of identity construction. The scope is deliberately limited and does not examine in depth the digital experiences of the fourth age, who are older and more likely to depend on care. Their digital lives are governed by different logics of health and care and call for dedicated research.

At the geographical level, the study focuses on mainland China's distinctive social and technological context. China is selected because younger retirement ages have generated a large third age population, and a rapid, top-down wave of digitalisation has led to widespread adoption of digital technologies by this group. These features offer a critical and representative site for observing the core social transformations under examination.

At the platform level, to analyse public social media as a core field of contemporary cultural production, the study selects Douyin, an algorithmically driven public platform, as the primary case. This choice allows in-depth analysis of algorithmic curation and cultural production and distinguishes the study from work centred on private,

relationship-maintenance platforms. The survey component also covers multiple social media platforms. While Douyin serves as the focal case for in-depth analysis, the study retains an overall view of other types of platforms.

1.3 Definition of two Key Concepts

The core objects of this study are the third age and public social media. It is therefore essential to define these two concepts clearly before proceeding to broader discussion.

Third Age

The core analytical concept of this study is the third age. This concept from Peter Laslett's (1994) theory of the four ages, which divides the life course into distinct stages to better understand life trajectories from a social perspective.

In this model, the first age is the period of dependency, socialisation, and education before entering the workforce. The second age is the period of work, family-building, and responsibility. The focus of this study, the third age, refers to the period after retirement but before the onset of final dependency. Its defining characteristics are personal agency, self-fulfilment, and, crucially for this thesis, the practice of identity construction through consumption and lifestyle pursuits (Gilleard & Higgs, 2020). Finally, the fourth age is the last stage of life, characterised by dependence, decrepitude,

and the loss of agency.

However, the third age is not a universally accessible status but rather a privileged practice that requires sufficient economic and cultural capital. A central argument of this thesis is that this lifestyle and consumption-mediated identity work is increasingly being supplemented and amplified by a new, more communicative practice: the performance of lifestyle on social media. A more detailed and critical discussion of the third age, including its distinction from the fourth age, will be provided in Chapter 2 and 3.

Public Social Media

Within this study's analytical framework, I use the term "public/private social media" to distinguish between the two categories of social media.

One category relies on acquaintance networks to build connections and maintain strong-tie social networks, such as WhatsApp, WeChat, and Facebook. In this study, I refer to these as private social media to emphasise their function of sustaining social networks. The other category is the object of this study, such as TikTok. Its core functions are not based on maintaining social networks. Its social structure is organised around content and interests. Users connect with strangers or creators and form a broad network dominated by weak ties. Content acquisition on these platforms does not depend on

acquaintance networks. It is driven by algorithmic distribution. This openness moves them beyond social tools and makes them a powerful public field.

Public social media can be seen as a core arena for cultural production, identity negotiation, and the circulation of ideas in contemporary society. Users, including older groups, not only consume content but also participate actively through self-expression and the exhibition of identity. It is in this public space that the cultural meanings of ageing and third age are renegotiated and new forms of the life course are shaped. Technically, most contemporary public social media deploys algorithmic recommendation systems. Platforms represented by Douyin are algorithm dominant and content distribution is primarily determined by recommendation algorithms. The platform is therefore not a neutral conduit of information but an active curator that selects which content, identities, and narratives gain high visibility.

Focusing on public social media is a considered theoretical choice. The study shifts the lens from the traditional concern with how older people use technology to maintain family relationships to a more central set of questions. How are cultural narratives of ageing constructed in public digital spaces under algorithmic governance. How do individuals negotiate their identities within these spaces. How are new forms of digital inequality produced and consolidated in this process.

1.4 Overview of the Thesis Structure

This doctoral thesis comprises nine chapters. It offers a systematic examination of the reshaping of the meaning of the third age by algorithm and platform, identity construction and digital inequality among China's third age in public social media.

To address this broad research question, the thesis conducts four interlinked empirical studies that together build a multi-level analytical picture.

The analytical path moves from the macro cultural landscape to the micro production of content. The study begins at the most macro level by mapping the algorithmic cultural landscape of ageing on public social media, asking which forms of the third age are visible and valorised in algorithmic spaces (Chapter 5).

After establishing the macro cultural environment, the focus shifts to the meso level of users. This part examines how different older groups are stratified within this environment and provides empirical evidence of digital inequality (Chapter 6). Having observed this stratification, Chapter 7 tests the pathways of capital conversion and explains how offline capital advantages are transformed into online returns.

Finally, the study turns to the micro level of content production. By analysing the practices of popular older creators, this part offers micro-level explanations for the

earlier macro landscape and meso stratification (Chapter 8).

These four studies are not parallel in a simple sense. They form an integrated whole that progresses from macro to meso to micro. The framework develops step by step to provide a coherent and deepening analysis that answers the core question of how China's third age users of public social media negotiate digital identities and experience digital inequality.

The summaries of each chapter of this thesis are as follows:

Chapter 1 Introduction: This chapter positions the study at the intersection of digital sociology and cultural gerontology. It identifies limitations in current perspectives, content, and objects of study, and establishes the necessity of this research.

Chapter 2 Literature Review: This chapter reviews and critiques three core domains: social media research in digital sociology, the third age in cultural gerontology, and studies of digital inequality. It identifies three main gaps: an incomplete shift from biological age to social age; insufficient deepening from access inequality to usage inequality, and limited expansion from private platforms to public platforms. These gaps form the points of entry for this study. The chapter then narrows the research question into four specific sub-questions.

Chapter 3 Theoretical Framework: This chapter develops an integrated analytical framework. It brings together three pillars: Goffman's self-presentation and Hogan's exhibition for analysing third age identity practices; Foucault's discipline for explaining platform and algorithmic governance; and Bourdieu's capital, including its extensions in the digital domain, for tracing the structural roots of inequality.

Chapter 4 Methodology: This chapter sets out the study's stance in Critical Realism and, on this basis, constructs a multi-level, mixed-methods design. Three parallel research paths correspond to macro, meso, and micro levels. Network analysis depicts the macro cultural landscape of platforms. Survey and statistical analysis reveal meso-level user stratification and mechanisms of capital conversion. Visual analysis explains the micro logic of content production.

Chapter 5 Algorithmic Culture and the Re-standardisation of the Life Course: As the first empirical chapter, it answers the first sub research question through large-scale hashtag network analysis on Douyin. The findings show that algorithms act as powerful cultural curators that selectively amplify a standardised third age narrative centred on successful ageing, while structurally obscuring discussions of ageing, illness, and dependence. This drives the re-standardisation of the life course.

Chapter 6 Digital Inequality in Social Media Repertoires: Focusing on the meso level, this chapter answers the second sub research question using a survey of 434 older

users. Cultural capital, represented by educational attainment, is identified as the core driver of stratified digital practices, producing a structural divide between cultural omnivores and univores. On this basis, the chapter proposes the metaphor of the algorithmic cave to describe the structural information constraints faced by low-capital users.

Chapter 7 Capital Conversion and Media Format Thresholds: Building on chapter 6, this chapter addresses the third sub research question through mediation analysis and related statistical models. It confirms the full conversion pathway from offline cultural capital to online participation diversity (digital capital) and then to online social capital. It also identifies media format thresholds, whereby short-video creation reduces dependence on cultural capital and opens possibilities for agency among low-capital groups.

Chapter 8 Constructing the Ideal Third Age: Shifting to the micro level of content production, this chapter answers the fourth sub research question through qualitative visual analysis of most liked older creators' videos. The mainstream image of older people emerges from the joint operation of capital barriers and platform discipline. High-visibility creators commonly possess significant capital advantages and follow homogenised, templated production strategies that align with algorithmic preferences.

Chapter 9 Integration and Conclusion: The final chapter integrates all empirical

findings to construct a cyclic model of the reproduction of inequality. It summarises the study's core theoretical contributions, discusses practical implications for platform governance, public policy, and digital inclusion, and reflects on limitations, indicating directions for future research.

Chapter 2: Literature Review

2.1 Introduction

Chapter 1 establishes the central context of this thesis: the speed and depth with which older people are integrating into the digital world have outpaced current academic research. As noted in Chapter 1, existing studies on older people's use of social media technologies contain three research gaps that hinder a comprehensive account of how these technologies reshape the lives of the third age. Through a critical review of relevant fields, this chapter identifies the research gaps this thesis seeks to fill.

Accordingly, this literature review chapter is divided into three main parts. First, Section 2.2 positions the study at the interdisciplinary intersection of Digital Sociology and, in Section 2.3, Cultural Gerontology. By tracing the theoretical background and core concepts relevant to this research, it sets the thesis's analytical lens.

Building on this foundation, the second part of the chapter systematically sets out the three core gaps identified in the Chapter 1 introduction.

Section 2.3.1 discusses the perspective on age being limited to the "biological" rather than the "social". It examines the dominance of functionalist and medicalised paradigms in studies of older people's technology use and argues for an identity

construction approach grounded in life course perspective.

Section 2.4.1 discusses research on social media use by older people being limited to "access" rather than "usage". It shows how the "grey digital divide" literature has overemphasised access barriers and insufficiently explored how structural inequalities are reproduced and intensified within the digital practices of older people who are already online.

Section 2.4.2 discusses research platforms being limited to "private" rather than "public" domains. It shows that current work focuses on privatised relationship-maintenance platforms such as WhatsApp while overlooking public, algorithmically driven platforms such as TikTok that serve as core arenas for identity negotiation and cultural production today.

By systematically setting out the case for these three research turns, the chapter defines the research problem. In Section 2.5, the research problem is narrowed to four specific sub-questions that guide the empirical work of the thesis, which are then explained in detail.

2.2 Social Media Research in Digital Sociology

Since this study approaches social media research from the perspective of digital

sociology, this section begins with a concise review of the development trajectory of this emerging discipline, with a focus on how scholars in this field view digital media platforms in their research. Following this, an overview of social media research and its definitions is provided from this viewpoint. This review positions the perspective that I adopt in the later sections

2.2.1 The Theoretical Development of Digital Sociology

Before digital sociology was recognised as a sub-discipline, scholarship on how digital technologies shape society had already begun to take shape. Yet this work was not organised under a consistent disciplinary framework or shared terminology. In 2009, Wynn first used the term "digital sociology" in an article. Subsequently, the pioneering work published by Orton-Johnson and Prior (2013) critically explored the fundamental questions of the field, while Lupton's (2015) systematic book laid a solid foundation for the disciplinary construction of digital sociology.

Lupton (2015) argued that we have entered a digitised society. Given the pervasive reach and deep embedding of digital technologies, it is hard for individuals to remain untouched by their effects, even without active use, so that people are becoming digital data subjects. In response to this reality, Lupton (2015) contended that digital sociology addresses the pressure on contemporary sociology for theoretical and methodological transformation and proposed four interrelated paths for its practice. The first,

"professional digital practice", concerns sociologists' use of digital technologies for academic networking, research dissemination, and teaching (Lupton, 2015, p.16). The second path centres "analyses of digital technology use" and examines how they shape individuals' identities, self-perceptions, social relationships, and everyday practices (Lupton, 2015, p.16). A third approach, "digital data analysis", complements this by using naturally occurring digital data for research, including material from social media and search records (Lupton, 2015, p.17). The final and most crucial path is "critical digital sociology" (Lupton, 2015, p.17). Guided by social theory, it involves an in-depth, reflexive analysis of the social, cultural, political, and ethical consequences of digital technologies, representing the very critical core of the discipline.

Furthermore, following Selwyn (2019), the concept of the "digital" in digital sociology can be approached from three dimensions. First, as a phenomenon, digital technology is an object of study. It is embedded in social practices and forms new social facts. Second, as a method, digital technology is a means to study society and offers new tools and pathways for sociological research. Third, as a platform, digital media act as a crucial space for researchers to communicate with the public and disseminate sociological knowledge.

This understanding aligns with the perspective of the mutual shaping of technology and society, inherited from science and technology studies (STS), and attempts to adapt to the new characteristics of digital technologies (Selwyn, 2019; Marres, 2017). Digital

technology operates on a scale entirely different from traditional technologies; it allows most people to learn and use it, is applied to the vast majority of societal aspects, and presents a massive volume of social interactions on a single platform. These features allow digital sociologists to seek greater flexibility in their research, viewing digital technology not only as an object of study but also as a social phenomenon, a research platform, a source of data and method, and a cause of or solution to social problems (Lupton, 2015; Selwyn, 2019; Marres, 2017).

Critical analysis is vital to digital sociology. As Fussey and Roth (2020) and Selwyn (2019) emphasise, the use of digital technology is not neutral and can make social exclusion worse and reinforce existing structural inequalities. As digital technologies change power relations, traditional hierarchies are challenged and more fluid patterns emerge (Lupton, 2015). Digital sociology should therefore reveal how digitisation, under an apparently neutral surface, creates or sustains social injustice and structural oppression.

Accordingly, this study is situated within digital sociology, particularly its critical tradition. On the basis of the above review, social media is positioned in three ways. First, it is the research object, which is a complex sociotechnical system shaped by algorithms, commercial logics, and power relations. Second, it provides the research method. The large volume of digital traces it generates makes it possible to analyse cultural narratives and user stratification. Third, it constitutes the field of research. It is

a space in which the third age negotiate identity. This integrated perspective enables the study to move beyond descriptive accounts of technology and to examine how platform mechanisms actively shape third age identities and cultures and reproduce structural social inequalities.

2.2.2 The Definition of Social Media and the Expansion of Its Research Field

This study examines social media platforms from the perspective of digital sociology, treating them as a research object and a method.

To understand the role of social media in contemporary society, firstly, it is necessary to see that the definition of social media itself has changed alongside technology. Early social network sites (SNS) were mainly designed to help users maintain their existing offline social connections (Boyd & Ellison, 2007). Boyd and Ellison (2007) defined these services as online platforms where users could build a personal profile, show a list of friends, and interact with others, the aim being to make existing offline networks visible online rather than to meet new people (pp. 211-213). With Web 2.0, the focus of the technology shifted. As a result, research also turned its attention to social media, a term that now described internet applications whose main feature was allowing users to create and share user-generated content (Kaplan & Haenlein, 2010). Later research offered a more functional definition, viewing social media as an internet-based

communication channel that is asynchronous and always available, with its value coming from user-created content and the interactions between users (Carr & Hayes, 2015). This history shows a shift in academic understanding from an early focus on interpersonal connection to an interest in content creation and sharing (Aichner et al., 2021; Khang et al., 2012).

This technological evolution was matched by new developments in the theories for understanding social media, which can be seen on two key aspects: an individual and interactional level, focused on new ways of presenting the self, and a systemic and critical level, which looks at the power of platforms in shaping society.

For the first aspect, at the individual and interactional level, sociologists soon realised that Goffman's (1959) classic theory of dramaturgy, while useful, needed further extension to explain self-presentation on social media. Goffman's theory is based on synchronous situations with clear boundaries of time and space, where individuals put on performances in real-time interaction. Key features of social media, however, like feeds and photo walls, are asynchronous. To account for this difference, Hogan (2010) made a crucial distinction, arguing that self-presentation on social media has shifted from a mode of "performance" to one of "exhibition".

In Hogan's (2010) new mode, self-expression on social media is not a momentary act. It accumulates as a lasting set of digital artefacts, including status updates, photos, and

videos, which can be viewed at any time. The platform receives and stores these artefacts in its databases, producing a permanent personal display. Unlike a live performance, the person who created the content is not necessarily present when it is viewed, and may never fully know who their audience is. This asynchronous exhibition of digital artifacts profoundly changes how identity is constructed. It also brings new challenges. Because platforms tend to bring together different social circles from a user's life (like family, work colleagues, and friends) into one single audience, a phenomenon known as "context collapse" can occur (Marwick & Boyd, 2010; Hogan, 2010; Davidson & Joinson, 2021). To deal with this, users often practise a form of self-censorship, adjusting their posts to be acceptable to the most sensitive or conservative members of their potential audience. Hogan (2010) called this a "lowest common denominator culture" (p.383).

For the second aspect, at the broader systemic and critical level, an individual's exhibition does not happen in a vacuum. It is shaped by a powerful platform ecosystem run by a few large technology companies. Van Dijck et al. (2018) offers a core critical perspective for this study. The theory argues that social and economic activities are increasingly organised by a global system of online platforms that are driven by algorithms and fuelled by data. These platforms are not neutral tools; they actively reshape social structures and public values through three main, connected mechanisms.

The first mechanism is datafication. This is the process where platforms turn users'

online activities, social interactions, and even emotions into data that can be measured and analysed. This data, continuously provided by millions of users, is treated as a private asset by platforms to be stored or sold, while users often lose control over their own data and are not paid for it. The second mechanism, commodification, builds on this. Platforms turn these datafied user activities into profit through various complex and non-transparent business models. This may involve charging user fees, using free content created by users to attract advertising, or selling data to other companies. In this system, users create value, and their attention and data also become the products being sold. The final mechanism is selection, which refers to how platforms use algorithms to filter, sort, and recommend content automatically. This process shapes what users see and which content becomes popular.

These two aspects influence each other, the platform mechanisms identified by van Dijck et al. (2018) are consistent with Hogan's (2010) curator concept. Platforms select content from large digital repositories to display to users, and this process both shapes macro-level social culture and influences micro-level strategies of personal presentation.

In summary, understanding how social media helps to reshape contemporary society is a central task for digital sociology. This study is based on the argument that there is a close link between how individuals construct their identity (the exhibition) and the large-scale structure of platforms (the three mechanisms). Among the many dimensions

of social stratification, such as class, education, and gender, this study chooses to focus on ageing. This study explores how social media plays a part in the process of ageing, and in the cultural conversations and reconstruction of the life course related to getting older. To answer this question, it is necessary to bring in the theoretical tools of cultural gerontology.

2.3 The Third Age in China

This study understands old age and ageing through the sociological lens of the third age. This perspective treats ageing not as a biological process defined by physical condition, but as a stage in the life course shaped by social and historical events. It is a period of life defined by agency. However, this sociological approach is seldom found in research on how older people use social media.

2.3.1 From Functionalism to Identity Construction

A review of the relevant literature shows that the prevailing paradigm on older people's use of social media tends to treat it as a tool for addressing negative health outcomes of ageing, with a clear tendency to prioritise the biological and health dimensions over the social and cultural. This paradigm is, in essence, functionalist and even "medicalised". A comprehensive review of studies up to 2022 states clearly that the most widely

examined well-being indicators in research on older people's social media use are social connection, isolation, and loneliness (Cotten et al., 2022). This finding is supported by many studies. Research commonly holds that digital technologies, especially social media, can alleviate older people's social isolation by facilitating social connection (Sen et al., 2022; Czaja, 2017). For example, a synthesis of 11 empirical studies found that as many as 63.6% showed that social media use reduces loneliness and social isolation among older people (Kusumota et al., 2022, p.5). Studies based on large, nationally representative data in the United States further verify the mechanism: social media communication reduces loneliness by enhancing perceived social support and the frequency of social contact (Zhang et al., 2021). In the specific context of COVID-19, tools such as video calling also helped to mitigate loneliness intensified by physical distancing (Hajek & König, 2020).

Beyond mental health, this line of research extends to physical health and cognitive function, treating social media as a tool to improve health management and provide cognitive stimulation. A study using the 2017 Chinese general social survey (CGSS) found a significant positive link between social media use and the physical and mental health of older adults (Fu and Xie, 2021). Experimental research shows that after four weeks of social media training, inhibitory control, an aspect of executive function, improves significantly, which supports the role of social media as cognitive stimulation (Quinn, 2018). Qualitative research from Singapore also found that older people felt using social media helped to keep their minds active and slow cognitive decline (Han

et al., 2021). Investigating the mechanisms involved, one study discovered that using social media to connect with others can positively predict and enhance executive function by increasing feelings of social support and lowering the perception of barriers (Khoo and Yang, 2020).

While valuable, these health- and function-centred studies offer a largely functionalist or medicalised view. If research on older adults' social media use is limited to this perspective, it risks obscuring their agency. It tends to cast them as passive recipients of care and treatment rather than as active individuals who are simply using social media. This echoes the critique by Harrington et al. (2014) of traditional media studies, which often reduced television viewing to a direct media effect and ignored the active role of older audiences. Even with traditional media, older users found ways to give meaning to their viewing habits. Hockin-Boyers et al. (2021) have more recently looked at this in terms of women's use of social media, they are not just passive recipients but actively shaping their feeds. Applied to highly interactive social media, the functionalist perspective wrongly portrays older users as a passive group needing technology to fix social or physical problems, completely overlooking their initiative.

In stark contrast to this functionalist view are social constructionist and life course approaches to understanding ageing (Holstein & Gubrium, 2007). Here, ageing is not seen as a purely biological process, but as a practical accomplishment that is given meaning, negotiated, and performed in social interaction. This perspective is

empirically grounded in the sociological concept of third age (Gilleard & Higgs, 2016). Third age refers to the life course period after retirement when health remains relatively good and individuals can pursue interests and lifestyles actively. Its core features are agency, consumption, and self-realisation (Gilleard & Higgs, 2016). Online spaces, and social media in particular, have become a key arena where this cohort constructs and negotiates identity.

The recent phenomenon of "senior influencers" or "granfluencers" is a clear example of this identity work in later life. Limited research shows that middle-aged and older women use platforms like Instagram to consciously perform age by sharing fashion and lifestyle content. In doing so, they make themselves visible in mainstream culture, pushing back against the cultural invisibility of older women in society (McGrath, 2018; Farinosi, 2022; Jerrentrup, 2023). Through "aesthetic digital labours", they construct a younger cognitive age, using hashtags like #mywrinklesaremystripes to reframe signs of ageing as markers of experience and honour (McFarlane & Samsioe, 2020). Similarly, Varjakoski (2023) shows how "granny bloggers" and "Activist Grannies" in Finland use social media to redefine the role of "granny", shifting it from a family-bound, selfless identity to active participation in social and political life. These studies show that social media is not only a tool for maintaining existing ties. It is also a stage on which older people explore and express "who I am" and "who I want to be" (Antunes et al., 2022). Although these studies focus mainly on a small number of older influencers, they reveal the reality of identity negotiation through social media and

support the need for research in this direction.

However, this celebration of a vibrant third age image also carries risks of new forms of exclusion. A study of older influencers on Douyin shows that social media commonly presents a filtered and idealised paradigm of "successful ageing", which places heavy emphasis on health, fashion, independence, and consumption (Yu & Zhao, 2022). While challenging ageing stereotypes, such singular and positive narratives may inadvertently marginalise the large number of older people who do not meet these standards, including those who are frail, financially constrained, or reliant on care (Jerrentrup, 2023). The over-aestheticisation of the third age may also intensify cultural exclusion of those in the fourth age, marked by frailty and dependence (Gilleard & Higgs, 2020), and may foster a subtle new ageism (Yu & Zhao, 2022). The lack of wider discussion of these potential inequalities further underscores the need for this research.

Furthermore, how exactly this idealised image of old age is created and amplified on social media needs deeper investigation. Current research suggests it is not simply a matter of individual choice by influencers, but the outcome of a negotiation between personal agency and the platform's structural forces. On the one hand, platform mechanisms centred on recommendation algorithms prioritise and amplify positive, healthy, and independent images for commercial interests such as user retention and advertising revenue, while content that shows the real difficulties of ageing struggles to gain visibility (Yu & Zhao, 2022). On the other hand, as older influencers gain visibility,

they are co-opted by the fashion industry and marketing agencies. Their content production begins to internalise market logic, catering to and reinforcing stereotypes of the ideal ageing (Farinosi, 2022; Farinosi & Fortunati, 2020). What we see on social media is therefore not pure self-expression, but the negotiated product of individuals, algorithms, and platforms.

This negotiation is not equal. It is closer to an exploration within the "invisible cage" described by Rahman (2021). In this cage of algorithms, evaluation standards are the preferences of the algorithm. These preferences are opaque and may change at any time. Older creators cannot know with certainty which kinds of content will be rewarded with traffic and attention, and which will be penalised and rendered invisible. Their identity construction is therefore less a free exhibition than a strategic practice adjusted to the algorithm and the platform environment. They keep testing and guessing in an effort to meet the preferences of the invisible evaluator. The polished, highly praised images of ideal ageing that we see on platforms are the successful outcomes of this experimental response. These ideal images are the best answers selected and shaped by this opaque mechanism.

In summary, academic research on social media use among older adults needs to shift some of its focus from a functionalist paradigm to one of identity construction. While the constructing the ageing self perspective highlights the considerable agency of older adults in the digital world, not enough attention has been paid to the hidden risks of

exclusion and the complex negotiation processes involved. In a society saturated with digital technology and social media, the question of how older people use these platforms to negotiate their identity, challenge stereotypes, and perform their third age lives is an area that urgently needs more research. Therefore, the first core entry point of this study is to focus on the identity construction undertaken by third age older adults when using social media, the role played by platforms and algorithms in this process, and how the culture and identities presented on these platforms affect the lives of older users.

2.3.2 Third Age Culture, Life Course Standardisation and Digitalisation

Having understood the third age as a core cultural construction and an identity practice, this study places it within the broader framework of the sociology of the life course. The life course approach focuses on age-graded patterns embedded in social institutions and history. Its analysis includes five core principles: life-span development, human agency, time and place, timing, and linked lives (Elder et al., 2003, pp.10-14). A central theme in this field is the changing "standardisation" of the life course. In the modern welfare states of the twentieth century, chronological age served as a tool to organise lives, producing a relatively fixed three-stage model of education, work, and retirement. Kohli (2007) termed this the "institutionalisation of the life course". In late modernity, this model has been challenged, and many scholars have observed a trend towards de-

standardisation. Empirical research, however, shows that this trend is not universal. It is most evident in family formation, such as more varied marriage and fertility patterns, while in education and employment trajectories institutional constraints remain strong (Brückner & Mayer, 2005).

Beyond the erosion of old norms, scholars point to re-standardisation, the gradual emergence of new social norms and institutions (Huinink, 2013). This study argues that the third age identity, centred on identity negotiation as discussed in the previous section, constitutes one of the most significant cultural forces driving this life course "re-standardisation". This new form of standardisation no longer operates through compulsory social norms. Research suggests that people generally do not perceive negative social sanctions for missing traditional age deadlines, but rather view age timetables as flexible developmental markers (Settersten, 2003). Instead, it functions by providing an attractive and desirable cultural script and lifestyle paradigm to guide individuals' life planning.

This process of life course re-standardisation is fundamentally generational. It is necessary to distinguish a cohort (people born in the same period) from a generation (a group that forms a cultural identity through shared experiences) (Alwin & McCammon, 2003). The third age became prominent in the late twentieth century because it is closely linked to the rise of the baby boomer generation (Gilleard & Higgs, 2020). This cohort benefited from post-war prosperity and the expansion of the welfare state. They built

up pensions and property wealth and formed expectations oriented towards individualism and lifestyle (Gilleard & Higgs, 2020). As a result, they pioneered and dominated the third age as a new life stage, opening a clear divide between themselves, earlier cohorts, and those who came after with greater economic uncertainty. They also carried consumerist values from youth into later life and, together, defined the retirement model (Gilleard & Higgs, 2020).

Today, as this process meets technology, it gives rise to the notion of the digital life course, defined as how an individual's relationship with technology changes over the life span (Prendergast & Garattini, 2017). When social media becomes infrastructural, it serves as a core arena for the performance of third age identity practices and for driving the re-standardisation of the life course. Online social networks clearly reflect real-world life course stages, as people tend to connect with others who are in similar positions regarding key life transitions such as marriage, parenthood, and education (Dávid-Barrett et al., 2016). Consequently, China's large and prolonged third age demographic, coupled with its extremely rapid digital transformation, offers a unique setting for observing how a new technology like social media participates as a new cultural and institutional force in the processes of identity construction and life course re-standardisation.

However, a critical perspective must be maintained on this contemporary culture-driven account of the third age. Scholars note that the seemingly positive discourse of active

ageing may in fact be a form of neoliberal governmentality (Katz, 2005). Its force lies in the emphasis on individual responsibility, which turns problems of ageing into the personal failures of older people and overlooks groups unable to participate because of structural factors. It therefore risks becoming a new, marketised form of ageism. For example, an ideal of the third age centred on consumption creates new forms of social differentiation (Gilleard & Higgs, 2020). Consumption becomes the central principle for organising and defining later life and is a key practice of identity. The ability to consume successfully, for instance by building a positive image through travel and learning, becomes a new criterion for distinguishing between groups of older people. This turns later life into a competitive arena defined by consumption capacity and lifestyle choices (Gilleard & Higgs, 2020). The third age is therefore not equally accessible to all. It is closer to a practice dominated by a privileged class within a specific generation that holds sufficient economic and cultural capital. Although people construct their own life courses through their choices and actions (Elder, Johnson, & Crosnoe, 2003), this agency, particularly optimistic future expectations, is itself shaped by social structures (Hitlin & Johnson, 2015). This logic, which converts structural social problems into individual responsibilities and idealises a particular identity, provides a key theoretical entry point for the subsequent analysis of how algorithmic platforms may selectively amplify certain ideal identities and exacerbate new inequalities.

2.3.3 The Digital Wave of China's Third Age

To fill the critical gaps identified above, this study turns its focus to China. China's unique social and technological environment makes it an excellent setting for observing and analysing how third age older adults construct their ageing from a social perspective on social media. This is evident in two main respects: first, the extended third age population created by China's compressed process of modernisation. Second, the wave of top-down technological popularisation has driven the rapid development of digitalisation, and as a consequence of this societal change, has incorporated a substantial number of older digital users.

First, China provides a suitable context for this study, primarily due to its large third age population that spans a wide age range. China's distinctive demographic transition and social systems have produced a large third age cohort with a long duration. On one hand, unlike the gradual demographic shifts that unfolded over one or two centuries in other countries, China completed its transition to low fertility and low mortality rates in just 30 years. This rapid pace means its population has aged much faster than those in Europe and North America (Yuan & Gao, 2020). On the other hand, China's statutory retirement policy stands in contrast to its citizens' increasing longevity. Under the current system, men retire at the age of 60, whereas women's retirement age is set between 50 and 55, depending on their professional role (Feng et al., 2019). These ages are notably low when compared with the national average life expectancy, which has

increased significantly (UN DESA, 2019) and reached 78 years in 2021 (World Bank, 2024). Regional disparities are also considerable; for instance, the average life expectancy in Shanghai reached 84.11 in the same year (Shanghai Municipal Statistics Bureau, 2023). The combination of this early retirement system and a long lifespan means that a large number of citizens embark on a post-work life while still in good health. This period, which can last for two, three, or even more decades, constitutes a long third age.

Second, and more noteworthy, is the extensive digitalisation of China's social infrastructure has not only led to a highly digitalised society but has also led a segment of the older population to adopt and use digital technologies for practical convenience. The ubiquity of mobile payments, in particular, means that older adults are often forced to use smartphones and applications in many everyday situations, or risk being excluded from daily social life (Song et al., 2020). The COVID-19 pandemic greatly accelerated and intensified this digitalisation. During this period, a health code became the sole credential for accessing public transport, medical facilities, and shopping centres. Online booking and digital payments also became the default or only option for many services. As a result, older adults who could not use a smartphone faced severe exclusion in both the physical and digital worlds (Song et al., 2021).

This socio-technical environment has driven the widespread adoption of digital devices among the older population and thereby increasing their likelihood of using social

media. This socio-technical change, combined with the catalytic effect of the pandemic, has led a growing number of older adults to adopt digital technology. This trend is clearly reflected in the data: the proportion of Chinese internet users aged 50 and over surged from 13.6% in 2019 to 30.8% in 2023 (CNNIC, 2019, 2023), forming a significant online cohort of older digital users.

While this socially-driven digitalisation has increased digital participation among the older population, they may still face profound digital inequalities. In the Chinese context, research based on nationally representative samples clearly indicates that socioeconomic status (SES), represented by educational attainment and household income, plays a crucial role at every level, determining older adults' internet access, the breadth of their use, their digital skills (Hu & Xu, 2024). In this way, what structural inequalities do digitally-engaged older adults face, particularly within the context of social media? Furthermore, are there mechanisms that enable the third age population to circumvent structural biases and realise greater digital benefits? These questions warrant further exploration in the subsequent sections.

Therefore, the core positioning of this study lies at the intersection of a leading-edge theoretical shift from biological to social age. It also rests on a highly representative empirical site: the digitalised third age in China. The uniqueness of this site is that it brings together a vast third-age population with extensive leisure time and a digital environment that permeates every aspect of social life. This combination will not only

fill a gap in the existing research but also allow for an in-depth exploration of the profound sociocultural meanings and specific inequalities of social media in the process of contemporary ageing, all within a critical case location.

2.4 Shifting the Research Focus

The previous sections outlined the disciplinary and theoretical background of this study, reviewed its development trajectory, and explained the first research gap addressed by this study: the need to shift from a biological age to a social age perspective. Beyond this theoretical limitation, existing digital research on older adults exhibits two further limitations in its content and object of study. These form the second and third core research gaps this thesis aims to fill. This section will elaborate on these two issues. First, the research agenda for older adults has concentrated excessively on digital access, while relatively neglecting their digital usage after they get online and the unequal outcomes that result. Second, the type of social media studied is heavily skewed towards private platforms based on networks of acquaintances, with insufficient attention paid to public platforms that serve as important arenas for contemporary cultural negotiation.

2.4.1 From Access to Usage Inequality

The theoretical frontier of digital inequality research has begun to shift its focus from the first-level access divide to the second-level usage divide and the third-level outcomes divide (DiMaggio & Hargittai, 2001; Scheerder et al., 2017). This means the academic focus is no longer on "who can get online", but on the differences that emerge after access is gained, which are disparities in digital skills, usage patterns, modes of participation, and even the eventual socioeconomic benefits or outcomes (van Deursen & Helsper, 2015; Lythreatis et al., 2022). However, a notable discrepancy exists. Although the overall agenda of digital inequality research is advancing, studies that specifically target older adults remain largely stuck at the first level, investigating the access divide and concentrating on the barriers that prevent older people from getting online.

A large body of literature on the grey digital divide has detailed the numerous barriers older adults face when entering the digital world. This research has systematically identified the key factors affecting their digital inclusion. First, sociodemographic and economic factors are consistently shown to be the primary basis of stratification for digital access. Age, education level, and income are the most stable predictors of whether older adults can access and use the internet; the older they are and the lower their education and income, the significantly lower their rate of internet use (Friemel, 2016; Sala et al., 2022; Hu & Xu, 2024; Wang et al., 2024). Beyond these objective conditions, a lack of digital skills and related psychological barriers form a second core obstacle. This includes not only a deficit in specific operational skills but also the

resulting technology anxiety, fear of making mistakes, and low self-efficacy (Damodaran & Sandhu, 2016; Büchi & Hargittai, 2022; Leukel, 2023). Furthermore, the quality of one's social support network is considered another critical determinant. Studies show that older adults rely heavily on informal channels like family for technical support, while formal, systematic community training is severely lacking. This absence of support often leads them to abandon technology altogether after encountering setbacks (Damodaran & Sandhu, 2016; Hu & Xu, 2024; Mubarak & Suomi, 2022). Finally, deeper structural factors also limit participation at its source, including exclusionary technology design that ignores the needs of older users, which is a form of digital ageism (Chu et al., 2022; Durand et al., 2022; Rosales et al., 2023), and motivational barriers, where some older adults choose limited engagement due to concerns about privacy and the authenticity of online communication (Durand et al., 2022; Wells & Russell, 2025).

While these studies provide indispensable insights into the barriers to digital inclusion for older adults, their common feature is that their central question remains "why can't older people use the internet (or why is their use limited)?". Important as this question is, a growing number of older adults are in fact already using social media, yet research on this group is far from sufficient. For the large population of older users who have already overcome the hurdles of access and basic skills, what new and more subtle inequalities do they encounter in their daily social media practices?

This is precisely the second core entry point of this study. It is not enough to focus only on the inequalities older adults face at the access level. When older people enter the complex social field of social media, the socioeconomic inequalities from their offline lives do not simply disappear; instead, they are likely to be reproduced, converted, and amplified. Helsper's (2012) Corresponding Fields Model provides strong theoretical support for this, arguing that an individual's advantages or disadvantages in offline fields (such as economic, cultural, and social capital) are systematically mapped onto their corresponding positions in online fields. In other words, the research agenda urgently needs to shift from the barriers to entry that prevent older adults from getting online to the mechanisms of reproduction through which inequality is recreated in the online sphere. This thesis will therefore delve into the specific practices on social media to investigate how older users' existing social capital (particularly cultural capital, as represented by education) is converted into new digital inequalities, ultimately affecting their social benefits and cultural expression.

Further, this study argues that in the ordinal society described by Fourcade and Healy (2024), usage inequality takes a new form. It is no longer only a difference in skills or usage patterns. It is the result of older users being ranked and sorted by algorithmic systems and then placed into different classification situations. Some users with higher capital can leverage their advantages to obtain a more favourable position in algorithmic rankings and higher visibility. Others may be assigned to categories with lower value or more closed information. The essence of the usage divide is therefore a

positional divide within an algorithmic hierarchy.

2.4.2 From Private to Public Platforms

In addition to the excessive focus on physical access, existing research also shows a systematic bias in its choice of social media platforms for study. This constitutes the third core research gap this thesis aims to address. A systematic review of the literature reveals that the vast majority of studies on older adults' social media use have concentrated on platforms primarily used to maintain offline relationships with acquaintances (Newman et al., 2021). The objects of analysis in these studies are mainly applications based on real-life social networks, such as Facebook, WhatsApp, and WeChat (Hutto et al., 2015; Simons et al., 2022; Qu et al., 2022). Scholars have found that the core motivation for older adults to use these platforms is to stay in touch with family and friends (Jung et al., 2017; Hutto et al., 2015), thereby maintaining and strengthening their existing bonding social capital (Simons et al., 2022). For example, research consistently shows that older adults use Facebook mainly to interact with their children and grandchildren (Bell et al., 2013; Hutto et al., 2015), and nationally representative data from China confirms that voice/video chat is the most common online activity for older people (Hu & Xu, 2024). While important, these studies position older adults as members of pre-existing family and social networks, confining their digital practices to the function of relationship maintenance. Focusing only on these platforms overlooks their potential within the broader digital public sphere.

In stark contrast, there has been a severe lack of academic attention on the practices of older adults on more public social media platforms like Douyin (TikTok). These public platforms are not just communication tools; they are central spaces in contemporary society for identity construction, cultural shaping, and the dissemination of ideas (Makita et al., 2021). Although a few emerging studies have highlighted the potential for empowerment on these platforms, such as achieving visibility through content creation (McGrath, 2018) or transitioning from lurkers to contributors (Tang et al., 2023), a more critical and under-researched area is the complex process of identity negotiation between older users and the platform's algorithms, as well as the new forms of digital inequality they may encounter in this process.

Specifically, the self-presentation of older adults on public platforms is not purely an act of autonomous expression but is largely shaped by platform and algorithmic mechanisms. Research indicates that platform algorithms, in pursuit of commercial interests, tend to selectively amplify a sanitised, exemplary image of active/successful ageing, that is, content that is healthy, fashionable, and vibrant. Meanwhile, images depicting the real struggles of ageing, such as illness and dependency, are marginalised (Yu & Zhao, 2022; Jerrentrup, 2023). This mechanism not only risks fostering a new, implicit form of ageism (Yu & Zhao, 2022) but also means that not all older adults have an equal opportunity to be seen on public platforms. The senior influencers who successfully gain attention are often a privileged group who already possess more

economic and cultural capital in their real lives (Jerrentrup, 2023). Therefore, while public social media provides a stage for some older adults to express themselves, it may also be reproducing or even exacerbating existing social inequalities (Helsper, 2021; Jerrentrup, 2023), making the lives and voices of the majority of ordinary older people who do not fit the ideal standard increasingly invisible in the digital world.

This study, therefore, argues that to fully understand ageing in the digital era, researchers also need to turn their attention to public social media. This means our object of study must expand from the private social media that primarily serves strong ties, to the public social media that acts as the main battleground for cultural production and identity negotiation. The core question is no longer simply whether older adults can break stereotypes, but how do they negotiate their digital identity in continuous interaction with platforms and algorithms? And in this process, how are new digital inequalities produced and solidified?

A further reason for focusing on public social media is that these platforms are core fields for social ordering in an ordinal society, and the primary sites where, as Zuboff (2023) describes, surveillance capitalism extracts behavioural surplus and implements behavioural modification. On these platforms, every like, comment, and act of creation by older users, or received by them, is no longer merely personal expression. It is converted into data for analysis and prediction. Platforms use algorithms to classify, rank, and profile users on this basis, with the ultimate aim of guiding their future

behaviour more effectively. Research on public platforms therefore does not only fill a gap in platform types. It reveals how a new mode of power, centred on data extraction and behavioural modification, reshapes the third age.

2.5 Addressing the Research Gaps and Sub-Questions

The preceding sections have identified fundamental gaps in the literature concerning the shift from biological to social age, from digital access to usage inequality, and from private to public platforms. The main research question of this study addresses three gaps: how China's third age users of public social media negotiate digital identities and experience digital inequality. Given the breadth of this question, it must be divided into manageable parts. I therefore break it into four targeted sub-questions that permit rigorous and robust research design. These sub-questions function as independent yet connected modules. Once each is completed, they can be assembled into a coherent whole that answers the main question from different angles.

2.5.1 Platform Culture and the Re-standardisation of the Life Course

First, based on the previous overview of social media platforms and the third age, the

theoretical perspective and premise of this study are established: social media can serve as an important arena for identity negotiation among the third age population. From a sociological perspective, age can be seen as a process of cultural negotiation. Therefore, in order to systematically study and understand the main research question, this study first takes a macro-level approach to grasp the process of elder culture formation on social media platforms, the identity negotiation of the third age, and the role played by social media mechanisms in this process.

Building on the need to study public platforms, the first crucial step is to understand the macro-level digital cultural environment in which older users are situated. Public social media, especially algorithm-driven platforms like Douyin, do not merely reflect social reality; they actively shape cultural narratives through mechanisms of selection and amplification. This process has profound implications for how ageing is represented and understood, potentially leading to a re-standardisation of the life course.

Platforms and their algorithms are integral part of the power in social media's cultural production. Social media has developed a unique model of culture production through platformisation, whereby content production is shaped by platform policies and iterated based on user feedback (Nieborg & Poell, 2018). The opacity of power on social media platforms, such as their algorithmic moderation mechanisms, combined with their pursuit of commercial objectives, enables them to shape public discourse through algorithms and governance practices (Gillespie, 2010, 2014, 2017). Algorithms, not so

much reflect but are generative of the process of social and cultural construction and, in doing so, shape social norms and identities (Shin et al., 2022).

Given that Douyin primarily delivers information to users through algorithmically recommended content on its For You page, and although the specific workings of these algorithms are unclear, they tend to prioritise highly liked and commented content, tagging users based on browsing behaviours to recommend personalised content (TikTok, 2024). Numerous studies indicate that influencers often adjust their content to align with algorithmic preferences (Klug et al., 2021; Born et al., 2021; Liang, 2022). These algorithms, designed to maximise user engagement, align closely with influencers' objectives, as many creators modify both content and posting schedules to attract greater attention (Klug et al., 2021; Born et al., 2021; Liang, 2022). Consequently, recommendation algorithms are thought to perpetuate stereotypes, potentially narrowing the diversity of content on social media.

The relationship between platforms, algorithms, and users is not a unidirectional process of influence but rather one of interaction and mutual shaping. This is demonstrated by some recent studies which suggest that the rise of senior influencers brings greater diversity to representations of ageing (Farinosi & Fortunati, 2020; Miranda et al., 2022; Antunes et al., 2022; Farinosi, 2023), opening up expectations of the ageing body fashion, participating in sports to challenge age-related stereotypes, and tapping into commercial opportunities linked to their distinctive value. However,

others concern that it may establish a new standard, potentially marginalising older adults who do not conform to these ideals (Köttl, 2022; Stephani, 2022).

Focusing on this tension, Gilleard and Higgs have suggested that contemporary ageing cultures have been reshaped by the emergence of two distinct stages within old age. Drawing on Laslett (1994), they argue that the third age represents the period from retirement until individuals can no longer live independently. Those in the third age are more likely to participate in social activities and, as a result, are more susceptible to cultural influences. The interaction of third age users with digital space and algorithmic culture has become a means of shaping identity. Xu et al. (2021), in their work conducted in China, observe that while institutional contexts significantly affect life course patterns, personal characteristics also play a substantial role in shaping transitions in work and family life.

A notable example is the discourse surrounding successful ageing and active ageing, which promotes the idea that older adults should maintain their vital functions and actively engage in productive and social activities (Lamb, 2014, Calasanti, 2016). This narrative appears to disregard the natural processes of ageing and reshapes the values associated with later life (Lamb, 2014), which can be interpreted as reflecting a process of re-standardisation through a new discursive framework. Critical social gerontologists suggest that such ideals shift normative expectation on older people and, in particular, emphasise the extension of active working life in detriment of other aspects of

wellbeing. Gilleard and Higgs (2013, 2020) suggest that consumer cultures, such as beauty, fashion, fitness, and anti-ageing medicine, have fostered an "agelessness" cultural phenomenon, reshaping the identities and lifestyles of older adults in the third age.

This critical review of the literature on platform power and cultural construction highlights the urgent need to empirically map the dominant narratives of ageing in algorithmic environments. This leads to our first research question:

RQ1: How do algorithms on social media reshape third age identities and cultures?

2.5.2 Digital Inequality and Capital

After clarifying the macro-level cultural landscape shaped by the platform and the role played by social media mechanisms in Sub-question 1, the next step should be to examine how different users adapt to this environment at the meso level, and whether the digital practices of the third age older population are constrained by structural inequality. Not all users experience digital practices in the same way. Existing social structures, particularly cultural capital, often shape users' digital practices, choices, and behavioural patterns, giving rise to new forms of digital inequality. By adopting this meso-level approach, which focuses on group dynamics, the study can address the aspect of digital inequality in the main research question.

2.5.2.1 Digital Inequality and Social Media Repertoire

Social media is not a central focus in research on digital divide and inequality. The concepts of the digital divide and digital inequality have been closely linked in internet research over the past two decades and have attracted considerable attention. As mentioned in the previous sections, the theoretical framework of the digital divide encompasses three levels: 1) the physical access divide, 2) the usage divide, 3) and the outcome divide (Attewell, 2001; van Dijk, 2017; Lythreatis et al., 2022). The first is the inequality in who can access the internet. The second involves the different ways various groups utilise the internet once online, while the third addresses the unequal outcomes that result from this use. Given the widespread adoption of mobile devices in the last ten years, academic attention has moved beyond access to concentrate on these second and third divides, that is, the disparities in internet use and the benefits people get from it (Attewell, 2001; van Dijk, 2017; Lythreatis et al., 2022). In contemporary society, as social media has become the most prevalent form of online interaction and the variety of platforms continues to expand rapidly, the use of social media and its outcomes warrant greater attention in research on digital inequality.

Existing research has identified clear differences in how various groups use social media, including differences in platform choice and the types of information accessed. These differences can indirectly lead to inequality. Early discussions of this topic

mainly examined variations in how different groups use social media (Lutz, 2016; Dutton & Reisdorf, 2019; Yates et al., 2015), and the impact of sociodemographic characteristics on the opportunities to create content and on the nature of the content produced (Scheerder et al., 2017; Blank, 2013). In addition, studies by Dargin et al. (2021) and Madianou (2015) have shown that during natural disasters, differences in social media use between groups have resulted in unequal access to disaster relief information. This has worsened the effects of such events and, in some cases, caused second-order disasters. In recent years, research in this field has become more diverse in focus. Topics now include the knowledge divide linked to patterns of social media use (Li & Cho, 2023), the exclusion of older people from digital platforms (Sala et al., 2022), the influence of social inequality on wellbeing in the context of social media (Büchi & Hargittai, 2022), and the unequal access to job-related information among groups with different demographic profiles (Karaoglu et al., 2022). Despite these developments, research on digital inequalities in the context of social media has largely focused on behavioural differences between social groups. Much less attention has been paid to how social media technologies themselves contribute to inequality.

In fact, digital inequality should not be regarded as a new form of inequality arising in the digital world, but rather as a continuation of structural inequalities that already exist offline. Technology is not a neutral force operating in isolation; it is deeply embedded within existing social structures. Its development has, in fact, amplified inequalities in the online environment (van Deursen et al., 2017; Helsper, 2012; Robinson et al., 2015;

Robinson et al., 2020; Richterich & Abend, 2019). This extends Bourdieu's (1984) theory of capital and its transformation framework to the digital context. A substantial body of research has shown that educational background offline (cultural capital) significantly influence how people use the internet and the extent to which they benefit from it. In addition, differences in demographic differences such as age, gender and race have also consistently been found to relate to digital inequality (Lutz, 2016; Hargittai et al., 2019; Hargittai & Hinnant, 2008; Zheng & Walsham, 2021). The characteristics of the technology, together with the structural characteristics of those who are skilled in its use, shape this form of inequality. This raises the question: will the manifestations of digital inequality evolve with advances in social media technology, leading to new forms of inequality?

In fact, the design, algorithmic systems and content format of social media platforms all shape user behaviour and influence patterns of digital inequality (Yang & Zhang, 2023). Different platforms may attract users from particular social backgrounds, contributing to segregation and inequality based on platform choice (Horvát & Hargittai, 2021; Matassi et al., 2022; Banisch et al., 2024). Examining social media repertoires allows for a deeper understanding of this research gap. The concept of social media repertoires builds on the broader notion of media repertoires, which refers to the personalised and structured sets of media that individuals develop when navigating a wide range of media options (Hasebrink & Domeyer, 2012). An individual's specific pattern of media consumption, known as their media repertoire, is deeply tied to their

social background and routines. Research has shown age, education, and location to be key influences on these patterns (Hasebrink & Domeyer, 2012; Kim, 2016). This connection between structural factors and personal choice aligns with Bourdieu's (1984) concept of the judgement of taste, which argues that social characteristics determine cultural preferences. The simple high-low cultural divide was later challenged by Peterson (1992), who introduced the theory of the cultural omnivore. This theory suggests that elites increasingly cultivate an omnivorous taste, appreciating both popular and highbrow cultural forms (Peterson, 1992). This framework has since been refined to distinguish between "weak omnivorousness", characterised by a wide range of interests, and "strong omnivorousness", which involves a full rejection of class-based cultural exclusion (De Vries & Reeves, 2022).

So, how are the theories of media repertoire, cultural capital, and omnivorous taste reflected in the context of social media? Due to their interactive design, social media platforms are not simply spaces where taste is displayed, but are active sites for its negotiation through multi-dimensional interactions (Paßmann & Schubert, 2021). While social media platforms do have selection mechanisms, these distinctions no longer simply reflect class differences. This is because popular content on social media is no longer limited to traditional cultural content, but also includes trendy and entertaining material, as well as the mastery and understanding of content and platform features. As a result, social media repertoires are shaped by the combined influence of personal taste and digital literacy. This study seeks to address this theoretical gap by

classifying social media according to how users access information and the format of content. It also draws on variables that influence media repertoires, such as education level, age, and other socio-demographic and structural factors, to examine how digital inequality is manifested in this dimension.

2.5.2.2 Social Media Use and Ageing

In contrast to the limited discussion of older people's social media use, older people are frequently addressed in research on the digital divide and digital inequality. Digital inequality in later life is particularly marked (Robinson et al., 2015; Robinson et al., 2020). Early studies on the digital divide among older adults focused on access to technology. However, with growing numbers of older internet users, current concerns have shifted towards differences in information literacy (Jun, 2021; Hunsaker & Hargittai, 2018). As a result, many studies have focused on this issue, both in theory and in policy, aiming to improve older adults' engagement with digital technologies through education. Education has been shown to be strongly associated with internet participation and digital competence, and it plays a key role in supporting older people's digital inclusion (Yoon et al., 2020). Those with higher levels of education and income are more likely to use the internet (Friemel, 2016; Yoon et al., 2020). Older people have less algorithmic awareness (Gran et al., 2021). However, the different ways in which older people use social media, and the new forms of inequality that emerge in the process, deserve closer examination.

Turning to the specific context of this thesis, a growing body of research has explored the use of social media by older adults in China. These studies examine the impact of platforms such as WeChat on mental health outcomes among older users, including the reduction of loneliness, the prevention of depression, and the improvement of subjective well-being (Qu et al., 2022; Tang et al., 2022; Ye & Zhang, 2019; Fu & Xie, 2021; Wang et al., 2022). In addition, other studies have looked at the role of digital technologies in promoting social participation among older adults (He et al., 2020). However, much of this research relies on survey data collected before 2018 (Fu & Xie, 2021; Wang et al., 2022; Tang et al., 2022; Qu et al., 2022; Ye & Zhang, 2019; He et al., 2020).

Although these earlier datasets retain their value, their capacity to accurately portray the contemporary landscape has arguably been diminished. The period since 2018 has witnessed a significant transformation in how older adults in China engage with social media, a shift fuelled by the rapid growth in digital participation and the rising prominence of algorithm-powered short-video platforms. Data from the semi-annual Statistical Report on the Development of China's Internet, published by the China Internet Network Information Center (CNNIC), reveals a dramatic increase in the digital engagement of older adults since the COVID-19 pandemic. The pre-pandemic 44th report (2019) indicated that users aged 50–59 and those 60 and above constituted 6.7% and 6.9% of the total internet population, respectively. In stark contrast, the 51st

report (CNNIC, 2023) showed these figures surging to 16.5% and 14.3%, signalling a profound growth in online participation among these older age groups.

These changes highlight the need for updated research to reflect current patterns of social media use among older populations. With the rapid development of social media technologies, short video platforms have attracted large and growing audiences, including many older users. The launch of TikTok in September 2016 has had a major impact on the social media landscape. Understanding how older adults engage with these new platforms is therefore of particular interest. In response to these developments, this study conducted a survey in 2024 to investigate social media use among third age older adults in China, and the inequalities reflected in these differences. It also considers the possible impacts of these inequalities.

The literature thus points to a significant gap in understanding how traditional forms of inequality are reproduced through the specific choices and combinations of platforms, the social media repertoires, of older users. Therefore, the second research question asks:

RQ2: How are the digital practices of third age social media users stratified by their cultural capital?

2.5.3 The Mechanism of Capital Conversion

Observing the existence of user stratification is not sufficient, this study must also uncover the underlying mechanisms through which inequality occurs. A key process in the reproduction of digital inequality is the conversion of offline resources (like cultural capital) into tangible online benefits (like social capital). Understanding this mechanism is vital for moving beyond description to explanation.

Existing research has shown that educational attainment is an important structural factor influencing digital participation (Vitalis et al., 2025; Raihan et al., 2024; Wang et al., 2024; Yu et al., 2016; Friemel et al., 2021). However, limited attention has been given to how education shapes older adults' digital participation and through which mechanisms this influence operates, indicating a need for further investigation.

Digital technology, particularly social media, has been highly anticipated as a means of promoting social participation among older adults and alleviating loneliness (Kusumota et al., 2022; Zhang et al., 2021; Chen & Gao, 2023; Cotton et al., 2022; He et al., 2020; Damant et al., 2017; Sen et al., 2022). Some studies have demonstrated that social media not only strengthens strong ties, such as emotional support from family members, but also fosters weak ties, such as information acquisition and connections with a broader range of individuals, thereby effectively enhancing social connections and reducing loneliness and social isolation (Zhang et al., 2021; Cotton et al., 2022). In

recent years, older adults have begun to actively use social media and should no longer be regarded simply as a group excluded from digital technology. Taking China as an example, a 2023 report by the China Internet Network Information Centre (CNNIC) indicates that among China's internet users, those aged 50–59 account for 16.5 per cent, and those aged 60 and above account for 14.3 per cent. This represents a large and significant demographic group. Nevertheless, a key shortcoming remains in the existing literature: current research on digital technology among older adults primarily concentrates on the initial stage of adoption, whereas the challenges associated with continued use remain underexplored (Kebede et al., 2022).

The initial adoption of digital technology often aligns with the first level of the digital divide framework, the access divide, which refers to the distinction between older people who do not use the Internet and those who have begun to use it. In contrast, the challenges associated with continued use relate to the second and third levels of the digital divide, which concern differences in usage patterns and outcomes (van Dijk, 2017; van Deursen & Helsper, 2015; Scheerder et al., 2017; Attewell, 2001). Research in this field remains at an early stage, as reflected in the inconsistent findings on the impact of social media use among older adults (Cotton et al., 2022; Newman et al., 2021). For instance, although many studies have shown that social media use benefits older adults' mental health and helps alleviate loneliness, Aarts et al. (2015) found that when social media use was measured by frequency, it was not significantly associated with loneliness or mental health outcomes. This does not, however, negate the potential

positive effects of social media on older people. Rather, it highlights the need to examine social media use from multiple dimensions, including the type of platform and the behavioural patterns of older users, such as active versus passive participation. As such, older adults' engagement with different types of social media, especially the distinctions between active participation and passive browsing, represents a research direction that warrants further in-depth investigation (Zhang et al., 2021; Cotton et al., 2022; Kim & Lee, 2023). This reflects the second and third level of digital divide, which concerns differences in usage and outcome. Specifically, how older people's varied ways of engaging with social media, such as active creation and passive browsing, shape their digital experiences and the benefits they derive.

Active participation involves creating content and establishing connections and interactions. Previous studies on older adults often characterised them as passive browsers; however, many studies have shown that older adults are also willing to engage in digital creation, and that such online creation can enhance social connections and participation (Waycott et al., 2013; Reuter et al., 2021). Although research specifically focusing on older adults remains limited, studies on other age groups indicate that the digital usage and participation gap is influenced by sociodemographic variables and reflects structural inequalities (Hoffmann et al., 2015; Correa, 2010). Among these factors, educational attainment is an important indicator. This finding is particularly detrimental to the digital participation of China's older population. According to the data from China Statistical Yearbook (2021), the majority of older

adults in China have only a junior secondary education or below, combining the two factors of low educational attainment and advanced age, both of which factor can hinder internet participation. Previous research has categorised content creation themes (Blank, 2013) but has not differentiated between types of social media, nor considered that the forms of media creation have evolved alongside the diversification of media formats.

Furthermore, the influence of sociodemographic variables on different forms of content creation has not been widely explored. Tang et al. (2023) conducted a qualitative study among Chinese older adults, finding that some low education level older adults perceived short video apps as having lower barriers to creation, which encouraged their participation. This suggests that different types of content creation may present different barriers for older adults, highlighting the need for further research to understand the obstacles they face when engaging in social media creation, the structural inequalities involved, and the potential opportunities to circumvent these inequalities and promote content creation among older adults. Therefore, identifying digital participation ways that are less influenced by sociodemographic variables and more suited to older adults can help provide more specific directions for encouraging their engagement in digital content creation. Therefore, this study first explores the impact of educational attainment on older adults' digital content creation across different formats.

Furthermore, while social media does offer benefits for older adults in areas such as social interaction, these benefits are not equally distributed. Individuals with higher

levels of education, tend to gain greater benefits from the internet, suggesting that the expansion of digital technologies may exacerbate rather than reduce existing social inequalities (van Deursen & Helsper, 2015). Existing research consistently shows that socioeconomic status (SES), particularly educational attainment, continues to significantly influence individuals' digital participation, usage patterns, and outcomes (Vitalis et al., 2025; Raihan et al., 2024; Wang et al., 2024; Yu et al., 2016; Friemel et al., 2021; Oyinlola, 2022). However, the precise mechanisms through which education influence digital behaviour and outcomes, whether through direct or indirect pathways, remain poorly understood. This also raises an important question: while it is recognised that educational attainment may influence older adults' digital experiences, the specific mechanisms at play remain insufficiently understood, making it difficult to propose concrete and effective measures to reduce digital inequality.

Raihan et al. (2024) found that educational attainment influences social media users' political participation through the mediating role of digital capital. This provides a research direction for understanding how education is converted into digital capital to achieve online outcomes and benefits. Ragnedda et al. (2018, 2020, 2024) provide a detailed definition of digital capital, referring to the digital capabilities (such as information processing, communication, creation, security protection and problem-solving abilities) and digital resources (such as devices and access conditions) possessed by individuals. This form of capital can be historically accumulated, transferred and transformed across different social domains. It not only reflects an

individual's ability to act within digital environments but also determines their potential to convert the outcomes of digital activities into traditional forms of capital, such as economic, social and cultural capital. Digital capital interacts with existing economic, social and cultural capital, amplifying or exacerbating pre-existing inequalities within the digital sphere. Building on Bourdieu's (1986) theory of capital conversion, Merisalo and Makkonen (2022) propose a comprehensive framework for capital conversion pathways: individuals input initial resources such as economic, social and cultural capital, accumulate digital skills and capabilities (i.e., digital capital) through activities in the digital space (such as socialising, creating and trading), and subsequently generate outcomes in various forms, including economic, social and cultural capital. These outcomes then flow back to reinforce individuals' capital positions in the offline world. This process of capital transformation does not occur automatically but is deeply shaped by individuals' pre-existing social resources and structural differences, revealing the critical role of digital technology in either intensifying or alleviating social inequality. Only a small number of exploratory studies have examined digital capital based on this concept, but the research remains very limited (Addeo et al., 2023; Raihan et al., 2024; Calderon Gomez, 2021). Further studies are needed to investigate this complex mechanism from multiple perspectives.

Existing research on older adults' digital participation often concludes by calling for enhanced digital education and encouraging more active engagement in digital society. However, Helsper and van Deursen (2017) argue that different social groups receive

different types and qualities of digital support. Therefore, when promoting digital education or formulating digital inclusion policies, it is essential to consider not only who receives support, but also the nature and appropriateness of that support (Helsper & van Deursen, 2017). The mere availability of support does not ensure its effectiveness, policy efforts should prioritise both the effectiveness and fairness of support provision.

This review highlights the need to empirically test the pathway of capital conversion among older adults. This brings us to the third research question, which investigates the specific mechanism:

RQ3: What are the mechanisms through which offline capital is converted into digital capital?

This sub-research question aims to explore: 1. the differences in the creation of various formats on public social media among older adults, as influenced by education; and 2. the pathways through which education level influence the social benefits obtained by older adults through public social media, as well as the potential conversion involving digital capital. To address theoretical gaps in understanding older adults' social media use, while offering concrete and actionable policy recommendations for enhancing digital support.

2.5.4 Content Production: Capital Barriers and Platform Discipline

Finally, to fully understand the mainstream cultural narratives identified in Sub-question 1 and why third age identities take their current form, as well as the differences and inequalities in the digital experiences of various older groups identified in Sub-questions 2 and 3, we must focus on the micro-level of content production. The previous sub-questions have provided detailed explanations of the macro and meso aspects of this main research question. However, when it comes to individuals, it is crucial to understand how people engage in content creation and identity negotiation, and how social media mechanisms and individual capital influence the individuals participating in this process. These issues need to be understood from a micro perspective.

Cultural gerontologists have long studied the portrayal of older people in the media. In recent years, with the rise of new media, technology has brought new influences to the construction of images of later life. The types of images presented, the mechanisms shaping them, and their broader impacts have all changed in ways that merit in-depth discussion—especially in the context of an ageing society. Understanding the characteristics of later-life culture and the mechanisms behind its construction is essential because ageing should not be regarded as merely a biological process; instead, it is constantly being reshaped by social, cultural, and structural factors (Gullette, 2015). The formation of cultural representations and the dissemination of public discourses

both have a profound effect on society's understanding of ageing, which in turn shapes the ageing process itself—often in ways that are difficult to detect (Gullette, 2015; Gilleard & Higgs, 2015). The shift in cultural constructions of later life not only affects theoretical approaches but also deeply influences practice, such as the formulation of ageing policy, health promotion strategies, the development of age-friendly communities, and the growth of age-related industries (Gilleard & Higgs, 2015). Therefore, studying how later-life culture and its construction mechanisms are changing in the era of social media holds practical significance for policies, social services, and the development of industries relating to later life.

Early studies on traditional media found that ageism was widespread: the proportion of older models was much lower than their share of the population, and their portrayals were often highly stereotypical and negative (Carrigan & Szmigin, 2000; Bai, 2014; Koskinen et al., 2014; Ylänne, 2015; Loos & Ivan, 2018). Older people were often depicted as weak, lonely, and dependent on others. In more recent years, the images of older people have gradually become more positive, depicting them as healthy, optimistic, and fashionable. Nevertheless, these portrayals remain homogeneous and stereotypical, overlooking the diversity of the older population (Koskinen et al., 2014; Ylänne, 2015; Loos & Ivan, 2018). The widespread emergence of these positive images is closely linked to the advocacy of active ageing policies. While the original intent of such policies is broad, in practice they tend to promote a standardised model of success, placing pressure on those unable to meet this standard (Lassen & Moreira, 2014;

Ishikawa, 2022). These shifts in the portrayal of later life in mass media, from frail and lonely to positive and healthy, cannot be separated from the influence of active ageing initiatives. With the rise of social media and the rapid transition from traditional to new forms of information consumption, it is important to ask whether these images of later life have also changed.

In recent years, research on the representation of later life in social media has begun to emerge. Overall, these studies reveal both cross-cultural differences and clear commonalities in digital later-life culture. Studies in Western contexts find that the images of later life presented on social media largely continue the patterns seen in traditional media, often including negative or ageist tendencies, but also a significant degree of active ageing discourse (Makita et al., 2021). The emergence of older influencers has contributed to more positive portrayals (McGrath, 2018). In China, research indicates an even stronger emphasis on positive ageing. Two recent studies of TikTok, for example, found that older influencers frequently construct and promote images of later life that are healthy, fashionable, and optimistic, which are widely endorsed and followed by users, though some critical voices exist (Yu & Zhao, 2022; Guo et al., 2024). At the same time, concerns have arisen that these idealised, new forms of stereotyping may place pressure on older people who do not fit this standard (Yu & Zhao, 2022). During the COVID-19 pandemic, however, online discussions of older people still focused on themes of passivity, vulnerability, and high risk (Xu, 2021). Overall, representations of later life in social media still pay insufficient attention to

diversity. Although social media are generally considered more pluralistic than traditional media, the portrayals of later-life culture remain largely stereotypical. Despite the emergence of some research on later-life images and culture in social media, most studies focus on the types of images presented, rather than the mechanisms behind their formation or the deeper inequalities these images may reflect. Only by understanding the deeper reasons for the formation of these images, and the inequalities that arise as a result, can relevant ageing policies and social interventions be appropriately targeted.

To discuss the production of images of older people on social media platforms, and what leads to the invisibility of certain groups, it is necessary to consider the mechanisms of content selection and recommendation, content creators' algorithmic adaptation, and the inequalities in digital content creation arising from capital barriers. First, the distinction between mainstream and social media primarily lies in the highly participatory nature of social media's creative process. Yet is this process truly decentralised? Gillespie's (2018) research reveals that the supposed neutrality of platforms is largely an illusion. In practice, platforms inevitably engage in content governance and use various mechanisms to moderate and filter content, determining what can be disseminated. In effect, social media platforms embed values in their selection and moderation processes, profoundly shaping discourse and culture (Gillespie, 2018). Unlike traditional media, social media platforms do not produce content themselves, but they decide how content is distributed (Gillespie, 2017).

Algorithms play a crucial role in this process. The generation of algorithmic outputs depends on data inputs, and the filtering of data is itself a form of selection (Gillespie, 2014). By capturing user data, platforms can predict which content is likely to be more popular (Nieborg & Poell, 2018). Thus, platform regulation and algorithmic processes influence the visibility of content, and this holds true for representations of older people as well.

Another important factor to consider is the identity of content creators, who not only choose what to produce, but whose backgrounds also shape the content itself. Numerous studies on older influencers have shown that the images they present are highly homogeneous (Yu & Zhao, 2022; Guo et al., 2024). Is this homogeneity merely coincidental? Evidence suggests otherwise: research shows that influencers learn and adapt to algorithms in order to compete for greater visibility in the algorithm-driven environment of social media (Cotter, 2019). As a result, older users seeking more exposure are likely to align their content with platform, algorithmic, and majority user preferences, which may contribute to the observed uniformity. The interplay of platform governance and content creator adaptation exemplifies Foucault's (1977) concept of discipline as it manifests in digital platforms. Platform policies and algorithmic preferences constitute standards by which power is exercised, while the attention and engagement received by creators serve as measures of both themselves and their content. Therefore, when discussing digital content creation on social media platforms, it is essential to include the concept of discipline in the analysis.

Furthermore, the identity of content creators partly determines their content preferences, such as the sharing of daily life. For older users from different social classes with varying levels of capital, the visibility of their content is not necessarily equal. A substantial body of research on the digital divide and digital inequality demonstrates that digital divides—including the first-level (access), second-level (skills), and third-level (outcomes) divides—are strongly influenced by factors such as cultural, economic, and social capital (van Dijk, 2020; Scheerder et al., 2017; Choi & DiNitto, 2013; Friemel, 2016; Yoon et al., 2020; Sala et al., 2022; Vitalis et al., 2025). Therefore, when considering the uniformity of older people's representations on social media platforms, it is essential to account for the class and capital of content creators. These factors not only influence the content they produce, but also affect its visibility.

Taking these factors together, this study examines the content produced by third-age users on Douyin who receive greater attention, investigates the images of later life they express, and explores the reasons for their increased visibility on the platform, thereby addressing a theoretical gap in the field. It also considers the practical implications of the research, including recommendations for policy and platform governance, and the development of practical skills to enhance older people's digital capabilities.

This review underscores the dual forces of capital barriers and platform discipline in shaping visible content. This completes our analytical loop, leading to the fourth and

final research question:

RQ4: How do popular older video creators use their capital to negotiate with algorithms and platform rules in their content production?

2.6 Synthesis, Theoretical Links, and Research Gaps

In summary, by rigorously reviewing the relevant literature, this chapter has identified three levels of systemic gaps in existing research within the highly valuable context of the digitalised third age in China. First, in terms of perspective, mainstream research tends to view older adults as a passive group requiring technology to compensate for physiological or social deficits, while neglecting to explore how they actively construct the ageing self from a social constructionist standpoint. Second, concerning content, studies on digital inequality among older adults remain largely focused on the access divide, failing to delve into their digital practices after gaining access to examine how inequality is reproduced. Finally, regarding the object of study, the social media platforms analysed are mostly confined to private spheres for maintaining family ties, with insufficient attention paid to the public platforms that are central to contemporary cultural production and identity negotiation. Together, these limitations obscure the complexity of older adults as active meaning-makers and cultural participants in the digital world.

These gaps in the literature are not merely descriptive omissions; they point to a deeper theoretical inadequacy, namely, the failure to effectively explain how structural inequality is reproduced and even amplified in the new media environment of platformisation and algorithmisation. Specifically, existing research has failed to adequately theorise how the third age is being reconstituted.

This thesis employs an integrated research design to systematically address one core question: In the digital age, how is contemporary ageing identity constructed on public social media, and how does this process reproduce or even exacerbate existing social inequalities? Although the four research questions have different emphases and correspond to macro, meso, and micro levels, they are structurally interlinked and mutually elucidating.

For example, the cultural narratives selected and amplified by algorithms at the macro level (RQ1) constitute the "platform discipline" that individual users must face and accommodate when producing content at the micro level (RQ4). Likewise, differences in users' digital practices arising from capital disparities (RQ2), together with the mechanisms of digital capital conversion (RQ3), shape the capital constraints that older users encounter in micro-level creation and the platform's preferences for particular backgrounds. Under these constraints, they adopt differentiated strategies of content production (RQ4). Taken together, the four questions form an organic whole designed to analyse the same core phenomenon from different dimensions.

To fill these gaps and understand the underlying mechanisms, this study will mobilise the multi-layered theoretical framework detailed in Chapter 3 (Theoretical Framework). It systematically analyses the construction of contemporary third age identity and its unequal consequences under the dual forces of capital screening and platform discipline.

Chapter 3: Theoretical Framework

3.1 Introduction

Building on the three research gaps and Sub RQ1-RQ4 discussed in Chapter 2, this chapter turns to constructing a theoretical analytical framework for empirical examination.

Drawing on cultural gerontology, the third age is understood as identity work practised and negotiated in everyday interaction, with emphasis on agency, consumption, and the social construction of lifestyles. This is the foundational perspective from which the study analyses the online negotiation of third age identity.

In the theoretical framework, the study structurally integrates multi-level sociological classics to interpret the four sub research questions spanning macro to micro levels. First, Goffman's theory of self-presentation with Hogan's exhibition approach to extend Goffman into the social media context. Second, taking the platform society and algorithmic governance as external mechanisms, it sets out content distribution logics and uses Foucault's theory of discipline to explain user-platform interaction. It also accounts for why images of later life on public platforms display skewed visibility and homogenisation. Third, using Bourdieu's capital theory and extensions of digital capital as the structural background, it links offline economic, cultural, and social capital with

online access, competences, and returns, in order to explain digital inequality. By connecting Goffman with Foucault and Bourdieu, it builds a theoretical bridge, clarifies tensions and linkages, and forms a coherent framework.

Accordingly, the structure of the chapter is as follows. Section 3.2 proposes a working definition, treat third age as identity practice, and its relation to the digital life course, addressing RQ1 on the macro picture of identity and cultural shaping. Section 3.3 integrates the disciplinary and feedback mechanisms of platforms and algorithms to explain the production of visibility and creative practice relevant to RQ1 and RQ4. Section 3.4 introduces capital theory to serve RQ2 and RQ3 on differentiation and mechanisms. Section 3.5 summarises the above concepts as a framework and explains how they are embedded in the research design of the subsequent empirical chapters. Through this arrangement, the chapter provides a unified and operational theoretical framework for the thesis.

3.2 Third Age as a Practice of Identity

To understand in depth the impact of social media on the lives of older people, this study adopts a social constructionist perspective. This perspective holds that ageing, or the life course, is not an objective fact awaiting discovery but a practical accomplishment that is continually constructed and completed in everyday life through language, narrative, and institutional practices (Holstein & Gubrium, 2007). Therefore,

the focus of this study is not on "what" the life course and third age is, but on "how" it is produced and endowed with meaning in specific digital social interactions. Within this theoretical orientation, cultural gerontology provides a key analytical tool. Emerging as a critique of traditional gerontology, which focuses on poverty, illness, and state policy, cultural gerontology emphasises that the ageing process is profoundly shaped by cultural forces rather than being a merely biological or physiological process (Gilleard & Higgs, 2000; Katz, 2005). Its core contribution lies in revealing how ageing itself is constructed by social institutions and cultural norms, with the third age being a core product of this construction process.

The concept of the third age originates from Laslett's (1994) theory, which divides the life course into four stages. In this model, the first age is the stage of learning and socialisation, and the second age is the period of adulthood and work, characterised by independence and responsibility. Later life is explicitly divided into two stages: the third age and the fourth age. The third age refers to the period from retirement until significant health problems prevent independent living. It symbolises an active, dynamic young-old stage, whose core cultural features are agency, consumerism, and the pursuit of lifestyle (Gilleard & Higgs, 1998). In contrast, the fourth age is the stage in which individuals lose agency due to severe physical frailty, cognitive decline (especially dementia), and complete dependence on others for care. At this stage, individuals risk the loss of social identity, and their personal dignity is seriously threatened. Consequently, the fourth age is often culturally excluded and kept out of

view in late modern societies, running against mainstream values such as youth, vitality, and autonomy (Gilleard & Higgs, 1998, 2013). The deep fault line between these stages reveals the complex social stratification and internal contradictions within contemporary cultures of ageing (Gilleard and Higgs, 1998).

Using the third age as an entry point for studying social media use among older people is both appropriate and crucial. As two consecutive stages of later life, the third age is often seen as a prelude and preparatory period for the fourth age. For instance, many people plan for their fourth-age health services during their third age. Furthermore, individuals in this stage experience significant changes brought about by social institutions: the transition from the identity of a worker, changes in social networks, and the sudden abundance of leisure time all compel them to reorganise their lifestyles, which in turn exhibit heterogeneity (Gilleard & Higgs, 2016).

This stage is significant not only because it involves major social role transitions like retirement and changing social networks, but more importantly, because it is not a passively experienced stage of life but an identity practice that requires active engagement from the individual. Confronted with prevalent negative stereotypes of older people in society, such as frailty and dependence, individuals in the third age, particularly women, are not passive recipients but active constructors of their identities (Radtke et al., 2016). Research has clearly revealed the discursive strategies they employ: they consciously resist labels such as "old", and while acknowledging bodily

changes, they place greater emphasis on the continuity in their core identity, the belief that the real me is the same person as in their youth, thereby creating a positive and agentic narrative of ageing for themselves (Radtke et al., 2016).

Consumption plays a crucial role in these identity practices. In late modern society, consumption has become a central principle for organising and defining the third age as an identity practice (Gilleard & Higgs, 2020). This development is closely linked to the rise of the baby boomer cohort. As the first generation to grow up within modern consumer culture, they are accustomed to expressing personal identities through brands and lifestyle choices, and they carry this logic into planning for later life after retirement. Through active participation in consumption-oriented lifestyles, such as travel, lifelong learning, and pursuing hobbies, third-age individuals construct a positive, youthful, and vibrant self-image. A core argument of this study is that, with the advent of the digital life course (Prendergast & Garattini, 2017), this consumption-mediated process of identity negotiation is supplemented and amplified by a new, more communicable practice: the performance of lifestyle on social media. If material consumption has been the traditional stage for identity construction in the third age, then posting travel photos, sharing learning achievements, and displaying hobbies on social media has become a new form of identity work. Therefore, using the third age as a theoretical entry point for understanding social media use among older people is appropriate and crucial.

This section defines the third age as an identity continually practised through narrative,

consumption, and everyday interaction, forming the foundation of the theoretical framework. Social media render this practice into visible digital self-presentation. I now turn to 3.3 to platforms and algorithms: how these mechanisms "curate" the visibility of the third age, shape older users' self-expression and homogenisation, and thereby speak to this thesis's research questions on platform culture, structural differentiation, and capital conversion.

3.3 The Algorithm as Curator

As outlined in the previous section, since the third age is treated as a product of identity negotiation, Goffman's theory serves as an effective tool for examining identity negotiation of the third age on social media platforms. Starting from Goffman's (1959) dramaturgical perspective, self-presentation on social media is first a form of situated impression management in which actors construct a "front stage" for an imagined audience. However, Goffman's theory cannot be applied directly to social media, because unlike offline, synchronous interaction, self-presentation on platforms is asynchronous, and creators can scarcely predict when and by whom their content will be seen. Applying Goffman to social media therefore requires a specific extension, which Hogan's (2010) framework provides effectively. In this exhibition hall constructed from digital artefacts, it is not the users themselves who decide which exhibits are placed in prominent positions or which galleries attract more visitors, but rather the platform and its inherent algorithmic mechanisms. Hogan (2010) proposed

the concept of the digital curator to describe this mechanism. Unlike curation by humans in offline exhibition halls, digital curation is performed mainly by algorithms or platform systems. It filters, ranks, and recommends large volumes of content according to the platform's commercial logic and data structures (Hogan, 2010). This commercial logic is rooted in surveillance capitalism (Zuboff, 2023). Its aim is to extract behavioural surplus from users' exhibitions and convert it into profitable predictive products. The choices of this digital curator reflect the three core mechanisms of the platform society identified by van Dijck et al. (2018): datafication, commodification, and selection. Among these, the mechanism of selection operates in practice as a profound process of social ordering. By ranking content and users, algorithms in effect create distinct classification situations, elevating certain narratives while marginalising others (Fourcade & Healy, 2024). These mechanisms are not neutral technical tools; they carry value biases and entail power practices. As most social media platforms begin to rely on algorithms to curate their content feeds, the role of the digital/algorithmic curator has become particularly important. Platforms are not simple information conduits but are selecting public discourse, making critical decisions about which content can be disseminated and which users can be connected through their community guidelines and algorithms (Gillespie, 2018).

A central question of this study arises: from the immense volume of content about ageing, what does the algorithmic curator choose to exhibit? The answer is closely linked to contemporary cultural imaginaries of ageing. As previously discussed, late

modern society strongly promotes the third age culture, which is centred on agency, consumption, and lifestyle, while simultaneously being filled with fear and rejection of the fourth age, which represents dependency and decline (Gilleard & Higgs, 2020). Without explicit value directives, algorithmic selection (van Dijck et al., 2018) tends to favour content that aligns with mainstream cultural preferences and is more likely to generate positive interaction and user engagement. Consequently, narratives of the third age that display vitality, travel, fashion, and self-improvement are systematically selected and amplified by the algorithm due to their inherent popularity.

The recent emergence of senior influencers is a typical outcome of the selection process conducted by the algorithmic curator according to this logic. These senior influencers, with diverse public images, are expected to challenge ageism and stereotypes of ageing (Miranda et al., 2022; Antunes et al., 2022). Some present health through sport, while others openly display features of ageing, illustrating the diversity of later life identity and being viewed as having potential for social change (Farinosi & Fortunati, 2020). From the theoretical perspective of this study, however, they are more aptly viewed as perfect exemplars of the third age identity project, meticulously selected by the algorithm. The lives they perform represent the very cultural script of a desirable, consumption-centred retirement (Gilleard & Higgs, 2020).

However, this algorithm-driven form of curation also introduces new problems. Some studies indicate that many senior influencers experience similar anxieties when facing

changes in their physical capabilities and worry that the healthy and fashionable images prevalent on social media may lead to the further exclusion of older people who are not fashionable or healthy (Köttl, 2022; Stephani, 2022). This reveals a new politics of visibility: while the algorithmic curator exhibits the glossy lives of the third age, it simultaneously and invisibly archives the more diverse and authentic experiences of ageing that do not fit this idealised narrative into a neglected storeroom. Therefore, algorithmic curation not only reproduces the societal valorisation of the ideal third age but also, through technological means, culturally silences life experiences and individuals that deviate from this ideal. This is the core issue that this study seeks to investigate in depth.

3.4 The Platform as a Disciplinary System

To examine in depth how algorithmic platforms intervene in and shape the identity practices of the third age, this study introduces Foucault's theory of power, with particular attention to discipline. Foucault (1977) challenged traditional views of power, arguing that it is not merely top-down oppression or prohibition but a productive force diffused across the social body. Power does not simply say "no". Through a set of subtle and often imperceptible techniques, it shapes and produces docile and useful individuals.

Drawing on his analysis of the seventeenth-century plague-stricken town, Foucault

(1977) depicted an ideal model of a disciplinary mechanism: a space that is thoroughly partitioned, continuously monitored, and hierarchically controlled. The principle of this mechanism is most clearly illustrated by Bentham's "Panopticon". The core design of this architecture lies in its asymmetrical visibility: the supervisor in the central watchtower can clearly observe the silhouette of every inmate in the surrounding annular cells, while the inmates cannot know if they are being watched at any given moment. This state of constant, potential surveillance creates a trap of visibility in the minds of the inmates. Its most profound effect is that power becomes automated; the supervisor no longer needs to be physically present at all times because the inmates have internalised the supervisor's gaze and begun to engage in continuous self-surveillance. In this sense, the disciplined subject becomes the vehicle for the operation of power, proactively undertaking self-restraint. Foucault emphasised that the Panopticon is not just a building but a generalisable diagram of power technology, whose core logic can be widely applied to any setting that requires the shaping of human behaviour, such as factories, schools, and hospitals.

Social media platforms, especially algorithm-driven systems like Douyin, can be understood as a form of contemporary digital Panopticon. Here, users (particularly content creators) are like the inmates in their cells, constantly in a state of continuous visibility. Every video they post, every like they receive, and every comment they get is taken in by the platform system, the invisible watchtower at the centre. The core of this watchtower is the algorithm, which conducts continuous, automated inspection and

assessment based on massive amounts of data. Users cannot know precisely how the algorithm is evaluating them at any given moment, but they are deeply aware that their every action is being observed and judged by it. The outcome of this judgment directly determines the visibility of their content, the "reward" or "punishment" of traffic. This asymmetrical visibility compels creators to internalise the algorithm's potential gaze and engage in profound self-regulation. Rahman's (2021) concept of the "invisible cage" captures the concrete experience of disciplinary power in the algorithmic era. Because algorithmic evaluation standards are opaque and unpredictable, creators know they are being assessed but cannot be sure of the rules. This uncertainty forces them to infer and accommodate algorithmic preferences through continual trial and error. Such ongoing self-adjustment and self-censorship constitute a micro-level practice of Foucauldian discipline.

However, we need to update Foucault's classic model to accommodate the complexities of late modern society. The theory of governmentality by the scholar Nikolas Rose (1999) provides a crucial supplement. Rose argued that the mode of operation of contemporary power has evolved from coercive discipline to a more subtle form of control. It is no longer confined to enclosed institutions but operates by activating the freedom and agency of individuals, guiding them to become active, self-responsible members of a community. Power no longer directly commands individuals on "what to do", instead, it creates an environment in which individuals voluntarily engage in specific behaviours in pursuit of self-realisation and community identity. The core of

this strategy of governing through community or governing through freedom is the translation of macro-level governance objectives into the personal projects and desires of individuals.

Social media platforms are the perfect sites for the practice of this new form of governmentality. The platform does not compel older users to post content that displays active third age. Instead, through algorithmic mechanisms such as the "datafication, commodification, and selection" described by van Dijck et al. (2018), it constructs a community based on the core value of popularity. Within this community, content that showcases health, vitality, fashion, and life wisdom is more likely to receive algorithmic recommendations and positive user feedback. In this way, the platform skilfully translates the potential governance objective of promoting the active third age narrative into the personal desires of older creators for attention, recognition, and social capital. To win in this popularity game, creators will proactively and creatively shape their life experiences to conform to the platform's preferences.

This process of self-regulation is not a cold, rational calculation but is filled with complex emotional experiences. The concept of the algorithmic imaginary, proposed by Bucher (2016), accurately captures this affective dimension. Through their daily interactions with the algorithm, users form an imagination of "what it is" and "how it works", which in turn generates strong affect. They may feel offended or annoyed when a recommendation does not align with their self-perception they may feel surprised

when the algorithm accurately guesses their thoughts and they may feel frustrated when their creation fails to gain traction because it did not cater to algorithmic preferences. It is these everyday, concrete emotional experiences that constitute the micro-level dynamics of discipline. In pursuit of positive emotions and avoidance of negative ones, users will consciously adjust their posting times, wording, and content, attempting to make their behaviour more easily recognisable by the algorithm. These adaptive behaviours, in turn, provide new data for the machine learning algorithm, further reinforcing the platform's norms in a feedback loop.

Foucault's "top-down" account of discipline is expansive and profound, but it needs a "bottom-up" interactional lens to explain how power acts upon individuals and shapes everyday life (Hacking, 2004). Goffman's framework of self-presentation provides a concrete, empirical elaboration of Foucault's "micro-physics of power", revealing how discipline operates at the level of lived experience.

Goffman reminds us that everyday life relies on the "interaction order", people maintain a respectable "front stage" through definitions of the situation and impression management (1959, 1974). In digital settings this order is not replaced by a blunt force. It is gently embedded through surveillance and procedures that operate by courtesy and tacit agreement. Small etiquettes such as "unfocused interaction" and "civil inattention" guide us to adjust posture and speech without disturbance (Eley & Rampton, 2020). Once platforms translate interaction into calculable and comparable metrics, "being

seen" itself is drawn into a broader regime of ordinalisation. Users' behavioural data are packaged as "eigencapital" that can be mobilised across multiple contexts, then circulate through ranking and matching mechanisms between markets and institutions. Those who are well classified move more easily, while those who are unfavourably classified may face punitive reclassification across settings (Fourcade & Healy, 2024). Placed back into social media, older users are not crudely "required" to present themselves in a certain way. They learn, through the minutiae of daily interaction, what is more "proper" and what "will be liked", and they naturally gravitate towards particular modes of presentation (Eley & Rampton, 2020).

From a Foucauldian angle, "discipline" on platforms is not only an internal psychological process. It resembles the systematic divestment of the space and resources needed to sustain one's performance. The backstage is compressed, exit routes narrow, and invisible corners become scarce. Under the pressure of being "possibly seen at any time", creators actively import the platform's evaluative imaginaries, ranking thresholds, and etiquette standards into everyday operations (Leib, 2017). This is akin to the drivers of life course standardisation. Through a Goffmanian lens, Foucauldian discipline is no longer a static, one-way structure of power. It is a dynamic process that is negotiated and managed, and that permeates every interaction.

In summary, we can construct a multi-layered analytical framework for platform discipline. The social media platform, as a system, combines the surveillance principles

of the Foucaultian "Panopticon" with the governmental strategies of Rose that guide through freedom. This system implements its power through specific technical mechanisms such as datafication and algorithmic selection (van Dijck et al., 2018), and at the user level, it triggers strong algorithmic imaginaries and affective responses (Bucher, 2016). The ultimate result is that, without coercion, the platform can effectively produce a large number of creators who engage in self-regulation, proactively aligning their content with platform norms. This disciplinary mechanism profoundly explains why, on a seemingly diverse and open social media landscape, cultural expressions of the third age exhibit a high degree of homogeneity and a tendency towards templated formats. This is not a simple coincidence but a profound process of social construction, woven together by technology, power, and affect.

3.4.1 Algorithmic Feedback Loops of TikTok/Douyin

Recommendation-algorithm platforms, exemplified by TikTok, push the role of the digital or algorithmic curator to an extreme. Their algorithms use sophisticated user profiling and tiered traffic-pool mechanisms to maximise user engagement (Zhao, 2021; Klug et al., 2021). In this process, a dynamic, mutually constitutive feedback loop forms between the user and the algorithm (Siles et al., 2022). To understand how this loop operates, we must analyse the technical mechanisms and examine the user's subjective experience. Bucher's (2016) concept of the algorithmic imaginary provides a key tool here. It refers to how people imagine what algorithms are, what they should be, and

how they work. This imagination is not formed in a vacuum. It is shaped in concrete encounters with algorithms and is accompanied by strong affect. For example, when creators feel they must publish at a specific time and in a particular manner to gain attention, they experience the frustration of being compelled to join a popularity game. This continuous affective feedback drives users to adjust their behaviour to fit the algorithm's preferences, completing the self-regulation part of the loop.

This complex interaction has a deep effect on self-perception. The "algorithmic crystal" model describes this relation well. The algorithm acts like a multi-dimensional reflective crystal that mirrors a user's self-concept and can be reshaped through the user's training to align with the user's true self (Lee et al., 2022). Applied to the third age, a critical question arises. For older users, does this algorithmic crystal reflect an authentic and diverse self, or a templated image of the ideal third age set by sociocultural norms? The normative bias within algorithmic systems, shown in Gillespie's research (2024), provides a powerful theoretical weapon. He finds that technical systems, when not explicitly labelled, default to generating normative content.

This insight is highly illuminating as it perfectly resonates with our earlier discussion based on gerontological theory. What exactly is the normative content about old age that algorithms generate by default? It is precisely the dominant third age cultural script described by Gilleard and Higgs (2020): a consumer-centric ideal that emphasises agency while actively excluding and concealing the realities of decline and dependency

inherent in later life.

This implies that the algorithmic curator, likely without malicious bias, systematically amplifies third age content that showcases health, vitality, consumption, and a positive mindset, simply because narratives of successful /active ageing are more popular in society and more likely to generate interaction. The consequence is that a templated mode of expressing older identity is continually reinforced, while other, more diverse, complex, and even struggling experiences of ageing are rendered invisible by the algorithm's filtering process. This may not only lead to the homogenisation of platform culture but could also, in turn, shape the life course planning and expectations of older people in the real world.

3.5 Capital: The Social Preconditions for Online Visibility

The vast disparities in online visibility, as demonstrated in the case of TikTok, do not stem from accidental creativity or luck; they are underpinned by the operation of profound social structural forces. For this, Pierre Bourdieu's theory of capital is useful as a key analytical framework. Bourdieu (1986) fundamentally challenged analytical perspectives centred solely on economics, pointing out that the social world is driven by the interplay of multiple forms of capital. He identified three basic types: Economic Capital, which is material wealth directly convertible into money; Cultural Capital,

which exists in three forms: the embodied state, internalised in the individual as dispositions and tastes, the objectified state, existing in the form of material objects like books and artworks, and the institutionalised state, which provides socially recognised credentials such as educational qualifications; and Social Capital, which is the aggregate of resources an individual can access by virtue of a durable network of social relationships.

The core insight of Bourdieu's (1986) theory lies in the convertibility of capital. Different forms of capital can be converted into one another through investment activities that consume time and labour. This is the key mechanism through which social inequality is legitimised and reproduced across generations. A substantial body of empirical research has demonstrated this process of capital conversion across various social fields, such as education, the labour market, and cultural consumption (Lareau, 2018; Rivera, 2016; Prieur & Savage, 2013; Martin & Spenner, 2009).

Applying this theoretical framework to the core subject of this study, we can clearly see that the third age is itself an identity project that is highly dependent on capital. As previously discussed, the cultural script of the third age is consumer-centric (Gilleard & Higgs, 2020). Therefore, the ability to successfully practise and perform this active and autonomous lifestyle is predicated on the possession of substantial economic capital (to support consumption activities such as travel and learning) and cultural capital (knowing how to appreciate and display a tasteful lifestyle) (Gilleard & Higgs,

2020). This makes the ideal third age not equally accessible to all; it is more akin to a practice dominated by a privileged class within a specific generation, possessing sufficient economic and cultural capital (Gilleard & Higgs, 2020).

With the digitalisation of society, scholars have extended Bourdieu's theory to cyberspace and proposed the core concept of digital capital. Although definitions vary, there is broad agreement that digital capital is the sum of resources and abilities related to digital technology. Early work defined it as a combination of internalised abilities such as digital literacy and externalised resources such as technological devices (Ragnedda & Ruiu, 2020). Later studies, especially Ragnedda et al. (2020, 2022), further operationalised it into two dimensions: digital access and digital competence. Scholars also agree that digital capital is not a wholly independent form of capital. It is intertwined with other forms and acts as a bridge capital that connects online activities with offline life opportunities (Ragnedda, 2018).

The strength of digital capital theory lies in its account of the reconversion cycle of capital in the digital field, a mechanism that is key to understanding the third-level digital divide (inequality in the outcomes of digital use). First, digital capital reflects offline capital projected into online contexts. Economic capital affects device quality and internet connectivity (Calderón Gómez, 2021). Cultural capital, notably education, shapes skills and aims of use (Lybeck et al., 2024). Social capital from family and friends aids skill learning (Helsper & van Deursen, 2017). Evidence shows that these

traditional forms are strong predictors of digital capital (Ragnedda et al., 2024; Addeo et al., 2023). Second, once in place, digital capital can be turned back into offline socio-economic gains. Ragnedda et al. (2022) documents expansions of social networks (social capital), access to economic opportunities (economic capital), knowledge acquisition (cultural capital), and participation in public affairs (political capital).

Bourdieu's capital theory maps the structural roots of inequality at the macro level, but this vantage point can underplay the constitutive role of interaction in the reproduction of power (Hallett, 2007; Lunt, 2020). Capital does not determine outcomes automatically. It must be performed by actors in concrete social situations. Goffman's interactional approach offers a micro lens that shows how capital is activated in everyday encounters and converted into symbolic power.

In the social media field, users do not start from the same place. Embodied cultural capital appears as a sense of narrative, camera literacy, aesthetic judgement, and demeanour. These features are more readily "read" by audiences and platforms, and in interaction they secure deference that sediments into reusable symbolic capital (Hallett, 2007). This aligns well with Goffman's theory. Goffman shows how performances build "decency" and credibility on the spot, while Bourdieu explains why some actors can establish this decency with less effort and convert the attention gained a stable advantage (Hallett, 2007). In other words, a "good performance" is not a pure contest of technique. It is the process by which capital structure becomes visible. Those whose

habitus and tastes fit platform and audience expectations are more likely to accumulate new resources through visibility.

Placing this structural advantage within today's datafied environment, Fourcade and Healy's notion of "the ordinal society" provides an outer explanatory frame. When platforms translate interaction into calculable and comparable indicators, "being seen" is no longer only applause in the moment. It enters a full ranking and matching system. Behaviours grounded in capital are recorded, classified, and ordered by the platform. This quantifies the redemption pathways of "symbolic capital". Attention, reputation, and endorsement are not merely "empty names". They function as ordinal resources that travel across platforms and markets (Fourcade & Healy, 2024). Goffman gives the micro mechanism of performance and face. Bourdieu reveals the structural gradients of capital and field. Layered onto platforms' ranking infrastructures, they form part of a comprehensive framework for the present study.

Thus, through a Goffmanian lens, the online reproduction of inequality is not a simple mechanical process in which "those with more capital win". It is a dynamic social performance saturated with techniques of impression management. Older users are not only consuming or displaying capital online. In each interaction they invest these capitals strategically in a ceremonial contest for deference and symbolic power.

In summary, digital capital research rooted in Bourdieu's theory reveals a profound

social reality: the internet and social media have not naturally become social equalisers. On the contrary, they often function as a field that amplifies existing inequalities, creating a matthew effect. The best/worst-case scenario ideal types proposed by Ragnedda (2018) clearly illustrate this point: individuals with abundant offline capital are more likely to accumulate high levels of digital capital and use it to further consolidate their offline advantageous positions. Conversely, groups lacking in offline capital face the risk of being doubly marginalised. Therefore, an individual's online performance is, from the very beginning, an unequal competition of capital. This theoretical perspective provides the fundamental explanatory framework for this study's subsequent comprehensive examination of the intersecting digital inequalities among the older population.

3.5.1 Digital Inequality

Capital theory, as discussed in the previous section, provides a foundational framework for understanding digital inequality. This study argues that individuals' online experiences do not start from the same position, but are instead profoundly shaped by the volume and composition of the capital they possess. The mechanisms of platforms and algorithms operate upon this pre-existing social differentiation, creating new and more complex forms of stratification. Early academic work on this process developed the digital divide framework, but the concept was quickly criticised for its simplistic binary of haves and have-nots (DiMaggio & Hargittai, 2001). With widespread internet

access, the focus of research has shifted from initial questions of access to the more complex issue of how inequality is reproduced in diverse forms after access is achieved. This study thus adopts digital inequality as its overarching analytical framework, treating the evolving model of the digital divide as a specific tool for dissecting the various manifestations of this inequality.

The evolution of the digital divide concept illustrates how inequality is reproduced and amplified across different levels. The first-level divide concerns physical access and is a direct reflection of economic capital (Scheerder et al., 2017). Once this initial hurdle was largely overcome in many societies, scholarly attention turned to the second-level divide: differences in digital skills and patterns of use (Büchi & Hargittai, 2022). Digital skills involve not just operational competence but also higher-order abilities in searching for, evaluating, and creating content (van Dijk, 2017). The acquisition of these skills is strongly conditioned by an individual's existing cultural capital (e.g., education) and social capital (e.g., support from friends and family) (Lybeck, 2024; Wu et al., 2015). This leads to a third-level divide, which concerns the unequal offline outcomes and tangible benefits that different groups derive from their internet use (van Deursen & Helsper, 2015).

To explain the logic connecting these multiple levels, Helsper (2012) developed the corresponding fields model. Its central proposition is that offline social exclusion is reproduced in the online environment across corresponding economic, cultural, social,

and personal fields. An individual facing economic disadvantage offline, for example, will likely encounter limitations in online economic activities such as e-commerce or job seeking. This model demonstrates that digital inequality is not a separate, technical problem, but a direct projection of offline social inequalities into the digital sphere.

This process is further defined by the concepts of compoundness and sequentiality (van Deursen et al., 2017). Digital inequality is compound because disadvantages tend to cluster: a deficit in one area is often associated with deficits in others. It is sequential because there is a causal chain whereby a lack of basic skills leads to less effective online engagement, which in turn diminishes the tangible benefits gained. Consequently, even among those with similar skills, usage patterns diverge. Individuals with higher education are more likely to use the internet for capital-enhancing activities such as work or learning, whereas those with less education use it more for entertainment (van Dijk, 2017). This is a direct extension of offline capital-reproduction strategies into the online domain (Hargittai & Hinnant, 2008).

The era of AI and big data introduces new layers of inequality that are actively generated by platforms (Lutz, 2019). A key concern is the use of digital footprints, the trail of data that individuals leave online (Micheli et al., 2018). These footprints enter algorithmic systems that may themselves be biased, leading to systemic algorithmic bias (Lutz, 2019). For example, algorithms may deliver lower-quality health information to users from lower socioeconomic backgrounds (Shi & Li, 2024) or

systematically disadvantage certain groups in hiring and credit scoring (Micheli et al., 2018).

For older people, digital inequality is shaped by intersecting disadvantages and by the cumulative effect of deficits in different forms of capital (Zheng & Walsham, 2021). Digital inequality is acute in later life, but older people are highly heterogeneous (Robinson et al., 2015; Friemel, 2016). These intersecting inequalities have roots in deeper institutional structures. The concept of data ageism, for example, highlights how the systematic exclusion of the oldest old from policy and research datasets renders them structurally invisible (Fernández-Ardèvol & Grenier, 2024). This statistically produced invisibility is then reproduced and amplified by the algorithmic curator, locking disadvantaged groups into a cycle that is driven by capital and that perpetuates marginalisation.

In sum, this chapter has integrated insights from digital sociology, cultural gerontology, platform theory, and capital theory to build a multi-dimensional analytical framework. This framework serves two purposes: first, to situate the digital practices of older people within broader sociocultural transformations, and second, to provide a set of theoretical tools for the present research. These tools make it possible to analyse how algorithmic platforms interact with existing social hierarchies to shape the third age identity and the re-standardisation of the life course. In the chapters that follow, this framework will be deployed to critically review the literature and to conduct an in-depth analysis of the

study's empirical findings.

3.6 Framework Summary

This chapter constructs a theoretical framework that addresses the core question running through the thesis: on public social media where platforms and algorithms intervene deeply, how is third age identity constructed, and how does this process reproduce or even intensify existing social inequalities? The framework does not simply juxtapose theories. It integrates them into a multi-level and dynamic analytical structure that provides a unified tool for the four sub-questions. Its central claim is that identity construction among older users, as micro practices, unfolds under sustained disciplining by platforms and algorithms, as meso mechanisms, and is shaped by the constraints of multiple forms of capital as macro structures.

The integrated framework first combines Goffman's theory of self-presentation, Hogan's notion of exhibition, and critical studies of platform governance to address Sub-RQ1: How do algorithms on social media reshape third age identities and cultures? This perspective shows how the algorithmic "curator" selects and amplifies a mainstream, standardised cultural script of the third age based on the economic logic of surveillance capitalism and the social logic of ordinalisation from the multitude of self-presentations by older users.

Within this algorithmically shaped cultural environment, the framework then applies capital theories to address Sub-RQ2: How are the digital practices of third age social media users stratified by their cultural capital? It explains structural stratification, namely how offline capital translates into differentiated modes of use, platform portfolios, and social returns online. To move from observing stratification to explaining its causes, the framework draws on Bourdieu's theory of convertibility of capitals to address Sub-RQ3: What are the mechanisms through which offline capital is converted into digital capital? It tests the specific mechanisms through which offline advantages are converted into online benefits via digital capital as a mediator.

Finally, to address Sub-RQ4: How do popular older video creators use their capital to negotiate with algorithms and platform rules in their content production? The framework closes the analytical loop by bringing together Foucault's discipline and Goffman's theory to examine the micro foundations of content production, and how they use capital as a tool for content production and as an object of display. It clarifies how leading older creators, in continuous interaction with platforms and under pressures of visibility, develop cycles of self-discipline that drive homogenisation and templating of content. This is the micro production process of the macro cultural uniformity observed in Sub-RQ1.

In sum, the framework offers a coherent path of analysis that links the macro cultural landscape and user stratification with the micro mechanisms of conversion and

production. It enables the study to move beyond description of what happens to explanation of why and how it happens, and provides a comprehensive sociological account of third age identity construction and its unequal consequences in the digital era.

Chapter 4: Methodology

4.1 Introduction

This chapter sets out in detail the research methodology adopted in this doctoral study. A rigorous methodology is not only the foundation of reliability and validity, it is also the bridge between theoretical reasoning and empirical inquiry. It is not a simple operation, but a systematic and theoretically grounded analysis and justification of the methods used in the research process. Given the core concern of this study, namely the complex interaction among digital platforms, algorithms, capital, and the construction of older users' identities and inequality, no single or linear research path can capture the whole picture. It is therefore essential to build a research design that rests on a firm philosophical basis and responds flexibly in practice to multi-level realities.

To achieve this aim, the chapter proceeds step by step. First, it clarifies the philosophical foundation of the study, critical realism, and explains how its core concepts of stratified ontology, mechanism-based causation, and open systems provide an underlying worldview and epistemological guidance for the research. Second, it presents the overall research design grounded in this philosophy, in particular how a broad research question is deconstructed into four operational sub-questions, and how a multi-level parallel convergent framework is constructed on this basis. The chapter then introduces, in three parts, the three methods designed to answer the sub research questions:

Method 1: Network analysis, an innovative mixed approach for depicting the macro-level platform cultural landscape.

Method 2: Survey and statistics, a quantitative study identifies meso-level user stratification and mechanisms of capital conversion.

Method 3: Visual analysis, an in-depth qualitative study that explains the micro-level logic of content production.

Finally, the chapter summarises how the three methods form an integrated and mutually supporting whole through triangulation, and together build a complete analytic framework that moves from description of phenomena to explanation of mechanisms, thereby addressing the core research question of the thesis.

4.2 Research Philosophy and Paradigm

This section clarifies the philosophical orientation on which the study rests and explains how it provides a clear through line for the research questions, research design, and data analysis. As a piece of social science research, this study should not assemble a set of methods at random. It first answers two foundational questions: ontology, which means what the world is like, and epistemology, which means how to obtain reliable knowledge about the world (Blaikie, 2007; Bryman, 2016). Only when clear judgements have been made at these two levels will the design, the choice of methods,

and the interpretation of results be more persuasive. On this basis, the study adopts critical realism as the overarching paradigm.

4.2.1 Critical Realism

Within the critical realism paradigm, the first concept to clarify is that "what exists" and "what we know" are not the same question. If the former concept is simply reduced to the latter, critical realists refer to this as the "epistemic fallacy" (Bhaskar, 2008). To avoid this fallacy, critical realism distinguishes an intransitive dimension and a transitive dimension. The former refers to objects and structures that exist independently of our knowledge. The latter refers to the theories and concepts with which we make sense of the world, which change across history and context (Bhaskar, 1998; Maxwell, 2012). Accordingly, critical realism is realist in ontology, which means there are structures and mechanisms independent of cognition. It is fallibilist and relativist in epistemology, which means knowledge is theory-laden and socially mediated, yet competing explanations can still be compared for their merits on the basis of evidence and reasoning (Danermark et al., 2002; Maxwell, 2012).

Critical realism maintains that reality is stratified. For ease of understanding, prior work has used an "iceberg diagram" as an intuitive illustration. What we directly see and measure is only the tip above the water. The much larger part is below the surface. Although invisible from above, it continues to operate (Fletcher, 2017). On this view,

reality comprises three interrelated domains. The Empirical refers to events and materials that we can observe or experience directly or indirectly. The Actual refers to whether those events occur, irrespective of our direct observation. The Real refers to the structures and their causal powers and generative mechanisms that make events possible (Sayer, 1992; Danermark et al., 2002; Fletcher, 2017; Wynn & Williams, 2012).

Here, "causal mechanisms" are not visible components. They are better understood as internal powers or tendencies. When conditions are present they make certain outcomes more likely to be produced. When conditions are absent the power may not manifest, yet it does not cease to exist (Sayer, 1992; Danermark et al., 2002; Fletcher, 2017). This view of causation indicates the multi-factor nature of social science. A factor that influences events does not necessarily form a direct lawlike cause. It may be one of the forces that help to produce the outcome. Rather than treat such a factor as an iron law, it is more reasonable to regard it as a force that helps to push the result into being.

Why are iron laws difficult to find in the social world. Critical realism answers that the social world is an open system. Multiple mechanisms and their attendant forces often operate at the same time in the same situation. They amplify or offset one another, and external conditions change constantly. Hence social science commonly observes demi-regularities and tendencies rather than the stable, replicable regularities of laboratory settings (Sayer, 1992; Fletcher, 2017; Wynn & Williams, 2012). Critical realism therefore prioritises explanation over prediction. Rather than pursue iron rules, it seeks

to show why identifiable patterns often appear in particular contexts (Wynn & Williams, 2012; Maxwell, 2012).

How does this paradigm guide researchers to connect visible phenomena with unseen mechanisms in research. Critical realism recommends combining two forms of inference, abduction and retroduction. Abduction re-expresses observed materials in more explanatory theoretical terms and positions them within theory. Retroduction works back from relatively stable empirical patterns to ask what mechanisms, if present and triggered in this context, would be sufficient to produce these patterns. It then proposes competing explanations and compares and screens them, retaining those supported by stronger evidence and more coherence (Blaikie, 2007; Bygstad & Munkvold, 2011; Danermark et al., 2002; Wynn & Williams, 2012). Throughout, Critical realism emphasises judgemental rationality. Competing explanations are not incommensurable. They should be compared for reasonableness on evidence and inference (Danermark et al., 2002; Maxwell, 2012).

4.2.2 The ontological stance of this study

Applying the above stratified ontology, each level maps to a different layer of the digital society examined here. Critical realism holds that the world comprises three distinguishable and interrelated domains. The real consists of structures and their causal powers and generative mechanisms. The actual consists of the sequences of events that

occur when mechanisms are activated. The empirical consists of the portion of evidence that we can observe and collect (Sayer, 1992; Danermark et al., 2002; Fletcher, 2017). Social research should not equate observed phenomena with reality itself. It should explain which structures and mechanisms, under what conditions, are triggered so as to produce the patterns that we observe (Maxwell, 2012; Wynn & Williams, 2012).

When situated in this study and the Chinese context of third age social media use, the layers of digital society correspond to this stratification.

First, at the level of the real, the focus is on structures and generative mechanisms that exist independently of cognition yet influence platform behaviour and interactional outcomes. In the platform society, typical structures include recommendation algorithms, platform architectures and governance, and the digital capital of user groups. These structures carry causal powers and tendencies. When contextual conditions are met they push certain kinds of content and interactions to the foreground. When conditions are not met they may remain latent, yet they do not disappear (Sayer, 1992; Danermark et al., 2002; Fletcher, 2017).

Second, at the level of the actual, when the above mechanisms are activated in particular contexts or by particular factors, they form chains of events that actually occur. For the purposes of this study, this may appear as specific ageing-related narratives repeatedly gaining exposure and engagement on social platforms, and as forms of digital inequality

on social media that arise from the coupling of user capital with algorithms and platform mechanisms. Because the social world is an open system, multiple mechanisms operate simultaneously and amplify or offset one another. We therefore observe demi-regularities and tendencies rather than iron laws (Sayer, 1992; Fletcher, 2017).

Finally, at the level of the empirical, the study should, on the basis of this ontology and epistemology, design a reasonable research plan. It should use collected data to analyse how mechanisms in the real give rise to phenomena in the actual. Critical realism stresses that mechanisms are usually not directly observable. We therefore employ abduction to restate materials in more explanatory theoretical terms, and use retroduction to propose and compare candidate mechanisms (Blaikie, 2007; Maxwell, 2012; Bygstad & Munkvold, 2011; Wynn & Williams, 2012). Through data and theory, the study explains these demi-regularities.

4.2.3 The epistemological stance of this study

Given that the social world is an open system and exhibits a stratified reality, it is difficult for a single method to cover the evidential and explanatory needs across different levels when faced with the complex interaction among digital platforms, algorithms, social capital, and user interaction. Guided by critical realism, the study therefore adopts methodological pluralism. It implements an overall multi-stage, sequential, explanation-oriented design. The aim is not to discover universal social laws

for predicting events, but to uncover the underlying causal mechanisms that generate those events (Wynn & Williams, 2012; Maxwell, 2012; Danermark et al., 2002).

Operationally, and under the guidance of the paradigm, the study employs an extensive design and an intensive design, and integrates the two.

First, the extensive design uses quantitative or large-sample methods to identify patterns, trends, and demi-regularities in the empirical. On this basis it proposes or screens candidate mechanisms (Sayer, 1992; Fletcher, 2017). This step is intended to reveal the overall features shown on social media platforms and the group profiles of third age users. It sits at macro and meso levels.

Second, the intensive design works closer to processes and contexts. It uses qualitative methods and process tracing, and combines abduction and retroduction to explain how mechanisms are triggered and operate in the context (Danermark et al., 2002; Bygstad & Munkvold, 2011; Wynn & Williams, 2012). In this study, this is reflected in excavating how groups and particular users interact with platforms in concrete ways.

The two are not separated in a simple sequence. They iterate throughout the research. Findings from the earlier stage guide sampling and analytic focus in the next stage. At the level of explanation they merge evidence from different sources so as to render the explanation comprehensive and credible (Wynn & Williams, 2012; Maxwell, 2012;

Blaikie, 2007).

Within this framework, quantitative evidence is understood as capturing causal tendencies and demi-regularities. It indicates the conditions under which certain outcomes frequently occur. Qualitative evidence provides the texture of mechanisms and details of contextual conditions. It answers why the phenomenon appears here and how the mechanisms are triggered. Taken together they form an evidence chain centred on mechanism-based explanation (Fletcher, 2017; Bygstad & Munkvold, 2011; Wynn & Williams, 2012).

4.2.4 Conclusion

In sum, critical realism provides an actionable underlying logic for this study. Ontologically, it acknowledges the "iceberg below the water", the existence of structures and causal mechanisms, and it understands the social world as stratified reality and an open system. Epistemologically, it acknowledges that knowledge is fallible, theory-laden, and socially mediated, yet it upholds judgemental rationality through evidence and reasoning so as to edge towards better explanation (Danermark et al., 2002; Maxwell, 2012). Methodologically, it links extensive and intensive designs, and through abduction and retroduction aligns patterns, mechanisms, and contexts in an iterative manner to produce an explanation-first research narrative (Sayer, 1992; Fletcher, 2017; Bygstad & Munkvold, 2011; Wynn & Williams, 2012; Blaikie, 2007;

Bryman, 2016). This enables the study not only to present what is observed, but also to answer why it appears so, thus advancing causal explanation. The paradigm fits the complex system that the study needs to observe. In digital social media platforms, a field full of complex mechanisms and forces in different directions, such a design permits a more comprehensive and objective understanding of how the system operates and with what consequences.

4.3 Research Design

4.3.1 Deconstructing the Research Questions

Having established the philosophical orientation of critical realism, this section translates that abstract paradigm into a parallel convergent, explanatory, multi-level research design. Earlier chapters set out an overarching question of this study: in the context of public social media use by China's third age population, how do platforms and algorithms act together with existing structures of capital to construct identities and life courses of ageing, and to reproduce or intensify digital inequality? Guided by a realist paradigm and methodological pluralism, the study deconstructs this complex question into four interlinked sub-questions that are addressed separately and then reassembled into a coherent, layered answer.

The four sub research questions are:

1. How do algorithms on social media reshape third age identities and cultures?

2. How are the digital practices of third age social media users stratified by their cultural capital?

3. What are the mechanisms through which offline capital is converted into digital capital?

4. How do popular older video creators use their capital to negotiate with algorithms and platform rules in their content production?

Sub-RQ 1 focuses on the phenomenon of identity and life course construction in older age. It offers a macro-level description of identities and cultures on algorithmic platforms and analyses the factors that produce them, then draws on theory to consider how Chinese third age users are affected when they negotiate and construct identities on such platforms. Sub-RQ 2 centres on digital inequality. It compares the practices and returns of groups with different capitals in order to explain the drivers of inequality, its concrete manifestations, and the mechanisms that push these outcomes. This is a meso-level, group-based analysis. Sub-RQ 3 follows on by examining the conversion mechanisms between traditional offline capital and digital capital, theorising one cause of digital inequality and discussing its consequences. Sub-RQ 4 brings the previous questions together by observing, at the micro level, how older creators favoured by platforms and users produce content, including how they negotiate complex algorithmic systems when choosing themes and modes of creation, the identities and values they

express, and how their own capital operates during this process.

On this basis the study adopts a parallel convergent design (see Figure 4.1). Sub-RQ 1 and 2–3 proceed within the same research framework without sequential dependence or prerequisite relations, and each collects its own evidence. Their outputs are then brought into an interpretive integration at the stage of sub-RQ 4 through qualitative analysis, with a synthetic discussion provided in the Integration chapter that combines findings across the four themes. This structure addresses a complex open system that spans macro, meso and micro levels, and involves platforms, algorithms, capital and users. It must answer what happens, how it happens and why it happens. A single linear path risks oversimplification and information loss. Running parallel strands supports both broad coverage and deep explanation (Blaikie, 2007; Sayer, 2000; Danermark et al., 2002; Maxwell, 2012).
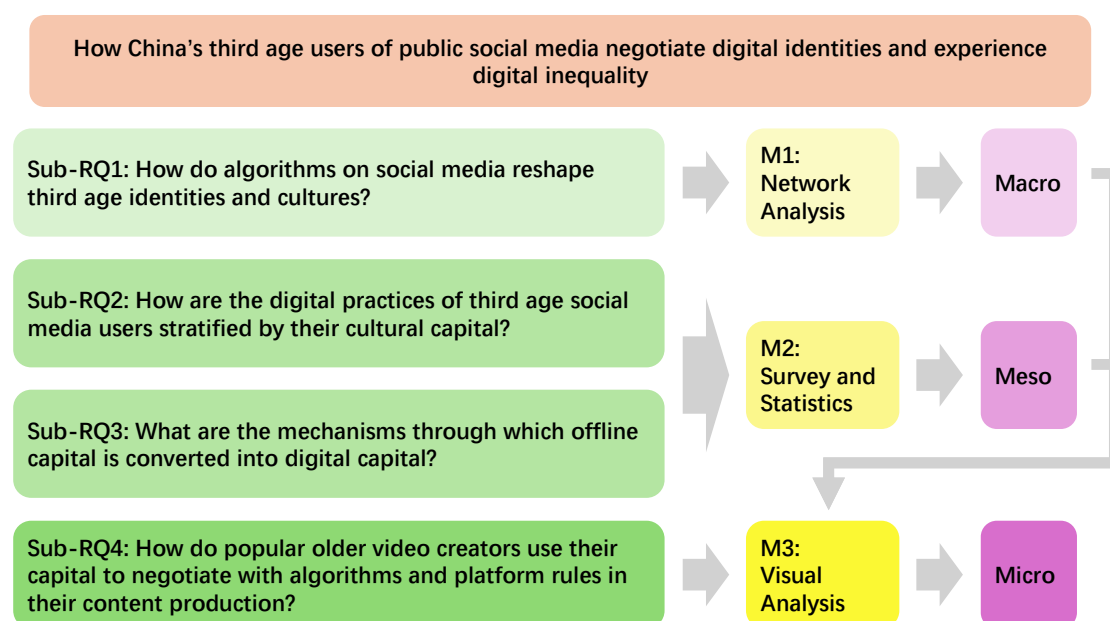
Figure 4.1: Method flow diagram

4.3.2 The System of Three Methods

To answer the four deconstructed sub-RQs, the study designs three methods that appear discrete but in fact address the problem from different angles.

Method 1 proposes an innovative mixed approach for public social media, using Douyin as the exemplar. It combines a hashtag co-occurrence network with thematic analysis. The core procedure constructs a hashtag network and couples it with two weights: the frequency with which hashtags appear and the level of engagement they attract. These respectively depict what users post most often (frequency, Map 1) and what receives greater attention under the joint action of platform, users and algorithms (popularity, Map 2). Inductive thematic analysis then turns high-weight nodes in the visualised networks into interpretable cultural themes. This integrates social media network analysis (Venturini & Munk, 2022; Pilař et al., 2021; Amaral & Flores, 2023; Loukianov et al., 2023) with thematic analysis (Braun & Clarke, 2006; Xi et al., 2021). The two comparative maps (frequency versus popularity) reveal the difference between what is posted often and what is amplified, providing empirical entry points for explaining how algorithmic culture and platform governance filter content visibility on Douyin (Nieborg & Poell, 2018; Gillespie, 2017). Gephi is used for visualisation (Bastian et al., 2009). This quali-quantitative integration preserves the reach of large-scale computation while using qualitative interpretation to supplement the limits of

purely quantitative meaning-making (Venturini & Munk, 2022; Smith & McGannon, 2018). It answers sub-RQ 1 by identifying which third age identities and cultures are shaped and reinforced on algorithmic social media, and it supports a theory-informed account of how this affects online identity negotiation among third age users.

Method 1 is located at the macro level. It builds hashtag network maps from large-scale public data in order to identify recurring patterns within an extensive design. This corresponds to the demi-regularities of critical realism, such as which third age narratives are markedly amplified (Sayer, 2000; Fletcher, 2017). Providing a structured macro context for the whole study (Danermark et al., 2002).

In parallel, method 2 is situated at the meso user-group level. It uses a questionnaire and statistical modelling and also belongs to an extensive design. It does not depend on method 1, but it is conceptually aligned on key dimensions such as platform types, modes of information access and participation diversity in order to enable later comparability and merging (Maxwell, 2012). Method 2 focuses on who uses which combinations of platforms, what kinds of participation they adopt, and how these differences manifest as tendencies toward inequality along particular channels and mechanisms (Fletcher, 2017; Danermark et al., 2002). From a critical realist perspective, statistical associations here are not treated as fixed laws. They are read as trend evidence that recurs within an open system, providing trajectory clues for later explanations of mechanism (Sayer, 2000; Blaikie, 2007).

Method 2 conducts meso-level quantitative tests on usage and outcome dimensions of digital inequality. An online questionnaire covers China's third age population. It applies quota sampling based on Laslett's (1994) social age framework and the demographic structure reported in the China Statistical Yearbook, with oversampling of highly educated respondents. It systematically measures demographics, social media repertoires and participation behaviours, thereby enabling quantitative tests of usage- and outcome-level digital inequality in the context of algorithmic platforms (van Dijk, 2017; Robinson et al., 2015; van Deursen & Helsper, 2015). The dataset answers sub-RQ 2 and 3. For sub-RQ 2, measurement introduces a classification for China's platform ecology: by content format, short-video platforms versus hybrid-content platforms; by access mode, algorithm-dominant platforms versus user-driven platforms, in order to capture structural differences between algorithmic recommendation and community or follow-based access (Kaye et al., 2021; Zhao et al., 2023; Deng, 2023; Wan et al., 2025; Statista, 2024). Analysis proceeds with descriptive statistics, then binary and ordered logistic regressions to test the effects of structural variables such as education on platform type and repertoire breadth. It then applies Gower distance and hierarchical clustering to identify coupled spectra of education, platform type and information source, which depict user stratification and repertoire differences under algorithmic conditions (Gower, 1971; Rousseeuw, 1987; Hasebrink & Domeyer, 2012; Horvát & Hargittai, 2021; Matassi et al., 2022; Banisch et al., 2024).

For sub-RQ 3, this study uses the social media participation diversity (SMPD) index, scored from zero to six across likes, comments, shares, text posts, image posts and video posts, and it measures social capital outcomes using two binary indicators: whether respondents made new friends online and whether they used platform information for offline activities (Ragnedda, 2018; Ragnedda et al.,2022; Ragnedda et al., 2024). Analysis first estimates three binary logistic models to test the "media format thresholds" of education for text, image and video creation. It then builds a mediation model of education to SMPD to making new friends online, follows the causal steps of Baron and Kenny (1986), and uses 5000 bootstrap resamples to estimate indirect effects. This provides an empirical test of the conversion path from cultural capital to digital capital to social capital (Merisalo & Makkonen, 2022). With unified sampling and measures and parallel analyses by topic, method 2 links social gradients in platform choice to the mechanism chain from participation to returns. It offers repeaand comparable quantitative evidence for explaining user stratification and inequality mechanisms in algorithmic public social media.

Since methods 1 and 2 proceed in parallel and address different levels of what and how, the third stage naturally moves to interpretive integration at the micro level of content production. This stage adopts qualitative visual and discourse analysis within an intensive design, and uses abduction and retroduction as its inferential thread. It selects phenomena and chains from the two quantitative strands that most require explanation, returns to the audiovisual details and production practices of high-visibility samples,

and asks under what conditions and through which causal mechanisms these patterns were pushed out (Danermark et al., 2002; Fletcher, 2017). It examines how high-traffic content shows capital thresholds and accommodation to platform preferences in camera language, narrative structure and material and symbolic resources, and how these mechanisms together constitute the production logic of visibility. By returning to scenes and practices, the study connects macro dominant patterns, meso group differences and pathways, and micro production details and discipline into a single mechanism-oriented explanatory chain (Blaikie, 2007; Maxwell, 2012).

Method 3 builds on the macro and meso quantitative evidence of the first two stages and turns to qualitative visual and discourse analysis on the micro production side. It addresses sub-RQ 4. The sampling strategy is purposive. It uses as its frame the nine older-life themes identified in method 1, excluding "social stories" and retaining "positive values, family, work, health, fitness, joyful and funny, fashion, rural, life wisdom". The analytic framework integrates Visual-Verbal Video Analysis and the Four-Column Analysis Structure (Mohammed et al., 2023; Fazeli et al., 2023). It conducts multi-round coding from the bottom up. It first codes the whole video for scenes, camera language, audio or subtitles, editing and narrative. It then segments material into semantically coherent units for finer decoding, and introduces grounded-theory procedures of open, axial and selective coding to build a testable explanatory skeleton (Mohajan & Mohajan, 2022). Coding infers and annotates capital structures from observable audiovisual cues, such as using multi-camera shots, complex

transitions, dubbing and standard written Mandarin to identify digital or cultural capital, and using living and consumption scenes and occupational hints to identify economic capital. It also examines how platform discipline and algorithmic selection shape creative themes, narratives and value expression at the discourse level (Gillespie, 2018; Foucault, 1977; Gillespie, 2018). This places the production of content visibility within a dual mechanism of capital filtering and platform governance. With cultural gerontology's account of the social and cultural construction of ageing as its theoretical starting point (Gullette, 2015; Gilleard & Higgs, 2015), this method provides a micro-mechanism identification pathway that aligns with methods 1 and 2. It explains the generative rules and sources of homogenisation in mainstream third age images on the platform.

It is important to note that "parallel" does not mean that each strand proceeds in isolation. The two quantitative paths are aligned in objects, concepts and measures. They both distinguish platform types and modes of information access and jointly measure participation diversity and creative forms. This ensures that the third stage can merge them within a common explanatory coordinate system (Danermark et al., 2002; Maxwell, 2012). Likewise, interpretive integration does not mean arbitrary splicing. It follows the fallibilism and judgemental rationality of critical realism. It proposes candidate mechanisms in light of the first two stages, compares them with competing explanations, specifies which evidence supports them, the boundary conditions under which they hold, and any counter-examples that must be reported (Blaikie, 2007;

Danermark et al., 2002). This avoids treating statistical association as causal law and avoids taking thick description of single cases as an end point. It presents pattern, mechanism and context as an integrated whole within an open system (Sayer, 2000; Fletcher, 2017).

In sum, this parallel convergent, explanatory, multi-level design links two extensive quantitative paths with one intensive qualitative path. It secures an overall grasp of platform culture and user stratification, and it uses contextual mechanism analysis to explain why these patterns appear here and under what conditions they become visible. This arrangement, in which extensive and intensive designs support each other, is fully consistent with critical realism's view of demi-regularities, generative mechanisms and open systems. It enables the study to provide a mechanism-focused account of identity construction in ageing and the reproduction of inequality in the digital era in a transparent, comparable and revisable manner (Sayer, 2000; Danermark et al., 2002; Blaikie, 2007; Maxwell, 2012; Fletcher, 2017).

4.4 Method 1: Network Analysis

4.4.1 Approach of Method 1

The first method in this study aims to systematically map and analyse the macro-level

identity and cultural landscape of the third age on Douyin, a major social media platform in China. The core purpose is to answer Sub-RQ 1: How do algorithms on social media reshape third age identities and cultures? To achieve this, the design adopts an innovative approach that integrates network-based methods for social media content (Venturini & Munk, 2022; Pilař et al., 2021; Amaral & Flores, 2023; Loukianov et al., 2023) with thematic analysis that treats hashtags as the unit of analysis for meaning-making and mechanism generation (Braun & Clarke, 2006; Xi et al., 2021). See Figure 4.2.
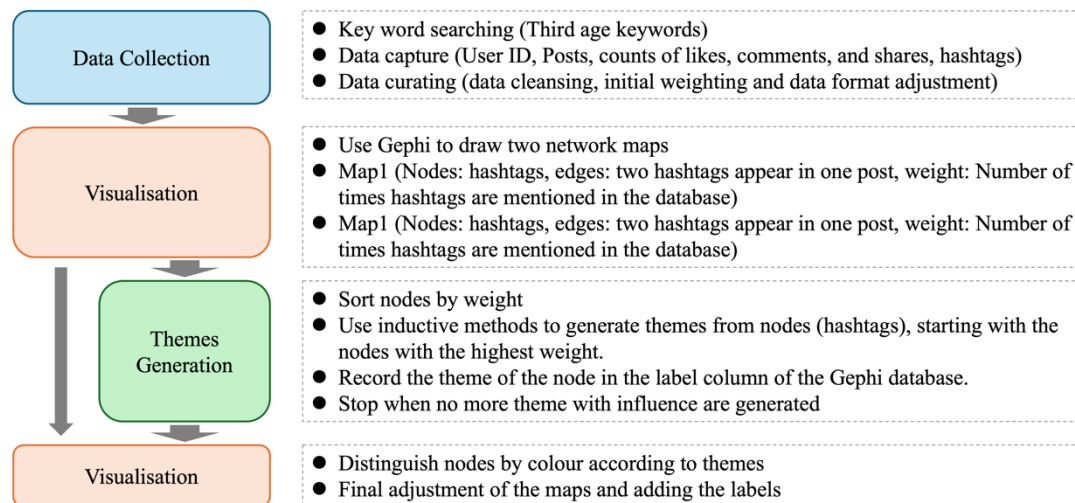
Figure 4.2: Method 1 Flow Diagram

Using this innovative "hashtag network + thematic analysis" approach, method 1 employs Gephi to produce two visual network maps that reveal how algorithms and the platform amplify and filter ageing-related topics. The filtering mechanism is inferred by comparing the two maps. Both maps are built from the same dataset. The dataset was collected using Octoparse software to collect relevant posts on Douyin through

keyword searches. The focus is not on close reading of the post content but on analysing the hashtags contained in those posts. Two key weighting variables are used. The first is the frequency with which an identical hashtag appears in the dataset, that is, the number of times a topic is mentioned. A larger number indicates that a hashtag is more commonly referenced and discussed. The second variable is the number of likes, comments and shares associated with each post, collected at the time of scraping. In this method, these three counts are summed to indicate which topics receive greater exposure and attention in the dataset. When drawing the network maps, these two variables are used as node weights on two separate maps to determine node size. By comparing node sizes and rankings across the two maps, it is possible to identify which topics are more frequently mentioned and which topics gain higher visibility on Douyin.

An inductive thematic analysis is then conducted to group high-weight hashtags into interpretable cultural themes (Braun & Clarke, 2006; Xi et al., 2021). For example, the nodes "#Fitness", "#Square dance", "#Meaning of fitness", "#Exercise at home", and "#Keep fit" are grouped into the Fitness theme. This allows comparison not only at the level of individual nodes but also at the level of themes, making it easier to observe how algorithms and the platform select and amplify specific cultural themes. By comparing the proportion and structural position of themes across the two maps, the analysis distinguishes between what is "mentioned" and what is "amplified", providing empirical entry points for explanations in terms of platformisation and algorithmic governance (Nieborg & Poell, 2018; Gillespie, 2017).

Finally, beyond the labels and themes generated from them, the network maps include information on edges connecting nodes. Hashtags that appear in the same post are treated as content-related and are connected by an edge. This enables the analysis to identify not only the content of individual nodes and themes but also relationships between themes through edges. If there are many edges between two themes, this may suggest shared cultural values, which then requires interpretation based on the substantive content of the themes.

This method does not rely on complex computation. Through three straightforward steps of data processing and visualisation, it provides an intuitive way to address Sub-RQ 1. The quali-quantitative approach identifies macro patterns of third age identity and culture on Douyin and then interprets those patterns through qualitative reading of nodes and structure. The method is tailored to Sub-RQ 1 of this study.

Douyin is selected as the public platform to examine third age digital culture in China. Compared with private, acquaintance-based platforms such as WeChat, Douyin's public and open nature is more suitable for observing negotiation and cultural production. Given its scale and links to governance in China's social media landscape, Douyin offers social representativeness and policy relevance for research on ageing culture (Zhang, 2021; Statista, 2024). According to Statista (2024), Douyin is the most used social media in China. It has developed beyond entertainment and has become an

important site for cultural production and negotiation. Douyin's report also noted a sharp rise in older users and content creators (Douyin & Juliangsuanshu, 2020). Selecting Douyin therefore allows the study to capture the cultural phenomena of interest effectively.

4.4.2 Method 1 in Practice

4.4.2.1 Data Collection

Following the above approach, the data were collected using Octoparse software to scrape via keyword searches.Several practical issues were encountered and addressed as follows.

To enhance representativeness, it would be preferable to avoid any potential algorithmic personalisation effects in the search results. I first explored whether Douyin provided an API for academic access. At the time of data collection this was not available, so an alternative strategy was required. I use Octoparse software to scrape the public search results. This software executes pre-set search and extraction procedures made it a feasible substitute for data acquisition.

The scraping window was 30th August to 5th September 2023. In choosing dates I avoided Chinese dates with special relevance to older adults, such as some festivals, to

limit bias in the collected content. To reduce cross-sectional time bias, posts were not restricted by publication date.

Keywords largely determine search results in Method 1. I therefore selected objective, theme-neutral terms that denote the third age in a broad sense. A total of 37 keywords were used. First, six terms that directly describe the third age were included: "retirement", "retirement life", "old age", "older age life", "later life", and "later-life living". Terms such as "grandpa" and "grandma" were avoided because they imply family roles could inflate the weight of family-related themes. In addition, chronological ages were used to capture the third age in the Chinese context. The range was set at 50–80 years. Individual keywords from "50 years old" to "80 years old" were used to retrieve posts. The lower bound follows statutory retirement ages in China (women 50-55 depending on post, men 60). The upper bound considers life expectancy: in 2021 the China's national average was 78 years, and in Shanghai it was 84.11, with urban–rural differences (Feng et al., 2019; World Bank, 2024; Shanghai Municipal Statistics Bureau, 2023). This age range may introduce some bias because statutory retirement ages differ by gender and the end of the third age is not a fixed boundary. Given large-scale collection via keywords, it is impossible to fully exclude off-range content at the retrieval stage. However, the study includes a qualitative phase that interprets the meaning of hashtags. The strategy is to cast a wide net during collection to cover the third age comprehensively and then identify and exclude non-third age items during analysis.

For each post the following fields were extracted: user ID, post text, hashtag list, and counts of likes, comments and shares. To keep a consistent format and ensure feasibility of analysis, when a post contained many hashtags only the first five were retained. Around 10,000 posts were initially collected. After removing posts without hashtags, 4,194 posts with hashtags remained and formed the dataset for method 1.

4.4.2.2 Data Analysis

The core of this analysis is visualisation. Two hashtag network maps are constructed from the same dataset, with different weighting schemes, to identify and interpret the cultural curatorial influence of the platform's algorithm. Gephi is used for calculation and visualisation (Bastian et al., 2009). Python or R could also be used, but the computations required here are modest and Gephi is sufficient. Given the aims of this method, the quality and clarity of the maps are prioritised.

Gephi requires specific input formats. During data cleaning I adjusted the structure of the data set, especially for posts with more than two hashtags. If an input row is (A, B), Gephi creates nodes A and B and connects them with an edge. If a post contains more than two hashtags, such as (A, B, C), Gephi would create edges A-B and A-C, but not B-C, which does not reflect the intent to represent within-post co-occurrence among all hashtags. I therefore split multi-hashtag posts into all unordered pairs, for example (A,

B), (A, C), and (B, C). This creates all within-post edges. Splitting changes raw counts, so proportional coefficients were applied to adjust weights back to their correct totals. For instance, if (A, B, C) appears once, splitting yields two occurrences per node. A coefficient of 0.5 is then applied so that each node's weight returns to 1. For Map 1 (frequency), to reduce rounding issues I scaled all node weights by a constant factor of 12 for layout stability. Reported values are backfilled to the actual counts in the tables. For Map 2 (popularity), weights equal likes + comments + shares per post. If a post's engagement sum is 10, each pair derived from that post receives weight 5 after applying the coefficient, so each node's final weight equals the correct 10. Given the large magnitude of Map 2 weights, I did not apply the x12 scaling used in Map 1. The minor rounding difference from coefficients is negligible and reported node weights reflect the actual engagement totals. For posts with a single hashtag, a self-loop of the form (A, A) was created with the appropriate coefficient so that the post contributes to node weight.

Single-hashtag posts generate self-loops. These only serve to carry the post's information into the node's weight and have no further interpretive meaning. Multi-hashtag posts are split into pairs to construct the graph. Proportional coefficients are used to avoid double-counting and to ensure that node-level frequency and engagement aggregates match the underlying dataset. These coefficients are used solely to prevent repeated accumulation at node level and are not used for inference. Scaling factors serve only to stabilise the visible range and improve label readability. They do not change

node rankings or comparative conclusions. Chapter 5 reports original values. This procedure does not use any edge-based or structural network statistics. Self-loops and pairwise splitting are employed only to attribute post-level information to node weights and to support visual layout. All comparisons and inferences are made at the level of node weights and themed aggregations.

Hashtags are the nodes and co-occurrence within the same post generates edges. Two comparable maps are produced in Gephi (Bastian et al., 2009). In Map 1, node and edge weights are based on frequency, presenting the structure of topics that are "what people post most". To avoid cumulative rounding error, frequencies were scaled (x12), with reported results backfilled to actual values. In Map 2, node weights are based on total engagement associated with the node's posts (likes + comments + shares), presenting the structure of "what became popular" through the combined effects of platform, algorithms and users. Because engagement magnitudes are much larger than frequencies, small coefficients were used for normalisation during pre-processing to stabilise the layout. Reported values reflect actual engagement. Each map contains 5,552 nodes. After removing zero-weight edges, Map 1 and Map 2 have 11,689 and 11,578 edges respectively. Comparisons are conducted only on node weights. Edges are used for visual reference and are not part of statistical comparison.

For theme generation, hashtags are treated as "codes" and grouped into themes based on content. Given the large number of nodes (5,552), it is not feasible to include all

nodes in the qualitative phase. The selection therefore follows the principle of data saturation from qualitative research (Fusch & Ness, 2015). Screening begins with the highest-weight nodes and continues until a stable set of influential themes is formed, at which point screening stops. In the end, 67 and 63 core nodes are retained from Map 1 and Map 2 respectively for in-depth thematic analysis and comparison.

For visualisation, nodes within the same theme are coloured. Node positions carry no analytical meaning in this study. To improve readability, I manually adjusted the layout produced by Gephi so that nodes within the same theme appear near each other. As hashtags are in Chinese, translation was required for labelling. Many hashtags involve slang or idioms that are not easily translated literally or become too long once translated. For such cases I used explanatory or summarised translations to maintain readability without distorting meaning. Gephi's automatic labels can obscure small nodes, which hinders comparison of node sizes. I therefore exported maps without labels and added labels manually to avoid covering nodes.

This process produces two network maps. Map 1 is a frequency-weighted network (What people post most). Node size and edge weights are determined by absolute frequency in the dataset. It presents topics most commonly appearing in user-generated content and can be read as the baseline landscape of discourse on the third age. Map 2 is an engagement-weighted network (What became popular). Node size and edge weights are determined by cumulative likes, comments and shares. Engagement is a

key indicator of dissemination and popularity on the platform and influences algorithmic recommendation. The map therefore shows dominant cultural narratives that are amplified by algorithmic and user attention. Chapter 5 presents the two maps with detailed data and analysis. In addition to the two maps, Chapter 5 includes tables of coefficients and other exhibits to support direct comparison.

By comparing structural differences across the two maps, changes in weights of specific nodes or themes can be quantified and interpreted as evidence of algorithmic selection. A theme with low weight in the frequency map but very high weight in the engagement map indicates algorithmic amplification. Conversely, a theme with high frequency but relatively low engagement suggests marginalisation in dominant dissemination.

4.4.3 Innovation and Limitations

The core innovation lies in combining elements of social network analysis with thematic analysis, using hashtags as the unit to form a new content-analytic approach suited to Sub-RQ 1.

There are limitations. Hashtags carry less semantic depth than other content formats on Douyin, such as videos or titles. However, the purpose of Method 1 is to present a macro picture of third age identity and culture and to identify, through comparison of the two maps, which third age topics obtain higher visibility under the combined effects of

algorithms, platform and users. As long as hashtags offer a reasonable summary of post content, treating them as natural summaries can still yield accurate macro-level findings. With more computing resources and technical support, future work could extend this method to richer samples. This limitation underscores the need for a multi-method, multi-stage design. The macro cultural landscape here provides a structural context for later stages that examine user stratification and content production mechanisms through surveys and qualitative visual analysis.

A further limitation is potential bias due to the absence of an official API. Since Douyin currently does not offer a lawful academic API, the scraping strategy is a necessary compromise. If an academic API becomes available, research of this type would benefit.

4.5 Method 2: Survey and Statistics

Within the framework of critical realism, method 2 runs in parallel with method 1 and addresses a different empirical domain, namely the structural inequalities encountered by China's third age users of public social media in their digital practices. It undertakes an extensive design to identify demi-regularities and tendencies in the empirical domain so as to provide testable trajectory clues for subsequent mechanism-based explanation. As outlined earlier, critical realism distinguishes the real, the actual, and the empirical. Platform architectures, recommendation mechanisms, and users' capital structures belong to the real. The triggering of these mechanisms under specific conditions, and

the chains of events they produce, belong to the actual. Quantifiable patterns captured by large-sample surveys and statistical modelling are situated in the empirical (Sayer, 2000; Danermark et al., 2002; Fletcher, 2017). In parallel to the macro depiction of platform culture in method 1, method 2 proceeds along three dimensions: who uses which combinations of platforms, in what modes they participate, and what forms of structural inequality may result.

Centring on social media repertoires and the conversion of digital capital, it addresses the next two interlinked sub-questions. Sub-RQ 2 asks how are the digital practices of third age social media users stratified by their cultural capital? Based on the specification in the literature review, the chosen entry point is whether platform type and mode of information access show a social gradient among China's third age users. Sub-RQ 3 asks what are the mechanisms through which offline capital is converted into digital capital? In practice, this is further specified as how education converts into online social capital via social media participation diversity (SMPD), and to what extent this spills over offline (Attewell, 2001; van Dijk, 2017; Robinson et al., 2015, 2020; Hasebrink & Domeyer, 2012; Horvát & Hargittai, 2021; Matassi et al., 2022; Banisch et al., 2024; Ragnedda, 2018; Ragnedda et al., 2022; Ragnedda et al., 2024; Merisalo & Makkonen, 2022). The strategy is to slice a large problem through a concrete lens and examine it in detail. In the inferential logic of Critical realism, statistical associations from method 2 are not taken as iron laws of causality. They are recurring patterns in an open system. These patterns enter method 3 as empirical facts to be

explained through abduction and retroduction, and are aligned with the macro visibility map from method 1 for integrated explanation (Maxwell, 2012; Wynn & Williams, 2012).

4.5.1 Research Design and Sampling

Method 2 uses an online questionnaire on the Tencent Questionnaire platform. Based on the population structure of China's third age by age, gender, and educational attainment, quota sampling was employed to collect data on social media use and sociodemographic variables among China's third age social media users. By using the platform's older-sample service, it was possible to collect sufficient responses from older adults without geographical restriction. The service also allows via younger helpers, such as family members, to reach and assist older participants, which widened access beyond the platform's panel and reduced associated biases. After data collection, statistical modelling was used to examine how this user group is affected by structural inequality when engaging in digital activities, thereby addressing sub-RQ 2 and 3.

The study population is China's third age (Laslett, 1994). The third age begins at retirement and lasts until independent living is no longer possible. The starting point is quantifiable. The endpoint requires a more precise definition. Method 2 therefore first specifies the end of the third age. The definitional core is independence, which is not equivalent to perfect health. The boundary between the third and fourth ages is often

blurred in practice. Older people in the third age commonly face health issues to varying degrees. The criterion used is the ability to live independently. The target population must be able to complete activities of everyday living and basic mobility without assistance. Without this capacity, it is difficult to enact an independent lifestyle, which is one focus of this research. To make the criterion operational, the study maps to the indicators in Abdi et al. (2019) and uses autonomous ADL and mobility as baseline inclusion conditions (see Figure 4.2). This recognises health heterogeneity while distinguishing the third age under study from the fourth age that requires ongoing assistance (Abdi et al., 2019). With this boundary set, the target population is initially delimited. Sampling then refines participant characteristics in light of design and fieldwork constraints.

Inclusion and Exclusion Criteria of Third Age in this study	
Inclusion Criteria	**Exclusion Criteria**
Individuals will be included, if they meet all terms below: • *Retried* • Having the *cognitive ability* to carry out daily activities without the assistance of others. • Having the *physical ability* to carry out daily activities without the assistance of others. • Individuals can perform *daily self-care* without the assistance of others. • Having *mobility* without the need for assistance from others. Some degree of mobility issues (e.g. inability to bend, slow walking) and the use of tools for mobility (e.g. use of a cane) that do not interfere with essential mobility functions are included.	**Individuals will be excluded, if they either:** • **Do not** have the *cognitive ability* to carry out daily activities without the assistance of others. • **Do not** have the *physical ability* to carry out daily activities without the assistance of others. • Individuals **cannot** perform *daily self-care* without the assistance of others. • **Do not** have essential *mobility* without the assistance of others.

Figure 4.3: Inclusion and Exclusion Criteria of Third Age in this study

Combining China's retirement rules with independent living ability, the target group is defined as women aged 55-79 and men aged 60-79. To ensure stratified comparability and alignment with the overall population structure, quota cells by gender x age x

education follow the China Statistical Yearbook (2021). Because educational attainment is generally low in the third age and the higher-education stratum is small, the higher-education group was oversampled to secure adequate cell sizes for modelling. The final dataset comprises n = 434 valid cases. For models on participation and outcomes in public social media, the analytic sample is further restricted to those who explicitly use Douyin, Kuaishou, Rednote (Xiaohongshu), or Weibo (n = 417). The structure is shown in the Table 4.1 below.

Table 4.1: Structure of the dataset

Age(Gender)	Primary or below	Secondary school	High school	College	Bachelor's or above
55-59(F)	26	32	8	2 + 3	2 + 2
60-64(M)	13	22	12	2 + 3	2 + 2
60-64(F)	20	18	8	2 + 3	1 + 2
65-69(M)	19	19	8	2 + 3	1 + 2
65-69(F)	28	14	5	1 + 3	0 + 2
70-74(M)	20	13	3	1 + 3	1 + 2
70-74(F)	27	9	2	1 + 3	0 + 2
75-79(M)	14	7	2	1 + 2	0 + 2
75-79(F)	19	4	1	0 + 3	0 + 2

Note. '+' in the indicates oversampled data.

Many quantitative studies on older adults and the third age in China still rely on nationwide baseline surveys collected in 2017-2018 (He et al., 2020). These data were formed before the full diffusion of algorithm-dominant social media, which limits explanatory timeliness for algorithm-driven stratification and outcome differences. In addition, the proportion of older adults using digital technologies rose sharply around the COVID-19 period. According to CNNIC's semi-annual reports, users aged 50-59 and 60+ accounted for 6.7 per cent and 6.9 per cent in the pre-pandemic 44th report

(2019). By the 51st report (2023) these shares had risen to 16.5 per cent and 14.3 per cent, showing rapid growth in older users' digital participation (CNNIC, 2019; CNNIC, 2023). This suggests that post-2023 usage patterns may differ markedly from the earlier context. Small-sample studies by individuals or institutions are often drawn from convenient sites, such as universities for older learners, and show strong imbalances by education, gender, and age. For example, women may comprise 81.3 per cent and the 50-59 group 84.4 per cent, which does not reflect the broader older population (Zhao et al., 2021; Yang & Zhang, 2023). Given the prior that education may strongly shape digital experience, coverage of lower-education older users is particularly important. These factors magnify the interpretive gap between old data and the new context. They also indicate the need for fresher evidence and transparent methods. Under doctoral resource constraints, this study therefore adopts quota sampling rather than a national probability design. The quota frame uses the China Statistical Yearbook distribution by gender x age x education. Because the high-education stratum is small, moderate oversampling is used to ensure analytic power.

Even so, the sample still has limitations. Ideally, the quota frame would be the true structure of China's third age social media users. In the absence of authoritative distributions for this group, the overall third age structure is used as a proxy. This is a transparent trade-off between feasibility and representativeness. The design aims to address two common data gaps. The first is temporal lag that continues to rely on pre-algorithm-era data. The second is structural mismatch between sample composition and

the national older population.

A further design issue concerns women's retirement. Women workers may retire at 50, while women in managerial posts retire at 55. Including women who retire at 50 would require authoritative proportions for this subgroup, which are not available. The study therefore sets the lower bound for women at 55 to maintain rigour in constructing the sample structure.

Practicality in fieldwork is also considered. Using the Tencent older-sample service allowed sufficient data collection from older adults without restriction to a single institution or locality. The service sets the lower bound for older samples at age 55, which supports the pragmatic choice of 55 as the women's starting age in the questionnaire. The upper bound of 79 is set with reference to average life expectancy discussed in method 1 and to keep five-year age bands consistent across groups.

4.5.2 Questionnaire Design

There is an objective constraint in questionnaire design. The target includes a large proportion of lower-education respondents. Some older participants may complete the questionnaire with assistance from younger helpers. The sample therefore may include respondents with limited stamina and constrained reading or comprehension. Questions and measures are kept as simple and objective as possible.

Variables for this doctoral thesis cover social media use, main information sources, health status, and sociodemographics. Items are as follows.

1) *Use of social media*

The aim is to capture experiences in public social media. Methods 1 and 3 cannot collect platform-level usage across China's third age for methodological reasons. Method 2 uses the flexibility of a survey to gather concrete platform usage for classification. This also enables tests relevant to Sub-RQ 2 and 3 and helps validate whether Douyin is an appropriate focal platform in methods 1 and 3.

After asking which platforms respondents use, the questionnaire filters users of public social media and examines their behaviours on these platforms.

For the platform list. Respondents were asked "Which of the following social media apps do you use on your mobile phone, tablet, or other handheld device?". The ten options were Douyin, WeChat, Rednote (Xiaohongshu), Baidu Tieba, Weibo, Zhihu, Qzone, Douban, Hupu, and Kuaishou. Each is coded as a binary variable. The ten platforms follow Statista's ranking of the most commonly used social networks in China (Statista, 2024). The questionnaire was designed with the February 2024 edition. The September 2024 update replaced it online. Because the list did not change, the

publicly available September 2024 edition is cited.

Given the focus on public platforms defined in chapter 1, respondents were screened by a concrete question: "Do you use Douyin, Rednote, Kuaishou, or Weibo?". Concrete platform names are used to avoid misinterpretation of an abstract category such as "public social media". Among the ten platforms, WeChat and Qzone are based on personal networks, and Zhihu, Douban, Hupu, and Tieba are closer to forum formats. Their functions differ from current mainstream public social media. Including them would complicate behaviour measures with non-common items. The four most widely used public platforms are therefore used for screening.

To capture usage preferences, users of these public platforms were asked to select which activities they had performed in the past month on Douyin, Kuaishou, Rednote, or Weibo. The six options were posting text, posting images, posting videos, liking, commenting, and sharing. These functions are common to all four platforms and enable construction of participation diversity in later analyses.

Two simple outcome questions measure returns from use. "Have you made new friends through Douyin, Kuaishou, Rednote, or Weibo?". "In the past month, have you used information from Douyin, Kuaishou, Rednote, or Weibo for offline social activities? For example, choosing a restaurant for a meal with family and friends based on information from these platforms." Both are binary. These variables support assessment

of capital conversion.

2) *Main information sources*

To address Sub-RQ 2 from the perspective of information acquisition, all respondents answered a single-choice item: "Please select your primary way of obtaining information." Options were newspapers, television, radio, the internet, word of mouth from relatives and friends, and other (free text). Together with repertoire measures, this forms a key dimension for the later clustering.

3) *Sociodemographics and health status*

Because the study concerns older adults, a five-point self-rated health item was included. "How would you rate your current health?" Responses are very good, good, average, not good, and very bad.

Sociodemographic questions include gender (Male and Female), marital status (with options unmarried, married, married but separated, divorced, and widowed). Educational attainment follows the sample structure categories to support both description and modelling. For age, given regional differences in age reckoning, the questionnaire asks for year of birth in free text, with an example, and also collects age.

4.5.3 Variable Construction and Data Analysis

Prior to modelling, several raw variables were reclassified and consolidated to build an analytic framework that addresses the research questions. Rather than analyse each platform in isolation, platforms are grouped from a technological perspective along two dimensions: content format and information access method, in order to capture structural differences (O'Riordan et al., 2016; Voorveld et al., 2018). By content format, Douyin and Kuaishou are short-video-centred platforms. The others combine text, images, and short videos and are treated as hybrid-content platforms. By access method, Douyin, Kuaishou, and Rednote mainly rely on algorithmic recommendation and are treated as algorithm-dominant platforms. Others increasingly incorporate algorithmic features yet still allow access through communities or interpersonal networks. They are treated as user-driven platforms (Kaye et al., 2021; Wan et al., 2025; Zhao et al., 2023; Deng, 2023) (see Table 4.2 and Table 4.3). WeChat is excluded from these platform-type analyses because its core is instant messaging, although its use is counted toward the total number of platforms per user.

Table 4.2: Social media categorised by content format

Types of social media	Specific social media platforms
Short video-dominant platforms	Douyin, Kuaishou
Hybrid content format platforms	Rednote, Baidu Tieba, Weibo, Zhihu, Qzone, Douban, Hupu

Table 4.3: Social media categorised by mode of information acquisition

Types of social media	Specific social media platforms
Algorithm-dominant platforms	Douyin, Rednote, Kuaishou
User-driven platforms*	Baidu Tieba, Weibo, Zhihu, Qzone, Douban, Hupu

*Note. * User-driven platforms category does not imply the absence of algorithmic recommendation systems. Rather, it indicates that, in addition to algorithms, users can still access information through communities or other user-driven channels.*

To operationalise digital capital and its returns, the social media participation diversity (SMPD) index is constructed from six behaviours: like, comment, share, post text, post images, and post videos. Scores range from 0 to 6 and serve as an indicator of digital capital. Social capital outcomes are measured by two binary variables: whether respondents made new friends online and whether they used platform information for offline activities. Sociodemographic variables are also consolidated where appropriate. For example, education is binarised to low versus high in some models. Marital status and self-rated health are grouped to meet modelling requirements.

Analysis proceeds in a structured sequence to address sub-RQ 2 and 3. For Sub-RQ 2 on user differentiation and repertoires, three steps are used. First, descriptive statistics present baseline usage of platform types among third age users. Second, binary logistic regressions test sociodemographic effects on use of hybrid-content platforms and on use of user-driven platforms. Ordered logistic regression examines factors associated with the total number of social media platforms used. Third, to identify user segments,

hierarchical clustering with Gower's distance and average linkage is applied, with the silhouette method to determine the optimal number of clusters. The aim is to reveal coupled patterns across education, platform type, and information source (Gower, 1971; Rousseeuw, 1987; Hasebrink & Domeyer, 2012; Horvát & Hargittai, 2021; Matassi et al., 2022; Banisch et al., 2024).

To address sub-RQ 3 on capital conversion, two core tests are implemented. First, to test media format thresholds, three independent binary logistic models are estimated with posting text, posting images, and posting videos as dependent variables to assess the effect of education on different forms of content creation. Second, to test the capital conversion pathway, a mediation analysis is conducted following the causal steps of Baron and Kenny (1986) to examine the mediating role of SMPD between education and making new friends online. Robustness is assessed with 5,000 bootstrap resamples for the indirect effect. This provides empirical validation for the theoretical pathway from cultural capital (education) to digital capital (SMPD) to social capital (online social ties) (Merisalo & Makkonen, 2022). Using a unified sample with topic-specific tests, method 2 links the social gradient in platform choice with the mechanism chain from participation to returns. It provides repeatable and comparable quantitative evidence for explaining user stratification and inequality generation in algorithmic public social media.

4.5.4 Fieldwork

Data were collected online using the Tencent older-sample service. Two pilot rounds were run on the platform to test questionnaire quality and technical settings, such as skip logic, and to assess the reliability of the sample source. After piloting, the first survey wave ran from 2 April to 25 July 2024. A supplementary sampling round ran from 12 to 14 February 2025. The final dataset contains n = 434 valid cases. Analyses on public social media participation for Sub-RQ 3 use the restricted subsample of n = 417 who reported using Douyin, Kuaishou, Rednote, or Weibo.

The detailed sample structure and counts are shown in the Table 4.4 and Table 4.5 below.

Table 4.4: Descriptive Statistics of Variables (*N=434*)

Variable	Categories	Frequency	Percentage
Social media application			
	Douyin	400	92.166
	WeChat	377	86.866
	Rednote	75	17.281
	Baidu Tieba	23	5.300
	Weibo	40	9.217
	Zhihu	31	7.143
	QZone	34	7.834
	Douban	12	2.765
	Hupu	9	2.074
	Kuaishou	216	49.77
Age			
	55-59 (1965-1969)	75	17.281
	60-64 (1960-1964)	108	24.885
	65-69 (1955-1959)	107	24.654
	70-74 (1950-1954)	87	20.046
	75-79 (1945-1949)	57	13.134
Gender			
	Male	179	41.244
	Female	255	58.756
Marital Status			
	Not in a stable marriage (Unmarried/married but separated/divorced/widowed)	85	19.585
	In a stable marriage	349	80.415
Education Level			
	Primary or below	186	42.857
	Secondary school	138	31.797
	High school	47	10.829
	College or above	63	14.516
Health Status			
	Bad (Bad/Very bad)	23	5.3
	Average	104	23.963
	Good	240	55.3
	Very good	67	15.438
Main Info Source			
	Internet	290	66.82
	Media (TV/Newspaper/Radio)	100	23.041
	Hearing form relatives and friends	42	9.677
	Other	2	0.461

Table 4.5. Descriptive Statistics of Variables (N=417)

Variable	Category	Frequency	Percentage
Social Media Participation Diversity (0–6 points)			
	0	5	1.2
	1	36	8.63
	2	58	13.91
	3	73	17.51
	4	69	16.55
	5	62	14.87
	6	114	27.34
Like			
	No	13	3.12
	Yes	404	96.88
Comment			
	No	132	31.65
	Yes	285	68.35
Share			
	No	145	34.77
	Yes	272	65.23
Text Create			
	No	225	53.96
	Yes	192	46.04
Image Create			
	No	177	42.45
	Yes	240	57.55
Video Create			
	No	169	40.53
	Yes	248	59.47
Made Friends Online			
	No	145	34.77
	Yes	272	65.23
Offline Activities via Online Info			
	No	160	38.37
	Yes	257	61.63
Education			
	Low - Secondary/Primary or below	312	74.82
	High - High school/College or above	105	25.18
Gender			
	Male	171	41.01
	Female	246	58.99

Age			
	55-59 (1965-1969)	73	17.51
	60-64 (1960-1964)	106	25.42
	65-69 (1955-1959)	103	24.7
	70-74 (1950-1954)	83	19.9
	75-79 (1945-1949)	52	12.47
Marital Status			
	Not in a stable marriage (Unmarried/married but separated/divorced/widowed)	81	19.42
	In a stable marriage	336	80.58

4.6 Method 3: Visual Analysis

The third methodological stage corresponds to an intensive design under critical realism. Its core task is to move to micro-level production and provide integrative explanation based on the macro patterns from method 1 and the meso stratification from method 2. It addresses sub-RQ 4: How do popular older video creators use their capital to negotiate with algorithms and platform rules in their content production?

Method 1 identifies third age narratives that are markedly amplified on the platform, which constitute demi-regularities to be explained. Method 2 reveals the structural effects of capital behind user stratification. Method 3 uses qualitative visual and discourse analysis. It adopts abduction and retroduction as its inferential thread. It begins from the empirical phenomena in the first two stages, such as content homogenisation and the higher visibility of users with more capital. It asks under what conditions and through which generative mechanisms these patterns are pushed out (Danermark et al., 2002; Fletcher, 2017). The aim is to probe the production logic of high-visibility content and to examine how capital thresholds appear in audiovisual language, narrative structure, and material and symbolic resources, and how creators negotiate platform discipline. By returning to scenes and practices, the study connects macro dominant patterns, meso group differences, and micro production mechanisms into a single mechanism-centred explanatory chain (Blaikie, 2007; Maxwell, 2012).

4.6.1 Research Pathway and Analytic Framework

To examine the content production strategies of Third Age users on Douyin and infer creators' social status and forms of capital from their works, this study employs qualitative visual analysis. The analytical path draws on two dedicated approaches to audiovisual data: the Four-Column Analysis Structure (FoCAS) and Visual-Verbal Video Analysis (VVVA) (Mohammed et al., 2023; Fazeli et al., 2023). The coding combines procedures from thematic analysis and grounded theory (Braun & Clarke, 2006; Mohajan & Mohajan, 2022).

Visual analysis depends on the study's theoretical stance and aims (Rose, 2013; Martin, 2015). Given the dual focus on third age digital culture and creators' capital, I adopt a discourse analysis approach. It considers not only the surface content of visual materials but also the social power and stratification they express. It also examines producers, the reasons and modes of production, and audiences.

Operationally, the study first uses the Four-Column Analysis Structure (FoCAS) proposed by Mohammed et al. (2023). Designed for the simultaneous analysis of audiovisual data, FoCAS transcribes content into four dimensions: (1) Timestamp, (2) Setting (what is filmed), (3) Scene (how it is filmed), and (4) Audio. In this study, FoCAS serves as a foundational tool to capture each video's overall structure and multimodal elements systematically.

Second, I also refer to the Visual-Verbal Video Analysis (VVVA) approach developed by Fazeli et al. (2023). VVVA is a six-step framework for qualitative video analysis centred on data extraction matrices that systematically code multiple dimensions of a video, including general, multimodal, visual, character, and content features. Here it is used to unpack details such as camera movement and editing, supporting the assessment of creators' various forms of capital.

It should be noted that this study does not replicate either method in full. Instead, it draws on and integrates FoCAS's transcription structure with VVVA's matrix-based coding logic. In light of Douyin short videos, the analytical framework was flexibly adjusted, for example, by adding codes for editing techniques. These integrations and adjustments aim to enable appropriate and effective coding and analysis for this visual medium.

Building on the structured data produced by these two tools, the analysis of meaning, especially that conveyed through speech and subtitles, uses thematic analysis (Braun & Clarke, 2006), supplemented by grounded theory procedures such as open, axial, and selective coding, to construct a coherent explanation (Mohajan & Mohajan, 2022).

4.6.2 Sampling and Data Collection

Sampling for this stage is informed by findings in method 1. The network analysis identified ten widely discussed themes related to older life on Douyin. These are "positive values, family, work, social stories, health, fitness, joyful and funny, fashion, rural, and life wisdom". The "social stories" theme is excluded because the videos are mainly stories about older adults or street interviews rather than content created by older adults themselves. Using the remaining nine themes, searches combined theme keywords with "retirement" on Douyin. Results were sorted by likes. The highest-liked video in each theme was selected, subject to the condition that the account belongs to an older creator. To increase diversity, multiple videos from the same account were avoided. To minimise personalisation effects, the study did not log in and cleared browser history during retrieval.

Data collection proceeded in two rounds. The first round took place in December 2024. Three top videos were selected for each theme, producing 27 videos for detailed analysis. Preliminary analysis indicated that saturation had not been reached. A second round was conducted from June to July 2025, selecting two additional videos per theme using the same procedure. In total, 45 videos were included.

The study adopts an exploratory stance that prioritises depth for a focused sample. Although the number of videos is limited, each was coded in two detailed passes using complementary techniques. Rather than a larger but shallowly coded set, this approach yields richer analytic material. The analysis goes beyond broad themes to examine

multiple dimensions for each video, including camera and editing, scene design, background music, subtitles, and spoken content. This provides extensive and fine-grained information for understanding the production of third age culture on Douyin.

4.6.3 Coding and Analysis

The coding and analysis in this study follow a multi-stage, progressively layered process that integrates bottom-up induction with top-down theoretical interpretation to decode video content systematically.

Because some creators restricted downloads, many videos could only be streamed on Douyin. The study was therefore unable to download all videos and upload them to CAQDAS for coding, and all coding was conducted manually in Word.

Step 1: Open coding

I conducted open coding on the transcripts of 45 video samples, using data-near descriptive labels to capture concrete experiential phenomena. Targets of coding included setting, audio, subtitles, editing techniques, and camera language. Examples generated at this stage include "multi-angle shooting", "residence with a garden", and "post-production dubbing". The aim was to produce a detailed, data-derived list of initial concepts.

Step 2: Axial coding

After generating a large number of open codes, I compared and related them systematically, organising the descriptive codes around a core phenomenon to form more general analytical categories. This established the properties and dimensions of categories. For example, aggregating "multi-angle shooting", "post-production dubbing", and "subtitle design" produced the analytical category "advanced video production skills".

Step 3: Selective coding

At the final and highest level, I identified the performance and reproduction of capital as the core category. All categories established during axial coding, such as "advanced video production", were then systematically linked to this core category for theoretical integration and interpretation. For instance, "advanced video production" is interpreted here as a concrete expression of digital capital and is positioned within the core storyline of capital advantage and performance. Through this step, disparate findings are integrated into a unified theoretical framework that directly addresses the study's core question (Sub-RQ4).

To illustrate this three-step pathway: description, induction, and theoretical

interpretation, Table 4.6 provides a concrete coding example that traces the route from

raw data to final theoretical concepts.

Table 4.6: Coding Process Example

Term	Content/Describing	Open Coding	Axial Coding	Selective Coding
Summary Codes	**Shooting Method:** A fixed camera position was used to film the person, with close-up shots of plants and arrangements in the courtyard.	Multi-angle shooting	Advanced video production skills	Digital Capital
	Character(s): The content creator: retired female. Dressed in casual yet appropriate clothing.	Well dressed Young old Female	Good taste Young Age Gender	Cultural Capital Age and Health
	Setting: The content creator's garden. It is large, filled with a variety of plants, and features carefully arranged displays.	Garden (City) High quality residence Well decorated 1 Well decorated 2	High-value living environment Good taste	Economic Capital Cultural Capital
	Subtitles: The video features real-time subtitles, with the subtitle colour adjusted from the default setting.	Subtitle editing	Advanced video production skills	Digital Capital
	Background Music: Soothing music, which is well-suited to the theme.	Appropriate music choice 1 Appropriate music choice 2	Advanced video production skills Good taste	Digital Capital Cultural Capital
	Video Title： *"After retirement, what matters most is not savings, but time—spending this golden period of life on what you love, making every minute worthwhile."*	Expression of values Satisfying with current life	Strong expressive ability optimism	Cultural Capital
	Dubbing: The content creator added a voice-over in post-production, with clear articulation in standard Mandarin.	Post-production dubbing Standard mandarin	Advanced video production skills Strong expressive ability	Digital Capital Cultural Capital

	Editing: The video features professional editing, with close-ups of the person, plants, and displays interspersed throughout the environmental footage.	Complex video editing	Advanced video production skills	Digital Capital
Detailed Content Coding	**[0:00-0:20]** *"My courtyard did not cost much … Hollow bricks costing two yuan each have been built into a flower wall, and small blue bricks costing thirty cents each have been made into flower beds and vegetable plots. In my courtyard, their purpose goes far beyond construction, they are my handmade creations. The flowers and plants I grow are not expensive; the costliest is only 40 yuan, but each one grows with great resilience."* By listing the prices of plants and displays in the courtyard, she shows that her lifestyle is not extravagant, yet she still enjoys a sense of comfort and contentment. However, the video presents her with a large courtyard—a luxury that is rarely affordable in Chinese cities—which she does not mention in her narration but is visible in the footage.	Lengthy and coherent narrative Doing housework Farming activity Down-to-earth Garden (City) personal narrative	High-value living environment Strong expressive ability Good health condition	Economic Capital Cultural Capital Age and Health
	……	……	……	

Note. This table shows only a part of this coding segment to illustrate the specific coding process.

In qualitative analysis, it is essential to acknowledge the researcher's role as an instrument of inquiry (Berger, 2015). The interpretations in this study are unavoidably shaped by my own standpoint. As a younger sociologist who has lived outside China for over a decade, I differ from the Chinese third age group under study in generation, life experience, and knowledge background. This outsider perspective may help me examine the data with distance and a critical eye. It may also limit the depth of my understanding of older people's concrete life contexts and emotional experiences.

To ensure rigour and reduce potential bias, I kept detailed records of the coding process throughout the analysis. The analysis extended over a long period, which enabled repeated review of my codes and interpretations. I also presented preliminary findings in regular supervisory meetings and actively sought alternative readings to challenge and test my own interpretations.

4.7 Triangulation and Integration of Methods

This chapter has set out three methods that appear independent yet are in fact closely connected. It is important to emphasise that the study is not a simple collection of three separate investigations. It is a designed and organic whole. The three methods speak to and corroborate one another at different analytical levels, macro, meso, and micro, and ultimately converge on a unified, multi-level explanatory aim. This design goes beyond triangulation understood only as result verification, and instead builds an integrated

explanatory framework that proceeds in stages.

The network map analysis in method 1 is the starting point of the study, and it answers the question "what". Using a broader design on large-scale hashtag data from Douyin, the study depicts at the macro level the mainstream cultural narratives about the third age. The findings show that what is jointly amplified by platform algorithms and user attention is a highly homogeneous and standardised image of successful ageing or active ageing. This indicates a key empirical phenomenon. In a space that appears diverse, imaginations of "ageing" are undergoing re-standardisation.

The meso-level questionnaire in method 2 turns to the user level and answers "how" and "who". This broader design shows that the macro cultural environment is not evenly distributed across user groups. It is differentiated along lines of capital, especially cultural capital represented by education. The statistical models show how capital shapes social media repertoires, and modes of participation, and how existing social inequality is reproduced in the digital sphere through mechanisms of capital conversion. For groups with less capital, information channels and participation patterns are more single-tracked, and they may be confined within an algorithm-dominant "algorithmic cave" that appears rich but is in fact closed.

Finally, to answer "why" such macro narratives and meso stratification take shape, the micro-level qualitative visual analysis in method 3 provides key explanatory evidence.

This intensive design applies abduction and retroduction to high-visibility video content and moves the lens to the production side. The analysis shows that the homogenisation of "active ageing" narratives at the macro level arises from two interacting mechanisms at the micro production level. The first is capital barriers, namely that the production of high-quality and high-traffic content requires economic, cultural, and digital capital, which excludes effective voice from low-capital groups. The second is "platform discipline", namely that algorithmic preferences and platform governance steer creators towards more positive and standardised directions to secure higher visibility.

Taken together, the three methods construct a complete explanatory chain from phenomena to mechanism and from macro to micro. Method 1 identifies amplified cultural patterns. Method 2 reveals stratification mechanisms acting on users. Method 3 probes the production mechanisms that shape these patterns and stratification. In combination, they not only corroborate one another's findings, they also fulfil a core task of critical realism. They move beyond surface appearances in the Empirical domain, explain the event chains in the actual domain, and identify the structures and generative mechanisms in the real domain. Through this integrated methodological design, the study offers a comprehensive mechanism-based explanation of the construction of third-age identities and the reproduction of inequality in the digital era.

In the following chapters (Chapter 5-8), the analysis results obtained using these methods are presented in turn, together with the discussion addressing sub-RQs 1-4.

4.8 Ethical Considerations

This study strictly follows academic research ethics. It received ethical approval from Durham University Sociology Department. Reference: *SOC-2023-06-08T00_52_47-vvxv46*. Date of ethical approval: *20 July 2023.*

The ethical stance of the study does not follow a fixed rule. It adopts a flexible, context based approach to make the decision (Franzke et al., 2019; Markham & Buchanan, 2012). This approach treats ethics as a considered, dialogic process. Researchers should make adaptive judgements within concrete research contexts rather than applying universal rules mechanically (Markham & Buchanan, 2012).

To build detailed ethical decisions, the study first clarifies its core principles. The principles are respect for human dignity, autonomy, and safety (Markham & Buchanan, 2012). Researcher should protect the older people who involved in this study from potential harm (Markham & Buchanan, 2012). Potential "harm" is defined contextually rather than in preset and unchanging terms. The study recognises that the meaning and risks of harm vary across platforms and modes of interaction (Markham & Buchanan, 2012). Another principle is minimising harm while maximising research value. This process requires a careful balance between the rights of participants, the potential social benefits of the research, and the researcher's right to conduct research (Markham &

Buchanan, 2012). Based on these principles, this section sets out the specific ethical considerations and responses in the three methods used.

4.8.1 Ethical Considerations for Method 1 Network Analysis

Method 1 scrapes and analyses public hashtag data on Douyin to depict a macro cultural picture of ageing culture. The main ethical issues concern the boundary between public and private on social media platforms and the traceability of personal data (Markham & Buchanan, 2012).

The data come from publicly accessible content on Douyin (Townsend & Wallace, 2016). However, technical publicity does not mean users consent to any research use of their content. The boundary between public and private in digital spaces are blurred, dynamic, and contested (Eynon et al., 2017). Users may still hold strong privacy expectations when interacting in a space defined as public by technology (Markham & Buchanan, 2012). Researchers therefore remain responsible for considering whether their actions align with users' expectations of contextual integrity, namely whether information flows within its expected context (Markham & Buchanan, 2012).

The study adopts the following approaches:

First is data minimisation. The core unit of analysis is the "hashtag" and its co-

occurrence network rather than full posts, comments, or interaction threads. This follows the principle of data minimisation at source. Although post content and related data were collected to aid interpretation of hashtags during analysis, they are not used for presentation and are not retained long term. Only hashtag data strictly relevant to answering the research questions are presented in the article (Franzke et al., 2019).

Second is anonymisation. As set out in Section 4.4.3, all personally identifiable information, such as user IDs was removed. The analysis focuses on macro, aggregated topic patterns rather than individual behavioural traces. This makes re-identification of specific individuals extremely difficult and minimises potential risks. Nothing presented in the findings can be traced back to specific persons. This protects users from harm arising from the presentation of results.

Finally is about data security and storage. The raw dataset is securely stored as part of the research process and will not be shared publicly. This prevents third-party misuse or secondary analysis and provides maximum privacy protection for data providers (Samuel & Buchanan, 2020). In accordance with Durham University's ethical guidance, data are stored in password-protected university's cloud storage and are accessible only to me.

4.8.2 Ethical Considerations for Method 2 Online Survey

Method 2 collects data through an online questionnaire distributed directly to older users or via their younger families. Ethical considerations centre on the protection of human subjects, particularly informed consent, participant vulnerability, and data confidentiality.

Before the questionnaire begins, participants see a detailed information sheet and informed consent. This is the foundation of ethical practice in this method. As set out in Section 4.5.4, all participants view a clear notice before starting the survey. It explains the research purpose, data use, guarantees of anonymity, voluntariness of participation, and the unconditional right to withdraw at any time (Eynon et al., 2017). Responses are included in the study only after participants explicitly indicate consent.

Given that the study involves older people, protection of a potentially vulnerable group requires special consideration. The study recognises that older participants may be relatively disadvantaged in digital settings and therefore deserve particular ethical attention (Markham & Buchanan, 2012). The questionnaire is designed with simple, objective, and easy-to-understand language and avoids specialist terms that might cause confusion or discomfort. Family members or other helpers are allowed to assist older participants in completing the survey. This widens coverage and reduces frustration arising from cognitive or operational difficulties (Eynon et al., 2017).

Confidentiality and anonymity are strictly protected. The study does not collect directly

identifiable information such as names or contact details. Analysis uses fully anonymised, aggregated data, ensuring that personal privacy is not disclosed (Eynon et al., 2017).

Storage of survey data also follows the same standards as method 1. Data are stored securely in password-protected university's cloud storage.

4.8.3 Ethical Considerations for Method 3 Visual Analysis

Method 3 conducts qualitative analysis of publicly available short videos. It raises similar issues concerning public and private boundaries and links between data and persons. As a micro-level qualitative method that cites cases in the thesis, its ethical issues are more complex.

The first requirement is careful interpretation of publicly posted content. Creators publish their videos on Douyin, making them publicly visible. This does not equal consent for any form of academic scrutiny (Markham & Buchanan, 2012). Research use constitutes recontextualisation and may exceed the creator's original expectations (Eynon et al., 2017). Researchers should therefore maintain respect for creators and their works throughout the analysis.

Respect for creators as persons is essential. Unlike hashtag data, short videos are

concentrated expressions of a creator's identity, emotions, and life. Treating them merely as "texts" or "data" carries a risk of objectifying creators (Markham & Buchanan, 2012). In this study, creators are regarded as agents. The analysis seeks to understand the logic of cultural production rather than to judge personal lives.

Strict anonymisation and presentation strategies are necessary and present a major ethical challenge. As set out in Section 4.6.3, all creator accounts, nicknames, and any identifiable personal information appearing in videos are anonymised in analysis and writing (Eynon et al., 2017). Findings are presented through thick description and paraphrase of spoken or written content. When screenshots are used in the thesis, I use Gemini AI tool as image edit tool to convert the screenshots into sketch. Although this sacrifices some information, such as colour, it is a necessary measure to ensure that content creators cannot be traced. All cases presented are translated from Chinese into English. Translation also increases the difficulty of tracing content back to participants and thus supports anonymisation.

4.8.4 Summary of The Researcher's Ethical Responsibility

In sum, ethical practice in this study is dynamic and continuous. From macro depictions of networked culture, to meso-level surveys of user groups, to micro analyses of content production, each stage assesses potential ethical risks and adopts appropriate safeguards.

The study recognises that ethical consideration has no endpoint (Franzke et al., 2019). Ethical responsibility ultimately rests with the researcher (Eynon et al., 2017). External guidelines and review boards provide oversight. The researcher must still make responsible, context-aware judgements at each decision point with a view to participant welfare. This study commits to sustained ethical reflexivity so that, while contributing to academic knowledge, the research process remains fair, transparent, and considerate.

Chapter 5: Algorithmic Culture and the Re-Standardisation of the Life Course

5.1 Introduction:

This chapter presents the first empirical study of the thesis, aimed at exploring foundational issues related to the macro cultural landscape of ageing on public social media. As discussed in the literature review, this chapter will use an innovative research method to address the first sub-RQ1: How do algorithms on social media reshape third age identities and cultures?

To answer this question, this chapter focuses on Douyin (the Chinese version of TikTok) as a key case, due to its market dominance and the rapid growth of its older user base. As outlined in the methodology section (Chapter 4), this study adopts an innovative quali-quantitative approach, combining hashtag co-occurrence network analysis with thematic analysis to map the dominant discourses of the third age. The core analysis strategy is based on a dataset of 4,194 posts, using two types of network maps for comparison:

Map1(what people post most: based on frequency): This map presents the topics most frequently discussed by older users, establishing the baseline for user-generated discourse.

Map2 (what became popular: based on the sum of likes, comments, and shares): This map reveals which topics are systematically amplified and gain high visibility through the collaborative influence of platform algorithms and user engagement.

By comparing these two maps, this chapter provides an empirical visualisation of the algorithmic curation process. This comparison allows us to identify which representations of later life are prioritised and promoted, offering clear evidence of how a standardised discourse on ageing is constructed and reinforced within China's digital public sphere.

The structure of this chapter is as follows: first, the frequency-based network map1 is presented, establishing the baseline of user-generated themes; second, the engagement-based network map2 is analysed to identify topics that have received significant attention; finally, a comparative discussion is conducted, explaining the structural differences between the two maps. The findings are interpreted within the theoretical framework of the thesis, addressing how the cultural construction of ageing and the re-standardisation of the life course are shaped in an algorithmic society.

5.2 Results:

In map1 (see Figure 5.1), node size is determined by the frequency with which hashtags

appear, representing the topics users post about most frequently and thereby illustrating the prevailing public perceptions and values surrounding older adults. In Map 2 (see Figure 5.2), node size is weighted by cumulative likes, comments, and shares, capturing the ageing themes that gain popularity on Douyin, shaped by the platform, algorithms, senior influencers, and everyday users. Map 1 reveals ten themes associated with older adults, while nine themes emerge in Map 2:
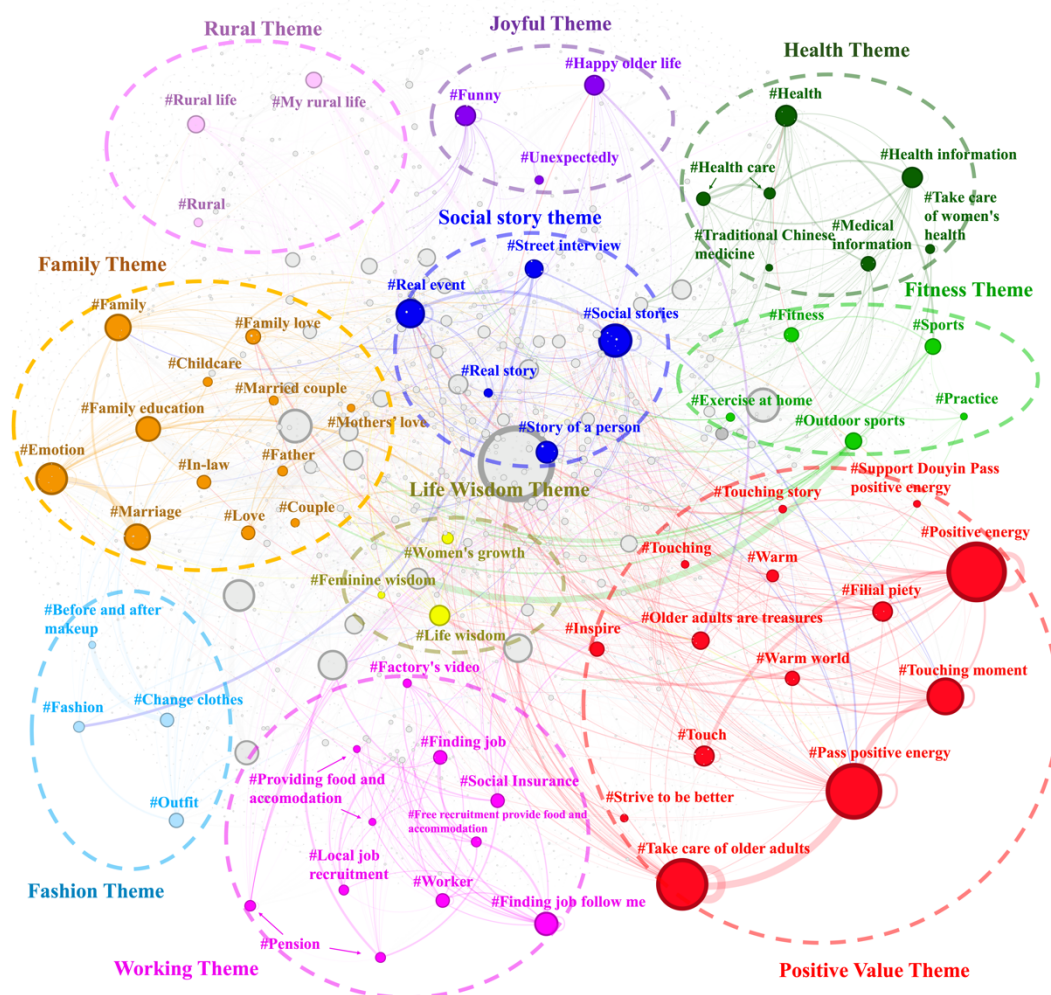
Figure 5.1: Map1: What people post most

Map2: What became popular
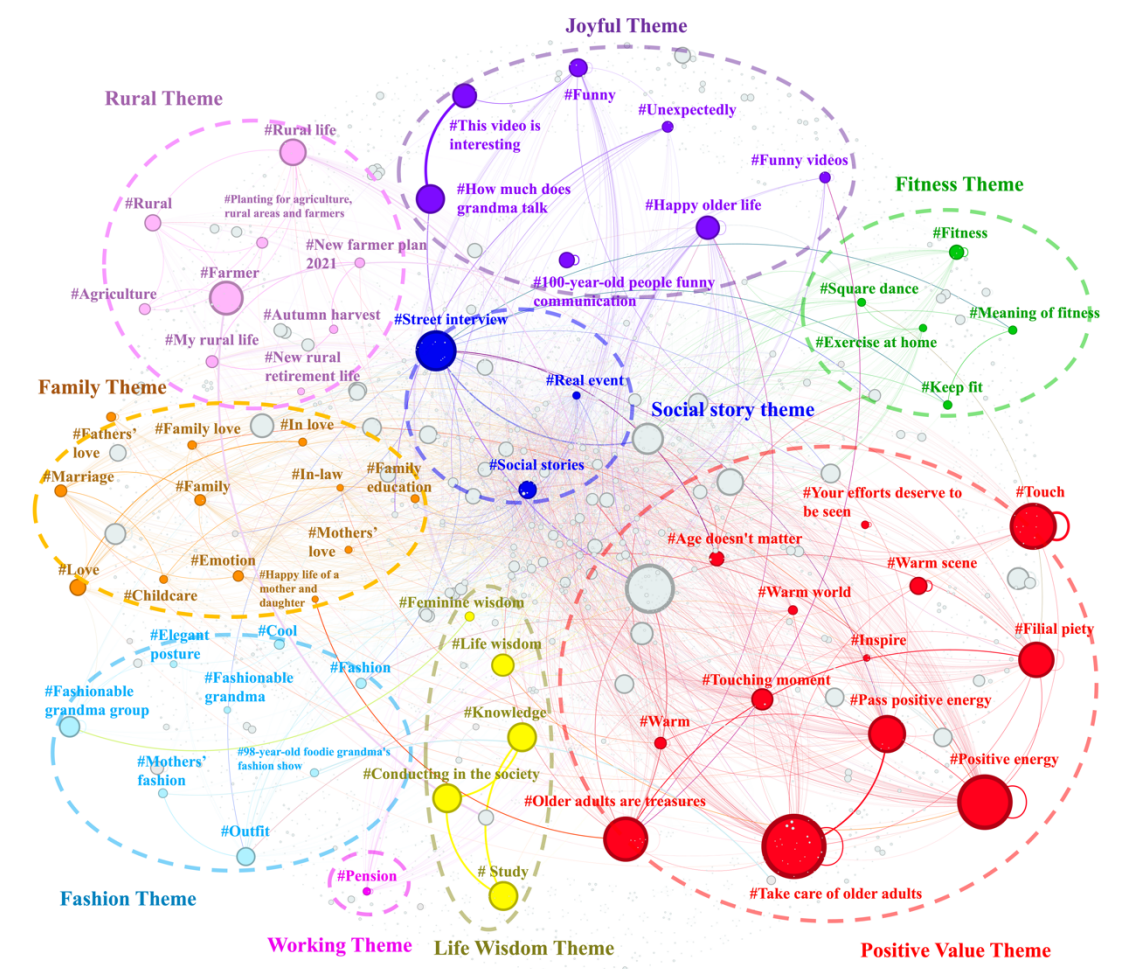
Figure 5.2: Map2: What became popular

Table 5.1 presents the ten themes identified in both maps, along with descriptions of each theme.

Table 5.1: Ten Themes Generated in Maps

Theme	Description
Positive Value Theme	This theme includes nodes representing traditional and contemporary Chinese values, such as *#Filial piety*, which represents traditional values, and positive energy, which represents current social values.
Family Theme	This theme includes nodes related to family relations, such as *#Marriage* and *#In-law*, nodes related to family affairs, such as *#Family education*, and nodes related to family love, such as *#Emotion*.
Working Theme	This theme contains nodes related to the theme of older people looking for jobs.
Social Story Theme	This theme contains nodes about social stories such *#Street interview*.
Health Theme	This theme contains nodes related to medical information and healthcare, e.g., *#Health information* and *#Medical information*.
Fitness Theme	This theme contains nodes related to fitness, e.g., *#Fitness* and *#Sports*.
Joyful Theme	This theme contains nodes related to funny videos, which include not only hashtags like *#Funny*, which is widely used for many kinds of funny videos, but also hashtags used by specific senior influencers like *#How much does grandma talk* and *#100-year-old people funny communication*.
Fashion Theme	This theme contains nodes about fashionable lifestyles, including not only hashtags such as *#Fashion* and *#Outfit*, which are widely used in many kinds of fashion-theme videos, but also hashtags such as *#Fashionable grandma group* which are used by specific senior influencers.
Rural Theme	This theme contains nodes about rural lifestyles.
Life Wisdom Theme	This theme contains nodes about study life wisdom, such as *#Life wisdom* and *#Conducting in the society*.

Table 5.2 provides a detailed breakdown of the ten themes in Map 1, where the total node weight for each theme was calculated and used to rank the themes by weight. Additionally, the proportion of each theme within Map 1 was calculated to enable comparison with corresponding data in Map 2, as shown in Table 5.3.

Table 5.2: Themes' ranking in Map1

Ranking	Themes	Total Weight in Map1	Proportion in Map1
1	Positive Value Theme	453	29.84%
2	Family Theme	271	17.85%
3	Working Theme	178	11.73%
4	Social Story Theme	151	9.95%
5	Health Theme	135	8.89%
6	Fitness Theme	87	5.73%
7	Joyful Theme	67	4.41%
8	Fashion Theme	64	4.22%
9	Rural Theme	58	3.82%
10	Life Wisdom Theme	54	3.56%

Table 5.3, structured similarly to Table 5.2, calculates the total weight of each theme using node weight data from Map 2 and ranks the nine themes identified in Map 2 by their thematic weight. The "Proportion in Map2" column, displays each theme's proportion within Map 2 and includes symbols to indicate comparative proportions with map 1. A "(+)" symbol signifies a theme's higher proportion in Map 2 than in Map 1, while a "(-)" symbol indicates a lower proportion. Additionally, Table 5.3 includes a "Weight of Map2 / Map1" column, representing the ratio of Map 2 weight to Map 1 weight for each theme, thus reflecting the average attention each hashtag within a theme received.

Table 5.3: Themes' ranking in Map2

Ranking	Themes	Total Weight in Map2	Proportion in Map2	Weight of Map2 / Map1
1	Positive Value Theme	76311580	34.94% (+)	168458
2	Rural Theme	27884539	12.65% (+)	480768
3	Joyful Theme	26980387	12.35% (+)	402692
4	Life Wisdom Theme	24408537	11.17% (+)	452010
5	Family Theme	22421310	10.26% (-)	82735
6	Fashion Theme	18117955	8.29% (+)	283093
7	Social Story Theme	13421536	6.14% (-)	88884
8	Fitness Theme	9376053	4.29% (-)	107771
9	Working Theme	1486660	0.68% (-)	8352

Figure 5.3 displays a bar chart that compares the proportion of each theme in Map 1 and Map 2, with colours distinguishing the two maps and percentage labels shown above each bar. This bar chart clearly shows the proportional influence of each theme across the two maps.
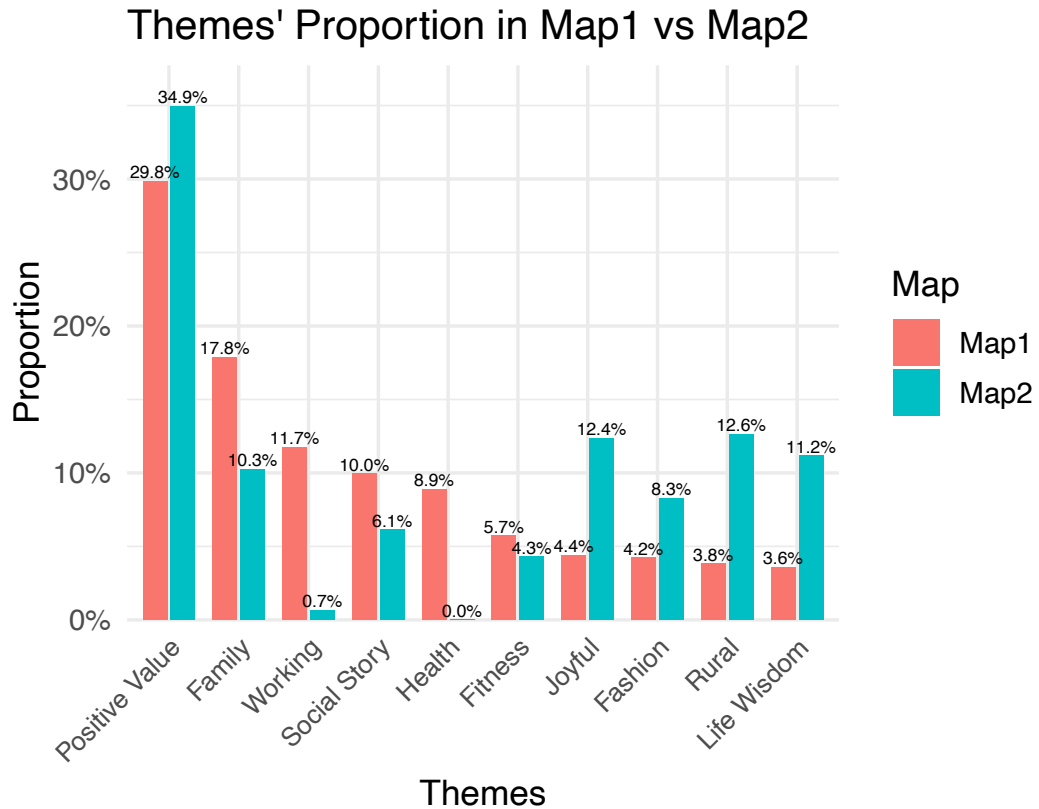
Figure 5.3: Themes' Proportion in Map 1 vs Map 2

A comparison of the two maps, firstly, reveals significant differences in theme proportions. Compared to Map 1, five themes in Map 2 show increased weight (positive value theme, rural theme, joyful theme, life wisdom theme, and fashion theme), while four themes show decreased weight (family theme, social story theme, fitness theme, and working theme), and one theme (health theme) is absent in Map 2. Notable differences in theme rankings between the two maps suggest that themes with increased weight in Map 2 have attracted more Douyin traffic and user attention relative to their frequency of mentions, as indicated by the Figure 5.3.

Secondly, two notable types of nodes appear exclusively in Map 2. The first includes

specific hashtags associated with senior influencers within the joyful theme and fashion theme (*#How much does grandma talk*, *#100-year-old people funny communication*, *#Fashionable grandma group*, and *#98-year-old foodie grandma's fashion show*). The second is the official Douyin hashtag for a traffic support initiative, *#New farmer plan 2021*, located within the rural theme.

Thirdly, while this study primarily examines nodes and changes in node weights, the edges also reveal insightful patterns. The positive value theme forms the most interconnected network, linking to nearly all themes except the working theme in both maps, unlike other themes, which are connected to only a few (see Figure 5.4).

* Positive Value Theme's networks with other themes in Map1   * Positive Value Theme's networks with other themes in Map2
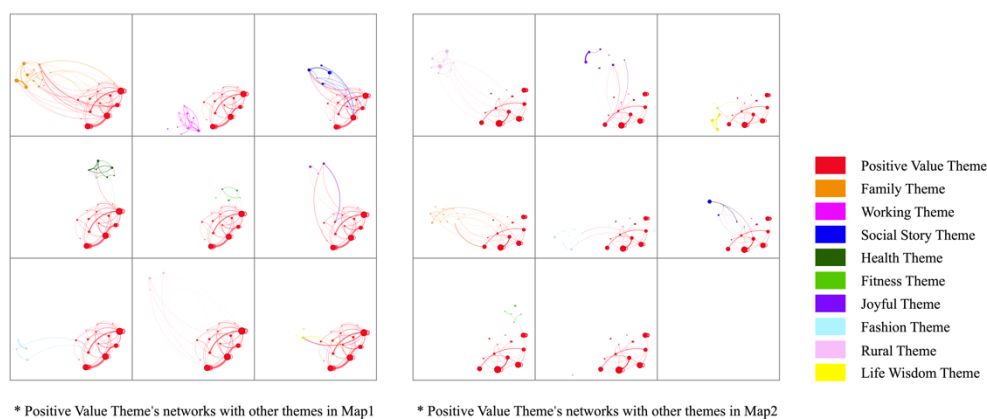
Figure 5.4: Positive Value Theme's networks with other themes in Map 1 and Map 2

5.3 Discussion

By comparing the two network maps, this section describes and analyses in detail the

powerful role of the Douyin platform and its algorithm in shaping ageing culture and the image of the third age. Based on this, the discussion will proceed in three interconnected parts, deeply analysing the content and mechanisms of this cultural shaping, as well as its profound impact on the third age group.

First, this section describes and explains the core content of this emerging culture of ageing, revealing that it is not a naturally occurring, diverse expression, but a cultural narrative of the ideal third age, meticulously constructed by the algorithm. This section analyses how this narrative operates by amplifying a positive, fashionable, and vibrant successful ageing narrative, while structurally silencing the real difficulties of ageing.

Second, this section dissects the production mechanism behind this narrative, and argues that the algorithm is not merely a content distributor, but also a cultural curator (Hogan, 2010). Through the interplay of platform governance, commercial logic, and creator practices, a complex socio-technical system efficiently produces the visibility of specific themes and content, and in doing so, shapes the dominant discourse of the third age.

Finally, this section analyses the profound social consequences of this process and argues that this algorithm-driven cultural narrative influences the identity and self-negotiation processes of older users, ultimately leading to a new, platform-logic-driven re-standardisation of the life course, which may exacerbate new age-related inequalities.

5.3.1 Constructing the Idealised Algorithmic Third Age

The data analysis reveals that the ageing culture on Douyin is characterised by successful ageing, self-focus and expression, and an optimistic future expectation. This systematic selection and amplification of content is more than just a reflection of user preference; it is an active process that constructs a cultural narrative about an idealised old age. Analysing this narrative's content, boundaries, and contradictions is crucial for understanding how algorithms reshape the discourse on ageing. This culture-constructing dynamic can be precisely captured by comparing the changes from Map 1 to Map 2. In the data, the weights of the positive value, rural, joyful, life wisdom, and fashion themes increase significantly in Map 2, while the related family and social story themes receive limited attention, and the health and working themes nearly disappear.

First, nodes in the positive value theme, such as *#Older adults are treasures*, *#Take care of older adults*, and *#Filial piety*, reflect traditional Chinese values that encourage young people to care for and support older adults. These nodes received much attention in Map 2. In contrast, nodes about family relationships and affairs, and older people's social roles are significantly downplayed in Map 2. The family and social story themes centre on the family and social identities of older adults. The family theme includes numerous aspects of family life, such as relationships like *#Marriage* and *#In-law*, and events like *#Childcare* and *#Family education*. Similarly downplayed is the social story

theme, which includes hashtags such as *#Street interview*, *#Real event*, and *#Social stories*, with content that mostly involves stories about the relationship between ageing and society. This points to a key cultural contradiction. While the algorithm amplifies symbols of traditional values like the *#Filial piety* tag, it simultaneously filters out depictions of the complex family practices that underpin them. This is a form of commodification, as described in the theory of the platform society (van Dijck et al., 2018). At a deeper level, this is the core operating logic of surveillance capitalism (Zuboff, 2023). A liked *#Filial piety* hashtag, rather than a realistic video full of family conflict, becomes a clearer and more positive signal for user profiling and affective prediction. Platform algorithms amplify these simplified emotional symbols because they are an efficient strategy of data extraction that serves the ultimate aims of behavioural prediction and commercial monetisation. The platform strips a cultural symbol with strong positive emotional value, such as filial piety, from its complex and even heavy practical core, transforming it into an emotional symbol that is easy to consume, like, and share. Thus, compared to themes related to social and familial identity, the ageing culture on Douyin promotes a greater focus on individual self-expression and personal development. This reflects a key feature of Douyin in shaping ageing culture: on one hand, it encourages society and younger generations to respect and care for older adults in line with traditional social norms at a symbolic level; on the other hand, it simultaneously promotes a narrative that encourages older individuals to downplay their social and family roles, prioritising self-focus over traditional intergenerational connections. This narrative presents a clear cleavage; of the two sides

of an issue, only the positive, beneficial side is amplified and promoted, while the sacrifices and frictions behind this positivity are rendered invisible through platform and algorithmic filtering.

In addition, the increased weighting of the life wisdom and fashion themes also highlights the characteristics of self-focus and self-expression. Combined with the rural and joyful themes, this creates the characteristics of successful ageing (Calasanti, 2016). These themes collectively depict an image of the ideal third age, the content of which is specific and vivid, perfectly echoing the theory of Gilleard and Higgs (2016) regarding the third age, with its core of agency, consumerism, and lifestyle. The life wisdom and fashion themes emphasise self-care and self-improvement in both mindset and appearance. This includes hashtags such as *#Life wisdom* and *#Feminine wisdom*, highlighting self-reflection on life and gender roles. Hashtags like *#Study* and *#Knowledge* emphasise personal growth. Although this theme also includes the *#Conducting in the society* hashtag, which mainly connects with *#Study* and *#Knowledge* to suggest ways of navigating social relationships, its focus is ultimately on self-improvement and understanding of life. The Fashion theme contains fashion-related hashtags, such as *#Cool*, *#Outfit*, and *#Elegant posture*. It also includes hashtags that link fashion with age and family roles, such as *#Fashionable grandma group*, *#98-year-old foodie grandma's fashion show*, *#Fashionable grandma*, and *#Mothers' fashion*. The content under these hashtags is not merely a record of daily life, but a curated self-presentation that aligns with what Hogan (2010) termed exhibition. For

example, in videos under *#Fashionable grandma group*, older models in fine clothing display professionalism and confidence under the spotlight, a consumerist practice that transforms the ageing body into an aesthetic object. These hashtags reinforce the idea that older people can pursue fashion and focus on themselves, irrespective of age or traditional social roles. In a similar vein, posts in the Rural theme present an idealised vision of a joyful and peaceful retirement. The joyful and fashion themes, which focus on stylish outfits and humorous content, break stereotypes of older people as unfashionable or unhappy (Bai, 2014).

In contrast to this positive portrayal of successful ageing, nodes representing negative aspects of ageing have significantly declined or even disappeared in Map 2. This process reveals how Douyin downplays the natural process of ageing and its associated challenges. The near absence of the health and working themes, which reflect such challenges, is not a passive omission but an active, structural cultural silencing. The health theme includes medical information that reveals age-related health problems and promotes self-care, while the Working theme covers job recruitment and pension issues. Nodes like *#Providing food and accommodation* and *#Free recruitment* suggest that retirees in these roles may face financial difficulties. This content depicts a reality starkly different from the glamorous consumer and leisure lifestyle of the third age: one of physical frailty, disease management, and working in retirement out of necessity rather than self-fulfilment. These authentic but unaesthetic experiences of ageing are precisely the content that does not conform to the ideal image promoted by the

algorithm. As a digital curator, the algorithm's selections are driven by mainstream cultural preferences and commercial value. This aligns with Gillespie's (2024) argument that technical systems, by default, generate normative content. Here, the positive narrative of the third age is the cultural norm, while the ageing-related difficulties that might trigger negative emotions, lack commercial promotion value, or even pose regulatory risks to the platform, are systematically filtered out. These discussions become invisible in the shaping of Douyin's ageing culture.

In summary, the analysis in this section reveals that the ageing narrative on Douyin is far from a neutral, democratic, or pluralistic collection of content, but rather a cultural narrative that is meticulously curated and constructed, and which contains internal contradictions. This narrative follows a dual logic: on one hand, it actively produces and promotes an idealised image of the third age and its corresponding values by amplifying fashion, joy, wisdom, and idealised urban and rural lifestyles. This encourages older people to engage in an exhibition of identity centred on consumption and self-improvement. On the other hand, this glamorous exhibition comes at the cost of the structural silencing of real-life difficulties. Those authentic ageing experiences related to illness, financial pressure, and dependency, even when created and discussed by many users in Map 1, are systematically silenced and rendered invisible after being filtered by the platform and its algorithm. Ultimately, even the traditional values that are incorporated into the narrative, such as filial piety, have their rich practical substance simplified by the logic of commodification, becoming easily circulated

emotional symbols.

The emergence of this highly filtered, internally coherent, and contradictory cultural narrative raises a series of deeper questions: it is not formed naturally, but is the result of being precisely shaped by a powerful force. How, then, is this narrative produced, disseminated, and maintained so efficiently? What kind of power mechanism is operating behind the scenes, guiding massive numbers of older users, whether content creators or ordinary viewers, to unconsciously participate in this collective exhibition of the third age and internalise its norms? To answer these questions, we must shift our analytical focus from the content of the cultural narrative to the production mechanism behind it. To understand how this culture is shaped, the next section analyses the interplay between the algorithm, platform policies, and influencers, using theories of power and governance to explain the underlying dynamics.

5.3.2 The Production of Visibility

The core finding of this chapter, derived from describing and interpreting the algorithmically filtered content shift from Map 1 to Map 2, is that Douyin is not merely a neutral content distribution channel, but a powerful cultural producer. To understand how the ideal third age cultural narrative described in the previous section is formed, we must analyse the production mechanism behind it. By analysing the nodes that gained greater attention in Map 2, Douyin's platform policies, and the creative

principles of senior influencers, it can be analysed that the algorithm and the platform played a driving role in this process. Although the algorithmic mechanisms are not fully visible and involve complex interactions, the cultural dynamics can still be analysed that contribute to this shaping process (Deville & van der Velden, 2016). More specifically, this mechanism can be understood as a complex system of algorithmic curation and platform governance that collectively determines content visibility.

First, the singular value system presented in the data reflects how platform governance sets the clear value orientations and commercial logics for algorithmic curation, which determines the boundaries of visibility at a macro level. The prominence of the positive value theme, the growth of the rural theme's weight, and the absence of the Health theme in Map 2 all illustrate the profound impact of Douyin's platform policies and algorithms on cultural content. The positive value theme aligns with the expectations of Chinese society and the government regarding Douyin's role in fostering a positive online environment. In Douyin's early stages, feedback from both Chinese society and the government expressed concerns about the platform's algorithm encouraging excessive use among young people (Zhang, 2021). As a result, Douyin shifted towards promoting a more positive and regulated environment for its users (Zhang, 2021), and the dominance of the positive value theme reflects the strong orientation of platform policies and algorithms towards certain content values. This orientation is not baseless; it is reflected in the preferential traffic given to content that aligns with mainstream society and the values the platform wants to advocate. For instance, heartwarming

content like *#Older adults are treasures* is clearly favoured by the algorithm over work-related themes that might reveal economic difficulties in old age. The hashtag included in the rural theme, *#New farmer plan 2021*, also reflects this. The "new farmer plan" is a long-term initiative by Douyin to provide online traffic to promote beautiful rural life and agricultural knowledge, and to assist the government in supporting the rural economy (Zhong, 2025). The appearance of this hashtag in the rural theme shows that one reason for the theme's significant increase in weight in Map 2 is the participation of the platform and its algorithms. This represents a win-win-win situation for the platform, the government, and the creators: the government's rural revitalisation policies are promoted; the platform gains political legitimacy by undertaking social responsibility and develops e-commerce potential in new markets; and participating creators receive valuable official traffic support. Moreover, Figure 5.4 shows that the positive value theme is connected to all themes except the working theme, which also shows the strong influence of the platform's value orientation on its culture shaping.

In contrast, the health theme, which mainly includes medical information, is tightly regulated on Douyin. According to Xinhua News Agency (Zhou, 2022), to control the spread of false medical information, Douyin has implemented strict rules to review and restrict medical content. This regulatory approach may partly explain the limited visibility of health-related content. A stark contrast is formed here: on one hand, there is a huge potential demand from middle-aged and older users for health information (such as chronic disease management and wellness knowledge); on the other hand, the

platform imposes strict restrictions out of consideration for liability mitigation. Complex medical advice, controversial treatment options, or even serious discussions about ageing could be judged as high risk content by the platform's review mechanisms and thus be intercepted at the source of algorithmic recommendation. These specific operational decisions perfectly corroborate the arguments of Gillespie (2017) and Nieborg and Poell (2018), that platforms adjust their governance strategies to meet their own developmental needs, such as commercial interests, avoiding political risks, and maintaining brand image, and implement these strategies through algorithms embedded with platform values. In this process, the platform acts as a digital curator as described by Hogan (2010); it does not passively reflect reality but actively filters and constructs an exhibition that fits its governance objectives. The real-life difficulties associated with the health and working themes are high-risk, low-reward content for the platform and are therefore systematically marginalised in the curatorial process. This process profoundly influences the public discourse of the third age.

Second, within the macro framework set by the platform, a dynamic and symbiotic relationship is formed at the micro level between senior influencers and the algorithm, jointly driving the production and popularity of specific content. The influence of senior influencers and algorithms on Douyin's ageing culture is evident in the joyful and fashion themes. Notably, hashtags such as *#Fashionable grandma group*, *#98-year-old foodie grandma's fashion show*, *#How much does grandma talk*, and *#100-year-old people funny communication*, which are specific to senior influencers, appear only in

Map 2. Their absence in Map 1 suggests these topics are less frequently mentioned overall but attract significant attention in Map 2, indicating strong audience engagement on Douyin. The topics they explore show a tendency to be concentrated, focusing only on fashion and joyful daily lives. This data pattern clearly demonstrates the operation of an algorithm-creator feedback loop. This process can be illustrated through a specific example: the videos under *#Fashionable grandma group* are often professionally planned works with high-quality lighting, makeup, and post-production, and their production standards far exceed the daily records of ordinary users. The content of these videos is highly focused on visual aesthetics and positive emotions, avoiding topics that might not be favoured by mainstream values. Studies indicate that most content creators are aware of the algorithm's preferences and often tailor their content to increase visibility and traffic (Klug et al., 2021; Born et al., 2021; Liang, 2022). Although they may not fully understand the algorithm, creators attempt to cater to it by using assumed strategies to reach a broader audience (Klug et al., 2021). Here, the concept of the algorithmic imaginary proposed by Bucher (2016) provides us with a key explanatory tool. However, this imagination is not unfounded speculation. It is a survival strategy within the "invisible cage" described by Rahman (2021). Because evaluation standards are opaque, older creators cannot know the algorithm's preferences with certainty. They therefore treat each post as a test of the algorithm. When a video unexpectedly attracts high traffic, the positive feedback becomes a rare clue inside the cage, directing them to invest more resources in the content strategy that appears to work. The feedback loop between older influencers and the algorithm is, in essence, a process in which the

disciplined party (creators) continually experiments to accommodate the disciplinarian (the algorithm) under conditions of extreme informational asymmetry. This inevitably leads to convergence in content. An older creator might initially post about her daily life casually, but one day, a video of her dancing in a qipao receives far more likes and comments than usual. This positive feedback from the algorithm shapes her algorithmic imaginary. She begins to believe "the algorithm likes to see me dressed up nicely." Consequently, she starts to invest more time, energy, and money into producing this type of content, even imitating the style of the *#Fashionable grandma group*, eventually becoming an active participant and reproducer of this cultural narrative. Since policy and governance affect the visibility of content (Gorwa, 2019), this can lead to biased content selection by algorithms, and content creators will also cater to the platform and its algorithms to create content that the platform favours, which will lead to the homogenisation of content (van Dijck et al., 2018; Born et al., 2021).

Therefore, a visibility production mechanism becomes apparent. The expectations of society and the government, platform governance, and the active catering of influencers work together with the algorithm to influence the direction of the platform's culture shaping. The positive ageing culture of Douyin has thus taken on an overly positive character. When this ageing culture is present in the daily lives of older users, it will have an impact on them through a process of self and identity negotiation. Ultimately, the convergence of the platform's macro-level governance needs (pursuing commercial interests, avoiding political risks) and the creators' micro-level survival needs (pursuing

traffic and recognition), mediated by the powerful algorithm, jointly produces the highly filtered and internally coherent ideal third age cultural narrative described in section 5.3.1.

In summary, the analysis in this section reveals that the formation of the ideal third age cultural narrative is not the result of a single factor but the product of a complex socio-technical synthesis. Within this synthesis, a two-way flow of power is evident: on one hand, the platform's top-down macro-governance based on its political-economic logic (risk aversion, pursuit of commercial interests, and responding to state initiatives); on the other hand, the creators' bottom-up micro-practices based on their algorithmic imaginary and their pursuit of traffic and recognition. The algorithm acts as the critical link, translating the platform's macro-level governance intentions into micro-level environmental signals (rewards and punishments of traffic) that creators can perceive and adapt to, thereby driving a powerful feedback loop. It is this loop that ensures the continuous production and amplification of positive, commercially friendly content that conforms to platform norms, ultimately shaping the highly homogenised cultural landscape we see in Map 2.

However, revealing this efficient mechanism for producing visibility is not the end point of our analysis. A more important question remains: what are the social consequences of this mechanism? When this highly filtered and beautified third age narrative, meticulously performed by influencers, penetrates the daily lives of hundreds of

millions of users via short-video platforms and becomes a mainstream discourse, how will it reshape people's imagination and expectations of later life? Does it, as some research hopes, break old stereotypes and bring about genuine diversity, or does it invisibly establish a new, more exclusive standard, thereby exacerbating potential age-related inequalities? And finally, how will this online cultural narrative act upon the identity construction and life course trajectories of older people in the real world? The next section will delve into these core questions, examining the profound interplay of standardisation, diversity, and social inequality behind this algorithm-driven cultural transformation.

5.3.3 Identity Negotiation and the Re-standardisation of the Life Course

Douyin presents a novel ageing culture distinct from traditional representations. It is shaped and reinforced through algorithmic recommendations. However, this does not imply diversity. On the surface, from groups of active seniors at the gym, to fashionable grandmas travelling the world, to intellectual "sisters" sharing life wisdom, the image of older people seems to show unprecedented diversity. This aligns with the expectation in some research that senior influencers can challenge stereotypes, as it does portray older adults as healthy and fashionable (Miranda et al., 2022; Antunes et al., 2022; Farinosi & Fortunati, 2020; Farinosi, 2023). However, by comparing Map 1 (a more diverse content ecosystem spontaneously created by users) and Map 2 (highly

concentrated popular content after algorithmic filtering), this study reveals that this diversity is more of an appearance than a reality. The illusion of diversity exists only because the currently popular ageing culture on Douyin is different from the traditional, negative narrative focused on decline, instead presenting a previously uncommon positive image of old age. But being different does not mean being diverse. The comparison of the two maps shows that Map 2 exhibits less diversity than Map 1, with dominant themes capturing most of the audience's attention. This change in the portrayal of old age demonstrates standardisation, not diversification. This new process of standardisation is the manifestation of "ordinalisation" in the domain of ageing (Fourcade & Healy, 2024). Algorithms do not merely advance a cultural proposition. They construct a dynamic, stratified ranking system. In this system, performances of successful ageing are given greater weight, rise to the top of the rankings, and receive disproportionate visibility. Narratives that display frailty, poverty, and dependence are placed at the bottom. This re-standardisation is therefore not only a cultural influence but also the structural creation of classification situations (Fourcade & Healy, 2024). When older users negotiate identity, they are in effect responding to their position within this ordinal system. To gain recognition, they are incentivised to perform behaviours that will improve their ranking. An idealised template distilled from the lifestyles of a small, high-capital group is ultimately established, through the power of algorithmic ranking, as a new standard that all third age individuals are expected to pursue. It shapes life planning and self-identification across the group. This is the algorithmic reshaping of the meaning of the third age. Therefore, the new standard is

not aimed at promoting diverse portrayals of ageing, but at promoting a positive, healthy, and fashionable image. As highlighted in previous studies on successful ageing, this may exacerbate age-related inequalities (Calasanti, 2016).

Douyin's ageing culture, rather than addressing the root causes of ageism, does the opposite: it reinforces the notion of ageing as a failure, marginalising older individuals who are unable to maintain health and attractiveness (Köttl et al., 2022; Stephani, 2022; Calasanti, 2016). This may lead to a crisis of identity or low self-esteem in such older people. The successful ageing framework individualises the ageing process, overlooking the inevitability of biological ageing and the structural inequalities associated with old age in society (Calasanti, 2016).

This inequality and identity crisis are rooted in the micro-process of identity negotiation that older users undertake in the digital space. This can be understood through Barrett's (2022) "sociology-of-age framework", particularly the "age as identity" dimension, which is useful for examining age inequality in online society. In digital spaces, individuals continuously construct their self and identity through social media (Robinson, 2007). For older users, engaging with social media culture similarly involves an ongoing negotiation and reconstruction of their ageing identity. This process unfolds as follows: when an older user enters Douyin, they are not faced with a blank slate, but with an environment already dominated by the ideal third age cultural narrative. Their identity construction is, from the outset, a dialogue and a struggle with

this powerful narrative. They must constantly choose whether to cater to it, resist it, or partially adopt it. Due to the positive and standardised image of older people presented in Douyin's ageing culture, users will increasingly be inclined to present themselves as healthy and fashionable, while avoiding the natural phenomena that arise from ageing. However, this deliberate avoidance of old age in self-presentation is itself a form of ageism. In this process, older users become active self-shapers, but also performers under specific constraints. They learn to exhibit their lives, as described by Hogan (2010): carefully selecting moments that fit the narrative, such as a pleasant trip, a newly bought outfit, or a piece of knowledge learned, and turning them into "digital objects" for publication. At the same time, they also engage in strict self-censorship, hiding authentic experiences that do not fit the narrative and might damage their image, such as complaints about joint pain, the loneliness of children not being around, or worries about their pension. This behaviour is partly a strategy to cope with the context collapse on social media, where different social circles like family, friends, and colleagues merge (Marwick & boyd, 2011; Hogan, 2010), by posting the "safest" and most widely acceptable content. Within this discursive framework, the normal and biologically inevitable processes of ageing and frailty are ignored, unspoken, or rendered invisible. Even when ageing-related challenges are mentioned, they struggle to gain visibility due to the culture-shaping mechanism. This phenomenon ultimately reflects the devaluation of ageing in social media culture, where only representations that align with the ideals of successful ageing are welcomed, while the natural ageing process is marginalised and even perceived as a failure.

Through online interactions, older users continually negotiate their selves and identities with the new ageing culture, which in turn shapes their life course trajectories and lifestyles. However, due to the singularity and standardising tendencies inherent in this algorithmic culture, the construction of older people's identities is imbued with these characteristics. Consequently, this process is likely to exert a standardising and homogenising influence on their life course trajectories. Notably, this form of standardisation diverges from traditional values and social norms, signalling a cultural transformation and the emergence of a new social norm. As such, this algorithmic culture may lead to the re-standardisation of the Chinese third age life course. This is precisely the trend of re-standardisation in life course theory. Unlike the "hard" standardisation of the past, which was driven by the national welfare state (e.g., statutory retirement age) and based on social roles, this is a "soft" standardisation driven by digital culture and promoted through the appeal of an ideal lifestyle. To understand this social change more deeply, we must compare the two models of standardisation. The traditional, institutionalised life course was predictable and uniform, its legitimacy endorsed by the state and the law, serving the labour reproduction needs of industrial society. In contrast, the algorithmic re-standardisation we observe exhibits entirely different characteristics: it appears personalised (everyone can be a "fashionable grandma") yet is essentially highly homogenised (adhering to the same narrative of vitality); it does not rely on coercion, but operates through the guidance of desire and platform mechanisms like "likes" and "follows". Therefore, what is being witnessed is

a new form of power logic; the power to define and regulate the life course is not limited to traditional social institutions (the state, family, community), as emerging digital platforms and algorithms are also forming this huge influence through the construction of identity.

The impact of standardisation can be understood through the concept of "the power of looking ahead" (Hitlin & Kirkpatrick Johnson, 2015). Future-oriented expectations significantly shape life trajectories, as optimism encourages individuals to pursue non-traditional yet fulfilling life paths (Hitlin & Kirkpatrick Johnson, 2015). Traditionally, key life events such as retirement, family milestones, and advancing age play a central role in defining lifestyle choices in later life. In traditional Chinese culture, the family is viewed as the primary source of care and social support for older people, who often rely on family members, particularly children and spouses, for assistance in later life (Zhong et al., 2020; Feng et al., 2020). This family-based care model reflects longstanding sociocultural values while also highlighting the inadequacies in social services available to older adults in China (Zhong et al., 2020; Feng et al., 2020). This has also led older people in China to place greater emphasis on family roles and responsibilities as they enter old age. However, Douyin culture downplays the challenges associated with ageing and encourages seniors to prioritise self-expression over traditional family or social roles. This cultural emphasis may reshape older adults' perspectives on ageing and influence their future plans. This shift could affect their plans for healthcare, finances, and retirement, as they develop a more optimistic outlook

on their third and fourth stages of life. For example, a user immersed in this culture may naturally have a more optimistic expectation of their own health status, spending more of their pension on self-investment consumption such as travel, learning, and socialising, rather than saving for potential illness and long-term care as is traditionally conceived. It also encourages people to focus more on their personal lives after retirement, rather than on family responsibilities and social roles. Although not all older people have the means to practice this new lifestyle, this algorithmically amplified cultural narrative undoubtedly sets a new and attractive frame of reference for the entire generation's later life. This suggests that a standardised online ageing culture may reshape the life course experiences and lifestyles of this generation of older adults, influencing their social interactions and intergenerational relationships within families. This phenomenon warrants the attention of ageing policymakers and researchers of intergenerational relations.

In summary, the in-depth analysis in this section reveals a complete chain from the micro to the macro level. It begins with the daily identity negotiations of every older user, filled with both anxiety and desire, under the algorithmic gaze. These seemingly personal, micro-level practices, multiplied by millions: every carefully chosen post, every imitation of a trend, and every self-censorship of the signs of ageing, converge under the powerful influence of the algorithm into an undeniable macro-level social force. The ultimate result of this force is not just a new type of ageing culture displayed on social media, but a profound reshaping and re-standardisation of the third age life

course.

Ultimately, the findings of this study point to a more fundamental social change. When the standards of the life course begin to be shaped by an algorithmic social media platform with data-driven logic at its core, this process of re-standardisation may, on one hand, offer some older people new paths to break free from traditional constraints and pursue individualised lives. On the other hand, it also creates a new form of cultural hegemony and digital inequality, where an individual's ability to gain social recognition is increasingly dependent on their ability to perform and exhibit an ideal lifestyle online. Understanding this profound, ongoing transformation is a core issue that both digital sociology and gerontology must continue to address in the future.

5.4 Conclusion

Through a macro-analysis of the Chinese social media platform Douyin, this chapter reveals the central role of the algorithm in shaping contemporary ageing culture and clarifies how this process leads to a new re-standardisation of the life course. The study finds that a cultural narrative of the ideal third age is becoming dominant on the Douyin platform. Through precise algorithmic curation, this narrative systematically amplifies the successful ageing discourse, which is centred on positivity, fashion, vitality, and self-improvement. However, the establishment of this glamorous narrative comes at the cost of structurally silencing the authentic experiences of ageing that do not conform to

this ideal, such as illness, financial hardship, and dependency. The production of this cultural narrative is not accidental, but the product of a complex socio-technical synthesis. Its dynamics originate from two levels: at the macro level, there is the platform governance carried out by the platform for commercial interests and political risk aversion; at the micro level, there are the self-adaptive performances of content creators, driven by the algorithmic imaginary in their pursuit of traffic and recognition. These two forces form a feedback loop mediated by the powerful algorithm, efficiently producing highly homogenised cultural content. Ultimately, the core argument of this chapter is that this algorithm-driven process of cultural production reshapes the standardisation of the third age life course. The daily identity negotiations of millions of older users online converge into a macro-level social force, driving a new, soft re-standardisation centred on lifestyle and personal exhibition.

The theoretical contributions of this chapter are threefold. First, for digital sociology, it provides a clear empirical model that shows how abstract theoretical concepts like platform governance and algorithmic curation practically affect the construction of social categories and produce profound social consequences. Second, for cultural gerontology, this study updates and develops the core concept of the third age. It reveals that in the digital era, the identity practices of the third age are no longer merely a product of offline consumer culture, but a cultural narrative that is actively produced, its dissemination accelerated, and its form replicated at scale by algorithmic media. Finally, this study also offers a new perspective for life course studies. Through an in-

depth analysis of the re-standardisation process, it reveals that the social forces shaping individual life trajectories in the digital age are undergoing a structural shift, providing key insights into the interaction between personal life courses and macro-social structures in the digital era.

Furthermore, the research in this chapter has important practical value in addition to its theoretical contributions. For policymakers, the findings can help to foster a deeper understanding of the cultural changes being experienced by the older population. Future policies on ageing should not be limited to digital access and skills training, but must also address the cultural norms and value-guidance functions of algorithmic platforms, and consider how to foster genuine digital inclusion by encouraging and protecting diverse images and narratives of ageing. At the same time, social media platforms should also use this study to reflect on the potential impact of algorithms on social and cultural shaping. Platforms are not just technology companies; they are powerful social institutions. This study suggests that platforms should proactively undertake their social responsibility, conduct "impact assessments" on the potential effects of their recommendation mechanisms on groups such as older users, and consciously introduce more pluralistic value considerations into their governance and content recommendation systems to balance commercial efficiency with social welfare.

Chapter 6: Digital Inequality in Social Media Repertoires

6.1 Introduction:

The previous chapter (Chapter 5) depicted, at a macro level, how the Douyin platform, through algorithmic curation, shapes and amplifies a standardised cultural narrative of the ideal third age. However, in the face of this algorithm-driven macro cultural environment, is the experience of all older users homogeneous? Do they access and use these platforms in the same way? This chapter shifts the research focus from platform content to user practices, aiming to explore the second dimension of digital inequality, the usage divide, which refers to deeper inequalities arising from the differing ways social groups use digital access after obtaining it.

This chapter aims to answer the sub-RQ2: How are the digital practices of third age social media users stratified by their cultural capital? To this end, the study is framed within the context of digital inequality and Bourdieu's capital theory, introducing the concept of social media repertoires as the core analytical tool. This theoretical perspective helps us understand how users from different social backgrounds select, combine, and use diverse social media platforms. As detailed in the methodology section (Chapter 4), the data for this chapter comes from an online survey of 434 older Chinese users (see Table 4.4). The study applies statistical methods such as logistic

regression and cluster analysis to systematically test how cultural capital, represented by educational level, influences older users' choice of different platform types (e.g., algorithm-dominated vs. user-driven; short video-dominated vs. hybrid-content) and the breadth of their platform usage combinations.

The findings of this chapter reveal that cultural capital is a key stratifying factor in shaping older users' social media usage patterns. Users with higher educational levels tend to use a wider range of platforms, forming an "omnivorous" media usage repertoire, while users with lower educational levels are more likely to be confined to algorithmically recommended short-video platforms. Based on these findings, the chapter introduces an exploratory concept Algorithmic Cave to describe a structural dilemma faced by users with lower cultural capital in the digital information environment: a heavy reliance on algorithmically recommended information despite a lack of algorithmic literacy. This concept not only reveals a new form of information inequality in the algorithmic age, but also provides a new perspective for understanding and intervening in the digital inclusion of older populations. Furthermore, it lays the empirical foundation for the next chapter's deeper exploration of the specific mechanisms of capital conversion.

6.2 Data Analysis Methods

This chapter employs three main statistical analysis methods.

First, descriptive statistical analysis is used to present the basic social media usage through frequencies and percentages. This provides an initial understanding of older adults' platform preferences.

Second, regression analysis is conducted. Binary logistic regression is used to examine the sociodemographic factors associated with the use of hybrid content format platforms and user-driven platforms. Ordered logistic regression is applied to analyse the factors influencing the number of social media platforms used by individuals, categorised as two or fewer, three, or four or more.

Third, cluster analysis is carried out using hierarchical clustering based on Gower's distance and average linkage. The silhouette method is employed to determine the optimal number of clusters. Within each cluster, the combined characteristics of educational level, platform usage patterns, and sources of information are examined.

6.3 Results:

First, the descriptive statistics show that majority of older users use algorithm-dominant platforms (95.9%) and short video–dominant platforms (94.9%), while only a minority use user-driven platforms (19.6%) and platforms with hybrid content formats (28.1%). It is therefore worth examining in greater depth the relationship between platform

choices and users' sociodemographic characteristics (see Table 6.1).

Table 6.1: Descriptive Statistics of Social media category (*N=434*)

Type	Frequency	Proportion
Algorithm-dominant platforms	416	0.959
User-driven platforms	85	0.196
Short video-dominant platforms	412	0.949
Hybrid content format platforms	122	0.281

*Note. * User-driven platforms category does not imply the absence of algorithmic recommendation systems. Rather, it indicates that, in addition to algorithms, users can still access information through communities or other user-driven channels.*

6.3.1 Logistic regression

Results of the logistic regression analysis indicate that educational attainment is a significant predictor of the use of hybrid content format platforms (see Table 6.2). Respondents with a college or above education were significantly more likely to use such platforms compared to those with primary education or below (OR = 8.65, CI [4.48, 17.2], p < 0.001). A significant positive association was also found for the high school education group (OR = 2.97, CI [1.4, 6.28], p = 0.004), with a similar relationship observed for those with a secondary education (OR = 2.29, CI [1.3, 4.09], p = 0.004). These findings point to a clear trend where usage likelihood rises in line with educational attainment.

Table 6.2: Logistic regression result for Hybrid content format platforms

	Variable	OR [95% CI]	P
1	(Intercept)	0.10** [0.02, 0.41]	0.002
2	MaritalStatus2	1.51 [0.81, 2.92]	0.203
6	Gender2	1.25 [0.75, 2.09]	0.397
7	Age2	1.30 [0.63, 2.7]	0.484
8	Age3	0.95 [0.45, 2.03]	0.898
9	Age4	1.16 [0.53, 2.58]	0.706
10	Age5	0.68 [0.26, 1.73]	0.429
11	Edu2	2.29** [1.3, 4.09]	0.004
12	Edu3	2.97** [1.4, 6.28]	0.004
13	Edu4	8.65*** [4.48, 17.2]	<0.001
14	HealthStatus2	0.92 [0.3, 3.25]	0.891
15	HealthStatus3	1.08 [0.37, 3.63]	0.891
16	HealthStatus4	1.31 [0.41, 4.76]	0.658

*Note. Signif. codes: 0.001 '***' 0.01 '**' 0.05 '*'*

Other variables, including gender, age, marital status, and self-rated health, did not show statistically significant effects on the use of hybrid content format platforms. Education level emerges as the primary driver of older adults' engagement with hybrid content format platforms. Other structural variables appear to have limited explanatory power for this usage pattern.

For the use of user-driven platforms, educational attainment also emerged as the most powerful predictor (see Table 6.3). A clear educational gradient was apparent: compared to the reference group with primary education or below, the likelihood of usage was significantly higher for respondents with a college education or above (OR = 9.15, CI [4.45, 19.5], $p < 0.001$) and for those with a high school education (OR = 3.81, CI [1.64, 8.84], p = 0.002). This upward trend was also reflected in the secondary education group, which showed a significant association (OR = 2.2, CI [1.11, 4.47], p = 0.026).

Table 6.3: Logistic regression result for user-driven platforms

	Variable	OR [95% CI]	P
1	(Intercept)	0.05** [0.01, 0.26]	0.001
2	MaritalStatus2	1.73 [0.83, 3.92]	0.160
6	Gender2	1.05 [0.59, 1.87]	0.871
7	Age2	1.36 [0.6, 3.16]	0.465
8	Age3	1.01 [0.42, 2.41]	0.990
9	Age4	1.23 [0.5, 3.07]	0.655
10	Age5	0.66 [0.21, 1.96]	0.460
11	Edu2	2.2* [1.11, 4.47]	0.026
12	Edu3	3.81** [1.64, 8.84]	0.002
13	Edu4	9.15*** [4.45, 19.5]	<0.001
14	HealthStatus2	1.05 [0.28, 5.15]	0.950
15	HealthStatus3	1.13 [0.33, 5.3]	0.856
16	HealthStatus4	1.53 [0.4, 7.64]	0.561

*Note. Signif. codes: 0.001 '***' 0.01 '**' 0.05 '*'*

In contrast, none of the other variables examined (marital status, age, gender, or self-rated health) showed a significant effect. These results underscore the decisive role of educational factor in shaping how older adults engage with user-driven platforms, while other structural factors appear to have limited explanatory power in this digital context.

6.3.2 Ordinal Logistic Regression

To investigate how sociodemographic characteristics influenced the number of social media platforms used by older adults, we conducted an ordinal logistic regression. The outcome variable was structured into three ordered categories (two or fewer, three, or four or more platforms). The analysis revealed that educational attainment was the primary significant predictor (see Table 6.4). Relative to the reference group with the lowest level of education, the odds of using a greater number of platforms were

significantly higher for those with secondary schooling (OR = 1.79, CI [1.16, 2.78], p = 0.009), high school education (OR = 2.67, CI [1.42, 5.03], p = 0.002), and a college degree or higher (OR = 5.12, CI [2.85, 9.27], p < 0.001).

Table 6.4: Ordinal logistic regression result for number of platforms

Variable	OR [95% CI]	P
MaritalStatus2	1.29 [0.8, 2.1]	0.309
Gender2	1.28 [0.85, 1.94]	0.244
Age2	1.11 [0.61, 2.02]	0.743
Age3	1.07 [0.59, 1.95]	0.822
Age4	1.09 [0.57, 2.07]	0.791
Age5	0.6 [0.28, 1.23]	0.167
Edu2	1.79** [1.16, 2.78]	0.009
Edu3	2.67** [1.42, 5.03]	0.002
Edu4	5.12*** [2.85, 9.27]	<0.001
HealthStatus2	0.83 [0.34, 2.1]	0.687
HealthStatus3	1.08 [0.46, 2.61]	0.868
HealthStatus4	1.16 [0.46, 3.01]	0.761

*Note. Signif. codes: 0.001 '***' 0.01 '**' 0.05 '*'*

In contrast, other variables including marital status, age, gender, and self-rated health status did not show statistically significant associations with platform usage at any level.

6.3.3 Cluster Analysis

To identify older users' segments, a Gower dissimilarity matrix was computed. This is the standard choice for mixed data containing binary, three-level nominal, and four-level ordered variables, and applied average-linkage hierarchical clustering. Two cases with "other" as the response were treated as missing values. A silhouette analysis across

k = 2-10 indicated a sharp improvement in cohesion-separation at k = 5 (0.718) relative to k ≤ 4 (≤ 0.538); scores then plateaued (k = 6-10 ranged 0.718-0.743). I therefore retained five clusters, balancing statistical quality with interpretability: larger k values would slice the data into very small groups that mainly reflect single-variable level splits and add little substantive meaning, whereas k = 5 preserves a high silhouette score while keeping the solution parsimonious and theoretically coherent.

The largest group identified was cluster 1, comprising 215 participants. Their common characteristics include a medium level of education (1.8 out of 4), exclusive use of algorithm-dominant platforms, and the internet as their main source of information. Clusters 2 and 3 were much smaller in size and had lower average education levels (1.7 and 1.5 out of 4, respectively). Their main sources of information were traditional media (television, newspapers, radio) and hearing from friends and relatives. Clusters 4 and 5 were characterised by higher levels of education (2.81 and 2.25 out of 4, respectively). Cluster 4, the larger of the two with 75 participants, use internet as main information source but did not restrict their use to algorithm-dominant platforms. Cluster 5 was smaller, and their main information source was traditional media, they similarly did not rely solely on algorithm-dominant platforms (see Figure 6.1 and Table 6.5).
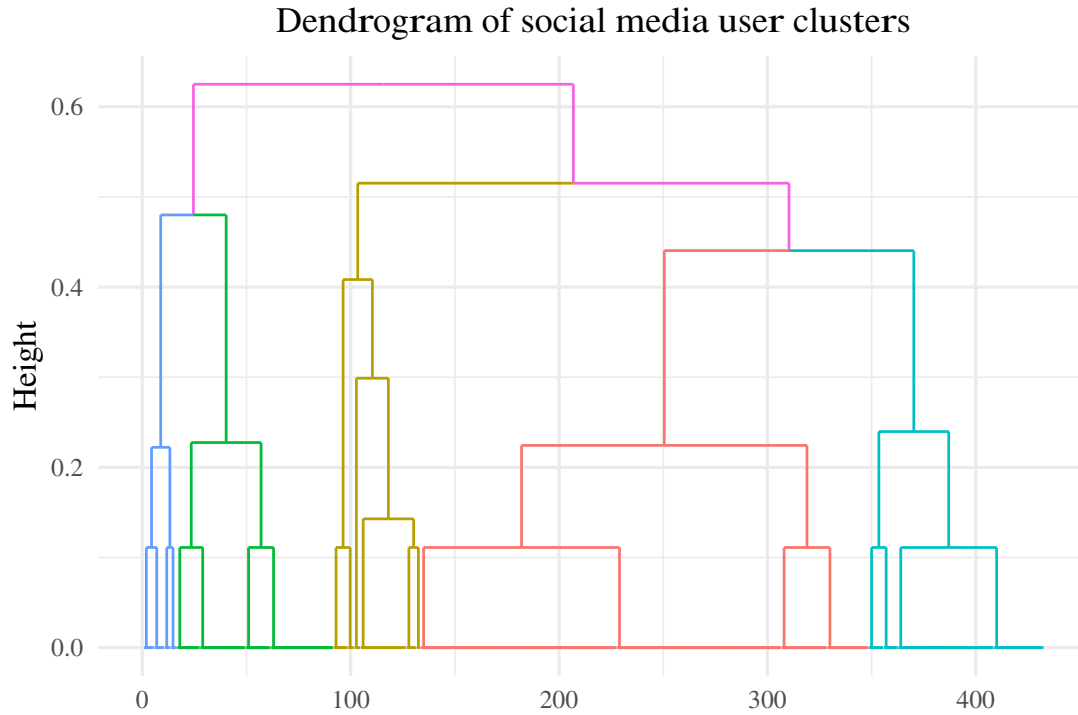
Figure 6.1: Dendrogram of social media user clusters

Table 6.5: Cluster analysis result for social media user clusters

Cluster	Count	Mean_Edu	MS_Internet	MS_Media	MS_Network	Algo_Only
1	215	1.85	1	0	0	1
2	84	1.7	0	1	0	1
3	42	1.5	0	0	1	0.762
4	75	2.81	1	0	0	0
5	16	2.25	0	1	0	0

Note. N=432, Two cases with "other" as the response were treated as missing values.

6.4 Discussion

6.4.1 Platform Choice as an Extension of Cultural Capital

The descriptive analysis in this chapter first establishes a fundamental reality of digital

experience for Chinese older social media users: the overwhelming dominance of

algorithm-dominant, short-video format social media. Social media platforms built on algorithmic distribution are used by 95.9% of survey participants, while those centred on short-video content are used by 94.9% (see Table 6.1). These two figures, both approaching saturation, show that the "algorithm-dominant platform + short-video format" model now constitutes the foundational setting for digital engagement among Chinese older users. A sharp contrast emerges when considering other platform types. User-driven platforms, which demand more proactive exploration and are often community focused, are used by only 19.6% of the sample. Similarly, platforms offering mixed content formats with substantial text and images are used by 28.1%. These statistics paint a vivid picture of Chinese third age users' social media preferences. The subsequent logistic and ordered logistic regression analyses indicate a pronounced stratification associated with social structural factors.

The results of the logistic and ordered logistic regressions are interpreted within the theoretical framework established in Chapter 2 of this dissertation. Specifically, the findings of this study provide empirical indications consistent with capital theory from the Chinese older population (Section 2.4.4) and the digital divide and inequality theory (Section 2.4.5). These data reflect how offline social stratification structures, particularly cultural capital centred on education, are activated, reproduced, continued, and even amplified in the digital field.

If the widespread phenomena described by the preceding descriptive statistics represent

the surface layer of the current situation, then the regression analyses show the inner layer: a profound capital differentiation hidden beneath the universal phenomena. The logistic regression (see Table 6.3) shows a strong positive correlation between the use of user-driven platforms and users' education level. This association presents a clear ladder effect: compared with users with a primary school education or below, the odds ratio for secondary school users is 2.2, which rises to 3.81 for high school users. For users with a college education or above, the odds ratio of using user-driven platforms is as high as 9.15 (OR = 9.15, p < 0.001). Similarly, an almost identical pattern is observed in the use of mixed-content format platforms with more diverse content formats (Table 6.2), where the odds ratio for users with a college education or above is 8.65 (OR = 8.65, p < 0.001). These differences in odds ratios lend powerful quantitative weight to this chapter's core argument: third age older adults with higher cultural capital exercise greater agency in their digital social media use. They are more likely not only to engage with diverse content formats but also to seek out information independently, moving beyond the confines of algorithmic recommendations. In contrast, users with less cultural capital tend to gravitate towards algorithm-dominant platforms. Their engagement is largely confined to short videos, positioning them as passive recipients of curated content. The influence of education extends beyond the type of platforms used to encompass their range as well. Indeed, the ordered logistic regression (Table 6.4) shows that platform usage increases with educational level; users with a college degree or above are 5.12 times more likely than those with a primary education or below to use a greater number of social media platforms (OR = 5.12, p < 0.001). Ultimately,

cultural capital appears not only to shape how users engage with specific types of platforms but also to suggest the overall scale and richness of their digital lives.

This core finding suggests that educational level is a key factor distinguishing older users' social media patterns and aligns with Bourdieu's capital theory in a digital context, highlighting a deeper mechanism. Offline cultural capital appears to translate into specific online usage patterns, thereby forming the second level of the digital divide, which is the usage gap (van Dijk, 2017). This is associated with the conversion mechanism between traditional and digital capital.

The integration of capital theory with this chapter's data analysis provides a deeper understanding of this phenomenon. From a cognitive perspective, older adults with higher cultural capital, reflected in their higher education, have developed complex information-processing habits through their long-term education and careers. This process not only equips them with the facility to navigate varied content, such as text and images, but also cultivates a "habitus" geared towards proactive exploration and critical information reception (Bourdieu, 1986). It is this habitus that enables them to confidently use platforms like Zhihu and Douban, which demand active searching, filtering, and deep engagement. The data clearly support this: compared with users with a primary school education or below, the odds of a user with a college education or above using user-driven platforms are 9.15 times higher (OR = 9.15, p < 0.001). This numerical difference, while not directly measuring habitus, indicates a pathway

consistent with the theory. It suggests that the dispositions and information processing skills cultivated through long-term education, which is what Bourdieu calls habitus, are plausibly manifested in these distinct behavioural choices. For users with relatively low cultural capital, the experience is markedly different. The browse model, typical of short-video platforms, is operationally simple. This design significantly lowers the cognitive threshold, providing a more accessible and passive mode of information consumption.

Secondly, from the perspective of platform functions, this difference in choice also reflects the goals of different capital holders when using social media. As discussed in Chapter 2 (Section 2.4.5), van Dijk (2017) argues that higher education groups tend towards capital enhancing uses of the internet, whereas lower education groups use it more for entertainment and socialising. In the present study, user-driven and hybrid content platforms often carry more knowledge oriented functions (for example Zhihu is a Q&A platform), while algorithm-dominant short video platforms are centred on entertainment. Therefore, the selection of different platform combinations by third age individuals from different educational backgrounds is in fact an extension of their offline capital reproduction strategies into the digital space.

However, this finding is not merely confined to Bourdieu's (1986) discussion of capital and taste, because in this theoretical discourse, taste is exclusive. Individuals with higher capital are presumed to engage in more tasteful cultural consumption, such as

classical music, while those with lower capital may engage in more popular cultural consumption. These two groups would not meet in each other's fields of interest because taste in this theory is exclusive. The findings of this study, however, do not support this conclusion, as older adults with higher educational experiences do not abstain from using algorithm recommended short video platforms. Instead, they use these platforms in addition to other types of platforms. This phenomenon aligns more with Peterson's (1992) theory, distinguishing between "omnivores" and "univores". This framework interpreting this study's data reveals that individuals with higher cultural capital (omnivores) do not restrict themselves to a narrow or exclusive use of specific social media platforms but tend to use a more diverse and broader range. This chapter's data show that older adults with more abundant cultural capital not only use the same types of social media platforms as those with lower cultural capital but also access additional platforms and information channels. This represents an accumulation of resources, not an act of exclusion. This finding aligns with the concept of "weak omnivorousness" (De Vries & Reeves, 2022). Older adults with lower cultural capital are often limited to algorithm-dominant short-video platforms, creating structural differences and inequalities in how they acquire information.

This difference in the volume of accessible content is also reflected in the number of platform use. The ordered logistic regression data show that the odds of a user with a college education or above using more platforms are 5.12 times greater than those of a user with a primary education or below (OR = 5.12, p < 0.001). This clearly indicates

that omnivores with higher cultural capital are through their diversified platform portfolios, they acquire richer information resources and build more varied social connections, which is a process of digital capital accumulation (Ragnedda et al., 2020). In contrast, the univores with lower cultural capital are anchored to algorithm-dominant short video platforms. This is not entirely a matter of active taste preference but is more of a structural constraint is associated with by their existing capital. Due to differences in digital skills, their threshold for entering other platforms is relatively higher. This creates a Matthew effect in the digital world, advantaged groups use their capital to acquire more digital resources, further consolidating their advantage, while disadvantaged groups are confined to a relatively monolithic information environment. This disparity may ultimately lead to the third level of the digital divide, which is the inequality in outcomes (van Deursen & Helsper, 2015; Ragnedda, 2018).

Therefore, the split between omnivores and univores is not merely a reflection of user preferences. It is the foundational mechanism through which platforms and algorithms reorder and stratify the third age. By steering users with different levels of capital into distinct information ecosystems, platforms and algorithms actively construct a new, algorithm-defined hierarchy. This is the first step in the algorithmic reshaping of the third age and the redrawing and reinforcement of internal differences.

By integrating this finding with capital theory, we can see that behind the distinction between cultural omnivores and cultural univores lies a profound capital logic. We can

conceive of social media as a library. In this analogy, omnivores with higher cultural capital are like readers with privileged access passes. They can browse popular publications in the general reading room (algorithmic platforms) and also freely enter specialised research rooms (user-driven platforms) that require search skills and expert knowledge. The univores with lower cultural capital, however, are more like individuals who remain confined to a single reading room under the guidance of an enthusiastic but opinionated librarian (the algorithm). This aligns with the high prevalence of algorithm-dominant use observed in the sample.

Furthermore, we can understand this differentiation in platform choice, and the potential consequences of this from the perspective of Hogan's (2010) curator theory, as introduced in Chapter 2 (Section 2.4.2). The fact that 95% of respondents use algorithm-driven platforms highlights the algorithmic curator's influence on older users. It shapes a default digital experience for most older adults, positioning them as passive audiences in a gallery managed by algorithms, with their field of vision determined by the curator. In contrast, those with higher cultural capital who use a diverse range of platforms act to a much greater extent as the curators of their own information flows. They proactively move between different exhibition halls, which is social media platforms, constructing their information sources according to their own needs. This difference in agency is a direct manifestation of how cultural capital operates in the online field, and it also reflects how third age individuals' agentic choices are shaped by the social structures in which they are embedded (Hitlin & Johnson, 2015).

These findings clearly indicate that social inequalities rooted in cultural capital are reproduced in the online environment through social media usage repertoires. This reflects a consistent argument within the digital inequality theoretical framework (van Deursen et al., 2017; Helsper, 2012; Robinson et al., 2015; Robinson et al., 2020; Richterich & Abend, 2019). It is therefore necessary to incorporate the concept of social media usage repertoires into the theoretical framework of digital inequality. This is particularly important in the current era of rapid technological innovation in social media and the widespread application of algorithmic recommendation systems. The type of social media one uses is no longer merely a matter of functional choice. It also represents the means and quality of information acquisition, and the new forms of structural inequality that arise as a result.

At the same time, the finding that algorithm-dominant short video platforms are the most readily accepted type of social media among older adults has important policy implications. Although the data in this chapter may largely reveal a worrying phenomenon of inequality, this finding also has positive significance for policymaking concerning older people, as we now know which digital technologies and platforms they are more likely to accept and use. With this insight, stakeholders such as governments and organisations focused on ageing issues can utilise this type of platform as a channel for interaction and communication with older adults. For example, integrating digital literacy education and age-related information into such short video

platforms we have the opportunity to improve older people's access to relevant and credible information.

6.4.2 The "Algorithmic Cave" Metaphor: On the Possibility of Informational Confinement

The cluster analysis identifies a significant group of older social media users in China (cluster 1, N=215) who share three key characteristics: below-average educational attainment (1.8 out of 4), reliance on the internet for information, and exclusive use of algorithm-dominant platforms. The other clusters are characterised by the following features: cluster 2 comprises 84 cases with a mean education of 1.7. Their main source of information is traditional media and they use only algorithm-dominant platforms. Cluster 3 includes 42 cases with a mean education of 1.5. Their main source of information is acquaintances' networks and the proportion using only algorithm-dominant platforms is 0.762. Cluster 4 comprises 75 cases with a mean education of 2.81. Their main source of information is the internet and they do not restrict themselves to algorithm-dominant platforms. Cluster 5 includes 16 cases with a mean education of 2.25. Their main source of information is traditional media and they do not restrict themselves to algorithm-dominant platforms.

This finding of cluster 1 suggests a concerning possibility: cluster 1 group may be confined within an information environment curated by algorithms. The common

features of this group: lower education and older age, are considered factors associated with a poorer understanding of how algorithms work in research on algorithmic awareness (Gran et al., 2021). This may lead to a lack of consciousness about critical questions related to algorithms, such as: How is this information produced? Why is it being shown to me? It is possible these users have never even considered such questions. Yet, despite this likely low algorithmic awareness, the cluster analysis indicates that a considerable portion of this group already treats the internet as their primary source of information and is highly dependent on algorithm-based platforms. This creates a paradox: in the digital world, those with the least understanding of algorithmic systems are the most dependent on them for information.

According to a 2024 survey by the China Internet Network Information Center (CNNIC), 99.9% of Chinese internet users access the internet via mobile phones, making them the overwhelmingly dominant means of access. Furthermore, the 51st report, released in 2023, shows a continuous decline in the number of websites in China from 2019 to 2022, while mobile internet traffic has surged, was projected to reach 3.7 times the figure recorded in 2018. These figures show that mobile social media applications now dominate online information acquisition in China. While the data from this study cannot rule out the possibility that some older users also obtain information through other means, such as search engines, it is reasonable to hypothesise that individuals with low algorithmic awareness, typically older and less educated people, are highly likely to rely on algorithmic content as their main source of online

information.

Algorithms should not be seen as neutral. They are embedded within platform architectures and designed to serve commercial and regulatory objectives. Although some algorithmic systems may broaden users' exposure to new content (Matassi et al., 2022), this potential for serendipity does not negate the inherent structural biases in how platforms select, display, or suppress content. Fourcade and Healy (2024) argue that algorithmic classification creates ranked situations that shape individuals' visibility, status, and access to resources. Individuals with low algorithmic awareness who are highly dependent on algorithmically curated information may become trapped within the unequal information spaces created for them, unable to recognise the structural inequalities embedded in these systems.

To better conceptualise this information-reception mechanism and the cognitive limitations that older users may face in the social media era, this study proposes the metaphor of the "algorithmic cave". This metaphor draws on the philosophical structure of Plato's allegory of the cave in The Republic. It aims to describe a media environment where users do not receive information from an open, selectable universe of content, but rather derive their understanding from informational projections that have been filtered and organised by algorithmic systems. Arguably, these projections can shape users' perceived reality, while the users themselves may be unaware of both the structure governing this process and their own position within this cave.

It must be emphasised that the point of the algorithmic cave metaphor is not that users are only exposed to similar viewpoints, as described by the filter bubble. Nor does it assume that algorithmic recommendations necessarily lead to extremism or polarisation, as implied by the echo chamber. If the filter bubble is a soundproofed sphere woven from personal interests, and the echo chamber is a private room that only reflects one's own voice, then the algorithmic cave is more like a public cinema. The people (the Cluster 1 group) are watching the same type of films, selected by the same projectionist (the algorithm). They are not isolated from the world, and the film's content may even be diverse. What they do not realise is that the selection criteria, the screening order, and which films are never shown at all are all suggested by a projectionist they cannot see.

The core of this metaphor, therefore, is its emphasis on structural confinement. It is concerned with how specific user groups, particularly older users with lower levels of education and digital literacy, may be structurally confined to an information space meticulously curated by algorithms. This space is defined not only by the personalisation of interests but also by the comprehensive shaping of information form (predominantly short videos), depth (fragmented), interaction mode (passive reception), and source (singularly distributed by the algorithm).

This metaphor thus points to a structural dilemma arising from the interplay of low

cultural capital and low algorithmic awareness. What it seeks to describe is precisely the possibility revealed by this study's cluster analysis: a vast group whose digital lives may resemble those of prisoners in a cave, staring intently at the vivid yet potentially partial shadows cast by an algorithmic fire onto a wall, taking them for the whole truth of the world. Linking this to the phenomena revealed in Chapter 5 of this dissertation, it is highly likely that these shadows systematically amplify the more popular and emotionally resonant narratives of the ideal third age. Meanwhile, the more complex, authentic, and even challenging experiences of ageing may be quietly filtered out by the algorithmic curator (Hogan, 2010).

Therefore, the metaphor of the algorithmic cave describes a space in which the third age is actively constructed and presented by algorithms. The "shadows" on the wall, which polished narratives of the ideal third age that algorithms select and amplify, are not random. They are instruments used by algorithms to reshape the collective imagination of this group. Through daily exposure to these choreographed "shadows", older people in the cave have their understanding of what later life should be quietly shaped. Their expectations and self-identification are redefined in the process.

This exploratory metaphor of the algorithmic cave offers a new perspective for understanding structural information inequality and merits deeper investigation in the fields of algorithm studies, media power, and digital ageing. This discussion also provides important insights for stakeholders, including policymakers, public sector

bodies concerned with ageing, and platform regulators and designers. When developing communication or information campaigns for older people, it is crucial to consider that those with lower educational levels often rely on a single channel for information. Collaboration with platforms to disseminate age-related information should be considered. For critical messages, leveraging algorithm-driven short video applications can increase the visibility of important content among this group. At the same time, the potential risks of such a narrow information channel must be recognised. Platforms should therefore pay special attention to content moderation for older users. Future research could further investigate the characteristics of users with limited algorithmic awareness, assess the impact on their lives and on society, and explore interventions to enhance the digital experiences of less-educated users by improving their understanding of algorithmic systems.

6.4.3 Theoretical Contributions and Practical Implications

This chapter's findings focus on a specific group of older adults in China, but they offer valuable insights for broader theoretical discussions and practical applications.

First, at the level of theoretical contribution, this study robustly suggests the necessity of incorporating social media repertoires into the research framework of digital inequality. Previous academic discussions on social media have often referred to it in general terms or focused on the use of a single platform. The findings of this chapter

add a new dimension to such research: the combination of platforms a user engages with. It further links this repertoire to the key mechanisms through which offline inequalities are reproduced. The focus on the third age group also responds to the call, proposed in Chapter 2 of this thesis, to shift the research focus on older adults' technology use from access to usage and outcome. Second, by directly linking cultural capital with platform choice, this chapter provides a concrete empirical example of the application of Bourdieu's theory of capital conversion in the digital age. It clearly illustrates the conversion path from institutionalised cultural capital (education) to a specific form of digital capital, which is the ability to use diverse platforms. In turn, this conversion indicates a pathway the differences in individuals' capabilities to gain offline returns, which is the third-level digital divide. Finally, the metaphor of the algorithmic cave, while exploratory, offers an extremely valuable heuristic tool. It helps to conceptualise a specific form of algorithmic inequality and provides a new theoretical language to describe how platform power acts upon disadvantaged groups.

The findings highlight the widespread use of algorithm-dominant short-video applications among older adults with lower educational attainment. This creates both opportunities and challenges. On one hand, these platforms provide a valuable channel for public information. Governments, non-governmental organisations and other social institutions should recognise and leverage this phenomenon by actively adjusting their communication strategies. Compared to traditional methods of publicity, consideration should be given to using channels and content formats that can more easily reach this

demographic, especially now that they are active on social media. This approach can be used to disseminate public health knowledge and publicise social policies relevant to older people, such as pensions. Furthermore, collaboration with platforms should be considered to ensure the visibility of important content to older users. This is a pragmatic strategy, which can be understood as entering the cave to change the shadows on the wall.

However, over-reliance on this single channel can also pose significant risks. This is especially true on open platforms where anyone can create and share content, making it crucial to develop strong information discernment skills. This implies that education in algorithmic literacy, which goes beyond basic operational skills, must be vigorously promoted in venues such as community centres and universities for older people. The goal should not be merely to teach older adults how to use an application, but to help them understand why they see the information they do. This includes understanding the basic logic of recommendation systems, identifying commercial advertisements and sponsored content, and cultivating a capacity for critical evaluation of information sources. This can be regarded as a strategy for helping people find the exit of the cave.

Finally, these findings highlight the profound ethical responsibilities that platforms should bear. Their role has moved beyond service provision to that of a powerful social architect. By designing systems that classify users, platforms have substantively participated in reshaping the social meaning of the third age. Any discussion of age-

friendly design must therefore go beyond surface functions such as larger fonts and simplified operations. It must confront the fundamental role of platforms in constructing and standardising the experience of later life. For instance, platforms could offer new ways for users to access information, helping them break free from established cycles. Enhancing algorithmic transparency is also essential. A simple label like "Because you watched A, we recommend B" could be a step towards increasing users' algorithmic awareness.

6.4.4 Limitations and Future Research

While this chapter provides new empirical evidence and theoretical perspectives for understanding digital inequality in the algorithmic age, it has certain limitations. These limitations, in turn, open up new possibilities for future academic exploration.

First, at the methodological level, this study has two main limitations. The first is the simplification of measurement. For the purpose of quantitative analysis, this chapter categorised complex social media platforms into types such as algorithm-dominant and user-driven. This was a necessary simplification. In reality, however, the boundaries between platforms are increasingly blurred and their functions are often hybrid. This simplification may have obscured the richer nuances of the user experience. The second is the limitation of cross-sectional data. This study uses cross-sectional data, which can effectively reveal correlations between variables but cannot establish causal

relationships. For instance, we found a strong correlation between lower educational attainment and a preference for short-video platforms, but a more complex research design is required to clarify the causal chain between them.

Based on these limitations and the findings of this study, future research can be deepened in the following directions:

First, to employ qualitative research to delve deeper into the algorithmic cave. Based on quantitative data, this study proposed the metaphor of the algorithmic cave to describe a form of structural information confinement. The next key step for future research is to validate and expand this metaphor using qualitative methods. Digital ethnography or in-depth interviews could be used to engage with older users in cluster 1 (lower education, high reliance on algorithmic platforms). The core research questions would be: What are their subjective experiences? How do they perceive and interpret the information recommended to them by algorithms? How does this singular information environment shape their daily lives, family relationships, health concepts, and even their socio-political attitudes? Such research would infuse the descriptive metaphor of the algorithmic cave with empirical substance.

Second, to adopt a longitudinal study to track the online-offline linkage process. Capital conversion is a dynamic process. To understand how offline cultural capital permeates online practices and influences the choice and use of digital platforms, future research

could adopt a longitudinal study design. For example, a study could follow a cohort of newly retired individuals over several years, continuously observing how their social media repertoires evolve and what dynamic relationships exist between this evolution and their offline capital.

Finally, to extend the research scope to broader groups and contexts. This study focused on the relatively healthy third age group. Future research could explore the digital lives of the fourth age, which are older adults who are frailer and more dependent on care. What roles do platforms and algorithms play in the contexts of care, dependency, and end-of-life? Do they offer comfort and connection, or introduce new risks and forms of exclusion? Moreover, applying this framework to other cultural and social contexts could offer valuable insights. This would help us to understand how different media ecosystems, social welfare systems, and intergenerational cultures collectively shape the patterns of digital inequality among older populations.

6.5 Conclusion

This chapter reveals that the digital practices of China's third age users are not homogeneous but are clearly stratified by cultural capital. The core findings are threefold. First, educational level is the strongest single predictor of older users' social media usage combinations. Higher education capital is associated with more diversified, omnivorous platform use, while lower capital is linked to a univorous mode, confined

to algorithm-driven short video content. Second, this study validates that offline inequalities are being reproduced online through the usage divide, providing a concrete example of capital conversion in the digital environment. Third, the chapter introduces the exploratory metaphor of the algorithmic cave to conceptualise the structural information confinement faced by users who have low algorithmic literacy but are highly dependent on algorithmic recommendations.

The theoretical contribution of this chapter lies in deeply integrating the concept of social media repertoires into the digital inequality framework and offering a new conceptual hypothesis algorithmic cave for analysing algorithmic power. Practically, the findings offer dual insights for policymakers. For older adults with lower educational levels, the dominance of short video platforms positions them as a strategic channel for disseminating public information. However, this dependence also necessitates strong algorithmic literacy education and responsible platform governance to mitigate the risk of information confinement.

The findings on user stratification lay the empirical foundation for the next chapter's in-depth exploration of the mechanisms of capital conversion. Chapter 7 will precisely examine how offline advantages are converted into online participation and social benefits.

Chapter 7: Capital Conversion and Media Format Thresholds

7.1 Introduction

The meso-level user stratification analysis in the previous chapter (Chapter 6) shows that, within this macro cultural environment, not all older users have homogeneous experiences. Users' digital practices, especially their social media repertoires, are deeply shaped by cultural capital. They exhibit a structural division between "omnivores" and "univores", and place users with lower capital in a potential algorithmic cave. These findings lead naturally to a deeper question. What specific operative mechanisms lie behind this capital-driven user stratification? It is not sufficient to observe inequality. The core task is to explain how it occurs and why it takes this form. This chapter therefore shifts focus from the phenomenon of "user stratification" to the mechanisms of the reproduction of inequality, and addresses the third sub-research question (RQ3): What are the mechanisms through which offline capital is converted into digital capital?

To answer this core question, the chapter uses the same survey data as Chapter 6, but moves from descriptive user profiles to explanatory tests of mechanisms. Using more refined statistical models, namely multivariate logistic regression and mediation analysis, it examines two interrelated mechanisms. The first is media format thresholds,

which asks whether education, as a core indicator of cultural capital, exerts different influence on content creation across media formats (text, images, and video). The second is capital conversion pathways, which tests a complete conversion chain with precision: cultural capital → digital capital → social capital.

By analysing these two mechanisms, the chapter completes the analytic loop from "what" (the cultural map in Chapter 5) and "who" (user stratification in Chapter 6) to "why" and "how" (the mechanisms examined here). The findings provide robust empirical evidence for Bourdieu's theory of capital conversion in the digital era. They also deepen understanding of the internal logic of the usage divide and the outcomes divide among older people. More importantly, the results offer specific and actionable insights for the design of targeted digital inclusion policies.

7.2 Data Analysis Methods

To examine the impact of educational attainment on different content creation behaviours, this study first conducted three sets of binary logistic regression analyses. The binary educational variable (Low/High) was used as the independent variable, and text creation (No/Yes), image creation (No/Yes), and video creation (No/Yes) were used as the dependent variables. Each model controlled for demographic variables including gender, age group and marital status.

To examine the influence of educational attainment on older adults' engagement in online social interactions and the use of online information for offline social activities on public social media platforms, and to test the potential mediating role of social media usage diversity. I employ mediation analysis to examine the relationship between the independent variable (educational level), the dependent variable (Whether new friends were made through Douyin, Kuaishou, Rednote or Weibo), and the mediating variable (Social Media Participation Diversity Points). The basic framework follows the causal steps approach proposed by Baron and Kenny (1986).

As the dependent variable is binary, a logistic regression model was primarily used for modelling. The analysis process is as follows:

First, the total effect path ($X \rightarrow Y$) of the independent variable (X: education) on the dependent variable (Y: made friends online) was tested, namely whether educational level significantly predicts the likelihood of online socialising without introducing a mediating variable. Second, the effect of educational level on the mediating variable, social media participation diversity points (M), was examined ($X \rightarrow M$). This involved testing whether educational level significantly predicts the diversity of social media usage behaviour through linear regression. Third, after introducing the mediating variable, the direct effect of educational level on the dependent variable ($X \rightarrow Y \mid M$) was tested, namely whether educational level still directly influences the likelihood of online socialising after controlling for social media participation diversity points. In

addition, the effect of the mediating variable (M) on the dependent variable (Y) (M →

Y | X) was also examined.

Finally, by comparing the effects of educational level on the dependent variable before

and after introducing the mediating variable, the existence, magnitude and significance

of any mediation effect were determined. To further validate the robustness of the

mediating effect, bootstrap sampling (5,000 resamples) was conducted to test the

significance of the indirect effect. In all models, gender, age and marital status were

included as covariates in the analysis.

7.3 Results

This section presents the empirical results that test the micro-level mechanisms of

capital conversion. The analysis follows a cumulative logic. It moves from examining

the direct effects of capital on different digital behaviours to identifying the precise path

through which capital converts into social returns.

The first step focuses on content creation as a core form of digital participation. By

comparing the effects of education on creation across three media formats: text, images,

and video, the analysis asks whether capital exerts equal influence on all forms of digital

creation. The focus then shifts to measures of social returns. It examines the relations

between education and the expansion of offline social ties, and between education and

the building of online social networks. The analysis of online social returns introduces a mediation model to identify the key bridge connecting initial capital to final outcomes. It tests the role played by social media participation diversity (SMPD). Through this sequence, the chapter provides robust and interpretable evidence for the subsequent discussion.

7.3.1 The impact of educational attainment on content creation behaviour

Under controlled conditions of gender, age and marital status, educational attainment shows distinct associations with different formats of content creation among older adults on social media (see Table 7.1).

Table 7.1: **Effects of educational attainment on older adults' content-creation behaviours (logistic regression)**

Model	Term	OR [95% CI]	P
Text Create	(Intercept)	1.19 [0.62, 2.29]	0.601
	Education	1.85** [1.16, 2.93]	0.009
	Gender	0.65 [0.42, 1.01]	0.055
	Age2	0.87 [0.45, 1.67]	0.673
	Age3	1.10 [0.58, 2.10]	0.775
	Age4	0.85 [0.43, 1.68]	0.633
	Age5	0.42* [0.19, 0.95]	0.036
	Marital Status	0.63 [0.37, 1.06]	0.082
Image Create	(Intercept)	1.78 [0.92, 3.42]	0.086
	Education	1.70*[1.06, 2.75]	0.029
	Gender	0.77 [0.49, 1.20]	0.246
	Age2	1.07 [0.56, 2.06]	0.842
	Age3	1.03 [0.54, 1.99]	0.927
	Age4	0.50* [0.252, 0.989]	0.046
	Age5	0.72 [0.33, 1.53]	0.389
	Marital Status	0.67 [0.40, 1.11]	0.118
Video Create	(Intercept)	1.70 [0.88, 3.30]	0.116
	Education	1.45 [0.90, 2.33]	0.132
	Gender	0.93 [0.59, 1.45]	0.741
	Age2	1.20 [0.62, 2.33]	0.593
	Age3	1.15 [0.59, 2.23]	0.681
	Age4	0.66 [0.33, 1.30]	0.23
	Age5	0.43* [0.20, 0.93]	0.032
	Marital Status	0.68 [0.41, 1.14]	0.144

Note. Reference categories: Education = "Low" (primary/secondary), Gender = Male, Age = Age1 (55-59), Marital status = Not in a stable marriage.

*Signif. codes: 0.001 '***' 0.01 '**' 0.05 '*'*

For text-based content, higher education is associated with greater odds of posting (OR = 1.85, 95% CI [1.16, 2.93], p = 0.009). For image content, higher education is likewise associated with posting (OR = 1.70, 95% CI [1.06, 2.75], p = 0.029). For video content, the difference by education does not reach statistical significance (OR = 1.45, 95% CI [0.90, 2.33], p = 0.132).

Across models, gender and marital status are not statistically significant. A small number of age terms are significant in a non-linear pattern; details are reported in Table 7.1.

In sum, education is positively associated with text and image creation, but not with video creation.

7.3.2 The impact of educational attainment on offline social participation through social media information

For the impact of educational attainment on participation in offline activities through social media information. The results of the logistic regression analysis showed that, after controlling for gender, age and marital status, educational attainment did not significantly predict this behaviour (OR = 1.63, CI [0.996, 2.661], p = 0.052). This suggests that, in this sample, the direct effect of educational attainment on offline social expansion through social media is relatively weak.

Regarding the control variables, age and marital status exhibited more significant associations. Specifically, older age groups (Age 5) (OR = 0.39, CI [0.18, 0.86], p = 0.019) and marital status showed significant effects. Compared to those not in stable marriages, married individuals were less likely to expand their offline social networks through social media (OR = 0.58, CI [0.35, 0.96], p = 0.033).

These results suggest that the direct effect of educational attainment did not reach conventional levels of statistical significance in this study. Other variables, such as age and marital status, may have a greater influence on the use of social media information for offline socialising (see Table 7.2).

Table 7.2: Logistic regression predicting use of social-media information for offline social activities

Term	OR [95% CI]	P
(Intercept)	2.23* [1.14, 4.35]	0.019
Education	1.63 [0.996, 2.661]	0.052
Gender	0.80 [0.51, 1.26]	0.335
Age2	0.95 [0.49, 1.86]	0.881
Age3	0.83 [0.43, 1.62]	0.588
Age4	0.91 [0.45, 1.84]	0.798
Age5	0.39* [0.18, 0.86]	0.019
Marital Status	0.58* [0.35, 0.96]	0.033

*Signif. codes: 0.001 '***' 0.01 '**' 0.05 '*'*

7.3.3 Mediating Effect of SMPD Points on Educational Attainment and Online Socialising

The results of the mediation analysis indicate that, in the total effect model, educational attainment has a significant positive influence on the likelihood of meeting new friends through social media (OR = 1.78, CI [1.06, 2.99], p = 0.029). Individuals with higher educational attainment are more likely than those with lower attainment to expand their social relationships through social media. Age also exerts an influence, with older age groups (Age 4, Age 5) associated with lower probabilities of online friendship

formation; gender does not reach conventional significance.

After introducing social media participation diversity (SMPD) points as a mediating variable, the direct effect of educational attainment on making new friends decreased and became non-significant (OR = 1.39, CI [0.78, 2.47], p = 0.263). Meanwhile, SMPD exhibited a significant and strong positive influence on the probability of making friends (OR = 1.87, CI [1.60, 2.18], p < 0.001). Furthermore, linear regression analysis showed that educational attainment had a significant positive predictive effect on SMPD (β = 0.52, p = 0.007), further validating the existence of the mediating pathway (see Table 7.3).

Table 7.3: Mediation of the Education → Online-Friendship Relationship by Social-Media-Participation Diversity (SMPD)

Model	Term	β (SE)	OR [95% CI]	P
Total effect	Intercept		3.16** [1.58, 6.29]	0.001
(Edu →	Education		1.78* [1.06, 2.99]	0.029
Made Friends	Gender		0.63 [0.40, 1.01]	0.054
Online)	Age2		1.22 [0.60, 2.49]	0.576
	Age3		0.77 [0.39, 1.52]	0.452
	Age4		0.40** [0.20, 0.80]	0.010
	Age5		0.41* [0.19, 0.91]	0.027
	Marital Status		0.83 [0.49, 1.40]	0.475
Mediation path	Intercept	4.05*** (0.27)		<0.001
(Edu →	Education	0.52** (0.19)		0.007
SMPD)	Gender	-0.28 (0.18)		0.126
	Age2	0.32 (0.27)		0.237
	Age3	0.20 (0.27)		0.465
	Age4	-0.31 (0.28)		0.267
	Age5	-0.67* (0.32)		0.034
	Marital Status	-0.34 (0.21)		0.110
Direct effect	Intercept		0.33* [0.13, 0.82]	0.017
(Edu →	Education		1.39 [0.78, 2.47]	0.263
SMPD →	SMPD Points		1.87*** [1.60, 2.18]	<0.001
Made Friends	Gender		0.70 [0.42, 1.17]	0.176
Online)	Age2		0.92 [0.42, 2.02]	0.833
	Age3		0.62 [0.29, 1.33]	0.220
	Age4		0.38* [0.17, 0.85]	0.019
	Age5		0.53 [0.22, 1.27]	0.153
	Marital Status		1.02 [0.56, 1.83]	0.958

Note. The Total effect and Direct effect panels are logistic-regression models; coefficients are reported as OR[95 % CI].The Mediation path panel is a linear-regression model predicting SMPD; coefficients are unstandardised β with robust standard errors. All models control for gender, age group, and marital status.

*Signif. codes: 0.001 '***' 0.01 '**' 0.05 '*'*

To further validate the robustness of the mediating effect, this study employed bootstrap sampling to test the indirect effects. Through 5,000 resamples, the CI for the indirect effect (β = 0.32) was [0.09, 0.60], which did not include zero, further supporting the significance of the mediating effect. This indicates that increased diversity in social media use plays an important mediating role between educational attainment and online

socialising (see Table 7.4).

Table 7.4: Mediation analysis results

Effect	β	Bootstrap_CI_Lower	Bootstrap_CI_Upper
Indirect effect (ab)	0.32	0.09	0.60
Total effect (c)	0.58		
Direct effect (c')	0.33		

Note. The 95 % CI for the indirect effect ab is a percentile bootstrap CI based on 5 000 resamples. Total (c) and direct (c′) effects are log-odds coefficients from the logistic models.

In summary, this result shows that educational attainment indirectly promotes the likelihood of online socialising through increased diversity in social media use, with the direct effect becoming non-significant after accounting for the mediating variable.

7.4 Discussion

The empirical results of this chapter, through a fine-grained analysis of meso-level mechanisms, depict a complex picture of structural inequality in the digital lives of China's third age population. The analysis moves beyond asking whether inequality exists. It enters digital practice to answer, in a systematic way, how inequality occurs and under what conditions it may be mitigated.

The discussion now turns to two interrelated core findings. First, media format thresholds. This examines how short video technologies open a window of opportunity for capital-disadvantaged groups at the level of content creation, and how these groups

display agency in this mode of creation. Second, the precise path of capital conversion. This shows how educational capital converts through SMPD to produce online social returns.

7.4.1 Media Format Thresholds

By analysing and comparing the impact of educational attainment on text, image and video creation behaviours among Chinese older adults, it is evident that education does not exert a uniform effect on digital creation. Instead, it displays a clear media-format dependence, I call this the "media format threshold". Specifically, educational attainment has a significant positive impact on both online text and image creation, indicating that older adults with higher educational attainment have more capacity to engage in these two forms of content production. The regression results clearly show that older users with higher education are 1.85 times as likely to engage in text creation ($OR = 1.85$, $p = 0.009$) and 1.70 times as likely to engage in image creation ($OR = 1.70$, $p = 0.029$) than those with lower education. These two findings support the classical proposition of Bourdieu's theory of capital outlined in the theoretical framework of Chapter 3: an individual's cultural capital, represented by educational attainment, profoundly shapes cultural practice. Text and image creation rely more on a form of habitus that is closely connected to the formal education system (Bourdieu, 1986). This "habitus" is an internalised system of dispositions that guides action and taste. It emphasises logic, grammar, structured expression, and visual presentation that accords

with specific aesthetic norms.

However, this influence does not extend to video creation: educational attainment has no significant effect on video production, the difference between the two groups is not statistically significant (OR = 1.45, p = 0.132). Given that the questionnaire in this study used Douyin, Kuaishou, Rednote and Weibo as reference platforms, video creation here primarily refers to short videos, which represent the mainstream media format. This finding highlights an important dimension that has often been overlooked in previous studies examining the influence of education on online content creation. A possible explanation for this phenomenon is that short video production relies less on complex textual expression and systematic knowledge and is closer to everyday modes of communication. Tang et al.'s (2023) interviews with Chinese older short video creators found that many older adults with lower educational attainment perceive short video creation as having a low barrier to entry, and that the diversity of content on these platforms gives them greater confidence to participate in online creation. This is also consistent with the results of this study. Social media platforms with short video functions, especially those that focus primarily on short video content such as TikTok, tend to be more inclusive of older users with lower levels of education and present fewer barriers to active digital creation for this group.

This finding suggests that the creative environment of short video platforms can help overcome the structural inequalities faced by older adults with lower educational

attainment. First, it highlights that the influence of educational attainment, as a sociodemographic factor, on social media use requires a multidimensional approach. This is because its impact varies depending on the type of platform and patterns of use. As a result, related research should avoid overly generalised discussions of social media use and instead consider its different dimensions, such as media format and platform's types. Second, the short video format appears to offer a point of access through which low-educated older adults can bypass structural barriers and engage more fully with social media. This has important implications for the design of digital education and digital inclusion policies. As Helsper and van Deursen (2017) argue, the effectiveness and appropriateness of digital support differ across social groups. Therefore, support strategies should be tailored to the needs of specific populations. This finding not only reveals the inclusive potential of short video creation for older people with lower education. More importantly, it provides a crucial opening for the digital agency of groups disadvantaged in capital.

This stands in an interesting tension with Chapter 6, which shows a pronounced division between omnivores and univores driven by educational attainment. Chapter 6 depicts an unequal, capital-dominated picture of digital participation. The present chapter, however, identifies a hopeful exception within video creation. The data strongly support this point. In text and image creation, the filtering effect of educational capital is clear (ORs of 1.85 and 1.70, respectively). In video creation this effect disappears (OR = 1.45, p = 0.132). This result not only indicates that educational capital influences the

ability to create different formats. It also suggests that the willingness and action of older adults with lower education to engage in video creation do not differ from those with higher education. They engage less in text and image creation. Yet when asked whether they have created short videos, there is no significant difference in participation.

This pattern implies that their subjective willingness to participate in the digital world is not lower. Rather, earlier media forms centred on text and images set a cultural barrier for groups with lower education. Text and image creation rely more on a habitus closely connected to the formal education system. It emphasises logic, grammar, and specific aesthetics (Bourdieu, 1986). The rise of short video has created a new field. Its mode of creation greatly reduces reliance on traditional cultural capital. This new form offers older adults with lower education the possibility of participating in social media as active creators, and the data show that once this became evident they joined in actively.

Therefore, the technological enablement of short video platforms can be understood as a structural window of opportunity. It offers older people who possess rich life experience but lack formal educational capital a stage on which to exercise agency. They now have an appropriate tool to turn their desire for expression and everyday routines into a visible and shareable digital performance (Hogan, 2010). In this way they can participate actively in a creative field that might otherwise have excluded them. The data confirm this. More than half (59.47%) of older users engage in video creation, a proportion higher than for text or image creation. This indicates that when technical

barriers are lowered, older people's intrinsic motivation and agency to participate in the digital world are greatly released. This also shows that, when given the opportunity to join the digital sphere and create, older people with lower education have seized it and added their voices on short video platforms. It indicates that, in the face of long term structural inequality, this group has not relinquished its agency to create and to speak.

For older adults with lower levels of education, digital literacy and training initiatives should avoid platforms or content that rely heavily on text and images, which may present additional challenges. Instead, emphasis should be placed on the use and production of short videos, supported by user-friendly and low-barrier educational approaches. In doing so, digital support can be made more effective and accessible for this group.

7.4.2 Digital Capital Conversion

Another important finding of this chapter is that the conversion paths of cultural capital show different effectiveness across social contexts. First, in the conversion from online to offline socialising, the influence of education appears limited. The data indicate that education does not reach statistical significance in predicting whether older people use online information to expand offline social ties (OR = 1.63, p = 0.052). By contrast, factors such as marital status show stronger effects. This suggests that converting online information into real-world social activity may face more complex constraints or may

require the drive of non-capital factors, such as actual social needs.

Unlike the ambiguous association with offline socialising, a clear and precise capital conversion mechanism emerges at the level of purely online socialising, defined here as making new friends through social media. At the level of total effect, education appears to confer a direct online social advantage. In the model without mediators, older users with higher education are 1.78 times as likely as those with lower education to make new friends online, and this effect is statistically significant (OR = 1.78, p = 0.029).

This result matters because online socialising is not an isolated digital behaviour. It is closely related to older people's well-being. As reviewed in Chapter 2 of this thesis, a substantial body of research shows that social media promotes social participation among older people and helps to alleviate loneliness (Kusumota et al., 2022; Zhang et al., 2021; Cotten et al., 2022). Studies generally find that by facilitating social connection, digital technologies can reduce social isolation among older people (Sen et al., 2022; Czaja, 2017). Online communication can enhance perceived social support and the frequency of social contact, thereby improving mental health (Zhang et al., 2021). The ability to make new friends online therefore means more than adding a contact. It expands the potential network of social support, especially by establishing weak ties beyond family and community, which is crucial for maintaining mental health, improving life satisfaction, and accessing a wider range of information.

The analysis does not stop at showing that education affects access to online social opportunities. The central story appears only after introducing SMPD as a mediator. The direct effect of education drops sharply and becomes non-significant (OR = 1.39, p = 0.263). At the same time SMPD itself shows a very strong positive effect on making friends online. For each one-point increase in participation diversity, the likelihood of making new friends rises by 87% (OR = 1.87, p < 0.001). To test the completeness of this mediating path, the study also examines the effect of education on SMPD. The result shows that higher education significantly predicts more diverse participation behaviours on social media (β = 0.52, p = 0.007).

A bootstrap test with 5,000 resamples confirms the robustness of this indirect effect. Its confidence interval [0.09, 0.60] does not include zero. Taken together, the data point to a single conclusion. Education does not promote online socialising through some intrinsic property. It operates by converting into more diverse digital participation, accumulating digital capital, and ultimately expanding online social networks to acquire social capital.

This provides vivid empirical support for the digital capital conversion model proposed by Merisalo and Makkonen (2022). It shows how offline capital extends and reproduces its influence through concrete digital practices. More importantly, this clear mediation pathway also shows how eigencapital is accumulated in the ordinal society described

by Fourcade and Healy (2024). SMPD can be regarded as a quantitative expression of eigencapital. When a user has a higher SMPD, they provide richer digital traces for the algorithm. This yields a higher internal rating in algorithmic ranking. The algorithm rewards this rating by increasing the visibility of their content, which ultimately converts into higher social capital, such as making new friends. The capital conversion path verified in this study is therefore the concrete process by which individuals in an ordinal society raise their positional status through the accumulation of eigencapital.

Revealing this mechanism has theoretical significance for understanding social inequality in the digital era. The acquisition of online social capital is not random. It is a structured process that depends on prior capital input. From the perspective of Goffman's interaction theory, each like, comment, share, and post is a micro-level front-stage performance (Goffman, 1959). On social media platforms this takes the form of what Hogan (2010) terms exhibition. Users with higher SMPD in essence perform more and richer exhibitions in digital space. They construct a more complete digital persona, accumulate more digital traces and artefacts, and greatly increase their opportunities to form new social ties.

This mechanism aligns with the previous section's findings on short-video creation. Both point to a potential opening through which structural digital inequality may be challenged. Earlier research on digital inequality, after identifying structural barriers (Friemel, 2016; Sala et al., 2022), often proposed broad policy suggestions such as

strengthening digital education for disadvantaged groups. In practice such suggestions struggle to shift entrenched structural inequality. Short-term and non-systematic digital training rarely equips digitally disadvantaged groups with skills that can counterbalance cultural capital accumulated over the long term. The mediating effect of SMPD revealed here offers a precise and effective entry point. It clarifies that cultural capital does not translate mysteriously into social returns. The conversion occurs through a concrete path of using more functions on social media, that is, by accumulating digital capital represented by SMPD. This provides a clear roadmap for digital skills support.

Compared with past digital education that lacked clear targets and attempted comprehensive coverage, this path is more focused and results-oriented. It suggests that policy interventions need not aim to teach all complex digital skills to older adults with lower education. Simple and concrete instruction can be effective. For example, guiding them to like, comment, and share, and to engage in other basic yet diverse interactions, can act directly on the core mechanism that improves digital outcomes, at the lowest educational cost. As emphasised by Helsper and van Deursen (2017), effective digital support must be targeted. The findings here indicate precisely such a direction. Diversified participation is a key step to help groups disadvantaged in capital to bridge the outcomes divide in the digital sphere.

7.5 Conclusion

This chapter tests the micro-level mechanisms of older users' digital participation and social returns. It offers a direct and central mechanistic explanation for the thesis's core claim that digital technologies reshape later life while reproducing social inequality.

First, the study identifies the presence of media format thresholds. The data show that cultural capital, represented by education, significantly affects text and image creation. Its filtering effect disappears for short-video creation. This is valuable. It shows how short-video technologies operate as a structural window of opportunity at the level of content creation. They open an avenue for agency among groups disadvantaged in capital and reveal both the inclusive potential of technology and the agency of those who face technological disadvantage.

At the level of social returns, the study validates a precise conversion path from cultural capital to digital capital to social capital. Education does not directly produce online social gains. It operates through the mediating role of social media participation diversity (SMPD). This conversion ultimately yields online social capital. The finding makes clear how, in the attainment of digital returns, the logic of capital reproduces structural exclusion. It also points to an opening for improvement.

Taken together, the theoretical contribution lies in providing robust empirical evidence for the application of Bourdieu's capital theory in the digital era. In practice, the findings offer a more precise route for digital inclusion policy. Rather than broad skills

training, they support deliberate cultivation of short-video capabilities and participation

diversity among disadvantaged groups. This can help to bypass structural barriers and

increase digital returns.

The next chapter turns to qualitative analysis. It examines content production at a micro

level to show how older creators who achieve high visibility perform their digital

exhibitions under the filtering of capital and the discipline of platforms.

Chapter 8: Constructing the Ideal Third Age

8.1 Introduction

Previous chapters have constructed a multi-level analytical framework. Chapter 5, at the macro level, revealed how algorithmic platforms filter and shape a standardised cultural narrative of the ideal third age. Chapters 6 and 7 confirmed, at the meso-level of stratification and the conversion mechanisms, that this digital world is not equal for everyone: users' digital practices are deeply stratified by their offline capital, and the conversion mechanisms of capital further exacerbate the "winner-takes-all" situation, trapping many low-capital users in the algorithmic cave. However, one core question remains unresolved: How is the content of the macro cultural landscape observed in Chapter 5 produced? Why do we only see these polished, highly standardised images of ageing?

To answer this question, this chapter studies the frontline of content production, conducting a micro-level qualitative analysis of high-traffic short videos to address the final sub-research question (RQ4): How do popular older video creators use their capital to negotiate with algorithms and platform rules in their content production? The analysis will focus on two core theoretical concepts: capital barriers and platform discipline. The former concerns the economic, cultural, and digital capital thresholds required for content production, while the latter, drawing on Foucault's theory, explores

how platforms, through governance rules and algorithmic preferences, shape creators' behaviours and expressions. As detailed in Chapter 4, this study employs a qualitative visual analysis that integrates the Four-Column Analysis Structure (FoCAS) for transcription and the Visual-Verbal Video Analysis (VVVA) framework for coding, combining thematic analysis with procedures from grounded theory to systematically decode creators' production strategies, deconstructing 45 high-traffic videos purposively sampled from the nine high-heat topics identified in Chapter 5. The coding process is as follow example (see Table 4.6):

This chapter argues that the mainstream images of older adults seen on Douyin are not a spontaneous reflection of the authentic, diverse lives of the older population, but rather products of the dual mechanisms of capital and platform discipline. The study finds that creators of high-traffic videos generally possess significant capital advantages, and their content exhibits a high degree of homogeneity and standardisation in terms of narrative structure, audiovisual language, and value expression. This phenomenon not only shows the digital inequality, like results in Chapter 6 and 7, excludes the real lives of ordinary, low-capital older adults from visibility, but also ultimately explains the formation of the macro cultural narrative observed in Chapter 5. Through this micro-level analysis, this chapter provides the final and most crucial piece of the puzzle in the overall argument of the thesis, connecting macro cultural narratives, meso-level stratification, and micro-level production into a complete explanatory loop.

8.2 Results

8.2.1 Capital Advantage and Visibility

I conducted a detailed analysis of the video production processes and found that most popular videos by older people are produced by those with relatively high economic, cultural, and digital capital. Furthermore, these content creators are also among the older population's most advantaged groups in terms of age and health. However, these forms of capital are not always directly displayed in the videos. In many cases, content creators even use language and other means to make their lives appear more down-to-earth. Nevertheless, their capital advantages can still be observed in more subtle ways, such as through the filming style, settings, and elements of the content.
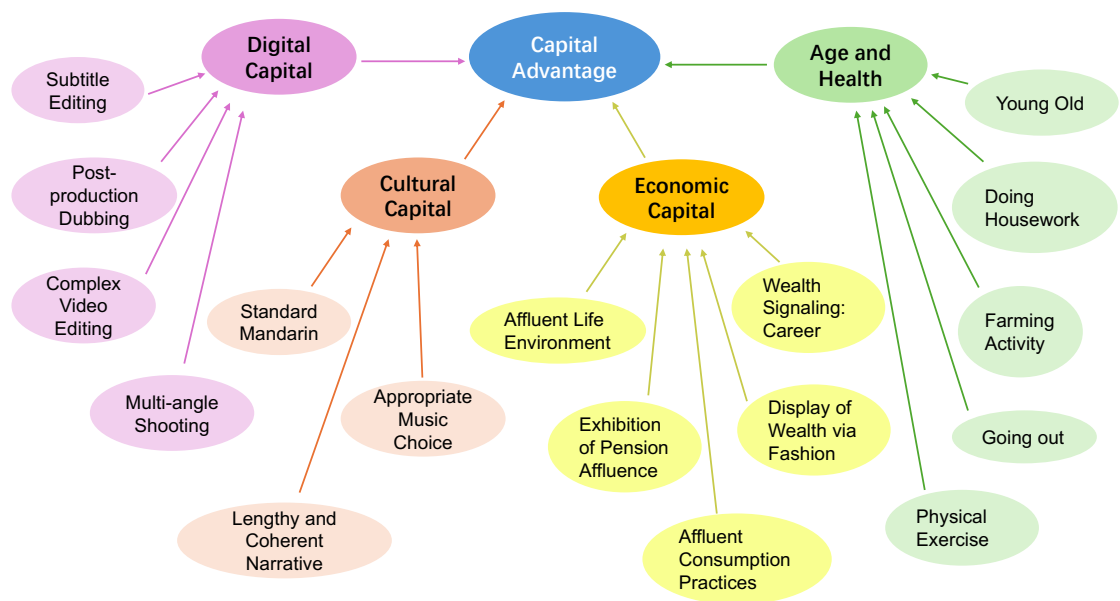

Figure 8.1: Older content creators' use and display of capital

8.2.1.1 Digital and Cultural capital

In older creators' video production, cultural capital and digital capital are the foundations for producing high quality content and achieving visibility. As Hogan (2010) points out, self-presentation on social media is a form of exhibition, and the quality of the exhibit directly determines its visibility. These forms of capital are both the basic capacities that underpin social media creation, embedded in the design details of production, and they can also become the content itself, presented directly in a performative way.

Regarding cultural and digital capital, the production quality of these videos is generally high. Analysis of editing, subtitles, dubbing and shooting reveals that these creators have higher video productive skills. Most videos are carefully edited, with close-up shots interspersed among regular footage to enhance expression; when footage is insufficient, dynamic images are added. Most of the videos are set to background music, with the volume and rhythm adjusted appropriately, reflecting both digital skills and aesthetic taste. As for subtitles, while some are automatically generated, in many videos subtitles are personalised in terms of colour, font, and emphasis on keywords, further enhancing both the visual experience and communicative effectiveness. Moreover, popular videos often feature longer content, lasting one to two minutes or longer, with voiceovers that are meticulously scripted and edited, rich in information, and delivered fluently, and this reflecting a high level of cultural capital.

Case 1: The Counter-Narrative and Fine Production (wisdom-v1)

This implicit embedding of capital is clearly evident in Case 1. The success of the video is not accidental, the video in this case study shares a simple yet important message with the third age group: after retirement, older adults should reduce their involvement in their adult children's lives, particularly in pressuring them to get married and have children. This topic is frequently discussed in the context of intergenerational relationships in contemporary Chinese society. Older generations often expect children to marry early, while the younger generation tends to have more diverse views on marriage and having children. This difference in opinion can lead to family tensions. The video creator captures this issue well, and the title directly reflects the theme, advocating that older adults focus more on their own lives rather than interfering with their children's personal choices, offering a counter-narrative to mainstream traditional views.

The video uses a well-designed approach rather than a simple recording of daily life. It runs for 2 minutes and 47 seconds, much longer than typical casual videos, and its high production quality is evident through its structure, editing, and harmonious sound design. Throughout the video, calm background music is played, with the creator's clear and composed Mandarin voiceover added in post-production. The choice of music matches the theme of the video perfectly, being set at a level just below the voiceover,

helping to support the narrative while creating a peaceful atmosphere. The creator's digital skills stand out in the sound editing. She has removed background noise from the original recording, allowing viewers to focus solely on her narration without distraction. For example, in the opening scene, she is cleaning the house with a vacuum cleaner. Because the environmental noise is removed, viewers hear only the soft background music and her slow-paced speech, making even the act of vacuuming seem peaceful and pleasant. This careful sound editing creates a calm, balanced atmosphere between the sound and visuals, showing the creator's understanding of how to enhance the viewer's experience.

The professional quality is also visible in the camera work and scene setup. The creator uses various filming techniques while capturing activities like cleaning, preparing food, and going for a walk. The video smoothly transitions between wide, medium, and close-up shots. For example, after finishing the vacuuming, she walks toward the refrigerator to take some food, and the shot follows her from behind. After opening the fridge, the camera seamlessly switches to a shot from inside the fridge, a technique often used in professional videos. There are also many close-ups of food preparation, such as washing grapes and making tea, which add visual appeal and elegance to the video. In scenes like brewing tea, the tea set and background decorations are carefully arranged, showing the creator's good taste and her cultural capital (see figure 8.2). It's also worth noting that the video uses many fixed shots, which likely means the creator did all the filming herself. This requires a high level of independence, planning, and digital skills,

which can be a challenge for creators of any age.
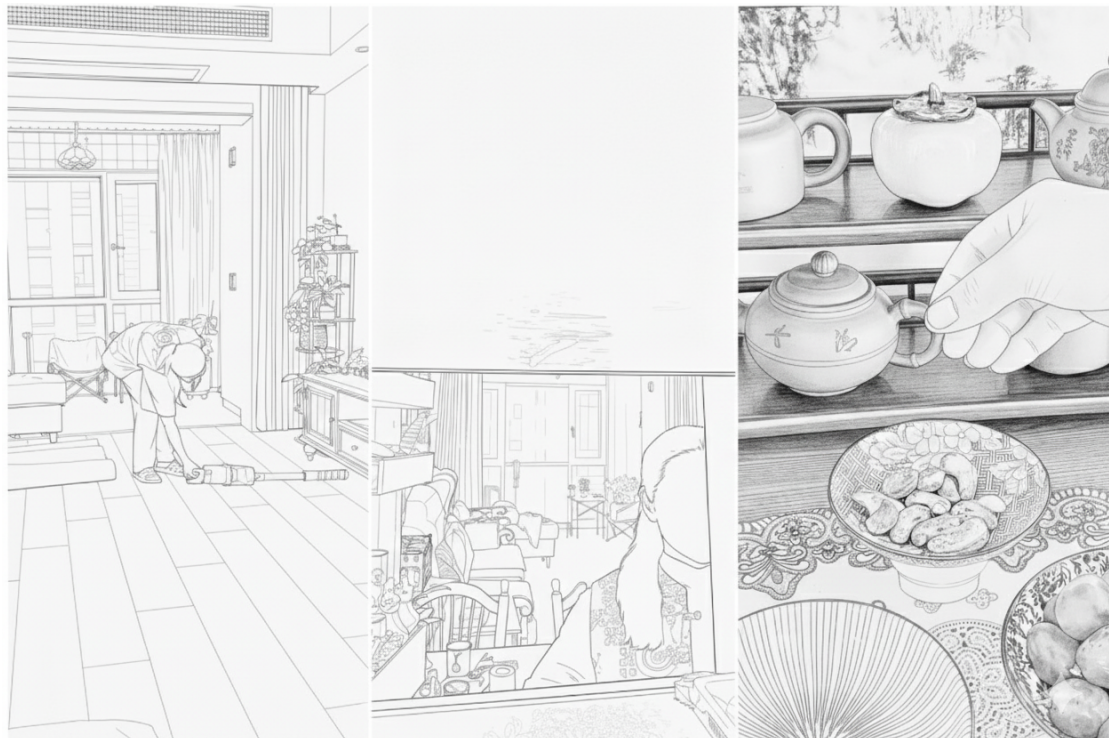
Figure 8.2: Case 1

This creator's cultural capital is also evident in her excellent logical thinking and ability to organise ideas. This is a form of embodied cultural capital that is closely linked to the formal education system (Bourdieu, 1986). The ability to construct a clear, linear argument is a skill cultivated and rewarded through long-term academic training. This is demonstrated in how she builds a clear narrative structure for the nearly three-minute video, mirroring a classic essay format with an introduction followed by three main points: focusing on oneself, managing retirement funds, and not interfering with children's lives. In the third point, she shows empathy by understanding the difference in perspective from the children's side and encourages her peers to reflect on not imposing their values on their children. At the same time, she explains that doing this

will benefit both the children and themselves, leading to a better life. To emphasise her message, she uses various editing techniques, like marking an "Introduction" part and the three main points on the progress bar to help viewers follow along; using carefully chosen subtitles (not the platform's default style) throughout the video; and highlighting important keywords in bright yellow and larger fonts.

Therefore, case 1 clearly shows how older creators draw on high levels of cultural capital (textual composition, aesthetic taste, and logical reasoning) and digital capital (filming and editing skills) to turn an ordinary topic about retirement life into a highly attractive, well produced video.

In conclusion, the success of this video is not by chance. It takes a socially relevant and resonant topic and presents it using professional audiovisual language and a clear structure. Behind this is the combination of the creator's deep cultural capital (thoughtfulness, language ability, aesthetic) and strong digital skills (filming, editing, and special effects). This case strongly shows that gaining high visibility on platforms like Douyin often requires creators to possess a high level of comprehensive ability.

Case 2: Explicit Display of Capital and Platformed Expression (Joyful-v1)

If the display of capital in Case 1 is implicit, Case 2 represents another approach, a successful strategy of direct, confident, and even performative display of capital. This

use of capital is not the capacity used for video production. It is an active display aimed at social media platforms' preference for content that features positive, exemplary images of older adults.

Case 2 is the most liked video under the Joyful theme, with more than 800,000 likes, an older male creator directly showcases the degrees, professional certificates, and trophies he has accumulated in life.

The filming setting itself signals achievement. The creator sits before a bookshelf filled with trophies. The presentation is not stiff or static. The entire video is driven by loud, upbeat music with a brisk rhythm. The creator gestures happily in time with the beat and moves his body with it. His achievements are presented through skilled video editing. Degree certificates from top Chinese universities, advanced professional qualifications, trophies, and photos of him giving talks appear as superimposed images in the frame. He points to them one by one in a rhythmic way, precisely matching the musical cues (see Figure 8.3).
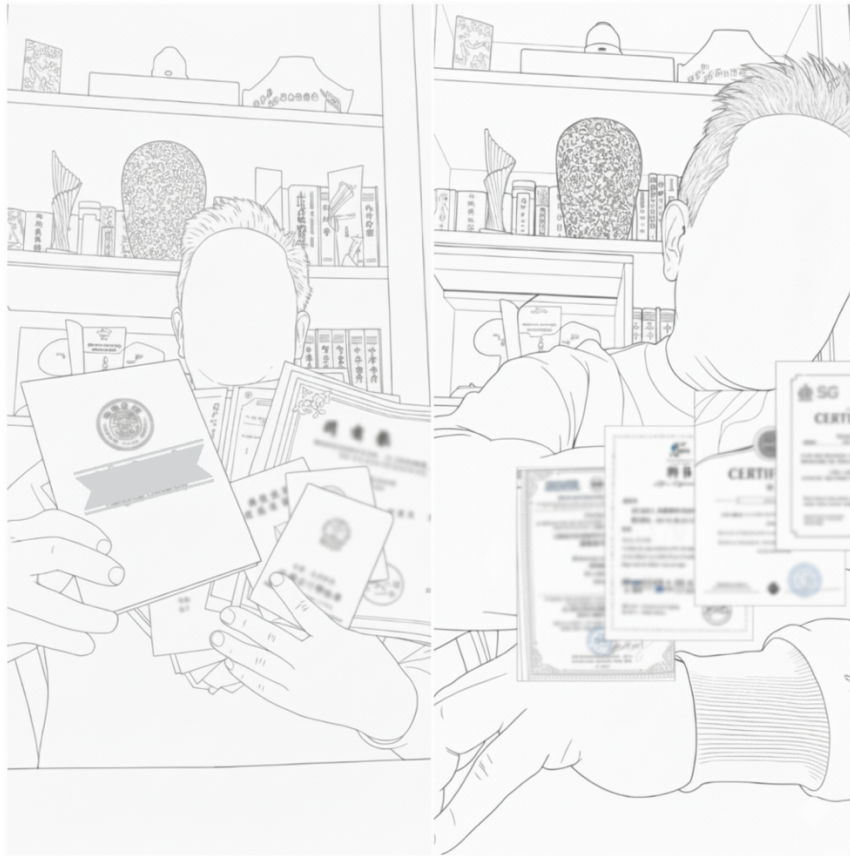
Figure 8.3: Case 2

The video's wide attention can be attributed to several factors that also show the creator's grasp of Douyin's platform features. First, fast-paced, rhythmic music has a natural capacity to capture attention on Douyin. More importantly, the video creates a strong emotional contrast. An older person cheerfully embraces and handles a modern, rhythm-based video form. This challenges common stereotypes of older adults as slow or out of touch. In addition, as discussed in Chapter 5, Douyin favours positive content. The portrayal of an older person who is happy, successful, and stylish fits this preference. The creator makes effective use of this feature and gains strong visibility on Douyin through his cultural and digital capital.

This video is a direct performance of cultural capital and digital capital. Its content, including degrees from top universities and high-level professional qualifications, is a clear signal of substantial cultural capital. Its form, including precise beat-matched editing, image superimposition, and synchronisation with the music, is strong evidence of advanced digital capital. Direct and confident display of life achievements, expressed through a lively visual language of active ageing, can also generate high visibility.

By comparing these two cases, we can observe two uses of cultural and digital capital on the Douyin platform. One treats them as production tools that raise professional quality and aesthetic value. The other treats them as the content itself, delivering a direct, performative impact on viewers' senses and perceptions. The two paths often appear together in a single video. Whatever the path, they point to a common conclusion. High levels of cultural and digital capital are the currency for achieving high visibility.

The phenomena observed in the above cases are not isolated instances. Systematic coding of 45 video samples shows that production techniques reflecting high levels of digital capital and cultural capital are widely used (see Table 8.1 and Table 8.2).

Table 8.1: Illustrating Digital Capital in Video Production (*N=45*)

Codes	Frequency
Subtitle editing	40
Post-production dubbing	21
Complex video editing	24
Multi-angle shooting	23

Note. Only the most representative codes are presented in the table.

Table 8.2: Illustrating Cultural Capital in Video Production (*N=45*)

Codes	Frequency
Lengthy and coherent narrative	27
Appropriate music choice	38
Standard Mandarin	31

Note. Only the most representative codes are presented in the table.

Tables 8.1 and 8.2 present the editing and production techniques that reflect digital capital and cultural capital, as well as the frequency of these techniques in the 45 video samples. Table 8.1 shows that out of the 45 videos, 40 include subtitles. These subtitles range from real-time captions to thematic or special-effect subtitles. Around half of the videos feature post-production dubbing, multi-angle shooting, and complex video editing.

Most content creators who use post-production dubbing speak in standard Mandarin, expressing themselves clearly. The spoken content is well-structured and of considerable length, demonstrates strong cultural capital. As shown by the two codes in Table 8.2, nearly all these videos last one to two minutes and are marked by a coherent and complete delivery. Given that the general education level of the retired population in China is not high, this ability to communicate effectively signals high cultural capital. Among the codes categorised under cultural capital in the Table 8.2, Appropriate music choice code is also included. Out of the 45 videos, 38 display this characteristic. Here, appropriateness is judged based on whether the selected music matches the video's theme and narrative style. For example, videos conveying life wisdom in a gentle manner often use soothing background music, while fitness-related

videos typically feature upbeat music. The Standard Mandarin code appears in 31 videos. In these videos, regardless of whether the audio is recorded live or added in post-production, content creators can use relatively standard Mandarin. This is considered a feature of cultural capital among older adults in China.

Multi-angle shooting is another sign of digital capital, as these creators are skilled in using filming equipment and have a good understanding of video presentation. Such videos typically combine fixed shots, moving shots, and close-ups. After preparing material from various angles, the final videos show the creators' proficiency in video editing. The coding for complex video production includes editing, transitions, and the use of both wide and close-up shots. Some videos also incorporate special effects to enhance the content. All these production features are evidence of the creators' advanced digital capital.

8.2.1.2 Economic capital:

Compared with cultural and digital capital, the presentation of economic capital is more subtle. Creators rarely flaunt wealth directly. Instead, they use a complex cultural strategy: downplaying their economic status in language to appear closer to ordinary audiences. This stance of modesty, and the suggestion that an ideal later life does not require great wealth, is itself a display of cultural capital. They hint at a high-quality life through non-verbal cues (such as in densely populated China, having a garden)

while verbally distancing themselves from wealth. This enables creators to build affinity and convert economic capital into audience appreciation. Even so, economic advantage still appears unintentionally through symbols such as living environments, consumption habits, and occupational backgrounds.

For example, as shown in the text examples in Table 4.6, one content creator highlights the low cost of the furnishings and plants in her garden, promoting a simple approach to life and conveying her view that a good life is not based on money. However, details such as her living environment (a large backyard in a Chinese city, a well-designed and stylish home interior, and her own casual yet neat appearance) reveal that she actually possesses considerable economic capital. Due to the high cost of housing and the high population density in Chinese cities, owning a garden and a spacious residence requires a certain level of economic capital. These forms of economic capital are reflected in their living environments, pre-retirement careers, clothing choices, and their daily consumption practices. Some content creators even disclose the specific amount of their pension to the audience. In the analysis, these contents are summarised under the following codes: affluent life environment, wealth signalling: career, exhibition of pension affluence, display of wealth via fashion, and affluent consumption practices.

Case 3 is a typical example that carefully constructs an idealised rural life through economic capital and, in a discreet way, displays economic strength.

Case 3: Signals of Economic Capital in Visual Aesthetics and Textual Markers (rural-v3)

This case adopts a very simple video form. The video lasts only 22 seconds and contains no voice-over or on-screen text. At first glance, it appears to be a calm left-to-right overhead long take that shows a quiet rural courtyard with soothing music. The seemingly unadorned presentation conceals carefully constructed signals of capital, which are ultimately confirmed by the video title.

First, the visual content itself is a tacit expression of economic capital. China has a marked urban–rural economic gap. Rural areas are often seen as economically lagging, while cities are more developed. The creator has carefully planned a rural courtyard and transformed it into an idealised rural life that matches current short-video platform aesthetics and audience expectations. This stands in clear contrast to the traditional stereotype of the countryside as dilapidated and backward. Spatially, the courtyard is clearly divided into functional and landscaped zones. A wooden walkway, a Chinese style pavilion with an ornamental fish pond, and a meticulously arranged vegetable garden with distinct plots coexist. This highly ordered design indicates tastes that go beyond basic subsistence and signals investment in renovation. In terms of maintenance, both the greenery by the fishpond and the layered fields in the distance present a tidy and well-kept state. Such a rural scene is not a natural given. It requires sustained inputs of time and money. In addition, scenes of family members each performing tasks in the

courtyard, combined with warm background music, create a harmonious family atmosphere. This conveys a leisurely retirement and implies a sound social support system, which can be read as a display of social capital (see Figure 8.4).
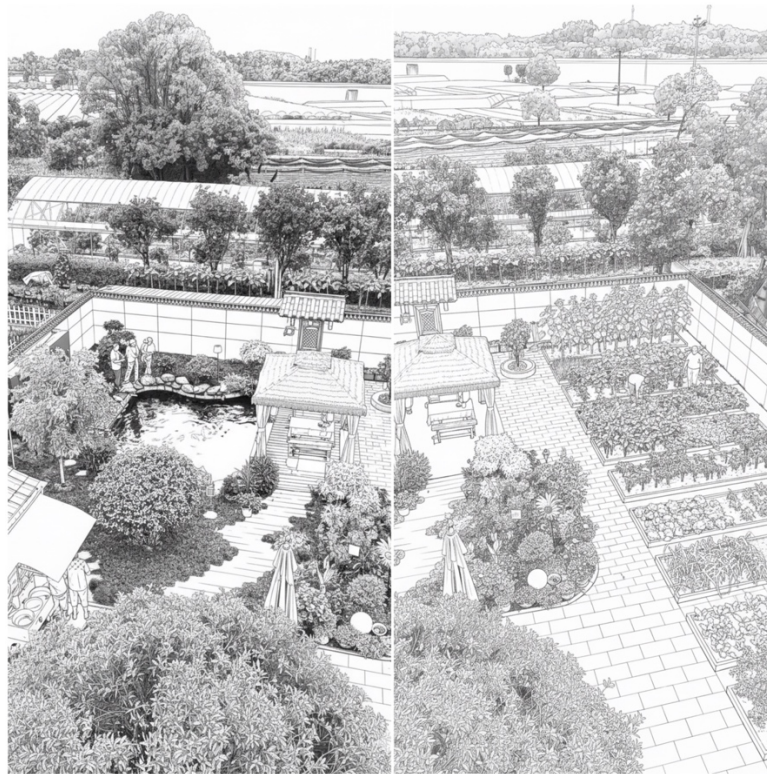
Figure 8.4: Case 3

Second, if the visual layer lays the groundwork in a restrained way, the video title provides the explicit disclosure. The title reads, "After retiring I returned to the countryside. I renovated the courtyard for the price of a single parking space in the city. Do you think it was worth it?" The title contains several key markers that reveal the creator's identity and economic strength. The phrase "returned to the countryside" frames the creator discursively as a "city retiree" rather than a "rural resident". Against the backdrop of pronounced urban-rural differences in China, this suggests that living

in the countryside is not due to constraint. It implies the capital and freedom to choose one's place of residence, which is itself a marker of class and cultural capital. The comparison to "the price of a single parking space" functions as a discreet display. In many Chinese properties, a parking space is not included with a home purchase and must be bought at considerable extra cost. For urban viewers, the parking space is a costly and familiar item. By using this comparison, the creator signals the high cost of the courtyard renovation in a way that is easy to grasp and that connects with the target audience. The display of economic capital is achieved without overt declaration. In this way, the creator constructs and conveys a mainstream ideal of third age living that requires substantial capital to sustain.

This case makes skillful use of the urban-rural divide as a social backdrop. It frames the substantial economic investment in courtyard renovation as a pursuit of quality of life and constructs an ideal retirement environment. In doing so, it gains platform endorsement and user aspiration.

Beyond spatial symbols, occupational identity is another key marker of economic capital. Case 4, in an extremely minimalist form, uses this with precision.

Case 4: The Connotations of Capital in a Minimalist Form

Within the database of this study, Case 4 is a special instance. Compared with most

videos that are carefully designed and edited, this work uses a highly minimal method. It consists only of a personal selfie, added text, and upbeat background music. The seemingly simple form conveys complex signals of capital with efficiency. The subject is a female creator's selfie. She is dressed elegantly and appropriately, with refined accessories, and her visual age appears to be around forty. In contrast to this youthful image, the overlaid text states that she was born in 1963 and is now 61. It adds that she is retired from a bank, is a little old, but keeps a young mindset.

The short text contains two key messages. First, the label "retired from a bank" is a strong symbol in the Chinese context. It represents a widely recognised respectable job and is directly associated with favourable income during employment and a generous pension after retirement. Without showing any material setting, the disclosure of this occupational identity efficiently signals substantial economic capital. Second, the modest phrase "a little bit old" contrasts with the youthful appearance in the photo. The tension is deliberate. It does not diminish the image. It reinforces the ideal narrative of successful ageing. In the end, this minimalist work combines a visual sign of youth with a textual sign of advantaged occupational status. It constructs an idealised retirement image that accords with mainstream platform imaginings. The portrait is affluent, respectable, and persistently youthful.

Unlike the visual construction in Case 3, Case 4 uses the simple textual label "retired from a bank" to efficiently evoke an image of a stable and well-remunerated retirement.

This indicates that, within the platform's symbolic interaction, certain occupational identities themselves serve as strong evidence of economic capital.

8.2.1.3 Age and Health

Beyond economic, cultural, and digital capital, age and health themselves constitute important capital for gaining visibility on the platform. My analysis finds that the images of older influencers on Douyin display marked features of younger and healthier. This is both a precondition for content production and a reflection of the platform's preference for the discourse of active ageing.

Case 5 perfectly demonstrates how health capital combines with other forms of capital (economic, cultural, and digital) to shape a vibrant image of the ideal third age.

Case 5: Multi-capital Performance of Successful Ageing in a Fitness Narrative (fitness-v2)

Another, more indirect, form of health capital appears as the fundamental basis that enables sustained content production and the creation of economic value. Case 6 demonstrates this convincingly through a narrative of re-employment after retirement.

This case uses the widely popular topic of fitness to present an ideal model of retirement

under the discourse of successful ageing that blends self-discipline, taste, and wealth.

The video is not a casual life record. It is a carefully planned self-presentation. It opens with an introductory segment that sets the tone. The creator, dressed in stylish sportswear, descends a modern indoor staircase at home and interacts with the camera, inviting viewers to work out with her. The scene carries several capital signals. In high-density Chinese cities, an indoor staircase is a strong sign of economic capital, implying a duplex or a villa rather than a standard flat (see Figure 8.5). The camera that tracks her movement indicates filming by a dedicated person rather than a fixed tripod, which entails higher time or labour costs.

Figure 8.5: Case 5

The suggestion of economic strength is reinforced in the subsequent training scenes. The edit assembles clips from different times. She changes into several distinct athletic

outfits and attends a professional gym with advanced equipment. These details construct an image of affluence and attention to quality of life. Beyond these material markers, the creator's core display is health capital. She completes several advanced exercises. Defined muscle tone shows the results of long-term training and a healthy physical state. This is persuasive visual evidence within the narrative of successful ageing (see Figure 8.5).

All of this is integrated through skilful use of digital and cultural capital. Captions clearly label the name and sets of each exercise, which indicates knowledge of fitness practice. The video uses English background music. It adds synchronised subtitles for the English lyrics in a pink effects font. The detail is small yet telling. It reflects cultural taste and digital skill. It goes beyond basic platform editing and signals a youthful modern identity aligned with global popular culture. The video places the process of training and the body, as health capital, within a setting of an upscale home, fashion, and a high-end gym, as economic capital. It presents them through polished post-production with an international orientation as digital and cultural capital. The result is a vibrant, disciplined, affluent, and modern image of the ideal third age.

Case 6: The Economic Ledger and Proof of Capability in a Work Narrative

Another, more indirect, form of health capital appears as the fundamental basis that enables sustained content production and the creation of economic value. Case 6

demonstrates this convincingly through a narrative of re-employment after retirement.

In the presentation of health status, there is a more indirect form beyond direct displays of fitness. Creators may not even notice it, yet it is often essential for attracting attention on social media platforms. Case 6 is a typical example. The video adopts a form that is very common in this database. It edits everyday life clips filmed from multiple angles and adds a later recorded voice-over. This separation of sound and image allows the creator to present warm family life with her husband and mother-in-law while using the narration to focus on a more specific topic. She explains how she earns money after retirement.

The core narrative is the creator's breakdown of her four income sources. She states her figures clearly and candidly. The cover at the start introduces her as 55 years old and retired for four years. At the beginning of the video she lists a total of four incomes. First, her pension is about 2,700 yuan per month. Second, after retirement she returned to the workplace with a full-time job that pays 3,500 yuan per month. The next two items are less "traditional". They come from two social media accounts that she runs on two social media platforms. The monthly incomes are 800 yuan and 300 yuan. Although she modestly concludes that she does not earn much and that running social media and posting videos brings her joy, a simple calculation reveals the rhetorical move. Her total monthly income is about 7,300 yuan. Based on her accent and the street scenes in the footage, I reasonably infer that she lives in northeast China. This region

has relatively modest incomes. The sum is already good and would be satisfactory for many younger people who is not yet retired. The use of a humble tone to wrap an advantageous economic situation is a common technique of online self-presentation.

More noteworthy than the direct display of economic capital are the strong health capital and digital capital implied by the narrative. Four years after retirement, the creator is able to hold three jobs at the same time. One is a full-time job and two involve creating and operating social media accounts. This is strong evidence of abundant energy and good health. More importantly, two of the roles belong to the emerging social media sector, which requires significant time for learning and practice. She has mastered these skills and successfully monetised them. This directly challenges the stereotype that older people are disconnected from the digital era. It shows strong learning ability, adaptability, and a high level of digital capital. The subtlety of this case lies in its use of a seemingly practical story about money and work to convey, indirectly yet persuasively, the health and up-to-date digital skills that underpin re-employment for a young old person. It also states plainly that she is satisfied with her current life.

This case shows that under the discourse of active ageing, health is no longer merely a personal condition. It becomes productive capital that can be converted into economic income and digital influence.

It is also important to note that a significant proportion of these popular videos are

created by the young old, yet they are often seen as representing the entire retired population on the platform. Since the retirement age in China is relatively early (50 or 55 for women, and 60 for men), those working in jobs with health risks are even eligible for earlier retirement. Many women who have just entered retirement are, in terms of chronological age, still some distance from what is commonly understood as old age. From the perspective of social age, however, retirement marks their entry into the older adult group. This large group is fundamentally different from older cohorts in terms of physical function, yet on platforms such as Douyin, they play an important cultural role as representatives of the entire retired population. This phenomenon highlights an inequality between age groups, and reflects a misalignment between chronological age and social age.

Table 8.3: Age of content creators (*N=45*)

Age	Frequency
Under 50	1
50-54	10
55-59	5
60-64	8
65-69	1
70-74	1
75-79	0
80 and above	0
Age not specified	19

Table 8.4: Illustrating Good Health Conditions in Video Production (*N=45*)

Codes	Frequency
Doing housework	18
Farming activity	8
Going out	26
Physical exercise	13

Note. Only the most representative codes are presented in the table.

This emphasis on youth and health is borne out in the sample data. As Table 8.3 shows, the majority of creators of high-traffic videos are under 65. Among the 45 samples, 26 videos clearly mention the content creator's age, and their age distribution is shown in Table 8.3. The vast majority of content creators are under the age of 65, with the largest group being those aged 50 to 54, totalling ten individuals. The videos also depicted the health status of content creators. Specifically, 18 videos showed creators actively engaged in housework, and 12 videos showed or mentioned their participation in sports or physical exercise (see Table 8.4). 8 videos include scenes of gardening or farming activities in courtyards or fields. 26 videos feature the "going out" code, which represents a broad range of outdoor activities, including shopping, walking outside and other activities. Taken together, these features portray a retirement cohort that appears younger and healthier than in reality.

8.2.2 Homogeneity in Video Production and Value Expression

In the preceding section, I analysed the capital advantages held by highly visible older creators. We examined how they use these advantages to produce content and how, through strong capital endowments, they construct positive images of older adults that align with platform and user preferences. However, when we examine the content and form of these videos more closely, another salient feature emerges. It is a high degree of homogenisation. This appears not only in similar value expressions. It also takes the

form of a replicable, template-based paradigm of narrative and production.

This homogenisation is reflected in two ways. First, some videos in the dataset show a high degree of similarity in both video production and content presentation, which can be summarised as a formulaic approach to retirement-related content creation. Second, our sample reveals highly similar representations of active ageing and related values, and this similarity extends across different themes.

8.2.2.1 Homogenised narrative patterns in videos

During data analysis, I found that a significant subset of the sample (15 out of 45 videos) shared strikingly similar narrative and editing patterns.

These videos typically begin with either the title or the opening sequence explicitly stating the content creator's age. The visual component then features scenes from daily life, such as watering plants or cooking, accompanied by post-production voice-over reflecting on retirement and personal values. The settings are almost exclusively the content creator's home or residential community. A range of filming techniques is used, including a fixed camera position capturing the creator, moving shots of the environment, and close-ups of dishes or plants. All these videos feature carefully crafted real-time subtitles and are edited to a professional standard, with smooth transitions. Most also include soothing background music. The individuals featured are all retired

women, dressed in casual yet appropriate clothing. The content conveyed in these videos is also highly consistent, with a strong focus on satisfaction with retirement life. Nearly all emphasise the importance of concentrating on one's own well-being without being influenced by external factors, as well as sharing personal reflections on life.

To unpack this phenomenon in concrete terms, I conduct an in-depth analysis using Case 7 as an example. This video can almost be regarded as a standardised production template for ideal retirement life videos on Douyin.

Case 7: A Typical Template for Template-based Production (Health-v2)

Case 7 is a typical exemplar within the trend towards homogenised videos. This section unpacks the case in depth to show the high degree of similarity in production mode, narrative structure, and value expression. It explains how older creators adjust their self-presentation to align with platform preferences in order to gain visibility.

Similar to Case 1 and Case 6, the video adopts a separated production of audio and visuals. The final presentation comprises three core elements: background music, post-production voiceover, and imagery. First, this video, like many homogenised works, uses soothing instrumental music as background, with the volume kept consistently below the voiceover. This choice supports the narrative atmosphere of the spoken content. Second, the narration is recorded and added in post-production. This method

enables the delivery of a complete and logically coherent viewpoint, so the duration is usually not short. The video in this case is 1 minute and 44 seconds long, which accords with the common length of such videos at one and a half to two minutes or more. In the dubbing, the creator speaks in standard Mandarin, calmly and clearly, and sets out her values regarding retirement life in a systematic way. It is noteworthy that although this video was retrieved via the keywords "retirement" and "health" and is categorised under the health theme, its core content is not physiological health in a strict sense. It discusses how to "maintain a good mood" after retirement by adjusting lifestyle and mindset, and thus achieve health in a broad sense.

The narrative follows a recognisable template. The opening sentence is a characteristic self-introduction that precisely identifies two key items of identity information, age and retirement status. In this case the opening line is, "I am XX, 55 years old, and I retired last year." The creator then delivers a highly condensed monologue that reveals the core values of the video: "After retirement I distanced myself from people and now live quietly in a small courtyard. I do not want others to know my situation, whether good or bad, because if things are good, people become envious, and if bad, they mock you." This passage contains several key narrative elements. First, it clearly advocates that after retirement one should "focus more on oneself", proactively withdrawing from social environments that are meaningless or bring negative emotions. This orientation of "pleasing oneself" and "loving oneself" aligns closely with the values favoured by platforms and users as shown in the network map in chapter 5. It shows the creator's

precise grasp of the platform's traffic logic. Second, it introduces a spatial symbol that recurs across many popular videos, the "small courtyard". As a symbolic element, its frequent appearance merits reflection. As noted earlier, in China's high-density urban environments, a private courtyard is scarce and is usually tied to high housing prices or to a minority of villas or ground-level residences. Its real-world rarity stands in stark contrast to its high prevalence in popular later-life short videos. This suggests that the platform's ideal third age narrative appears to be within reach for ordinary people, yet is in spatial terms already constructed as an aspiration that requires considerable economic capital.

The visual content serves the core values of "tranquil life and self-focus". The shots feature almost only the creator. She wears stylish and appropriate outfits. In a carefully maintained courtyard she harvests vegetables, arranges a tea table, and reads quietly. Within barely more than a minute she changes into several refined outfits paired with different accessories. A striking detail is that these clothes are clearly not everyday home wear, yet she wears them at home to present a relaxed daily state. There is a subtle tension between this carefully constructed performativity and the video's claim to real life (see Figure 8.6).

Figure 8.6: Case 7

Finally, the production craft shows a high level of templating and polish. The real-time subtitles use carefully designed fonts and colours rather than the platform's default style, which reflects digital skill and aesthetic taste. In filming, the video skilfully employs multi-angle and multi-shot techniques, including: wide fixed shots to capture full-body movement such as walking in from a distance, making tea, and reading; fixed close-ups to highlight details such as steeping tea leaves and turning pages; and first-person shots with a hand-held device to simulate the viewer's perspective and follow the creator walking through the courtyard, enhancing immersion (see Figure 8.6).

In sum, from audiovisual language and narrative structure to core values, the video is highly refined, but it is not unique. A large number of similar works in the database together form a template-based production landscape. This clearly reflects the creative

strategies chosen by content creators under platform discipline and capital barriers, and the resultant homogenisation of content.

Table 8.5: Examples of video narrative with the similar pattern

Term	Video voiceover content to text
Family-v3	*"I am 53 years old and have been retired for three years, living a leisurely life with a pension that satisfies me... First and foremost, I take care of my own affairs, look after my health, and maintain a positive mindset. I stay away from drama, and as for people or things that affect my mood, I let them go as far away as possible."*
Health-v2	*"I am XX, 55 years old, and I retired last year. After retirement, I distanced myself from the crowd and now live quietly in a secluded courtyard. I do not want others to know my situation, whether good or bad, because if things are good, people become envious, and if bad, they mock you. Health preservation is about living your own life."*
Lifewisdom-v2	*"The best way to live after retirement—see if you agree. I was born in the 1960s and have been retired for just over a year. I've been relaxing at home with a satisfactory pension for almost two years now, and I've truly experienced an easy and comfortable life. The best way to live after retirement is not dancing, not playing cards, not social gatherings, and definitely not gossiping. If you can do these three things well, your retirement will be comfortable and enjoyable."*

As shown in Table 8.5, this narrative structure of "self-introduction (age + retirement status) + showcasing a tranquil life + sharing life insights" repeatedly appears across multiple videos, forming an efficient traffic formula. Creators seem to have discovered and are following an unwritten set of rules to align with the platform's algorithmic preferences and users' viewing expectations.

8.2.2.2 Similar content and value expressions

The convergence of the narrative template lies in the high consistency of value expression. Regardless of whether the video theme is family, health, or life wisdom, it

ultimately leads to a highly homogenised active ageing value system centred on self-care and living in the present (see Table 8.6).

Table 8.6: Key values in videos (*N=45*)

Codes	Frequency
Prioritising personal well-being	16
Satisfying with current life	31
Optimistic outlook for the future	12
Believe that one should lead an active life after retirement	18

Note. Only the most representative codes are presented in the table.

The prioritising personal well-being code represents content where some creators express that, after retirement, one should avoid comparison with others, avoid becoming overly involved in their children's lives, and refrain from unwanted social engagements. Instead, they advocate focusing on one's own feelings and living for oneself. For example:

Case 8: Precise Replication of the Narrative Template and Restatement of Values (Wisdom-v5)

Building on the interpretation of Case 7, this case presents a template that is widely used by older creators and has become sufficiently established. Case 8 is content produced under this template. The video not only closely resembles the previous example in its separation of sound and image and its multi-angle shooting and editing, its core narrative logic and value claims are likewise almost identical. It provides strong

support for this study's argument on homogenisation.

The opening structure follows the template exactly. The creator first establishes identity, then presents the core viewpoint: "I am 52 and have been retired for a year. It feels as if I have suddenly become enlightened, living clearly and freely. Good enough is good enough. This is my key principle in dealing with people and matters. Do not force, do not expect. It is also one of the ways I love myself." This mirrors the expression in Case 7. The monologue can be regarded as the standard format for the values abstract in this type of video. Compared with the outward behavioural strategy of distancing oneself from the crowd in Case 7, Case 8 focuses on an inner adjustment of mindset, which are "good enough is good enough" and "do not force, do not expect". Although the wording differs slightly, the core is the same. It shifts the centre of life from the external world of others' evaluations and social relations to the internal world of one's own feelings and inner fulfilment.

The creator's subsequent discussion revolves around how to realise this shift. She states clearly that energy should move from giving to others to being reserved for oneself, and she proposes specific paths to achieve this, such as enriching one's inner life through hobbies like music, reading, and travel. The logic chain leads to an ideal outcome, a relaxed and happy retirement and genuine physical and mental health. The existence of Case 8 shows that, under platform algorithmic preferences and the self-presentation strategies set by older creators, a highly unified narrative of the ideal retirement life has

taken shape. Creators can simply change their own faces and living scenes and apply this mature discourse system to produce content that aligns with platform preferences and resonates with users.

The satisfaction with current life code is one of the most frequently observed values in the coding process. In 31 videos, creators clearly express satisfaction with their present life, either in speech or in titles. For example:

Case 9: The Narrative Construction of "Leisurely Life" and the Display of Values (Family-v5)

Case 9 delicately constructs the core value of "satisfaction with current life" over four minutes. It vividly reflects how the creator, through narrative strategies, packages a lifestyle that requires substantial capital support into one that appears easily attainable, offering spiritual wealth through simple mindset adjustment.

The title, "Introducing my family's pension income, and how we get along as a couple to live a leisurely life," directly highlights the theme, suggesting that the video will explore three dimensions: economic status, marital relationships, and quality of life.

Despite introducing the element of marital interaction, the production of this video still follows the templated approach identified in previous cases. Like the other videos, it

uses a separated production mode for audio and visuals, with the creator's narration as the central thread, complemented by carefully edited daily life clips. The visual content is rich, covering diverse scenes such as the couple walking together, using gym equipment at home, cooking, tea drinking, and unboxing online shopping packages. These scenes comprehensively depict a positive, fulfilling, and financially comfortable retirement. The selection of camera angles also mirrors Case 7, employing a mix of fixed shots, close-ups, and dynamic follow shots to ensure a professional and refined visual presentation.

The video has a strong narrative construction ability, lasting 4 minutes and 10 seconds. It uses a "retreat for progress" rhetorical strategy, openly acknowledging the limited nature of economic capital, thus leaving ample space to showcase spiritual wealth and the wisdom of lifestyle choices.

At the start of the video, the creator candidly shares their economic situation: "My husband and I are both retired from companies, and our monthly pension is only a few thousand yuan." This honesty immediately brings the creator closer to the audience. However, the narrative quickly shifts: "but we live very comfortably every day. There are no worries as long as we stop comparing ourselves to others… Although the pension is not high, our spiritual world is rich." This sentence sets the tone for the entire video: happiness does not stem from high income, but from the ability to make active choices and manage life. Here, the creator compares their pension to their income level, but the

pension is not necessarily their total income. In the video, both their living environment and lifestyle clearly require a good economic foundation.

The climax of the narrative comes with the couple's reflection on their past life. They reflect on how the husband contributed little to the household while the wife worked hard to pursue material success, often working late and under pressure. Based on this reflection, they both decide to change their previous bad habits, opening a new chapter for the second half of their lives, with specific behavioural guidelines: cooking for themselves, avoiding arguments, and sharing household chores. This narrative depicts their current harmony and leisure as a rational choice made after reflection and mutual effort, greatly enhancing the emotional power and persuasiveness of the story.

The declaration "our focus for the second half of life is health preservation" becomes the core of their lifestyle. The video fills this concept of health preservation with concrete actions: a regular routine, healthy eating, skin care, tea-drinking habits, and positive spiritual pursuits. This attention to physical health and self-discipline not only serves as a display and maintenance of health capital but also echoes the platform's promotion of a positive, self-disciplined image of successful ageing.

The video cleverly addresses consumption. On one hand, the creator claims, "we don't downgrade our consumption," maintaining a decent quality of life. On the other hand, she emphasises, "we don't buy expensive cosmetics or clothes," and insists, "cosmetics

are only a few dozen yuan," praising cost-effective items as the best. This economical and affordable consumer attitude shapes an image of someone who is neither materialistic nor struggling financially, representing both a lifestyle strategy and a form of cultural capital.

The video concludes with a philosophical reflection, elevating personal experience to universal life wisdom: "Everyone only lives once, and life should be lived for happiness." This not only deepens the theme but also perfectly aligns with the platform's algorithmic preference for positive, inspirational content. Through the narrative of a couple's life together, this case vividly demonstrates how "life satisfaction" is constructed and presented. It transforms limited economic capital into a pursuit of spiritual fulfilment, marital harmony, health, self-discipline, and rational consumption, successfully creating an ideal retirement model that is both relatable and admirable. The creator's modest narrative approach suggests that this retirement life is easily attainable by simply adjusting one's mindset, yet in reality, such a life requires solid economic foundations, cultural capital, and harmonious family relationships working in concert.

Beyond present satisfaction, the *optimistic outlook for the future* code highlights that positive expectations for the future are also a prominent theme in the data. For example:

"*I know the energy I have at 60 comes from countless moments of persistence. I am grateful for life and for not giving up on myself. I will simply live happily from now on*

and savour every day." (Fitness-v5)

Finally, 18 videos indicate the belief that one should lead an active life after retirement. The *Believe that one should lead an active life after retirement* code summarises the idea that retirement should involve ongoing work, participation in physical activity, maintaining self-discipline, and continual learning and new experiences. This value is present in 18 out of the 45 videos analysed. For example:

"*Someone asked me a few days ago, 'Now that the retirement age is being extended, if you were offered a re-employment opportunity, would you go back to work?' How should I put it? For us older adults, retiring at 50 or 55 still feels early, and I was not comfortable with it... As for me, I am already 70 this year and still feel energetic. If I truly had the chance to be rehired for a suitable role related to my previous work, I would be willing to do it.*" (Positive energy-v2)

Overall, both the standardised narrative and the convergent values clearly indicate that the content created by older influencers on Douyin is not a spontaneous reflection of older adults' real-life conditions. Rather, it is the result of careful production and performance by users who possess the relevant capital, under the dual mechanisms of capital barriers and platform discipline. This finding provides a key micro-level explanation for understanding the formation of the macro cultural landscape observed in Chapter 5.

8.3 Discussion

The micro-level analysis of popular Douyin videos reveals two core phenomena that appear contradictory yet are internally consistent. First, older creators who achieve high visibility generally possess marked capital advantages. Second, this widely popular content displays a high degree of homogenisation in narrative, aesthetics, and values. To explain this, we must avoid treating creators as passive digital puppets controlled by technology, which would fall into the trap of technological determinism. These empirical findings are not the result of one-way platform shaping. They are the product of a two-way negotiation between users and mechanisms.

The central argument of this section is that the polished, standardised image of the ideal third age on Douyin emerges from an ongoing, dynamic interplay between structural boundaries and individual agency. This process has two layers. First, a mechanism of capital barriers that extends offline inequalities, together with a platform discipline implemented through algorithmic governance, jointly delineates an invisible rule of visibility. Within this field, creators, as thoughtful and agentic individuals, actively learn, infer, and adapt to the platform's internal logic. To obtain scarce attention resources, they engage in a series of strategic self-presentations.

Homogenisation is therefore not a sign that creators have been stripped of creativity.

On the contrary, it is a highly rational strategic choice. This aligns with Hogan's (2010) lowest common denominator strategy. In an environment of context collapse, and facing a broad, heterogeneous, and unpredictable audience, creators tend to present only the safest, least controversial, and most broadly appealing content in order to avoid risk and maximise recognition. The homogenisation we observe is the inevitable outcome of many creators converging on this optimising strategy. The discussion that follows will examine this game in depth. How does capital function as the ticket of entry and core equipment. How does platform discipline set the goals and pathways of the game. And how do creators, within these given rules, exercise agency so that they are shaped by, yet also participate in shaping, the digital cultural landscape of later life that we see.

8.3.1 Capital as a Resource for Agentic Performance

The first key finding of this chapter is that the older creators of popular videos tend to possess higher levels of economic, cultural, and digital capital. This provides micro-level evidence for the reproduction of offline inequality in the digital sphere. It strongly supports the view that offline advantages are systematically mapped onto online fields (Helsper, 2021). However, this mapping is not passive or automatic. More precisely, the data show creators actively leveraging their stock of capital and performing it. These cases are not only stories of older users gaining visibility on social media. They are vivid illustrations of Bourdieu's (1986) theory of capital conversion coming to life in the digital era under the drive of individual agency.

In these cases, capital itself is static, while its vitality in the digital field comes from older creators' active deployment. For example, in Case 1 and Case 5, creators skilfully mobilise their embodied cultural capital, such as aesthetic judgement and clear elocution, together with economic capital, such as a good living environment and professional fitness equipment. They then purposefully integrate these elements through digital capital (Ragnedda et al., 2020), namely acquired filming and editing skills, to produce high-quality works that align with platform and audience preferences.

Integrating Goffman's (1959) interaction theory further reveals the complex agency behind this capital operation. In some cases creators seek to appear "down to earth". For instance, the creator in Table 1 lists inexpensive courtyard decorations. This is not a simple denial of capital. It is a strategic form of impression management aimed at attracting and retaining a broader audience. At the same time, substantial capital advantages operate as the resources that sustain this mode of self-presentation and continually support the seemingly effortless front-stage performance.

The fundamental purpose of this performance of capital is to compete within algorithmic classification (Fourcade & Healy, 2024). Each high-quality production, each tasteful setting, and each fluent delivery provides clear signals to the algorithmic system and serves to accumulate a key, quantifiable new form of digital capital. The stock of this digital capital determines a creator's position within the platform's internal

ranking system and, ultimately, their visibility. The capital barrier this study observes arises by shaping who can be well classified in this algorithmic ranking game.

8.3.2 Self-discipline as Strategy

The second main finding, the marked homogenisation of content, points directly to the platform's strong disciplinary power. Drawing on Foucault (1977), Douyin can be understood as a digital Panopticon. Creators remain under the gaze of algorithms and audiences, which generates powerful environmental pressure. Through using social media, users gradually learn which values and images are welcomed and which are disfavoured by both the platform and viewers. Under this subtle discipline, creators and ordinary users alike are inevitably influenced to reflect on their online self-presentation, their offline lives, and their negotiation and definition of third age identity.

In the cases analysed in this chapter, highly visible older creators are astute rule players. They discern and actively adapt to the platform's traffic logic, taking "self-discipline" as a core strategy for gaining visibility. This phenomenon accords with Hogan's (2010) insights on curation and context collapse (Marwick & boyd, 2011). Confronted with an algorithmically filtered, heterogeneous imagined audience, creators tend to adopt a lowest common denominator strategy of self-presentation. They showcase content that is safest, least likely to provoke controversy, and most likely to attract broad approval.

As shown in Chapter 5, the narrative template of the ideal third age, healthy, affluent, wise, and harmonious, embodies this lowest common denominator strategy. It avoids discomforting realities of ageing such as illness, dependence, and financial strain, and focuses on facets that align with mainstream social values and the platform's commercial interests. The template-based production seen in Cases 7 and 8 is therefore not a sign of deficient creativity. It is evidence of collective, rational adaptation to the platform ecology. Creators know what is likely to succeed, so they choose accordingly.

This strategic self-presentation also provides a micro-level explanation for the singularity of the macro cultural landscape in Chapter 5. It is not the product of one-way platform manipulation. It is a co-produced outcome in which some older creators, operating within algorithmically set rules, stage agentic and strategic performances that are then selectively amplified by algorithmic mechanisms.

Behind these strategic choices lies the lived experience of creators within the invisible cage described by Rahman (2021). Foucauldian discipline is not an abstract environmental pressure. It materialises as a daily practice. Unable to know the algorithm's evaluation standards, creators can only proceed experimentally. They observe and imitate successful cases and continually test the system's boundaries. The templated production seen in Cases 7 and 8 is the collective outcome of this experiment. It is not the exhaustion of creativity. It is an optimal solution evolved to reduce risk and maximise the chance of survival within an opaque evaluative regime. This self-

discipline is a survival strategy rooted in the uncertainty produced by the invisible cage.

8.3.3 Standardisation Produced by a Cyclical Mechanism

The theoretical contribution of this chapter lies in a micro-level observation. Capital barriers and platform discipline are not two separate forces. They are tightly interwoven in a mutually reinforcing cycle. Creators' agentic choices activate this cycle, yet the eventual outcomes are constrained by the capital biases embedded in platform discipline.

Foucauldian (Foucault, 1977) platform discipline is not capital neutral. The kind of disciplined performance rewarded by algorithms, which is a high-quality, template-based positive content aligned with the lowest common denominator strategy (Hogan, 2010), is the enactment of a capital intensive cultural script of the ideal third age (Gilleard & Higgs, 2020).

This produces a powerful feedback loop. For creators seeking visibility, the most rational survival strategy is to perform this capital intensive paradigm. Those with capital can execute the strategy more easily and more effectively, thereby gaining algorithmic favour and higher visibility. Visibility in turn consolidates their advantageous position and makes them benchmarks for defining the ideal third age. By contrast, creators who lack capital, even if they grasp the rules of the game, are

systematically marginalised because they lack the core resources required for the performance.

The consequences of this loop are not limited to unequal attention allocation within the platform. They produce a deeper socio-cultural effect. The loop becomes an engine of life course re-standardisation in the digital era. As discussed in the literature review, the late-modern life course is no longer governed by strict institutions. It is guided by attractive cultural scripts and lifestyle paradigms. The analysis in Chapter 5 also shows Douyin's partial generation and standardisation of third age culture.

This loop is the core engine through which algorithms reshape the third age. Its operation can be understood at three interconnected levels. First, at the level of economic motivation, the system aligns with the logic of surveillance capitalism (Zuboff, 2023). Platforms must identify and amplify the most predictable and commercially valuable user behaviours, because these generate the highest-quality behavioural surplus. Narratives of the ideal third age fit these requirements. Second, at the level of social mechanisms, this economic drive appears as an ordinal society (Fourcade & Healy, 2024). Through algorithms, platforms assign greater weight to creators with higher offline capital who can more successfully perform the ideal third age and place them in classification situations at the top of the rankings. Third, at the level of micro experience, creators inhabit the invisible cage of this opaque ranking system (Rahman, 2021). To prevail in competition, they are compelled to experiment

repeatedly in search of the strategies that yield greater visibility. They converge on templated performances that have been shown to secure the highest rewards. Taken together, a cultural script distilled from the life experiences of a small, high-capital group is amplified, through a cycle driven by economic incentives, executed by social mechanisms, and reinforced by individual experience, into a general standard for all. This constitutes the complete process by which algorithms reorder and redefine the third age and, ultimately, contribute to the re-standardisation of the life course.

In the end, this cycle, driven jointly by capital barriers and platform discipline, not only intensifies inequality within the digital world. It also contributes to a new, subtler normative pressure at the societal level. It narrows the social imagination of the third age and pushes more diverse and more realistic experiences of ageing, those bound up with illness, dependence, and financial difficulty, further into cultural invisibility. This is a clear manifestation of how capital, algorithms, and older creators together enact the digital re-standardisation of the life course.

8.4 Conclusion

In sum, this chapter provides the final and most crucial piece of the thesis. By moving to the frontline of content production, it clarifies the micro production logic through which the macro cultural narrative observed in Chapter 5 is formed, and it traces, at the level of actors, the roots of the stratification in Chapter 6 and the conversion

mechanisms in Chapter 7, thereby linking the whole study into a complete explanatory loop.

At the theoretical level, the core contribution is to offer a multi-level, dynamic integrative framework for understanding cultural production and social inequality in the digital era. First, the chapter shows how creators' agentic strategies, such as adopting the lowest common denominator, operate within a cyclical mechanism alongside structural forces, such as capital barriers and algorithmic discipline. It demonstrates how older creators' agency is deeply constrained by structure while simultaneously becoming a key link in the reproduction of that structure. On this basis, the study adds a new perspective to cultural gerontology. It extends discussion of third age identity into the digital sphere and, more importantly, reveals the mechanisms through which this identity is negotiated and re-standardised under algorithmic governance. It further advances the critical lens in digital inequality research towards the often overlooked politics of production and visibility, showing that even though Chapter 7 finds lower entry barriers on short-video platforms, profound capital barriers and algorithmic biases still determine who is seen and who has the authority to represent older people.

The practical implications are likewise significant, addressing both platform responsibility and public policy. Platforms should attend more closely to algorithmic fairness, examine and correct capital biases within recommendation systems, and use

measures such as traffic support to protect and promote genuine diversity in the content ecosystem. Policymakers and civil society organisations should provide more diverse, non-commercial channels and resources for digital storytelling by disadvantaged older groups in order to counter a singular commercial cultural narrative.

Chapter 9: Integration and Conclusion

9.1 The Core Landscape of Research

This study makes a contribution at the intersection of two of the twenty-first century's most profound social transformations: global population ageing and the sweeping digital revolution. As social media has evolved from a communication tool into an omnipresent digital infrastructure, it is no longer merely technology. It has become a powerful cultural field. As scholars of digital sociology argue, we have entered a deeply digitised society in which every facet of personal life is intertwined with digital technology (Lupton, 2015). For China's growing third age population, this emergent digital field offers unprecedented possibilities for later life while also introducing challenges that cannot be ignored. In particular, public social media centred on algorithmic recommendation are using opaque rules and classificatory power to reshape the meaning of the third age. Yet academic research has not fully kept pace with these shifts, leaving theoretical and practical gaps that require urgent attention.

It is against this backdrop that the thesis addresses the systematic limitations in existing work. Prior research has often treated older people as passive technology adopters, which constrains its perspective in three ways. First, it tends to start from biological age, viewing technology as a functional tool for compensating physiological decline or alleviating loneliness (e.g., Leist, 2013), while overlooking how older people, as active

social agents, construct self-identity from the perspective of social age (Holstein & Gubrium, 2007). Second, in discussions of digital inequality among older groups, the assumption that they are a digitally disadvantaged population has anchored attention on the access divide at the physical level, with insufficient focus on the deeper usage gap and outcomes divide that emerge after access is obtained (DiMaggio & Hargittai, 2001). Third, research has concentrated too heavily on private social media that maintain strong ties, such as Facebook or WhatsApp (e.g., Hutto et al., 2015), while relatively neglecting public social media, such as Douyin, which serve as core stages for contemporary cultural production and identity negotiation. This study is designed to address these gaps systematically.

Across the four empirical chapters (chapters 5-8), the research outlines a complex and internally contradictory picture of the third age in China on public social media. On the surface lies a stage for the exhibition (Hogan, 2010) of an ideal third age that is carefully curated by algorithms and older creators with capital advantages. It systematically amplifies and celebrates a successful ageing script centred on health, fashion, consumption, and wisdom. This precisely echoes cultural gerontology's account of the third age as organised around consumption and lifestyle (Gilleard & Higgs, 2016), and it shows how digital culture constructs third age identity in the digital era. Beneath this polished surface lies a cultural field in which ordinary and real later life experiences are structurally excluded and rendered invisible, especially narratives linked to illness, dependence, and economic pressure. More importantly, in this apparently open arena,

users' experiences are quietly bounded by their offline capital (Bourdieu, 1986). Users with substantial cultural capital resemble cultural omnivores (Peterson, 1992) who can move freely across platforms. Those with relatively limited capital resemble cultural univores whose digital lives are largely confined to an algorithmic cave that appears rich yet may in fact be closed.

The core task of this chapter is therefore to integrate these dispersed findings into a coherent whole and answer the thesis's central question: how China's third age users of public social media negotiate digital identities and experience digital inequality. This chapter argues that the seemingly free construction of older identity on social media, and in particular the socially constructed third age identity that lies at the heart of cultural gerontology, negotiated through a process that extends from Goffman's (1959) theory of performance and is adapted by Hogan (2010) as exhibition for the digital era, is in fact jointly shaped by two forces. These are users' existing capital (Bourdieu, 1986) and platform and algorithmic discipline (Foucault, 1977). This process constitutes the core mechanism through which the classic digital divide is reproduced and deepened into more complex forms of digital inequality. To set out this process clearly, the chapter first briefly reviews four core empirical findings. It then presents an integrative theoretical model that explains the specific operation of this inequality reproduction cycle. It aims to argue that behind these scattered scholarly gaps lies a broader, under-theorised social transformation: the third age is being systematically reshaped, ranked, and redefined by algorithms. On this basis, it distils the study's theoretical contributions,

discusses practical implications for platforms, policy, and the public, and finally reflects on limitations to guide future research.

9.2 Summary of Core Findings

To build the integrative argument of this thesis, I first review and summarise the core findings from the four empirical chapters. Chapters 5-8 address four sub-questions from distinct entry points to illuminate different layers of the main research question. Together they form an interlocking explanatory chain that connects the macro cultural landscape with micro production and inequality mechanisms.

The first empirical finding in chapter 5 depicts the macro cultural environment in which third age Douyin users negotiate identity, as well as the platform's and algorithms' content preferences. By comparing two network maps, "map1: what people post most" and "map2: what became popular", chapter 5 shows that Douyin is not a neutral reflection of later life realities and culture. The platform and its algorithms act as a powerful curator that selects which user-generated content becomes visible with clear preferences and tendencies. This curatorial process systematically amplifies a standardised, idealised narrative of the third age centred on the script of active or successful ageing, namely the exhibition of health, fashion, pleasure, and life wisdom. At the same time, it structurally silences more challenging and realistic experiences of ageing, particularly narratives linked to illness, dependence, and economic strain. The

finding indicates that the platform actively uses later life content posted by users to reproduce a specific cultural discourse through biased distribution of traffic. Given the study's theoretical premise that the third age is a socially constructed identity, the end result of algorithmic filtering and amplification, through users' interaction with platform culture, becomes a force that drives the re-standardisation of the life course.

Where chapter 5 describes the macro cultural script and environment of identity negotiation, chapter 6 turns to the meso-level of user groups to examine whether experiences in this digital setting are unequal across groups. The analysis finds that offline cultural capital, simplified here as educational attainment, is the main factor driving deep differentiation in third age users' digital practices. Two types of users are identified. Higher capital users tend to be cultural omnivores (Peterson, 1992). They use a more diverse social media repertoire across platform types, balancing algorithm-dominant and user-driven platforms, and they can take in more varied content formats. In contrast, lower capital users are more likely to be cultural univores. Their digital lives are largely confined to algorithm-dominant short-video platforms. On this basis the study proposes the metaphor of the algorithmic cave to describe the structural information predicament faced by the latter. With relatively low algorithmic literacy yet high reliance on algorithmic recommendation, these users dwell in a digital space shaped by a platform curated projection. This constitutes a new and subtle usage gap within digital inequality research.

Chapter 7 remains at the meso-level and probes the concrete mechanisms behind the stratification observed in chapter 6. Two insights emerge. First, the study identifies media format thresholds. Cultural capital imposes a notable entry barrier for text and image production, yet this barrier disappears in short-video production. This shows that the technical affordances of short-video provide a potential pathway for the agency of capital disadvantaged groups. Second, the chapter verifies a capital conversion path. Through mediation analysis, it shows that offline cultural capital primarily converts into online social capital, such as making new friends, through the mediation of digital capital as measured by diversity of social media participation. This provides a concrete explanation for the outcomes divide. It shows how offline advantages are systematically turned into online social returns through specific digital practices. Moreover, since part of the effect of cultural capital on outcomes is mediated by participation diversity, the finding suggests a policy lever. Stakeholders could directly increase diversity of social media participation to enhance digital returns for those with lower capital.

The final empirical chapter (Chapter 8) moves to the micro-level of content production to ask where the macro cultural landscape in chapter 5 comes from and how the capital advantages described in chapters 6 and 7 are enacted. Qualitative analysis of popular Douyin videos shows that the polished, idealised narratives of the third age are the product of a dual mechanism. The first is capital barriers. Producing highly visible content requires substantial economic, cultural, and digital capital, which structurally limits the visibility of ordinary, lower capital older adults and their real experiences.

The second is platform and algorithmic discipline (Foucault, 1977). To gain visibility, creators with capital advantages and interpretive capacity engage in strategic self-discipline. They learn and follow the platform's unwritten rules and algorithmic preferences. They adopt homogenised, template based production strategies that align with the mainstream script of successful ageing. Together these mechanisms ensure that their output attains higher visibility. Much of the highly viewed short-video content is performed by a small group of older users with capital advantages who follow a standardised script. This provides a final micro-production explanation for the macro cultural phenomenon.

9.3 Integration of Findings

Following the independent summaries of the four core findings in Section 9.2, this section weaves them into an integrative explanation that can answer the thesis's central research question in a comprehensive and incisive way. It is necessary first to restate that question: How do China's third age users negotiate their digital identities and experience digital inequality on public social media?

To address this broad question systematically, the study decomposes it into four progressively layered levels of analysis, each answered by a sub-question and corresponding empirical finding. First, we must understand the cultural environment within which older users negotiate identity. Chapter 5 answers this by depicting the

macro platform cultural landscape and its generative mechanisms. Second, we must ask why this environment takes its observed form. That is, what production logic underlies it. Chapter 8 reveals the dual mechanisms behind this through analysis of micro content production. This micro production logic is the key to the entire inequality cycle. It explains not only the causes of the macro cultural landscape but also provides a micro descriptive account of meso-level user stratification and capital conversion. Third, we must analyse how experiences diverge across users within this environment. Chapter 6 examines user groups at the meso level and shows capital-driven structural inequality. Finally, we must probe the underlying mechanisms that generate this divergence. Chapter 7 tests specific capital conversion paths and offers a mechanistic explanation for the emergence of inequality. This section now integrates these four layers into a dynamic and coherent account.

Taken together, the four layers yield a dynamic, integrative theoretical model. It shows that in the digital field, older users' identity construction and unequal experiences are not linear processes. They form a self-reinforcing system shaped jointly by users, capital, platforms, and algorithms.

The cycle begins on the production side. As shown in Chapter 8, the production of visible content is constrained by a powerful dual mechanism, namely capital barriers and platform and algorithmic discipline. The joint action of these mechanisms also supplements the macro phenomenon observed in Chapter 5. The mainstream culture

that appears on the platform is not only a product of platform and algorithmic preferences. It is also driven by an idealised narrative of successful ageing that is performed by a small advantaged group following a standardised script. These users operate within the algorithm's opaque evaluation system and must experiment to gain visibility (Rahman, 2021). Once they identify a suitable mode of content production, they adopt templated creation, as shown in Chapter 8, choosing this safer approach. Chapter 5 explains how this narrative, aligned with platform and algorithmic preferences, is selected and amplified by the algorithmic curator, thereby forming the dominant macro cultural environment. This algorithmic preference for symbolised positive content aligns with the perspective of surveillance capitalism, namely that platforms prioritise content that advances their commercial interests (Zuboff, 2023).

This carefully produced cultural product then enters the domain of unequal experience. As Chapter 6 shows, different user groups have divergent digital experiences. In light of Chapter 8, it is reasonable to infer that the successful older content creators possess higher cultural capital. They are the cultural omnivores described in chapter 6 (Peterson, 1992). Their productive capacity and visibility directly constitute and solidify structural stratification among users. Meanwhile, for the far larger group of lower capital users, the cultural univores, the idealised narrative pushed by algorithms is more passively received. Their digital lives are confined to the algorithmic cave. Their imagination of later life, and their negotiation and understanding of third age identity, may be further narrowed and fixed. This stage of the study identifies the advantaged and disadvantaged

groups in contemporary digital social media participation. These advantages and disadvantages are determined by the nature of social media technology.

Finally, the creators' adept process of exhibition (Hogan, 2010) in chapter 8 gives concrete form to the abstract mechanisms quantified in Chapter 7. Each successful video is a vivid instance of converting offline cultural capital into online social capital through the mediation of digital capital. This mechanism explains why advantaged groups can maintain their position. It ensures that existing capital advantages can appreciate and consolidate in the online sphere, forming a positive feedback loop. The loop is not, however, entirely unbreakable. The media format thresholds identified in Chapter 7, and in particular the lower dependence of short-video production on cultural capital, open a fissure in the cycle. They suggest that technological evolution may create new structural opportunities that, under specific conditions, can activate the agency of capital disadvantaged groups and offer a modest possibility of disrupting the reproduction of inequality.

In sum, the integrative model shows clearly that China's third age people's negotiation of digital identity and their experience of inequality on public social media unfold within a cycle whose production, experience, and mechanism components are tightly coupled. It begins with a micro production process jointly shaped by capital and platform discipline. This process determines the macro cultural profile and lays the practical foundation for meso-level user differentiation and capital conversion. This is

the thesis's final answer to the central research question. It also shows that, owing to the nature of platform and algorithmic technologies, the meaning of the third age is being reshaped.

9.4 Theoretical Contributions

Drawing on the theoretical model developed above, this study makes distinctive contributions to three related fields: cultural gerontology, digital inequality, and social media research. Its value lies not only in applying existing theories to a new empirical domain, but also in integrating and empirically testing them to add new meaning and explanatory power.

First, the study deepens and updates cultural gerontology's understanding of the core concept of the third age. Earlier work, such as the seminal study by Gilleard and Higgs (2016), shows that the third age is a social construction closely linked to offline consumerism and lifestyle. Taking this as a premise, the present study advances the argument into the algorithmic era. It reveals how the practices and mechanisms of this identity unfold in digital settings and with what effects. In the digital field, the third age identity is not merely the outcome of individual consumer choice. It is a cultural narrative actively produced by algorithmic platforms and a small group of advantaged users, accelerated in its circulation, and replicated at scale. The re-standardisation of the life course on social media clarifies how platform logics become a new and

powerful social force. By shaping a seemingly personal yet highly homogenised ideal of life, they exert influence over later life trajectories.

Second, the study contributes new conceptual tools and mechanistic explanations to digital inequality, especially for older groups at the levels of the usage gap and the outcomes divide. The proposed metaphor of the algorithmic cave offers a heuristic for understanding the structural informational predicament faced by capital disadvantaged older adults in algorithmic environments. It goes beyond notions such as the filter bubble by emphasising limits on cognition and agency on digital platforms that stem from deficits in cultural capital. Mediation analysis verifies a capital conversion path from cultural capital to digital capital to social capital. This provides micro-level evidence of how Bourdieu's (1986) capital theory operates in the digital era. The finding on media format thresholds adds an important nuance. It shows that the reproduction of inequality is not wholly deterministic. Technological evolution may create new structural opportunities for agency.

Finally, the study offers social media research and digital sociology an integrative explanatory framework for how platform power operates. While much work has examined platform power from angles such as algorithmic governance and datafication, the core contribution here is a dual mechanism model of capital barriers and platform and algorithmic discipline. The model shows that platform power is not a purely top-down technical force. It operates in close collusion with existing structures of social

inequality, namely capital, and activates them. This provides a strong account of how platforms systematically reproduce offline social stratification.

Furthermore, the overall contribution of this study goes beyond separate discussions of the three domains. Using empirical data, it links them and offers a key lens for understanding a broader transformation in contemporary society.

The extended argument is that algorithms, as an emergent social power, are systematically reshaping, redefining, and reordering the life course and society at large.

The underlying driver aligns with the logic of surveillance capitalism identified by Zuboff (2023). Platforms and algorithms subtly modify human behaviour to realise economic gains. In this thesis, such behavioural modification is interpreted as algorithmic discipline. It appears not only in the direct guidance of content creators analysed in Chapter 8 but also, through platform interaction mechanisms, in the indirect influence on ordinary users.

The macro social mechanism enabling this reshaping can be explained through Fourcade and Healy (2024) together with the study's empirical data. They argue that contemporary society operates through continuous measurement, ranking, and classification. The platform cultural selection shown in Chapter 5 is a concrete manifestation of this logic of ordinalisation. By preferentially selecting content,

algorithms in effect generate a standardised life course trajectory. Its outcome is the highly homogenised third age narrative identified in this study. These interrelated processes show how a hard-to-trace algorithmic mechanism reshapes social reality.

In sum, using the third age as a distinctive prism, the study connects these seemingly scattered theoretical insights with robust empirical evidence and offers an integrated explanation of the complex relations among power, capital, and identity construction in the digital era.

9.5 Practical and Policy Implications

Beyond its theoretical contributions, this study offers practical and policy guidance for building a more inclusive digitally ageing society. Drawing on the integrative model of the reproduction of inequality, this section proposes concrete and actionable recommendations for three levels: platforms, policymakers and civil society organisations, and older users themselves. The aim is to translate scholarly insight into measures that enhance the well-being of older adults in the digital era.

First, for platforms as builders of the digital environment, the findings indicate a social responsibility that exceeds commercial interests. Platforms are not neutral technical conduits. As Gillespie (2017, 2018) notes, they are key actors that shape public discourse and wield significant social power. Current older people friendly adaptations

tend to remain at the interface level, such as larger fonts and text-to-speech functions.

The core issue revealed here lies in structural biases within the content ecology and algorithmic mechanisms, rooted in the platform society logic centred on datafication, commodification, and choice (van Dijck et al., 2018). Platforms should therefore look beyond surface level user experience optimisation and reflect on the societal impact of their algorithms. They should examine whether recommendation systems systematically favour particular life paradigms and marginalise other authentic later life narratives. Further, platforms can take proactive steps to promote genuine content diversity. For example, they can deploy traffic support measures to increase visibility for non-commercial, reality-based content from ordinary, lower-capital older users. Enhancing algorithmic transparency and granting users greater choice are also essential. This not only helps users understand recommendation logics. It is a key step in helping them move beyond the algorithmic cave and strengthen digital agency.

Second, for policymakers and civil society organisations, the conclusions call for deeper and more targeted strategies of digital inclusion. Traditional digital literacy programmes often focus on teaching older adults how to go online, remaining at the level of physical access and basic operational skills. Yet, as van Dijk (2017) argues, closing skills gaps does not automatically yield equality in outcomes. The present findings support this view and show that a more profound usage gap stems from differences in cultural capital. Future policies and programmes should therefore shift from skills training to literacy cultivation, with particular emphasis on algorithmic

literacy as algorithmic systems now underpin many mainstream platforms. As Helsper and van Deursen (2017) stress, effective digital support must be targeted. The findings on media format thresholds and the mediating effect of social media participation diversity provide clear direction. Community centres and universities for older adults should promote and support short-video creation. Given its lower dependence on cultural capital, short video is one of the most effective tools for empowering ordinary older people to tell their stories and to counter a singular commercial narrative. Training should prioritise common features on mainstream platforms, as these have been shown to increase older adults' online social returns.

Finally, the study offers guidance for third age users and their families. Older adults should recognise that the polished images of an ideal third age online are often carefully curated exhibitions (Hogan, 2010), not the whole of life. Proactively broadening information sources and engaging with different types of platforms and content are effective personal strategies against the potential effects of the algorithmic cave. For family members, especially younger generations, intergenerational digital support should not be limited to operational instruction. More important is to open conversations about digital content so that older adults can recognise the performative nature of online culture and imagery.

9.6 Limitations and Future Research

Although this study seeks to build an integrative explanatory framework through a multi-method, multi-level design, three main limitations remain. First, in terms of research objects, the focus is primarily on Douyin as a public social media platform. Although method 2's survey includes a wider set of platforms, the methods 1 and 3 are platform-bounded. While Douyin is highly representative, its logic centred on algorithmic recommendation does not fully represent all platforms. Caution is therefore needed when generalising the conclusions to other types of social media.

Second, in terms of sample coverage, resource and methodological constraints prevent a finer-grained division and sampling of China's urban-rural differences, which likely matter for understanding inequality and merit future study. Targeted research is also needed on rural users, on the fourth age who are older and more physically vulnerable, and on those still outside the digital world. Their digital experiences and the exclusions they face are indispensable for a full account of ageing.

Finally, in terms of research design, the study mainly employs cross-sectional data. This allows robust identification of associations and plausible mechanisms among variables, but it does not permit definitive causal claims, nor does it capture the temporal dynamics of digital inequality.

These limitations open up broad avenues for future work. First, comparative research can be pursued. One line compares different platforms to examine how technical

architectures and community logics shape distinct later life digital cultures and inequality patterns. Another line is cross-cultural comparison. By examining older people's digital lives under different welfare regimes and intergenerational cultures, we can better understand the interaction between structural factors and platform mechanisms. Second, future studies should attend more to marginalised groups. Research on the digital lives of the fourth age is especially needed. Investigating the role of digital technologies in contexts of care, dependence, and end of life, whether as tools of connection and comfort or as sources of new risks and exclusions, will advance key agendas in cultural gerontology.

Moreover, longitudinal studies would greatly deepen understanding of relevant processes. By following an older cohort's digital practices over time, researchers can observe more dynamically the process of capital conversion and the longer-term cognitive and social effects of sustained immersion in the algorithmic cave.

Lastly, while this study focuses on structural constraints and on users' strategies within those constraints, future work can centre more on agency and resistance. Users are not purely passive recipients. How they use platforms creatively, and even game platform rules and algorithmic logics to achieve individual or collective goals, will provide a fuller and more hopeful view of the relationship between technology and people.

9.7 Concluding Remarks

This study began with curiosity and concern about later life in the digital era and ultimately revealed a complex landscape woven by platforms, algorithms, capital, and individual agency. The findings show that public social media, though seemingly open and diverse, does not grant equal attention to everyone. Users' pre-existing capital largely influences who can stand at centre stage and gain visibility, while platform and algorithmic discipline profoundly shapes the scripts permitted on that stage and, through interactions among users and the platform, influences and disciplines their values and lifestyles. What we finally see is a carefully curated exhibition of successful ageing, performed by a small advantaged group and promoted to the public as an ideal model. At the same time, many ordinary and authentic life stories may be left in the unseen shadows behind the algorithms.

Understanding this process is not to take a pessimistic stance on technology. It is to recognise more clearly the deep social attributes behind it. Digital technology is not inherently neutral. It is more like a prism that not only refracts but can also amplify existing structural inequalities. The ultimate point of this study is that when we discuss digital inequality, we should focus not only on those excluded from the digital threshold, but also on those who have entered yet find themselves in different rooms. The core task ahead may not be to reject or escape platforms, but to intervene and shape them consciously on the basis of a deep understanding of their operating logic, and to ask

about and create possibilities for technological fairness. Ensuring that the digital stage can accommodate all forms of life, rather than only those that best fit commercial logics and mainstream aesthetics, will be an ongoing challenge. This concerns the well-being of hundreds of millions of older adults and, ultimately, how each of us will be seen and understood and what kind of digital future we will collectively shape.

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Appendix 1: Participant Information Sheet

You are invited to take part in a study conducted as part of Shuman Xie's PhD research at Durham University.

This study has received ethical approval from Department Sociology Ethics Committee of Durham University.

The details of this study are as below:

Project title: The role of social media in third age transition

Researcher: Shuman Xie

Contact details: shuman.xie@durham.ac.uk

Supervisors: Prof. Tiago Moreira (tiago.moreira@durham.ac.uk)

Dr. Kimberly Jamie (kimberly.jamie@durham.ac.uk)

Department: Department of Sociology

Date: 01/07/2023

Before you decide whether to agree to take part it is important for you to understand the purpose of the research and what is involved as a participant. Please read the

following information carefully. Please get in contact with the researcher if there is anything that is not clear or if you would like more information.

1. The purpose of the study：

The aim of this study is to examine the role of social media in third age transition in China.

I am interested in your social relationship and habits, social media using habits, your plan of retirement life and your lifestyle.

The study is expected to run from June 2023 to September 2025.

2. Why have I been chosen?

You have been invited to participate in the research as you are living in China, using social media and currently retired and living independently which meet the following criteria.

Inclusion and Exclusion Criteria of Third Age in this study	
Inclusion Criteria	**Exclusion Criteria**
Individuals will be included, if they meet all terms below: • *Retried* • Having the *cognitive ability* to carry out daily activities without the assistance of others. • Having the *physical ability* to carry out daily activities without the assistance of others. • Individuals can perform *daily self-care* without the assistance of others. • Having *mobility* without the need for assistance from others. Some degree of mobility issues (e.g. inability to bend, slow walking) and the use of tools for mobility (e.g. use of a cane) that do not interfere with essential mobility functions are included.	**Individuals will be excluded, if they either:** • **Do not** have the *cognitive ability* to carry out daily activities without the assistance of others. • **Do not** have the *physical ability* to carry out daily activities without the assistance of others. • Individuals **cannot** perform *daily self-care* without the assistance of others. • **Do not** have essential *mobility* without the assistance of others.

3. Do I have to take part?

Your participation is voluntary, and you do not have to agree to take part. If you do agree to take part, you can withdraw from the survey without giving a reason up to the point of completion of data analysis (anticipated to be by the end of 2024). If you decide to withdraw you will be asked what you wish to happen to the data you have provided up that point.

If you change your mind and do not want to take part in the survey anymore, or if you do not want to answer some questions, you can exit the survey at any time by closing the web page.

4.   What will happen to me if I take part?

If you agree to take part in the study, you will be asked to participate in one online survey that will last approximately 15-20 mins.

This online survey will involve topics of your social relationships and lifestyles, your plans about retirements, some social media use related questions and your some personal information.

During the survey you can stop the survey at any time.

The survey will take place online via Tencent Questionnaire.

5.   What are the possible disadvantages and risks of taking part?

Since the survey involves sensitive topics of retirement and ageing, it is a possibility that the participants will become uncomfortable during the interviews. Participants have the option to end the survey at any time when they feel uncomfortable.

Participants may have concerns about the use of the data. However, the researcher will ensure the anonymity and confidentiality of the data, and in outcomes will not contain any information that can be tracked back to the participants.

6. What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will be recognised by professionals in sociology, gerontology and social media research.

7. Confidentiality and the use of data:

All the information that we collect about you during the survey of the research will be kept strictly confidential. You will not be able to be identified in any ensuing reports or publications.

I will be selective in how your responses to the interview questions will be reported in research outputs (such as, PhD dissertation, journal articles, conference papers, research briefings, webpages). Only me and my supervisors, internal and external examiners, and other related researchers will able to access the original data. If you want to access the outcomes of this study, please contact me.

If you have any further questions or concerns about this study, please speak to the researcher (Shuman Xie – xie.shuman@durham.ac.uk).

Thank you for reading this information and considering taking part in this study. If you are willing to participate in this study after reading this participant information sheet, please read and select YES for the Informed Consent Form on the next page.

Appendix 2: Informed Consent Form

I confirm at I have read and understand the information sheet about this project and have.

I understand that participation is voluntary and that I am free to withdraw at any time prior to the research project being written up, without giving a reason.

I understand that I can exit this survey at any time when answering the questionnaire by closing the web page.

Do you agree to take part in this project.

YES

NO

Appendix 3: Questionnaire

Q1: Are you completing this questionnaire as a retired person yourself, or assisting a retired person to complete it?

(Please note: if you are assisting a retired person, all questions in the questionnaire are addressed to the retired person. All instances of "you" refer to the retired person. Please consult the retired person's actual situation when answering.)

A. I am the retired person

B. I am assisting a retired person to complete the questionnaire

Q2: Through a mobile phone, tablet, or other device, which of the following social media applications do you use? (Multi select)

A. Douyin

B. WeChat

C. Rednote

D. Baidu Tieba

E. Sina Weibo

F. Zhihu

G. QZone

H. Douban

I. Hupu

J. Kuaishou

K. I do not use the above applications.

Q3: Do you use: Douyin, Xiaohongshu, Kuaishou, or Sina Weibo?

A. Yes

B. No

Q4: In the table below, please select the activities you have carried out on Douyin, Kuaishou, Xiaohongshu, or Sina Weibo in the past month.

	Done	Not done
Post text		
Post images		
Post videos		
Like		
Comment		
Share		

Q5: Have you got to know any new friends through Douyin, Kuaishou, Xiaohongshu, or Sina Weibo?

A. Yes

B. No

Q6: In the past month, have you referred to information on Douyin, Kuaishou, Xiaohongshu, or Sina Weibo when arranging social activities?

(For example, choosing a restaurant for a meal with family or friends based on information from these apps.)

A. Yes

B. No

Q7: Please select your primary way of obtaining information:

A. Newspapers

B. Television

C. Radio

D. Internet

E. From relatives and friends

F. Other

Q8: How would you rate your current health status?

A. Very good

B. Good

C. Average

D. Poor

E. Very poor

Q9: Please select your marital status:

A. Never married

B. Married

C. Married but separated

D. Divorced

E. Widowed

Q10: Please select your gender.

A. Male

B. Female

Q11: Please enter your year of birth.

(For example: 1960.)

Q12: Please select your highest level of education.

A. Primary or below

B. Secondary school

C. High school

D. College

E. Bachelor or above