Article

Short Video Entrepreneurship among Smallholder Farmers in the Era of Digital Intelligence: An Exploration of Labour Alienation

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Abstract

This article deals with smallholder farmers in L village who engaged in short-video entrepreneurship on less than 50 acres of farmland. Through a digital labour alienation perspective and in-depth interviews, it was discovered that these farmers faced issues such as the transfer of ownership of their labour products, the standardization of labour processes, and a sense of alienation from their own human identity. These disparities stem primarily from the inequalities of digital power, driven by factors like data indicators, algorithm manipulation, inequitable agreements, re-intermediate exploitation, and identity psychology. By examining specific digital labour practices in this context, this research provides a more comprehensive understanding of worker alienation in the digital labour space. The findings have significant value and practical importance for enhancing the effectiveness of new media in revitalizing rural communities.

Keywords

Digital labour alienation, digital power, digital labour, short video entrepreneurship

Introduction

The primary factors influencing farmers' income include production risks, such as climate risks, new technology risks, and market risks (Xing 2006). Owing to the low concentration of agricultural industries, individual farmers lack the ability to manipulate fluctuations in market pricing for agricultural products and are very

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susceptible to encountering sales crises. Amidst social change and digitization, farmers who continue to practice agriculture possess a diminished degree of consciousness and experience marginalization within the labour market. However, their viewpoints align more closely with and accurately depict rural circumstances. As per the Third National Agricultural Census Main Data Bulletin No.1, agricultural operators who cultivate at least 100 acres of open crops annually in the first mature area and 50 acres or more in the second mature area are considered large-scale operators, and those below that standard are smallholders (National Bureau of Statistics of China 2017). In contrast to farm owners, the resilience and sales stability of smallholder farmers in the agri-risk sector are comparatively lower, whose inclination to extend sales channels is stronger, and who constitute the primary driving force behind rural short video entrepreneurship. Given that the focus of the study is on China's one-year double-growing area, this research examines smallholder farmers who cultivate fewer than 50 acres of land and engage in short-video entrepreneurship.

After the COVID-19 pandemic, many physical farms were hit and smallholder farmers had to tackle the sales problems through entrepreneurship. Chell et al. (2016 as cited in Widjoyo and Gunawan 2020) describe entrepreneurship as a mechanism for entrepreneurial institutions to establish trust and value through innovative techniques that generate long-term advantages among stakeholders by identifying new possibilities and resources. Social media platforms do not restrict the cultural level and professional qualifications of entrepreneurs; thus, it has become an innovative approach for smallholder farmers to establish a business. Short video entrepreneurship for smallholder farmers on social media platforms is often done in different forms. First, smallholder farmers build shops on the platform and post their own agricultural products on the "window" for people to purchase. Secondly, smallholder farmers produce short videos on social media platforms to acquire visibility, using video content to evoke people's collective memory of the countryside, generate a sense of consumer confidence, and create

opportunities for the sale of agricultural products. Furthermore, in addition to enticing people to purchase things through the short video displayed in the window, they will also be available for sale through live streaming. Smallholder farmers utilize social media platforms to enhance the perception of rural areas and market agricultural products, thereby promoting rural development as modern-day digital farmers. Social media platforms facilitate the removal of middlemen and enable direct sales of agricultural products from smallholder farmers to consumers. Consequently, smallholder farmers have acquired fresh employment prospects to work as autonomous contractors or freelancers (Burtch, Carnahan, and Greenwood 2018; Jansen 2017; Kuhn and Maleki 2017).

Simultaneously, smallholder farmers are engaging in the practice of short video business but are struggling to regulate their work pace and even their personal routines. Due to their cognitive limitations, they face marginalization in society and are very susceptible to the influence of social media. This paper focuses on the most popular and dynamic platform in China—Douyin. It will give us a streamlined and representative research environment. This paper examines digital labour alienation within the framework of Marx's theory of labour alienation and aims to analyze the alienation experienced by smallholder farmers during the process of short video entrepreneurship and identify the underlying causes. The goal is to provide insights into the entrepreneurial experiences of marginalized groups in the short video industry with the aim of leveraging new media to revitalize rural areas.

Considering this perspective, this study poses the subsequent research inquiry: What kind of alienation is present in short videos about smallholder farmers? What are the causes of these instances of alienation? To tackle these difficulties, I conducted a thorough analysis of the factors contributing to the division of labour based on Semi-Structured In-depth Interviews with smallholder farmers. Additionally, I examined the personal emotions and opinions of the group members, providing a foundation for further study.

Simultaneously, I utilized Marx's framework of Labor Alienation Theory and conducted in-depth interviews to analyze the alienation of the labour process, their labour products, and himself as a human species. With all this, I investigated the essence of the labour class and delved into the underlying causes of alienation among smallholder farmers in the context of short video entrepreneurship.

Studies on small entrepreneurship and digital technology use have been conducted by many researchers. These include Leong et al. (2022), Sahut et al. (2021), Zahra et al. (2023), Soluk et al. (2021), Paoloni et al. (2019) and Crittenden et al. (2019). Undoubtedly these studies have contributed to our understanding of the impact of the use of digital technology on the existence of small entrepreneurship. However, what is missing from these studies is an exploration of how digital technology use impacts small entrepreneurs in rural areas. Therefore, this study will fill this research gap by focusing its analysis on short video entrepreneurship among smallholder farmers in village areas.

Labour Alienation

The renowned American critical sociologist Mills (2023:108) states: "Know that the problems of social science, when adequately formulated, must include both troubles and issues, both biography and history, and the range of their intricate relations." Hence, the idea of alienation holds significant prominence within the realm of Western contemporary social sciences, and it has garnered much scholarly attention and discourse from notable figures such as Freud, Heidegger, Weber, and Marx.

Marx's primary focus was on the estrangement of labour relations within a capitalist society. In capitalist societies, the introduction of money has transformed labour into a more abstract concept, leading to a transition from natural to social characteristics. This transition is referred to as productive labour (Marx and Engels 2014:422). Productive labour transforms labour into a social characteristic, leading to exploitation and advancing it to the human

level (Wang 2020). Marx developed the concept of alienation in his work *Economic and Philosophic Manuscripts of 1844*, focusing on the issues of labour and exploitation. Marx (2016:42) believed that the alienation of labour could be observed primarily in four dimensions: 1) man's estrangement from the product of his labour; 2) estrangement from his life activity; 3) alienation from himself as a human species; and 4) estrangement of man from man. The concept of Marx's alienation of labour is manifested in four distinct aspects: the alienation of labour activity, the alienation of labour products, the alienation of species, and the alienation of fellow human beings. In the broader process of capital accumulation, he stressed the fact that workers were estranged and separated due to organizational and working conditions (Kassem 2023). This highlights the profound consequences of capitalism's production on individuals, as well as its influence on social dynamics, in light of the disparities between capital and labourers (Ollman 1976). The examination of labour alienation is inherently linked to the examination of the matter of exploitation. Within the realm of social digitization, digitalization is integrated into the workforce. The merging of technology and capital leads to a wider range of concealed and varied forms of worker exploitation, as well as the emergence of novel occurrences of worker alienation in the digital labour process.

As time progresses, there are continual shifts in the duration, location, and methods of people's work. The advent of internet technology has introduced novel types of work, known as digital labor. The political economist Smythe's Audience Commodity Theory is the foundation of the field of research on digital work. Based on the global academic tendencies in digital labour, it can be broadly categorized into three main areas: the Political Economy School, the Liberal Democracy Faction, and the Left-wing Marxist School (Brophy 2008). The Political Economy School analyzes the economic value and exploitation of digital labour within the capitalist system, emphasizing labour value and capital accumulation. The Liberal Democracy Faction studies the impact of the internet and digital technology on democracy, particularly focusing on how

technology affects individual freedoms and user power on digital platforms. Left-wing Marxist School, drawing from Marxism, concentrates on the economic structure, unequal labour relations, and labour dynamics under capitalism (Simon et al. 2002; Xia 2021).

While certain scholars may not explicitly affiliate themselves with Marxism, their perspectives on the exploitation of digital labour are consistent with Marxist theory. For instance, Terranova's (2000) free labour and Ritzer & Jurgenson's (2010) prosumption provide illumination on the theory of labour alienation and its contemporary theoretical development. Fuchs, who is the pioneer in examining digital labour through Marxist lenses, has significantly advanced the comprehension of alienation in digital labour. Fuchs (2010:179-196) proposed that the Internet class should encompass those who engage in the production and recreation of collective experiences, and the content generated and the realm of significance associated with it are subject to exploitation for economic gain. Social media platforms profit from trading users' data at a higher price than the inputs of fixed and variable capital. However, the users who generate this surplus value are not compensated for their contributions. As a result, users' engagement on social media effectively becomes unpaid work, leading to a growing sense of alienation among workers in this new digital labour landscape (Fuchs 2015). The advent of digital technology has intensified the estrangement of labor, rendering it opaque, and the statistics indicate that workers are voluntarily distancing themselves (Ou and Yan 2022).

Technology plays an essential role in the digital realm. The extensive utilization of artificial intelligence, generative AI, blockchain, algorithms, and other technologies may result in the alienation of technology, social interaction, and labour. This alienation arises from excessive dependency on technology, excessive surveillance by technology, data-driven interactions, human-machine interactions, and the displacement of human labour by machines (Fu and Xie 2023; Xie and Liu 2023). While contemplating the different manifestations of alienation and interpersonal connections, Marxism's theory of alienation elucidates the paradoxical nature of

social dominance and seclusion that is inherent in modern capitalist society. This paradox highlights a contradiction where, despite the evident rise in human social power and interdependence, there is a simultaneous growth in feelings of helplessness and loneliness (Øversveen 2022). The transition of capitalistic exploitation in the information age demonstrates the transformation of labour alienation into digital labour alienation (Wang 2023; Liu et al. 2022). During the production of products and services, capitalists exploit the unpaid ownership of digital products and data. In the process of labour, digital labour is unilateralized and domesticated, as is the monitoring and involuntary acceleration of the labour process. In terms of alienating himself from himself as a human species, the dominance of technology over workers leads to their alienation from themselves. Additionally, emotional labour becomes a valuable method of work, but it also gives rise to new problems in terms of alienation from other humans (Feng 2023; Li 2023; Wang and Liu 2023). The commercial aspect of the digital industry is becoming more and more overshadowed by the exploitation of workers amid the rapid growth of global mobile connectivity.

The academic community expresses apprehension regarding the alienation of labour in light of emerging technologies and the transformation of labour relations in the digital realm (. However, most research in this field focuses on analyzing the broader context and conducting theoretical or technical case studies, rather than exploring the experiences of marginalized groups or investigating specific scenarios with limited applications. Few studies have addressed this issue such as a work by Ahmad et al. (2021). Nevertheless, more studies are needed to explore this question so that we understand better how labour alienation impacts the users of digital technology. To this end, this paper builds upon Marx's critique of labour alienation and examines the digital alienation and digital exploitation experienced by smallholder farmers during the entrepreneurial process, as well as the underlying causes.

Method

This study focuses on smallholder farmers who are closely connected to rural life. It utilizes content analysis and in-depth interviews to examine the digital labour alienation experienced by smallholder farmers in the context of short video entrepreneurship. The study is segmented into two phases. Initially, I administered online interviews on the Douyin platform and subsequently gathered and organized the interview data. The content analysis relies on Latent Dirichlet Allocation (LDA) thematic analysis to encode the theme and ascertain the orientation of the deep interview thesis. In addition, I employed a systematic sampling method to choose 15 smallholder farmers from the online sample to conduct comprehensive interviews. To ensure the reliability of the data, I utilized NVIVO 14 software to encode and validate the information.

Content Analysis

Given the preceding discussion, digital labour alienation is an intricate and multifaceted issue. Without identifying the primary areas of concern, it becomes difficult to analyze the digital labour alienation issue smallholder farmers face. Therefore, this paper aims to employ the LDA thematic model to examine the three primary themes of concern among smallholder farmers, using unstructured line interview content as the basis for analysis.

LDA Thematic Model Introduction

LDA is a prevalent model in text mining and natural language processing. It is employed to automatically identify themes in texts from collections of documents. This approach enables researchers to extract themes from extensive textual data and examine the distribution of these patterns across documents, ultimately uncovering the underlying significance and structure of the text data. In LDA, it is assumed that each document is formed from a mixture of various topics, with each topic represented as a collection of words. The chance of these words appearing on a given topic

is assumed to vary. Each document was seen as a combination of themes represented by a probability distribution. The objective of the model was to invert these probability distributions. Therefore, by going through the process of model iteration, the model can identify the most significant distribution of themes in the document. By employing this methodology, I identified the most compelling topics for smallholder farmers in the realm of video entrepreneurship based on a substantial pool of interviews.

Theme Extraction Steps

The interview consists of two stages: A straightforward random sampling of numerous groups of smallholder farmers on the Douyin platform, followed by an effective pre-interview including 40,942 words. In Python, data cleansing involves removing interrupted words, punctuation marks, repetitive text, and meaningless content from a given text. The total number of words in the text is 23981. Following the pre-processing of the text content, a wordbox model was generated in Python. The LDA model was then constructed using the Gensim library for training. After conducting several rounds of experimental debugging, the num_topics were determined to be 3. Additionally, the number of passes for the final training was set to 100. Following the finalization of the manual theme, the class subjects were established as 3, and the number of keywords in the LDA model was 5 (See Table 1).

Table 1 LDA Topics (Keywords Preceded by Keyword Weights**)**

No.	0	1	2
Theme	Account assets	Content creation	Product sales
Keywords 1	0.020*"account"	0.018*"video"	0.030*"live streaming"
Keywords 2	0.016*"Any?"	0.017*"live streaming"	0.024*"production"
Keywords 3	0.014*"company"	0.011*"media"	0.018*"sale"
Keywords 4	0.012*"ideas"	0.011*"update"	0.011*"channel"
Keywords 5	0.012*"a little more"	0.009*"cooperation"	0.010*"new agrarian"

Combined with the contents of the interview, this study categorizes the content of topic 0 as "account assets," which encompasses account affiliation, company operations, business strategy, and other issues. Topic 1 is classified as "content creation," which includes video production, content planning, shooting creativity, and other aspects. Topic 2 pertains to "product sales," encompassing product sales, live broadcast marketing, e-commerce businesses, and other comparable areas.

In-Depth Interviews

Research Design

In-depth interviews allow for a comprehensive exploration of the study subject's perspective and the overall situation. They enable the interviewees to express their personal emotions and thoughts, which helps to enhance our understanding of the subjective experiences of smallholder farmers in the process of frequent short video entrepreneurship. This study applies the findings of content analysis to formulate the interview outline and carries out semi-structured, in-depth interviews. During the interview process, adjustments were made flexibly based on the current circumstances. The interviews primarily focused on topics such as account attribution and operational conditions, revenue structure, work-related experiences, perceptions of the platform, and overall job satisfaction. The specimens were collected from smallholder farmers residing in L village, who cultivated less than 50 acres of land and utilized social media platforms to broaden their sales networks. A systematic sampling approach was employed to choose 15 participants from the sample for conducting comprehensive interviews. To safeguard personal information, foster respondent participation, and facilitate data management, the study refrains from revealing the actual identities of respondents and instead uses a numerical system for data management. The participants who have achieved success in short video entrepreneurship, as indicated by stable sales of their products, are labelled as N. On the other hand, the participants who

have not been successful are labelled as Q. These labels are assigned randomly using allocated numbers. Table 2 displays fundamental data for the participants.

Table 2 In-Depth Interviewer Background Information
(K = thousand)

No.	Age	Qualifications	Number of fans	Update frequency
N1	50	Junior High School	1.2K	Every day
N2	43	Associates	1.1K	Every day
Q3	49	Junior High School	1.363K	Every day
N4	36	Undergrad	1.063K	Five times a week
N5	46	Junior High School	5.611K	Every day
N6	41	Junior High School	3.386K	Every day
Q7	34	Senior High School	1.062K	Not recently updated
N8	40	Senior High School	1.300K	Every day
Q9	49	Junior High School	1.104K	Every day
Q10	45	Junior High School	1.970K	Every day
N11	35	Junior High School	21K	Six times a week
N12	44	Junior High School	6.569K	Every day
N13	47	Senior High School	12K	Every day
N14	34	Associates	8.1K	Every day
Q15	53	Elementary School	4.627K	Every day

Result Analysis

Case Creation. The transcribed interview data were imported into NVIVO 14. It began by creating the initial coding node for the interview information. The encoding function of NVIVO 14 automatically constructs a node and subsequently alters it. The basic node encoding is finished. The next step was the manual encoding of the interviews. I additionally modified the initial coding node, making necessary adjustments to any uncoded or unsuitable coding and assigning it to the proper node. A new tree node and subnode could be constructed if needed. As an illustration, the "income

structure" was initially represented as a tree-shaped node. However, after carefully considering the content and relationship, the sub-node of the "life change" tree node was further divided into "incoming structure" for coding analysis.

Reliability Assessment. The dependability of the encoding findings was assessed using the Mills (2018:372–374) approach, which measured the level of agreement between two independent encoders. The primary and secondary coders utilized NVIVO 14 to autonomously encode the interview data and assess the coding outcomes of both coders. The results indicated a consistency of 91.45%. To ensure the reliability of the encoder, the master encoder conducted a second encoding of the interview material after 15 days. The results of the two encodings were compared, and the consistency was found to be 95.72%, confirming the validity of the coding process.

Results discussions. The qualitative analysis of the in-depth interview results revealed that smallholder farmers who were engaged in short video entrepreneurship experienced various degrees of alienation in content creation, cooperative relationships, sense of identity, and workload. Additionally, they exhibited a strong sense of trust and enthusiasm towards the platform, which corresponds to the labour product, labour process, and labour issues. The study investigates the alienation of digital labour among smallholder farmers in short video entrepreneurship and its underlying causes through in-depth interviews.

Alienation of Labor under Digital Capitalism

Coercion: Standardized Training of Labor Processes

The concept of the labour alienation process primarily pertains to the dual harm inflicted upon the physical and mental well-being of workers during the job process. This phenomenon is particularly evident in digital labour practices when the labour discipline of the non-self is involved in the digital labour process. Social media platforms diverge from conventional businesses as they function as

meta-organizational entities that dynamically organize and utilize capital and technology to exert control over the output and content generated by the labour force. This results in the establishment of a digital barrier for labour control (Casilli and Posada 2019; Li 2021). Social media platforms employ various methods of labour control, such as data-based labour, self-exploitation, depersonalization, and other instruments. They utilize opaque production chains to hide the true nature of workers' exploitation while motivating them to adhere to explicit and non-apparent rules.

The Metaphor of Data-Based Capital

Social media platforms have created indicators to describe the ratings of user-generated data, such as video views, likes, comments, and fans, to streamline the administration of data produced by users' use of the media (Gandini 2021). Indicators are a crucial requirement for successfully expanding sales and business channels for smallholder farmers. Social media platforms monitoring and evaluating smallholder farmers' labour behaviour through indicators have exerted control over the labour process, leaving smallholder farmers feeling passive and fearful of being ranked, evaluated, and controlled. This has led to the alienation of small farmers from the digital labour process (Xiang et al. 2022). Social media sites assess the worth of smallholder farmers' accounts based on data and manifest intangible means of production labour through figurative data. This not only encourages the creation of content for smallholder farmers on the site but also simplifies the administration of human resources on the platform.

The tangible indicators also present smallholder farmers with the dual stress of the Super Panopticon and Peer Pressure. This is a new model of platform labour control in the digital age (Poster 2018; Thompson 2002). The engagement of smallholder farmers on social media yields a substantial amount of data, and the indicators created based on the data serve as fertile ground for the platform's monitoring of data manufacturing for smallholder farmers. Smallholder farmers

are seemingly becoming short video entrepreneurs, but they are categorized as digital workers on platforms and are subjected to covert surveillance. Additionally, they face competition and pressure from their fellow farmers. When confronted with peer pressure, smallholder farmers can only intensify their efforts to enhance their performance and strive for the achievement of the "work" indicator. In this procedure, the platform does not employ hierarchical management like traditional businesses but instead utilizes technology to optimize the management of quantitative data. It integrates data-driven metrics into the mindset of smallholder farmers, transforming them into highly committed employees who are devoted to social media platforms (Hu 2015). Social media platforms offer small farmers the chance to gain visibility through algorithms and indicators, which provide a new kind of power relationship and new labour standards. It leads to the digital alienation of smallholder farmers in the new power relations and standardized work procedures (Ping 2023).

Psychological Manipulation of Self-Exploitation

The importance of technology in the production process is growing as workers become increasingly dependent on it and subject to its strict control over their labour. Workers assume the position of prosumer on the platform and experience dual exploitation by the platform. Smallholder farmers face challenges in recognizing the exploitation they experience when they embrace, adopt, and promote the business principles of the platform due to the impact of algorithms and capital. This process also involves psychological manipulation.

Toffler (1980:267) established the notion of prosumer in his book *The Third Wave* during the 1980s. This concept views individuals as both consumers and producers of goods and services. In the context of the digital economy, the term "prosumer" typically refers to groups that generate both productive value and consumer value by engaging in consumer activities, such as borrowing, leasing, and transactions, to fulfil their own or other consumers' needs and create consumer

value for products (Xiang et al. 2022). Smallholder farmers utilize the platform to create and share video content, which allows them to generate non-material asset production and engage in the trading of their material resources on the website (Ritzer and Jurgenson 2010). However, in actuality, smallholder farmers contribute unpaid resources to social media platforms in the form of intangible and physical means of production, hence supplying a significant amount of informational material to the platform. However, smallholder farmers face challenges in obtaining remuneration for their efforts that is commensurate with their labour inputs.

Marx highlights this fact in *Marx & Engels Collected Works Vol 37: Karl Marx Capital: Volume 3* (1998:291-202). The very function, by which the merchant's money becomes capital, is largely done through his employees. The unpaid labour of these clerks, while it does not create surplus value, enables him to appropriate surplus value, which, ineffect, amounts to the same thing concerning his capital.

The fast expansion of the Internet in China has eroded the distinctions between "production" and "consumption" in the prosumer realm, leading to a blurring of workers' self-perception. As described by my personal interview with N1 on November 29, 2023, I felt very good about the platform as a whole and believed that it provided a platform for sharing my life. Once smallholder farmers transition into being producers on social media platforms and generate revenues through short video entrepreneurship, they develop a strong affiliation with the platform, making it challenging to recognize any adverse effects it may have.

Conversely, smallholder farmers are perceived as data producers. Smallholder farmers can utilize the sales channels and resources offered by social media platforms by endorsing advertising and business models that acknowledge the platform's identity, embracing the financial principles and inherent ownership of the platform. Traditional factories represent a form of exploitation

where workers are subjected to the control and dominance of capitalist forces. However, through the collaboration of capital and technology, workers' self-exploitation is an essential aspect of their digital labour (Yan and Li 2023). Smallholder farmers freely continue to publish material that is consistent with platform norms and popular aesthetics while choosing to buy promotional traffic in a great number of engines under Byte Dance's Ocean Engine. At the same time as smallholder farmers produce free data content, they also consume data on the platform, and because smallholder farmers are highly dependent on their users voluntarily, they unconsciously accept the business logic of the platform—spending money to make the flow hotter—and they are willing to self-exploit themselves in the social media platform centre.

Disengagement: Transfer of Ownership

The output of digital workers consists mostly of digitized products, which are predominantly manifested as the ownership of content and accounts. Social media platforms exploit their dominating position to take the products of smallholder farmers' labour, leading to a significant disparity between the value of their labour and the compensation they receive. This ultimately results in the alienation of labour products.

Smallholder farmers frequently relinquished ownership of content products and data products in the realm of content ownership. Chinese Copyright Law (2020) Article 10 grants writers the rights to publish, sign, change, and safeguard the integrity of their works. Nevertheless, smallholder farmers typically have to consent to the user agreement of the social media site when using it. These agreements frequently include provisions of the entitlement to utilize and disseminate content. Under specific conditions, users may consent to authorize the platform to replicate, disseminate, exhibit, or execute said content. Failure by smallholder farmers to comply results in the forfeiture of the chance to initiate a business on the platform. Smallholder farmers' ownership of content encompasses

not only the creative content itself but also the privacy of their personal data. This data is generated during their work process and subsequently transferred to social media platforms as per the user agreement. Smallholder farmers struggle to recognize the loss of ownership of content because of their cognitive limitations. Successful participants in short video entrepreneurship have distinct perspectives about labour and products compared to unsuccessful participants. Triumphant entrepreneurs, as demonstrated in my personal interview with N5 on December 10, 2023, exhibit a favourable disposition towards labour products and platforms as he said: "I don't really get this—we don't have a culture. I think it's great to be able to sell our house goods in the Douyin, but I can't think about them". In contrast, failed individuals, as demonstrated in my personal interview with Q7 on December 16, 2023, demonstrate an unfavourable disposition towards labour products as he said: "I feel like I'm too busy working and not selling anything, so shooting this (video) makes no sense, and I've been bored with it lately".

Smallholder farmers who encountered challenges in independently pursuing short-video entrepreneurship were exposed to significant risks in terms of account ownership. Although social media platforms offer possibilities for decentralization, they have also accelerated the rise of re-mediation (Gandini 2021). Media intermediaries are platforms that offer various support services, including transaction support, review and feedback mechanisms, human resources management, and skills training. These platforms act as active "infrastructure" agents in labour relationships (Manyika et al. 2016; Van Doorn 2017). This paper aims to categorize intermediaries into two groups:basic-service intermediaries and function-providing intermediaries. Basic-service intermediaries, such as third-party payment providers, are often unavoidable for smallholder farmers.

However, these farmers also relied on function-providing intermediaries, such as data feedback intermediaries with Multi-

Channel Network (MCN), who assisted them through short videos. MCNs have a higher demand for smallholder farmers compared to data feedback platforms. MCN agencies provide smallholder farmers with shackles and offer services such as contractual or cooperative labour relations, practical skills training, account management, and equipment provision. First, in my interview on December 3, 2023, with N4, who had contracting experience with MCN, he was told that if the account was incubated by the corporation, it would be its property. Smallholder farmers lacking a contract structure based on fan ownership cannot regain control of their accounts independently once the contract concludes. Secondly, smallholder farmers have limited authority in decision-making processes, particularly on content production, live broadcasting categories, and brand selection. As a result of my interview with N12 on December 18, 2023, he shared his opinions on why many smallholder farmers oppose working with MCN: "Suppose that we use their stuff and sales increase. They start to offer poorer-quality production to trick you. I'm not sure, so just use my own home." Furthermore, engaging in high-intensity activity may impose psychological strain on smallholder farmers. The regulations of MCN are rather stringent, encompassing criteria for video quality, fan count, and live transactions. Smallholder farmers engaged in self-processing production for an extended period may experience more psychological strain than physical strain.

The involvement of intermediaries that provided functions significantly impacted the ownership of accounts held by smallholder farmers, thereby diminishing their freedom of expression limited to the contents of their accounts. Smallholder farmers were likely expected to generate labour products, but they would not possess ownership of these items, thus yielding no tangible outcome.

Occupation: The Disappearance of Individuals
Marx (1998: 39–40) defined the human species as labour that is both free and conscious. He attacked the state of being alienated from themselves as human beings, stating that it was created by a conflict

between the labourer's basic survival needs and their spiritual values. The smallholder farmers, motivated by the social recognition acquired through the short video entrepreneurship, diligently engaged in identity-building and emotional performance in the virtual world. Although it may appear as a deliberate effort by smallholder farmers, it is a labour tool that compels them to generate content, sacrifice their personal time and physical surroundings, and willingly embrace social media platforms. Consequently, smallholder farmers felt disconnected from their own identity as a part of the digital world. According to the Self-Categorization Theory, individuals tend to categorize people into different groups, both internal and external. They also tend to identify with their own group and adopt the characteristics associated with that group, which contributes to the formation of their own identity (Turner and Reynolds 2011). Smallholder farmers utilized social media platforms to access sales channels, self-identify as a collective of media practitioners, and adopt the typical behaviours associated with media professionals. Smallholder farmers utilized the platform's traffic to share logical and informative content, consistently acquiring knowledge on script writing and video production to enhance their online presence. Smallholder farmers, once they identified with a particular group, tended to modify their online activities, increase their level of engagement, and differentiate themselves from other group members to obtain more respect (Zhang and Zuo 2006). Smallholder farmers believed social media was a tangible burden so they were willing to forgo their leisure time to engage in digital labour on social media. N2 said:

> If you want to live broadcast, you don't have much time to take short videos; if you want high-quality videos, there isn't much time to live... This (short-video entrepreneurship) income is not very reliable, and it's extremely exhausting... It takes a few days to update the video, and the first phase of each product requires a lot of energy; perhaps a year before the end of the year, you must consider the design of this year's product, including the video.

Smallholder farmers faced resource constraints when it comes to utilizing social media platforms. The interaction between small farmers and their followers is confined to the platform and lacks stability, making long-term connections challenging. Smallholder farmers who engaged in Cyber-Online activities relied heavily on social media platforms and dedicated a significant amount of time to managing their accounts and interacting with fans. This may result in their isolation from both themselves and others (Dong and Li 2020). Smallholder farmers consistently infused their emotions into the content of their produce. The emotions encompassed in this context encompassed both the affective states associated with the process of generating content as well as the emotional responses elicited through engaging with followers. Rural farmers invested their emotions into data products and eagerly anticipated comments from visitors. This response encompasses two aspects: firstly, the admiration of the creators by the spectators, and secondly, the interests of potential consumers. Smallholder farmers, motivated by dual objectives, often experienced a sense of disappointment and wanted greater recognition when their short videos were not valued, acknowledged, or popular. The interviewee's feelings reflect this very issue. A smallholder farmer said: "I think this Douyin is still quite tasty. For instance, no one's paying attention to you today, or the work you shoot out for nobody to admire is instead a depressing, unhappy thing." (Interview, December 21, 2023).

Certain smallholder farmers devoted excessive emotional energy to social media platforms, thereby squandering their time and focus. Smallholder agricultural producers encountered challenges in distinguishing between their business and private domains, and the indistinct demarcation of working hours weakened the notion of this distinction. The deprivation of smallholder farmers' ability to allocate their time freely and the overwhelming influence of internet emotions have facilitated capital's full appropriation of workers' surplus value in a lawful manner.

Conclusion

This paper has explained how the process of smallholder farmers' short-video entrepreneurship was influenced by the alienation of labour products, labour processes, human species essence, and the interpersonal dynamics involved. The struggle for power on social media platforms was primarily driving this alienation. The reasons for smallholder farmers' digital labour alienation can be summarized by the utilization of data indicators, algorithms, platform agreements, intermediaries, and social identity psychology. Social media platforms create data-based indicators, algorithms, and platform protocols. Intermediary agencies and social identity emerge within the context of social media platforms. Thus, examining the estrangement of digital work in the context of smallholder farmers' business ventures is unquestionably an exploration of the connection between smallholder farmers and digital capitalism. When digital capital is unevenly distributed, smallholders are often attracted to platforms and unknowingly develop a sense of detachment between themselves and their work. This is in line with the idea that "alienation and the rejection of alienation are not a finalized historical process but an ongoing historical process" (Luan 2023:61).

Having been marginalized in real life, small farmers had difficulty recognising the influence of the platform and organized resistance. Numerous marginalized groups engage in short-video entrepreneurship on social media platforms. It is crucial to prioritize understanding the emotions and attitudes of individuals involved in labour practices. This is one of the key motivations for studying under unique circumstances. To promote the advancement of smallholder farmers' short-video entrepreneurship and achieve greater social equality, it is imperative to conduct a systematic analysis of the phenomenon of alienation and its underlying causes in a specific context. This will involve a comprehensive examination of Marx's theory of labour alienation, which will help us deepen our understanding of digital labour alienation and facilitate the redistribution of social power.

References

Ahmad, Panji Mulkillah, I. Hikami, B. N. F. Zufar & A. Syahfrullah. 2021. "Digital Labour: Digital Capitalism and the Alienation of YouTube Content Creators." *Journal of Asian Social Science Research 3*(2): 167-184. https://doi.org/10.15575/jassr.v3i2.44

Brophy, Enda. 2008. "The Organizations of Immaterial Labour: Knowledge Worker Resistance in Post-Fordism." *Doctoral dissertation*, Queen's University.

Burtch, Gordon, Seth Carnahan, and Brad N. Greenwood. 2018. "Can You Gig It? An Empirical Examination of the Gig Economy and Entrepreneurial Activity." *Management Science* 64(12): 5497-5520.

Casilli, Antonio and Julian Posada. 2019. "The Platformization of Labor and Society." *Society and the Internet: How networks of information and communication are changing Our Lives*, 293-306.

Chinese Copyright Law. 2020. Copyright Law of the People's Republic of China. Retrieved from https://hlipa.hlj.gov.cn/hlipa/c103159/202111/c00_31316463.shtml

Chell, Elizabeth, Laura J. Spence, Francesco Perrini, and Jared D. Harris. 2016. "Social Entrepreneurship and Business Ethics: Does Social Equal Ethical?" *Journal of Business Ethics* 13: 619-625.

Crittenden, Victoria L., William F. Crittenden, and Haya Ajjan. 2019. "Empowering Women Micro-Entrepreneurs in Emerging Economies: The Role of Information Communications Technology." *Journal of Business Research* 98: 191-203.

Dong, Hui and Jiali Li. 2020. "Human Emotions Are Alienated and Liberated in Digital Labor." *Philosophy of the World* 06: 28-37+157.

Fu, Yue and Xiaojuan Xie. 2023. "A Philosophical Interpretation of Cyberpunk-Human Alienation and Liberation in the Age of Artificial Intelligence." *Academic Exploration* 08:14-20.

Fuchs, Christian. 2010. "Labor in Informational Capitalism and on the Internet." *The Information Society* 26(3): 179-196.

Fuchs, Christian. 2015. "Dallas Smythe Today–The Audience Commodity, the Digital Labour Debate, Marxist Political Economy and Critical Theory. Prolegomena to A Digital Labour Theory of Value." Pp. 522-599 in *Marx and the Political Economy of the Media*. Leiden: Brill.

Feng, Yanfang. 2023. "Analysis and Criticism of Digital Labor Alienation in Contemporary Capitalist Society." *Journal of Hebei University (Philosophy and Social Science)* 48(05): 80-90.

Gandini, Alessandro. 2021. "Digital Labour: An Empty Signifier?" *Media, Culture & Society* 43(2): 369-380.

Hu, Yong. 2015. "Always Examine the Metaphors of the Internet." *Social Sciences Weekly*, 8th Edition, China.

Jansen, Giedo. 2017. "Farewell to the Rightist Self-Employed? New Self-Employment' and Political Alignments", *Acta Politica* 52(03): 306-338.

Kassem, Sarrah. 2023. "How to Study Alienation: Marx's Four Relations." Pp. 15-23 in *Work and Alienation in the Platform Economy*. Bristol University Press.

Kuhn, Kristine M. and Amir Maleki. 2017. "Micro-Entrepreneurs, Dependent Contractors, and Instaserfs: Understanding Online Labor Platform Workforces", *The Academy of Management Perspectives* 31 (03):183-200.

Leong, Carmen, Felix Ter Chian Tan, Barney Tan, and Fithra Faisal. 2022. "The Emancipatory Potential of Digital Entrepreneurship: A Study of Financial Technology-Driven Inclusive Growth." *Information & Management* 59 (3): 103384.

Li, Biao. 2021. "Social Platforms in the Light of Platform Capitalism: The Nature of Value, Social Labor, and Public Governance."*Journal of Social Sciences* 06:171-178.

Li, Xuan. 2023."An Exploration of the New Alienation of Digital Labor." *Social Sciences of Beijing* 03:14-23.

Liu, Yong, Nan Xiang, and Jing Zhang. 2022. "Marx's Labor Alienation the Dilemma of "Digital Odd Jobs" and Its Crackdown." *Journal of Socialist Theory Guide* 09: 98-103. doi:10.13644/j.cnki.cn31-1112.2021.06.018.

Luan, Yimei. 2003. "The Theory of Alienation and Media Criticism." *Chinese Journal of Journalism Communication* 03:60-63. DOI:10.13495/j.cnki.cjjc.2003.03.014.

Manyika, James, Susan Lund, Jacques Bughin, Kelsey Robinson, Jan Mischke, and Deepa Mahajan. 2016. *Independent Work: Choice, Necessity and the Gig Economy*. McKinsey Global Institute.

Marx, Karl. 2016. "Economic and Philosophic Manuscripts of 1844." In *Social Theory Re-Wired*. London: Routledge.

Marx, Karl and Frederick Engels. 2014. *Marx/Engels Collected Works Vol. 26 (2nd ed)*, Beijing, China: People's Publishing House.

Marx, Karl and Frederick Engels. 1998. *Marx & Engels Collected Works Vol 37: Karl Marx Capital: Volume 3*. Chadwell Heath, LDN: Lawrence & Wishart.

Mills, C. Wright. 2023. "The Sociological Imagination." Pp. 105-108 in *Social Work.* London: Routledge.

National Bureau of Statistics of China. 2017. *Third National Agricultural Census Main Data Bulletin* (No. 1), Retrieved from https://www.stats.gov.cn/sj/tjgb/nypcgb/qgnypcgb/202302/t20230206_1902101.html

Ollman, Bertell. 1976. *Alienation: Marx's Conception of Man in A Capitalist Society* (Vol. 9). Cambridge University Press.

Ou, Yangqin and Shuangsheng Yan. 2022. "The New Changes of Digital Labor Alienation and its Countermeasures." *Frontiers in Economics and Management* 3(8): 118-122.

Øversveen, Emil. 2022. "Capitalism and Alienation: Towards a Marxist Theory of Alienation for the 21st Century." *European Journal of Social Theory* 25(3): 440-457.

Paoloni, Paola, Giustina Secundo, Valentina Ndou, and Giuseppe Modaffari. 2019. "Women Entrepreneurship and Digital Technologies: Towards A Research Agenda." Pp. 181-194 in *Advances in Gender and Cultural Research in Business and Economics: 4th IPAZIA Workshop on Gender Issues 2018, Rome, Italy 4.* Springer International Publishing, 2019.

Ping, Chengtao. 2023. "Digital Labor: Conceptual Definition, Power Relations, and the Subjectivity Issues Based on the Perspective of Marxist Critique of Political Economy." *Changbai Journal* 06:61-69. DOI:10.19649/j.cnki.cn22-1009/d.2023.06.008.

Poster, Mark. 2018. *The Second Media Age.* Hoboken, NJ: John Wiley & Sons.

Ritzer, George and Nathan Jurgenson. 2010. "Production, Consumption, Prosumption: The Nature of Capitalism in the Age of the Digital 'Prosumer'." *Journal of Consumer Culture* 10(1): 13-36.

Sahut, Jean-Michel, Luca Iandoli, and Frédéric Teulon. 2021. "The Age of Digital Entrepreneurship." *Small Business Economics* 56 (3): 1159-1169.

Simon, Leslie David, Javier Corrales, and Donald R. Wolfensberger. 2002. *Democracy and the Internet: Allies or Adversaries?* Washington, DC: Woodrow Wilson Center Press.

Soluk, Jonas, Nadine Kammerlander, and Solomon Darwin. 2021. "Digital Entrepreneurship in Developing Countries: The Role of Institutional Voids." *Technological Forecasting and Social Change* 170: 120876.

Terranova, Tiziana. 2000. "Free Labor: Producing Culture for the Digital Economy." *Social Text* 18(2): 33-58.

Thompson, Paul. 2002. "Fantasy Island: A Labour Process Critique of the 'Age of Surveillance'." *Surveillance & Society* 1(2): 138-151.

Toffler, Alvin. 1980. *The Third Wave*. New York: Morrow.

Turner, John C., and Katherine J. Reynolds. 2011. *The Story of Social Identity. In Rediscovering Social Identity: Key Readings.* Psychology Press, Taylor & Francis.

Van Doorn, Niels. 2017. "Platform Labor: On The Gendered and Racialized Exploitation of Low-Income Service Work in the 'On-Demand' Economy." *Information, Communication & Society* 20(6): 898-914.

Wang, Jingang. 2020. "Informationized Society Production and Digital Labor Alienation: A Contemporary Interpretation of Marx's Theory of Alienated Labor." *Journalism Research* (02): 80-93+122.

Wang, Tongyu. 2023. "The Alienation of Human Subjectivity by Digital Communication and Countermeasures Against It." *Youth Journalist* (23): 46-49.

Wang, Yuanyuan, and Binbin Liu. 2023. "On Digital Labor's Alienation and Its Resolution in the Era of Intelligence." *Journal of China University of Labor Relations* 37(05):43-52.

Widjojo, Handyanto and Sandy Gunawan. 2020. "Indigenous Tradition: An Overlooked Encompassing-Factor in Social Entrepreneurship." *Journal of Social Entrepreneurship* 11(1): 88-110.

Xia, Bingqing. 2021. "Rethinking Digital Labour: A Renewed Critique Moving Beyond the Exploitation Paradigm." *The Economic and Labour Relations Review* 32(3): 311-321.

Xiang, Diandian, Bao, Ying, and Jiao, Guanzhe. 2022. "A Review and Prospects of Prosumers in the Digital Economy." *Foreign Economics & Management* 44(03): 36-52. doi:10.16538/j.cnki. fem.20211028.102.

Xing, Li. (2006). "Study on Production Risk and Policy Agricultural Insurance in Chinese Cropping Sector." *Doctoral dissertation*. Nanjing Agricultural University, NanJing, China. CLC: F326.1.

Xie, Jun and Ruilin Liu. 2023. "ChatGPT: Human Alienation Crisis and Reflection Caused by Generative Artificial Intelligence." *Journal of Chongqing University* (05):111-124.

Yan, Kunru and Yu Li 2023. "The Multiplication Logic of Digital Capitalism and Its Criticism." *Huazhong University of Science Technology* 37(05):134-140. doi:10.19648/j.cnki. jhustss1980.2023.05.13.

Zahra, Shaker A., Wan Liu, and Steven Si. 2023. "How Digital Technology Promotes Entrepreneurship in Ecosystems." *Technovation* 119: 102457.

Zhang, Fenfen. 2008. Qualitative data analysis: An expanded sourcebook (Miles, M. B., & Huberman, A. M.) (2nd ed). Chongqing, SC, China: Chongqing University Press.

Zhang, Yingrui, and Zuo, Bin. 2006. "Social Identity Theory and Its Development." *Advances in Psychological Science* 14(03):475-480.