

Governance Practices of Digital Platforms from the Perspective of Fluidity Governance: Mechanisms, Challenges, and Transformations

— An Analysis Based on Actor-Network Theory

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Abstract

From the perspective of Actor-Network Theory (ANT), the governance of digital platform fluidity essentially manifests as a translational practice mechanism involving multiple heterogeneous actors, including digital platform enterprises, digital platform users, governments, and other businesses. This translational practice mechanism can be divided into four stages: problematization, intereselement, enrollment, and mobilization. In current digital platform governance practices, these diverse human and non-human factors are interconnected and imbued with the meaning of fluidity governance, giving rise to multiple challenges in the translational practice: first, the disorder of the translational space within the context of fluid spaces; second, divergences in inter-subjective network relationships caused by the singularization of actors; and third, the deficiency of "obligatory passage points" in translation due to structural blockages. Consequently, in response to the practical demands of governing digital platform fluidity, it is imperative to address the challenges of translational practice in the new era by focusing on spatial integration, actor connection, and structural efficiency enhancement. This involves exploring strategies to optimize the actor-network of digital platforms, thereby promoting the transformation of modern social governance systems and capabilities.

Keywords:

Digital Platform; Fluidity Governance; Translation; Actor-Network Theory

1. Introduction: The "Translation" Interpretation of Digital Platform Fluidity Governance

With the advancement of digitalization, communities, as vital units of social governance, have exhibited nonlinear and diversified trends of change (Zheng Zhongyu & Liang Benlong, 2016). This is particularly evident in the successive emergence of digital virtual communities (Zhu Kunpeng & Zhou Jing, 2020).¹ As a significant aspect of social governance, current academic

¹ Current academic discussions often refer to communities based on digital technology as platforms or media collectively as digital communities. Related conceptual categories also include online communities, cyber communities, virtual communities, and digital-virtual communities. In fact, broadly defined digital communities encompass at least two distinct types: one involves the ongoing, varying degrees of digitalization within real-world communities—digitalized real communities; the other refers to virtual communities generated through reliance on digital technology (Zhang Jieying & Li Xueshi, 2023). From the perspective of Actor-Network Theory, the term "digital virtual community" (abbreviated as virtual community) used in this paper does not strictly distinguish between the two. Instead, it posits that social behavior involves an integration of online and offline activities, and that cyberspace and physical space constitute a "virtual-real symbiosis" of social space (He Mingsheng, 2016; Lü Xiaokang, 2024), focusing primarily on how digital platforms connect these two spheres.

research on virtual community governance mainly concentrates on two areas. The first analyzes problems within virtual community governance. Examples include conflicts between "real-name registration" interaction mechanisms and the inherent characteristics of virtual communities (Zhang Rong & Zeng Fanbin, 2007), privacy protection issues (Chi Ming et al., 2020), and problems related to the digital labor process and labor control (Hu Hui & Ren Yan, 2018; Chen Long, 2020; Bieber, 2024). The second area focuses on strategies for virtual community governance, such as promoting broad participation among community members (Zeng Fanbin, 2009), adopting governance methods based on decentralization and checks and balances (He Zuocheng, 2011), and governance according to law (Li Zhenfeng & Zhang Chi, 2020). Within this context, digital governance has clearly become a "new cipher" for promoting the construction of a community governance collective (Liu Peigong, 2023), and digital platforms have become an indispensable component within the governance perspective.² As a form of "general-purpose infrastructure" in social life (Chen Long & Chen Ze, 2024), digital platforms pervade numerous fields (Srnicek, 2017: 1; Doorn, 2017), not only generating new social relations and novel modes of interactive connection but also presenting new governance propositions (Nash et al., 2017; Gorwa, 2019).

The imperative for digital platform governance signifies a structural shift in social and community governance for the digital age, also embodying the meaning of fluidity governance.³ As Castells (2006:383) stated: "Our society is constructed around flows: flows of capital, flows of information, flows of technology, flows of organizational interaction, flows of images, sounds, and symbols. Flows are not just one element of the social organization: they are the expression of processes dominating our economic, political, and symbolic life." As a core characteristic and crucial concept of modern society (Bauman, 2002: 3; Beckmann, 2004; Creswell, 2006: 24; Yang Qianhao & Zhu Hong, 2015), flow and fluidity carry various metaphors along with their underlying social meanings and values (Sun Jiuxia et al., 2016). Fluidity governance originates from new regionalism's response to social governance challenges under globalization and regional integration, treating social flows as a fundamental variable (Qin Zhimin, 2023). It is a mode of governance that takes fluidity as its object, and even more so, a mode that utilizes flow as its instrument (Bærenholdt, 2013; Guan Qiping, 2022).

For contemporary society, fluidity stems from social complexity and uncertainty. Its rapid intensification is primarily due to the widespread application of information technology, which enables people and objects to enter a state of high-speed flow when supported by IT (Zhang Kangzhi, 2016). Viewing current digital platform governance practices through this lens, the challenges posed by fluidity are numerous. The crux lies in the disorder of the translational space, divergences in inter-subjective network relationships, and the deficiency of "obligatory passage points" in translation. Fluidity governance, focusing on constructing fluid networks of governance objects, precisely encompasses the interconnection of multiple heterogeneous governance subjects—digital platform enterprises, digital platform users, governments, and other businesses—echoing the "translation" mechanism of Actor-Network Theory. Within this theory, Latour's advocacy for establishing a sociology of "association" to replace the sociology

² The digital platforms discussed in this paper refer primarily to private-sector digital platform enterprises registered as companies, i.e., internet-based companies.

³ "Platform governance" encompasses three meanings: "governance of platforms" (platform as object, external governance), "governance by platforms over other actors" (platform as subject, internal governance), and "governance on platforms" (platform as adverbial, collaborative governance) (Lü Peng et al., 2022). From the Actor-Network Theory perspective, and starting from the collaborative governance of fluidity, this paper regards digital platforms as a governance subject to explore their relationships with governments, other businesses, and society.

of "the social" is undoubtedly a theoretical strategy responding to social fluidity (He Xuesong & Yuan Yuan, 2017).

Actor-Network Theory adheres to the principle of generalized symmetry, studying the interactions between human and non-human actors and the resulting heterogeneous networks (Latour, 1992). Building on this, Latour employed three core concepts—actor, translation, and network—to demonstrate how Actor-Network Theory reassembles the social (Wu Ying et al., 2008). Here, actors refer not only to human agents but also include many non-human entities such as ideas, technology, and biological organisms (Latour, 2005: 64-71). The concept of translation permeates Actor-Network Theory, denoting the process whereby actors negotiate and translate their own problems into the problems and interests of other actors, thereby enrolling these others into a shared "actor-network alliance," or vice versa (Zhang Xueyi & Ni Weijie, 2011). The key to successful translation depends on the "obligatory passage point," which compels the interests of the translator and the translated to connect. Through translation, research can incorporate all elements of action into a unified explanatory framework, subsequently constructing a pluralistic and equitable community actor-network (Wen Jun & Chen Xuejing, 2023). Hence, Actor-Network Theory is also termed the sociology of translation.

Analyzed from the Actor-Network Theory perspective, digital platform fluidity governance essentially manifests a translational practice mechanism involving multiple heterogeneous governance subjects. From the "translation" viewpoint, the practice of digital platform fluidity governance unfolds as follows: The digital platform enterprise, situated at the central node of governance, identifies the specific problems and interest claims of other subjects—such as digital platform users, governments, and other businesses—during their participation in the governance process, and clarifies the main challenges these subjects need to address to advance digital platform governance. Subsequently, the digital platform enterprise enrolls various governance subjects into the governance network by designing suitable incentive mechanisms, establishing effective communication channels, and providing technical support, thereby fostering interactive cooperation among them. In summary, based on outlining the translational practice mechanism centered on the digital platform enterprise within digital platform fluidity governance, this paper employs a "space-subject-structure" analytical framework to conduct an in-depth analysis of the specific translational processes and challenges faced by multiple actors in digital platform fluidity governance. It further explores optimization strategies, aiming to provide theoretical foundations and practical references for policymaking related to digital platform governance and to promote the transformation of social governance systems and capacities in the process of modernization.

2. The "How" of Translation: The Practical Mechanism of Digital Platform Fluidity Governance

In the fluidity governance of digital platforms, the construction of the actor-network and its translation process are key to understanding the current practical governance mechanism. As a primary focus of applied research in Actor-Network Theory, translation is a procedural concept composed of four stages: problematization, intereselement, enrollment, and mobilization (Callon, 1986). Therefore, from the perspective of Actor-Network Theory, this paper regards the fluidity governance of digital virtual communities as the cumulative result of the dynamic changes and effects within the actor-network across these stages. By examining

each stage of translation, it delves into how diverse actors within the heterogeneous network achieve interaction and cooperation through translation.

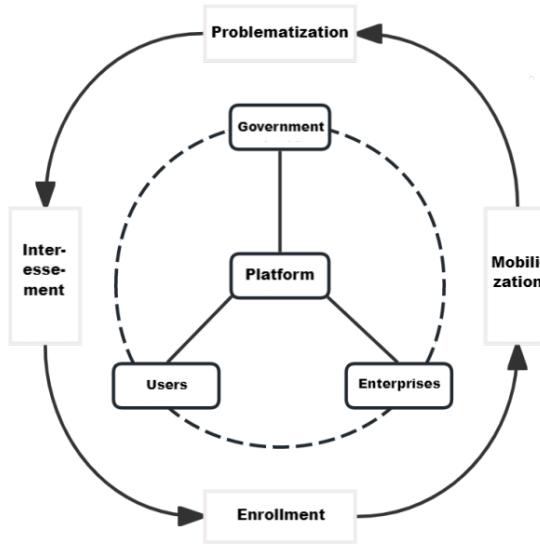


Figure 1 The Translational Mechanism of Digital Platform Fluidity Governance Practice

(I) Composition of the Actor-Network

In the fluidity governance of digital platforms, the composition of the actor-network forms the foundation for understanding its governance mechanism and promoting effective governance (as shown in Figure 1). The digital platform enterprise is the core actor within the actor-network, responsible not only for building the technological platform but also for establishing governance rules and mediating relationships among other actors. As the central hub of governance, the decisions and actions of the digital platform enterprise profoundly influence the platform's operational mode and future development. By employing and maintaining complex algorithmic technologies, the digital platform enterprise can effectively manage information flows, facilitate rich interactions among users, and ensure the platform's technical security and stability. Simultaneously, the community norms and terms of use formulated by the digital platform enterprise constitute foundational elements of platform culture or virtual culture, regulating and guiding user behavior and the platform atmosphere. Digital platform users, through creating and consuming content, directly influence community vitality and interaction patterns. User participation and activity levels are not only indicators of a platform's healthy development but also provide crucial feedback for the platform enterprise to optimize its services. This user behavior and feedback mechanism forms a dynamic loop, offering a basis for the platform to adjust its algorithms and rules in response to user needs. Other enterprises, relying on the platform for commercial activities, inject vitality into the platform economy while also enriching user choices and experiences. These enterprises, while adhering to platform rules, also support the implementation of platform governance. The government, as an external regulator, provides policy support and oversight through laws and regulations, ensuring the legality and social responsibility of community activities, thereby safeguarding the platform's compliance and social benefits.

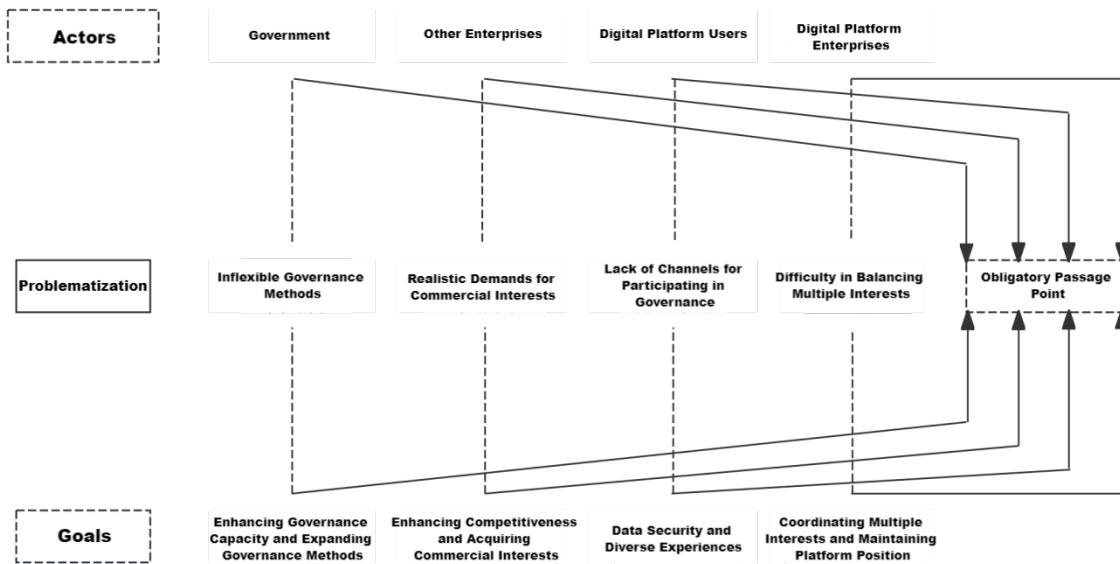


Figure 2: Problematization and the "Obligatory Passage Point"

(II) Translation within the Actor-Network

1. Problematization

Within the actor-network of digital virtual communities, the interactive cooperation of multiple heterogeneous governance actors makes problematization the primary stage in constructing the translational practice of fluidity governance (as shown in Figure 2). As the central hub of platform governance, the digital platform enterprise faces problems primarily focused on balancing commercial interests, user experience, and information security. In other words, the platform enterprise is the core actor connecting other parties and clarifying their respective goals and interests within the translational practice. In current platform governance practices, the diversified interest claims of various actors lead to a diversity of problems presented. Digital platform users exhibit growing individual awareness and concern for privacy protection but lack channels to participate in platform governance, resulting in diminished trust in the platform. Government agencies play a regulatory role in digital platform governance, where policy formulation and enforcement capabilities are crucial, yet they sometimes lack flexibility, failing to respond promptly to industrial changes. Other enterprises, such as suppliers and partners, seek commercial benefits through the platform but often face uncertainties arising from changes in platform rules, leading to adaptive opportunistic behaviors (Deng Guangkuan, 2021; Yao Yanhong & Liu Xiao, 2023). The digital platform enterprise itself follows market competition logic but needs to balance regulatory compliance, user experience, and commercial interests, easily falling into the dilemma of juggling multiple responsibilities and often being perceived as a "technology evildoer" (Zhang Shuqin & Hu Yaqi, 2021; Yan Zehua & Wang Tianfu, 2022). As the core actor, the digital platform enterprise must respond to and coordinate the needs of all parties to maintain the harmonious operation of the platform ecosystem while ensuring compliance and promoting innovation. From an external perspective, the platform enterprise must meet government policy and legal requirements while safeguarding user rights and data privacy. From an internal perspective, it needs to provide stable cooperation conditions for other enterprises while enhancing user participation and trust to meet the business imperative that "water can carry the boat." Therefore, the digital platform enterprise

is situated at the intersection of the macro policy framework of platform governance and the micro-interactions of actors, serving as the central hub that combines external and internal governance to form collaborative governance.

2. Interesement

The interesement stage involves delving into the root causes of various problems in digital platform governance and clarifying the roles and needs of all stakeholders. For a digital platform enterprise to successfully mobilize multiple actors within the network, it must prioritize addressing their respective interest claims. Digital platform users typically focus on platform security, data privacy protection, and the convenience of the user experience. The platform enterprise needs to ensure these basic needs are met to maintain user trust and loyalty. Government departments emphasize regulatory compliance and social stability. If the platform can align with government requirements, achieving effective oversight and information transparency, it supports the government's governance capacity. Other enterprises participating in the digital platform often aim to enhance market competitiveness and economic benefits, but their participation depends on the support of the platform's ecosystem and rules. Therefore, they are willing to contribute technology, services, and innovation within the platform's governance framework, expecting equal cooperation opportunities and a fair competitive market environment. In this process, based on clearly identifying governance problems, the platform enterprise must further stimulate the interest participation of multiple governance actors, attracting them to actively engage in platform governance.

3. Enrollment

In the current practical process of digital platform governance, enrollment can be understood as the methods for incorporating various actors into the fluidity governance actor-network. These methods can be summarized in three ways: First, internal governance by the platform enterprise. This perspective holds two meanings. On one hand, the platform enterprise governs its internal operations through designing reasonable pricing structures (Rochet & Tirole, 2002), technological investment (Mantena & Saha, 2012), governance models (Wang Xuhui et al., 2020), and control mechanisms (Amrit et al., 2010). On the other hand, as the accessibility of relevant goods or services largely depends on the operations of specific large-scale internet platforms, the latter transcend purely commercial activities, acquiring properties of public governance, leading to the internalization of social governance through business models (Cheng Lian, 2021). Second, external governance of the platform, i.e., state regulation of platform enterprises (Ji Deqiang, 2021; Lü Peng et al., 2022), primarily addressing issues of market order such as excessive capital expansion, restricted market competition and innovation, and the relative weakness of consumer rights protection. Third, collaborative governance. Furthermore, the digital platform enterprise is both a governor and a governed object. Under the collaborative governance framework, the enrollment methods of internal and external governance are transcended. Simultaneously, various actors are enrolled into a unified governance network to actively participate in governance.

4. Mobilization

Mobilization is the crucial stage where interaction among various actors is established to form the governance network. The digital platform enterprise needs to fully leverage its

technological and market advantages, utilizing big data and algorithmic tools to promote positive interactions and value dissemination on the platform. At this important stage, it is essential to provide platform users with more participation channels, enabling them to express needs and provide feedback. Simultaneously, the government needs to use policy tools to create a fair competitive environment for relatively disadvantaged users and small-to-medium enterprises. Furthermore, improvements in digital infrastructure and the provision of high-quality online experiences can foster a positive platform environment, encouraging various actors to voluntarily participate in platform governance. In this process, transparent cooperation between the platform enterprise and users can continuously enhance users' sense of trust and satisfaction, and platform users will, through subtle influence, actively participate in data contribution and content creation. Leveraging the professional capabilities of both enterprises and individuals to enhance overall network efficacy is equally important. Therefore, with the interests of all parties safeguarded, the digital platform governance network is ultimately constructed.

3. Space-Subject-Structure: Multiple Translational Challenges in Digital Platform Fluidity Governance

In the previous section's discussion, the author theoretically explored how to construct a governance network centered on the digital platform enterprise and its translational mechanism. However, the practical fluidity governance of digital platforms in actual operation faces multiple translational challenges: spatial fluidity, singularization of actors, and structural blockage. These intertwined layers make the translational practice of digital platform fluidity governance difficult to execute smoothly.

(I) Spatial Fluidity: The Disorder of Translational Space

Space has long been a key object of state governance. In the digital context, the rise of digital platforms has broken down traditional spatial boundaries. Grassroots social governance models, primarily organized around territoriality, are increasingly impacted by growing geographical and social mobility (Wu Yuefei, 2019), ultimately leading to disorder in the translational space of governance practice.

Digital platforms are characterized by decentralization and boundlessness. Traditional administrative divisions struggle to encompass their sphere of influence and govern them effectively. Life and production on platforms are no longer confined to specific locales but traverse geographical space. This extensibility and uncertainty of space lead to a blurring of governance spaces. This makes it difficult for governance subjects to define their jurisdiction, limiting their translational impetus, and also prevents placing digital platforms under governance across multiple layers such as local society, the nation-state, and globalization. For example, due to the lack of geographical constraints, the low entry barriers of digital platforms attract a large number of goods or service providers with tax obligations, making it difficult for tax authorities to promptly and accurately identify taxable entities and locations.

Beyond geographical space, digital platforms have also profoundly impacted traditional social space, endowing human activities with another organizational logic within fluid spaces. People connected through virtual networks gather and interact in digital spaces based on factors like

interests, values, or needs. This endows individuals with virtual identities and multiple roles on digital platforms, blurring the boundaries of traditional social identities. This can potentially lead to a weakening of a sense of belonging and participation, thereby affecting the practical outcomes of social governance. Lacking effective cognition and influence over virtual identities and behaviors, traditional, single governance subjects often appear powerless, ultimately hindering them in the translation process.

The openness of digital platforms also redefines political space, altering the ways and channels through which citizens participate in public affairs. Through social media and other digital platforms, individuals and groups can more easily express opinions and engage in political mobilization. This decentralized information dissemination not only disrupts traditional party- and government-dominated modes of political participation but may also challenge existing power structures. The rapid spread of information and diversification of viewpoints make public opinion more complex and volatile, impacting the authority and influence of traditional governance subjects. In this context, governance subjects in the translation process must confront new public opinion environments and social demands; traditional governance methods and communication channels may prove ineffective.

(II) Singularization of Actors: Divergences in Inter-Subjective Network Relationships

The wave of platformization has swept over every individual, undoubtedly forming a multi-heterogeneous network of governance subjects within the "general-purpose infrastructure" of digital platforms. Any platform matter is woven together at specific "obligatory passage points" by different interests and social relations. As digital technology shifts from universalization to singularization (Reckwitz, 2019: 9), governance subjects often become singular and possess divergent interests and emotions, creating, to some extent, divergences and conflicts in inter-subjective network relationships.

Within the multi-governance subject network constructed by digital platforms, the interest claims of different subjects show significant divergence due to their differing positions and roles. As commercial entities, platform enterprises pursue profit maximization, tending to utilize big data and algorithmic optimization to enhance user stickiness and market share. In contrast, user groups are more concerned with protecting personal privacy and the fairness of platform services, hoping for greater autonomy and participation in digital space. Furthermore, government regulatory agencies aim to safeguard public interest and regulate market order, emphasizing platform responsibility and compliance. This intertwining and conflict of multiple interests make it difficult to form a unified consensus on values among governance subjects; interest divergence becomes an important cause of divergences in inter-subjective network relationships.

Emotion, as an important dimension of social relations, also shows a trend of differentiation within the platform governance network. Personalized push notifications and algorithmic recommendations from digital technology immerse individuals in "filter bubbles," leading to one-sided emotional experiences. Moreover, users engaging in weak-tie interactions on digital platforms can also result in a state of "mass loneliness" — seemingly heavily invested in socializing yet lacking deep, intimate relationships. Platform enterprises, through emotional design and user experience optimization, attempt to increase user dependence on and loyalty to the platform. However, excessive commercialization may trigger user resentment and a crisis of trust. Therefore, emotional differentiation causes communication between subjects to lack

emotional resonance, weakens the foundation of trust, and increases the difficulty of translation.

Interest divergence and emotional differentiation ultimately lead to behavioral divergences among governance subjects, causing the failure of translation in governance practice. In the governance of platform affairs, platform enterprises may consolidate their own interests by adjusting user agreements, algorithmic rules, etc., even evading regulation. Users may organize online protests, initiate public opinion supervision, or even resort to legal means to protect their rights. Regulatory agencies may increase enforcement efforts and introduce stricter regulations, attempting to standardize platform behavior. However, these differences and contradictions in behavioral strategies exacerbate conflicts between subjects, hindering the realization of fluidity governance. Against the backdrop of singularizing digital technology, behavioral divergences exhibit more complex and dynamic characteristics, interactions between subjects become more uncertain, and the stability of the translational mechanism within the governance network is challenged.

(III) Structural Blockage: The Deficiency of "Obligatory Passage Points" in Translation

An open and connected governance structure is inherent to fluidity governance, focusing on networks and connections within regions, between cities, and across different spatial scales (McCann & Ward, 2010). In this sense, it is precisely the unsystematic organizational capacity and power resource integration ability of governance subjects in digital platform governance that leads to the deficiency of "obligatory passage points" in the translation process.

From the perspective of platform-to-platform interaction, competition and exclusivity between different platforms lead to a lack of translational "obligatory passage points." The digital platform economy exhibits strong network effects. To consolidate their market positions, platforms often maintain competitive advantages through technological barriers and differentiated business models. This exclusivity means platforms lack mechanisms for interoperability, making it difficult to form common standards and protocols. For example, data and users between social media platforms often lack interoperability; transaction rules and rating systems differ across e-commerce platforms. This segmented state between platforms results in a lack of common negotiation channels and cooperation mechanisms in platform governance practice, hence the deficiency of "obligatory passage points" in the translation process.

In the interaction between platforms and social users/other enterprises, insufficient trust mechanisms undermine the formation of "obligatory passage points." Users and third-party enterprises play important roles in the platform ecosystem, but due to information asymmetry and power imbalance, they are often in a disadvantaged position. The formulation and adjustment of platform rules typically lack the participation of users and enterprises, making it difficult for their interest claims to be expressed and addressed promptly and effectively. Furthermore, excessive pursuit of commercial interests by platforms may harm user rights, leading to a crisis of trust. For instance, platforms collecting and misusing personal data without user consent raises privacy and security concerns; unfair competition and commission policies towards third-party enterprises squeeze their survival space. The breakdown of this trust relationship makes it difficult to establish stable cooperative bonds between platforms, users, and enterprises, lacking common "obligatory passage points," and hindering the achievement of governance goals.

The regulatory game between platforms and governments also contributes to the lack of "obligatory passage points." As a key subject in social governance, the government attempts to regulate digital platforms through policies and laws to safeguard public interest and market order. However, the cross-jurisdictional nature and technical complexity of digital platforms pose challenges to government regulation. Platform enterprises may use technological means and legal loopholes to evade regulation, even influencing policymaking through lobbying. For example, multinational platform enterprises may locate data centers and servers overseas, increasing regulatory difficulty; utilizing complex ownership structures and financial operations to evade taxes and liability. In such situations, the lack of effective communication and cooperation mechanisms between governments and platforms makes it difficult to form a common governance consensus and action plan, preventing the establishment of "obligatory passage points" in the translation process.

4. Translational Practice Strategies for the Digital Platform Actor-Network

Confronted with the multiple challenges of fluidity governance, this paper proposes re-examining and optimizing current translational practices from three dimensions—"spatial integration, actor connection, and structural efficiency enhancement"—and explores how to promote the transformation of digital platform fluidity governance by steering towards fluidity-oriented governance networks, revitalizing the translation mechanism, and enriching multiple options for "obligatory passage points."

(I) Spatial Integration: Steering Towards Fluidity-Oriented Governance Networks

Facing the challenge of disorder in the translational space within digital platform fluidity governance, spatial integration becomes the primary strategy for optimizing translational practice. By reconstructing governance spaces and steering towards fluidity-oriented governance networks, it can effectively address the disorder in geographical, social, and political spaces brought about by digital platforms, enhance the translational impetus of governance subjects, and improve governance efficacy.

First, construct a multi-level spatial governance system to strengthen the integration of geographical space. In response to the characteristic of digital platforms transcending administrative divisions, governments should break away from traditional territorial governance models and establish cross-regional fluidity governance systems. On one hand, promote the unification and coordination of policies and regulations across regions, formulate nationwide digital platform governance standards to avoid regulatory gaps arising from regional differences. On the other hand, encourage information sharing and cooperation between local governments to jointly address the cross-regional governance challenges posed by digital platforms. Digital platform enterprises should actively cooperate with government spatial integration strategies, providing necessary data support and technical assistance to promote effective linkage among governance subjects.

Second, integrate online and offline social spaces to enhance the integration of social space. Digital platform enterprises should strive to eliminate the gap between virtual and physical

spaces, promoting the unification of user identities and enhancing a sense of belonging. On one hand, strengthen the connection between users' online and offline identities through methods like real-name authentication, increasing users' sense of responsibility within digital platforms. On the other hand, build community platforms that integrate online and offline activities, promoting the organic combination of online community activities and offline community building. For example, organizing public issue exchange activities that combine online discussions with offline forums can enhance users' sense of participation and cohesion. Governments and social organizations should also actively utilize digital platforms to carry out social services and governance work, realizing the integration of social space.

Third, construct an open and collaborative political space to achieve the integration of political space. Governments should adapt to the characteristics of the digital age, utilizing digital platforms to expand channels for public participation and build governance networks involving multiple subjects. On one hand, disclose policy information and solicit public opinions through digital platforms to increase the transparency and democracy of policymaking. On the other hand, cultivate citizens' digital literacy, guide the public to rationally participate in online discourse, and foster a healthy and orderly atmosphere for political discussion. Digital platform enterprises should fulfill their social responsibilities, improve content moderation mechanisms, prevent the spread of harmful information, and maintain a positive online ecosystem. Through the integration of political space, trust and cooperation among governance subjects can be strengthened, promoting the smooth operation of the translational mechanism.

(II) Actor Connection: Promoting the Revitalization of the Translational Mechanism

Facing the divergences in inter-subjective network relationships caused by the singularization of actors in digital platform fluidity governance, strengthening actor connection and promoting the revitalization of the translational mechanism is the key strategy for optimizing translational practice. By promoting interest alignment, emotional resonance, and behavioral consistency among multiple governance subjects, it can effectively resolve divergences in network relationships and enhance the stability and effectiveness of the governance network.

First, construct a community of interests to promote interest alignment among multiple actors. Digital platform enterprises should actively assume social responsibilities, balance the interests of all parties, and promote a win-win governance landscape. On one hand, platform enterprises should establish mechanisms to safeguard user interests, deeply understand user needs, and protect user privacy and legitimate rights, thereby enhancing user trust and loyalty to the platform. This can be achieved by setting up user feedback channels, user committees, etc., allowing users to participate in the formulation and optimization of platform rules. On the other hand, platform enterprises should establish fair and transparent cooperation mechanisms with other businesses, avoiding unfair competition by leveraging their dominant platform position. By formulating open and equitable cooperation rules, the interests of small and medium-sized enterprises can be protected, promoting the prosperity of the platform ecosystem. The government should improve relevant laws and regulations, standardize platform enterprise behavior, maintain market order, and protect the legitimate rights and interests of all parties. By constructing a community of interests, the interests of multiple actors can be accommodated and realized, eliminating divergences caused by interest divergence and promoting the collaborative operation of the governance network.

Second, cultivate a shared virtual culture to enhance emotional resonance among multiple actors. Digital platform enterprises should prioritize platform culture construction, advocate positive values, and foster a healthy digital ecosystem. On one hand, platforms should strengthen content moderation and management, eliminate the dissemination of harmful information, and ensure a healthy information environment. This can be achieved by introducing AI technologies and strengthening manual review processes to improve content quality. On the other hand, platforms should actively organize online and offline activities to promote interaction and communication between users, and between users and the platform, enhancing users' sense of belonging and participation. For example, hosting community events, online discussions, public welfare projects, etc., can foster shared value recognition and emotional connections among users. Governments and social organizations should also participate in virtual culture building, conduct digital literacy education, and enhance the public's media literacy and ethical awareness. By cultivating a shared virtual culture, emotional resonance among multiple actors can be strengthened, solidifying the trust foundation of the governance network.

Third, establish a consultative and collaborative governance system to promote behavioral consistency among multiple actors. To resolve behavioral divergences among governance subjects, a consultative and collaborative governance mechanism should be constructed, promoting joint participation, decision-making, and governance by all parties. On one hand, platform enterprises should enhance governance transparency, disclose platform rules and algorithmic mechanisms, and accept supervision from users and society. This can be achieved by establishing governance transparency reporting systems, setting up independent oversight committees, etc., to enhance the platform's credibility. On the other hand, governments should establish communication channels with platform enterprises, users, and other businesses, forming regular consultation mechanisms. For example, holding regular forums and hearings to understand the demands of various parties and coordinate interest conflicts. Users and other businesses should also actively participate in the governance process, express opinions and suggestions, and fulfill corresponding responsibilities and obligations. Through a consultative and collaborative governance mechanism, consistency in governance goals and methods among multiple actors can be promoted, reducing behavioral divergences and facilitating the healthy operation of the translational mechanism.

(III) Structural Efficiency Enhancement: Enriching Multiple Options for "Obligatory Passage Points"

Facing the deficiency of translational "obligatory passage points" caused by structural blockage in digital platform fluidity governance, structural efficiency enhancement is an important strategy for optimizing translational practice. By enriching multiple options for "obligatory passage points," the connections and cooperation among governance subjects can be strengthened, the effective operation of the translational mechanism can be promoted, structural obstacles within the governance network can be addressed, and innovation and upgrading in digital platform governance can be propelled.

First, construct a system and mechanism for multi-party collaborative governance to enhance the linkage of the governance structure. To compensate for the lack of "obligatory passage points," a fluidity governance system involving platform enterprises, governments, users, and other businesses needs to be established. On one hand, governments should improve laws and regulations for digital platform governance, clarify the rights and responsibilities of all parties, and provide institutional guarantees for collaborative governance. For example, formulating

responsibility lists for platform enterprises, user rights protection regulations, etc., laying a legal foundation for cooperation among governance subjects. On the other hand, platform enterprises should actively participate in public governance, establish self-regulatory norms, and jointly formulate platform rules with governments and users. A platform governance council can be established, incorporating representatives from multiple stakeholders in decision-making to enhance the democracy and transparency of governance. Through innovation in institutional mechanisms, "obligatory passage points" recognized and followed by all subjects can be established, ensuring the orderly operation of the governance network.

Second, promote the unification and openness of technical standards to strengthen "obligatory passage points" at the technical level. The interoperability of digital platforms requires unified technical standards and open interfaces, which helps break down barriers between platforms and promotes the sharing of information and resources. On one hand, governments and industry associations should lead the formulation of industry standards for digital platforms, promoting unification in areas such as data formats, interface protocols, and security specifications. For example, implementing unified user authentication systems, data exchange standards, etc., to reduce compatibility barriers between platforms. On the other hand, platform enterprises should uphold the philosophy of open cooperation, open some data and service interfaces, and encourage interoperability. Through the unification and openness of technical standards, "obligatory passage points" for technical cooperation between platforms can be established, promoting the healthy development of the ecosystem and enhancing the overall efficacy of the governance network.

Third, foster social trust and a culture of cooperation to solidify "obligatory passage points" at the humanistic level. Trust is the cornerstone of digital platform governance. Cultivating social trust and a culture of cooperation helps various subjects form consensus and collaboration within the governance network. On one hand, platform enterprises should strengthen integrity building, fulfill social responsibilities, protect user rights, and establish a positive corporate image. For example, making platform operations transparent, promptly responding to user concerns, eliminating unfair competition, etc., to enhance trust among users and partners. On the other hand, governments and social organizations should conduct digital ethics education, advocate values of integrity, lawfulness, and win-win cooperation, and create a positive social atmosphere. Through various forms of publicity and educational activities, improve the public's digital literacy and ethical awareness. Cultivating social trust and a culture of cooperation can establish shared "obligatory passage points" for all subjects at the humanistic level, promoting the smooth operation of the translational mechanism.

5. Conclusion and Discussion

Centering on the challenges of digital platform fluidity governance, this paper, based on Actor-Network Theory, explores the construction and optimization strategies of the translational mechanism in digital platform governance practice. By analyzing the impact of spatial fluidity, actor singularization, and structural blockage on governance practice, it proposes strategies focusing on spatial integration, actor connection, and structural efficiency enhancement to promote the revitalization of the translational mechanism, aiming to provide theoretical support and practical guidance for the transformation and innovation of digital platform governance.

First, the rise of digital platforms has broken traditional spatial boundaries, leading to disorder in governance spaces. This paper proposes spatial integration to steer towards fluidity-oriented governance networks. Specifically, it necessitates constructing a multi-level spatial governance system, integrating online and offline social spaces, and building an open and collaborative political space. This can effectively address the blurring of geographical, social, and political spaces, enhance the translational impetus of governance subjects, and improve governance efficacy.

Second, the singularization of digital technology has led to divergences in network relationships among governance subjects. This paper emphasizes actor connection to promote the revitalization of the translational mechanism. By constructing a community of interests, promoting interest alignment among multiple actors; cultivating a shared digital culture, enhancing emotional resonance among multiple actors; and establishing a consultative and collaborative governance system, promoting behavioral consistency among multiple actors. By strengthening actor connection, challenges arising from interest divergence, emotional differentiation, and behavioral divergences can be resolved, enhancing the stability and effectiveness of the governance network.

Third, blockages in the governance structure lead to a deficiency of "obligatory passage points" in the translation process. Addressing this issue, this paper proposes structural efficiency enhancement to enrich multiple options for "obligatory passage points." By constructing a system and mechanism for multi-party collaborative governance, enhancing the linkage of the governance structure; promoting the unification and openness of technical standards, strengthening "obligatory passage points" at the technical level; and fostering social trust and a culture of cooperation, solidifying "obligatory passage points" at the humanistic level. By enriching "obligatory passage points," the connections and cooperation among governance subjects can be strengthened, promoting the effective operation of the translational mechanism.

Under the practical requirements of the digital era to "improve the social governance system featuring collaboration, participation, and common interests," governance is actually undergoing a process of transformation from a single subject to multiple subjects, also signifying the joint participation and construction of society by multiple actors (Ren Mengshan et al., 2023). However, the fluidity transformation of governance spaces, governance subjects, and governance structures all reflect the "uncertainty" of digital society (Wen Jun & Liu Yuting, 2023). Whether it is the rapid development of digital technology and the constantly emerging production and lifestyles based on it, or the lagging of existing laws, regulations, and institutional systems, all bring new uncertainties and complexities to governance. Therefore, platform governance and even social governance should establish a systems thinking of "coping with uncertainty," improving the capacity of development subjects to respond to uncertainty and participate in governance (Wen Jun & Liu Yuhang, 2022).

In summary, as an important carrier for socioeconomic development in the new era, the healthy and orderly development of digital platforms has profound implications for the entire society. To adapt to the demands of digital society and truly transition from "management" to "governance," it is precisely necessary to improve the translational mechanism of governance practice. Strategies of spatial integration, actor connection, and structural efficiency enhancement should be employed to construct a multi-party collaborative governance system, thereby promoting the well-ordered development of digital society, achieving "good

governance" of platforms, and propelling the transformation of modern social governance systems and capacities.

References

- [1] Bauman, Zygmunt. (2002). *Liquid Modernity* (Jinggen Ouyang, Trans.). Shanghai: Shanghai Joint Publishing Company.
- [2] Zeng, Fanbin. (2009). Social Network Websites and Virtual Community Governance. *Jianghuai Tribune*, (4).
- [3] Chen, Long. (2020). Labor Order under "Digital Control": A Study on Labor Control of Food Delivery Riders. *Sociological Studies*, (6).
- [4] Chen, Long, & Chen, Ze. (2024). Corridors, Patches, Matrix: Reflections on Ecological Methods for Platform-Based Social Governance. *Journal of Shandong Normal University (Social Sciences Edition)*, (4).
- [5] Cheng, Lian. (2021). Governance of Large Internet Platforms in the Era of Digital Economy. *Social Science Front*, (9).
- [6] Chi, Ming, Bi, Xinhua, Li, Jinqiu, & Li, Chuanyun. (2020). The Impact of Mobile Virtual Community Governance on Organizational Citizenship Behavior from a Relationship Quality Perspective: A Case Study of Knowledge-Based Mobile Virtual Communities. *Management Review*, (1).
- [7] Deng, Guangkuan. (2021). Research on Marketing Channel Behavior from the Perspectives of Platform E-commerce and Artificial Intelligence: Channel Power, Conflict, and Opportunistic Behavior [Doctoral dissertation, Southwestern University of Finance and Economics].
- [8] Guan, Qiping. (2022). Fluidity Governance: The "Fluid Turn" in Rural Social Governance. *Journal of Taiyuan University of Technology (Social Science Edition)*, (5).
- [9] He, Mingsheng. (2016). The Positioning and Practical Path of China's Internet Governance. *Social Sciences in China*, (7).
- [10] He, Xuesong, & Yuan, Yuan. (2017). Mobility and Social Governance in Global Cities. *Journal of East China Normal University (Philosophy and Social Sciences)*, (6).
- [11] He, Zuocheng. (2011). Research on Urban Virtual Community Governance from a Social Capital Perspective: A Case Study of the Rednet Xiangtan Urban Virtual Community [Doctoral dissertation, Minzu University of China].
- [12] Hu, Hui, & Ren, Yan. (2018). Manufacturing Dreams: The Crowdsourced Production System and the Flexible Labor Practices of Mass Knowledge Workers in the Platform Economy—The Case of Online Writers. *Open Times*, (6).
- [13] Ji, Deqiang. (2021). Platform Governance: A New Paradigm of National Governance from the Perspective of Communication Political Economy. *News and Writing*, (4).
- [14] Castells, Manuel. (2006). *The Rise of the Network Society* (Chu-jiu Hsia & Zhihong Wang, Trans.). Beijing: Social Sciences Academic Press.
- [15] Reckwitz, Andreas. (2019). *The Society of Singularities* (Jie Gong, Trans.). Beijing: Social Sciences Academic Press.
- [16] Li, Zhenfeng, & Zhang, Chi. (2020). Virtual Community Participation in Urban Community Governance: An Investigation Based on Virtual Communities in Urban Renewal. *Governance Studies*, (4).
- [17] Liu, Peigong. (2023). The Logic of "Intelligent Governance" and Practical Path for Community Governance Communities from the Perspective of Digital Governance. *Theoretical Investigation*, (5).
- [18] Lü, Peng, Zhou, Lüjun, & Fan, Xiaoguang. (2022). The Field of Platform Governance and Sociological Participation. *Sociological Studies*, (3).
- [19] Lü, Xiaokang. (2024). Retrieving the "Social": Rethinking Online Social Governance. *Social Development Research*, (3).
- [20] Ren, Mengshan, Zou, Jun, Huang, Chuxin, Meng, Tianguang, Zhou, Baohua, & Hong, Yu. (2024). Digital Good Governance and Digital Methods: A Roundtable Forum on "Digital Technology, Political

Communication, and National Governance". *Journal of University of Chinese Academy of Social Sciences*, (3).

[21] Sun, Jiuxia, Zhou, Shangyi, Wang, Ning, Zhu, Hong, Zhou, Daming, Zhen, Feng, Liu, Xingjian, Yang, Jingjing, Chen, Jingfu, & Yang, Qianhao. (2016). A New Interdisciplinary Focus: Flowing Time, Space, and Society. *Geographical Research*, (10).

[22] Qin, Zhimin. (2023). Fluidity Governance: A New Governance Strategy for Post-Relocation Support. *Western China*, (2).

[23] Wang, Xuhui, Wu, Yun, & Lu, Xingtong. (2020). Research on the Modern Governance Model of Internet Platform Enterprises in the Context of Media Convergence. *Finance and Trade Research*, (12).

[24] Wen, Jun, & Chen, Xuejing. (2023). Translation Practice in Community Collaborative Governance: Models, Dilemmas, and Transcendence—An Analysis Based on Actor-Network Theory. *Social Sciences*, (1).

[25] Wen, Jun, & Liu, Yuhang. (2022). Facing Uncertainty: The Dilemmas of China's Social Governance in the New Development Stage and Their Countermeasures. *Scientia Geographica Sinica*, (3).

[26] Wen, Jun, & Liu, Yuting. (2023). "Technological Relief": Methodological Reflection and Transformation of Digital Sociology Research from the Perspective of Uncertainty. *Social Science Research*, (2).

[27] Wu, Ying, Lu, Yuxia, Chen, Jiajian, & Wang, Yige. (2008). Following the Actors to Reassemble Society: Reading Latour's Reassembling the Social: An Introduction to Actor-Network-Theory. *Sociological Studies*, (2).

[28] Wu, Yuefei. (2019). Towards Fluidity Governance: Theoretical Reconstruction and Action Strategies for New Territorial Spaces. *Academic Monthly*, (2).

[29] Yan, Zehua, & Wang, Tianfu. (2022). Digital Governance Returning to Society: A Transformational Sociology Investigation of a Case. *Journal of Xi'an Jiaotong University (Social Sciences Edition)*, (2).

[30] Yang, Qianhao, & Zhu, Hong. (2015). Progress and Insights of "Mobility" Research in Western Human Geography. *Journal of South China Normal University (Natural Science Edition)*, (2).

[31] Yao, Yanhong, & Liu, Xiao. (2023). The Interaction of Platform Governance, User Participation, and Complementor Relationships and Its Effect on Value Co-creation. *Science and Technology Management Research*, (21).

[32] Zhang, Jieying, & Li, Xueshi. (2023). Digital Virtual Community Research: Academic Context and Key Issues. *China Social Science Review*, (3).

[33] Zhang, Kangzhi. (2016). Social Governance under Conditions of Rapidly Increasing Mobility. *Journal of Changzhou University (Social Science Edition)*, (5).

[34] Zhang, Rong, & Zeng, Fanbin. (2007). On the "Governance" of Virtual Communities. *Jianghuai Tribune*, (1).

[35] Zhang, Shuqin, & Hu, Yaqi. (2021). Technology Opportunity Acquisition and the Process of Control Rights Exchange: A Mutual-Shaping Perspective Analysis of Ride-Hailing Platform Technology. *Sociological Review of China*, (4).

[36] Zhang, Xueyi, & Ni, Weijie. (2011). Internet of Things Technology from the Perspective of Actor-Network Theory. *Studies in Dialectics of Nature*, (6).

[37] Zheng, Zhongyu, & Liang, Benlong. (2016). Community Practice and Change from a Nonlinear Perspective: Also on the Localized Multiple Community Issues in China. *Social Science Front*, (1).

[38] Zhu, Kunpeng, & Zhou, Jing. (2020). Research on Virtual Community Governance from the Perspective of Sociology of the Body: Taking Short Videos as an Example. *Guangxi Social Sciences*, (2).

[39] Amrit Tiwana, Benn Konsynski & Ashley A. Bush. (2010). Research Commentary—Platform Evolution: Coevolution of Platform Architecture, Governance, and Environmental Dynamics. *Information Systems Research*, 21(4).

[40] Bærenholdt, Jørgen Ole. (2013). Governmobility: The powers of mobility. *Mobilities*, 8(1).

- [41] Beckmann, Jörg. (2004). Mobility and safety. *Theory, culture & society*, 21(4-5).
- [42] Bieber, Friedemann. (2024). Labour Justice in the Platform Economy. *Journal of Applied Philosophy*, 41(2).
- [43] Callon, Michel. (1986). Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay. *The sociological review*, 32(1).
- [44] Creswell, Timothy. (2006). On the move: Mobility in the modern western world. London: Routledge.
- [45] Doorn, Niels van. (2017). Platform Labor: On the Gendered and Racialized Exploitation of Low-Income Service Work in the 'on-Demand' Economy. *Information, Communication & Society*, 20(6).
- [46] Eugene McCann & Kevin Ward. (2010). Relationality/territoriality: Toward a conceptualization of cities in the world. *Geoforum*, 41(2).
- [47] Gorwa, Robert. (2019). What is Platform Governance? *Information Communication and Society*, 22(6).
- [48] Latour, Bruno. (1992). One more turn after the social turn: Easing science studies into the non-modern world. *The social dimensions of science*, 292.
- [49] Latour, Bruno. (2005). Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: Oxford university press.
- [50] Mantena, Ravi & Rajib L. Saha. (2012). Co-opetition Between Differentiated Platforms in Two-Sided Markets. *Journal of Management Information Systems*, 29.
- [51] Nash, Victoria, Jonathan Bright, Helen Z. Margetts & Vili Lehdonvirta. (2017). Public Policy in the Platform Society. *Policy & Internet*, 9(4).
- [52] Rochet, Jean-Charles & Jean Tirole. (2002). Cooperation among competitors: Some economics of payment card associations. *Rand Journal of economics*, 33.
- [53] Srnicek, Nick. (2017). Platform capitalism. Cambridge: Polity Press.