

When Culture Becomes Data: Alienation in Rural Digital Culture and Its Governance

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Abstract: The pace of digital change is altering rural China, spreading the radius of rural culture, but also producing the risk of new psychological problems. This paper studies the physical reality in psychological sense of alienation in rural digital culture and gains some intuition of governance response. Three forces are important: traffic data measurement, recommendation algorithm and data control of regulation. Together, they weaken the cultural identity of rural cultural practitioners, cultural creativity and psychological subjects. This analysis is based on the practice of rural digital cultural life in China, pointing straightforwardly to both instrumental and value rationality, connecting folk culture identity, cultural psychological ownership and autonomy with psychological ideas. We can see three kinds of dynamic relations: traffic data measures the value of culture; algorithm disciplines cultural creativity; data control on regulation reverses the relation of subject and object. These dynamic relations bring some tendency of psychology: under the traffic data measurement, the intrinsic value of culture goes astray and the cultural identity goes lose. Algorithmic control reduces creators' autonomy and intrinsic motivation and homogenises cultural expression. As data objects become cultural subject, psychological ownership also decreases, dependence on algorithms increases. This deepens the imbalance between instrumental rationality and value rationality and intensifies the alienation of rural cultural subjectivity. Our article argues that governance needs to shift away from technical and economic efficiency to human development and psychological empowerment. Evaluation system needs to be rebuilt such that traffic does not become "singularity"; practitioners need autonomy and ability to grow; and governance needs to become more collaborative in participation,

capital, technology and rural community together. Only a proper balance between instrumental rationality and value rationality can enable digital transformation to serve rather than counter, cultural identity, creative autonomy and psychological well-being of rural society.

Keywords: Rural Digital Culture; Instrumental Rationality; Psychological Mechanisms; Cultural Identity; Algorithmic Dependence

1. Introduction

As digital technologies can now penetrate rural culture revitalization. It conveys cultural contents, displays traditional hobbies, and so does much more, and visibly so. Cultural heritage also becomes increasingly preserved, interpreted and circulated digitally, bringing traditional culture to a broader audience [1]. This content is easily digitalized, and that is much of what explains the success. But there is a hard question: how can rural culture innovate and yet not lose its authenticity? Some scholars have gone back to cultural subjectivity to search for an answer. They treat subjectivity as a force for inheritance and innovation, and ask if problems faced by rural digital culture are caused by the weakening of it. Subjectivity matters here simply because it shows where the practitioners stand in the digital world, and also how the practitioners' cultural identity and creative autonomy are shaped or gradually worn out. But this article is making the point that such weakening can never be reduced to individual capacity. It comes from the structural imbalance between technological logic and value rationality. What follows explains three psychological mechanisms: weakening cultural identity, frustration of cultural autonomy and loss of psychological ownership. To understand rural cultural subjectivity in the digital age requires not only the perspective of instrumental and value

rationality, but also a psychological understanding of cultural identity and autonomy. Before digitalisation, rural culture found its value in local particularity and, to some degree, in technological irrationality. Digitalisation transformed rural society and pushed cultural development into a new stage. Digital tools facilitated transmission more easily. They also damaged the balance between culture and technology. Digital platforms provided more space for rural cultural development. They also brought in instrumental rationality into the cultural world. Let us look at research on algorithm-based video-sharing platforms such as Kuaishou. They argue that algorithm-based platforms allow marginalized rural users to become creative workers, but at the same time, they mobilize and calculate those users' creativity, daily life, and subjectivity according to platform logic [2]. In rural society, culture is the richest endogenous resource. Its value lies in intrinsic meaning rather than external index that is quantitative. Rural digital culture is both a process and result of digital technology meeting rural culture. It appears in digital preservation, innovative expression and network dissemination of rural culture, and it shows how deeply technology has changed culture. What stand out are: traffic metrics conceal cultural value. Algorithms command cultural creativity. Data exercise reverse hegemony over cultural subjects. Psychological effects exist. Cultural identity weakens. Creative autonomy weakens. Psychological ownership over cultural expression weakens. Let's then briefly take up that rural digital culture is also at risk of cultural alienation: cultural practices become ever more the matter of some external technological logic and rules of data; with negative consequences for rural residents' psychological well-being and their feeling of self as citizens. Our analysis off-set out of the alienation that is visible in rural digital culture. It takes up how instrumental rationality goes astray and gets extended and produces homogenized content, tightens its grip on creation, and thereby a lower feeling of cultural subjectivity. It also picks up the psychological aspect on how rural cultural practitioners feel these negative consequences. It goes on to take up how rural digital culture might overcome its current predicament. Key here is to restore value rationality, and to bound instrumental rationality also and to take the psychological aspect of cultural subjectivity and

autonomy seriously.

2. Manifestations of Alienation in Rural Digital Culture: Psychological Dimensions

Rural digital culture has a double displacement. Culture is technologized; technology is culturalized. Once this double displacement comes into view, there are deeper issues on both sides. The technologization of culture unfolds mainly in the dimension of standardization, mechanization, instrumentalization. It straightjackets cultural life, takes much of its meaning, takes away much of the psychological base upon which cultural identities are laid. The pull in the other direction: technology is made cultural—has winners and losers, too. However, it cannot happen unless the first happens. To make technology cultural is difficult unless culture itself can first be analyzed, represented in terms of technological logic. Stated purpose may head toward culturalization of technology. The ultimate route is not. Technologization of culture goes to the other side. This goes in three directions. Traffic metrics trump cultural value. Algorithm-enabled creation disciplines cultural growth. Intelligent platforms, by virtue of instrumental logic, confine and even control cultural actors. The psychological consequences are dire. With cultural identity eroded. With creative autonomy frustrated. Individuals lose their sense of control over their culture. At its root, technological logic has infiltrated deep into cultural development and now rules over it. It has very considerable implications for the subjectivity of rural cultural practitioners.

2.1 Traffic Metrics That Obscure Cultural Value: The Erosion of Cultural Authenticity and Psychological Identity

Technology is about efficient and effective communication. So, in rural digital worlds, this intent shows up as to how far cultural content diffuses, as to how much it grabs. New technologies are straightforwardly tools for transforming the world, attached to efficiency and progress. They also promise human augmenting and defying nature. Wide reach and big apparent effects are the basic aim. Diffusion is only the first aim. The wider aim is to diffuse it cheaply, rapidly and at scale. Digital platforms reach more quickly, people and types of participation than their traditional mediums. Rural cultural diffusion is more efficient and more attractive as a result. To reach such

platforms, rural culture has to be the logic of modern communication: expand audiences, amplify effects, whatever it does. As this efficiency logic starts to take hold, cultural meaning lets way to quantifiable performance. Rural people start to see and evaluate their own culture from this perspective.

Another manifestation of this priority is in never-ending communication mechanism, on-rising indicator of influence, and great content production. The digital content of rurals caused by technology resembles more other media content, diffusing and refreshing in a cycle. Digital communication of culture differs from traditional cultural communication in one feature. Algorithm-aware content could attach to audience more accurately, take more forms, use more adapted strategies and so on. Intelligent recommendation algorithm lets a distribution platform know the audience's interests and send content to specific audiences at low cost. Traditional cultural communication, creativity and preservation require costly long-term efforts. They are burdened with generational gaps or lack innovations and severely restrict the long-term evolution of culture. Digital technology could relieve part of burdens like these. They promote communication effectiveness and ensure more accurate distribution of content. Platforms make use of the dissemination effect into growing indicator, influence may be seen and accumulated. They also change content strategies quickly to the audience's response—preferring light entertainment, for instance, and avoiding serious or deep content. Digital content also provides a simple possibility for large-scale production. Once some format is communicative, it can be reproduced in series with the same specifications and methods. Rural digital culture has, at least in part, now entered a phase of assembly-line production. Traditional, festive events are reduced to forms produced in series and their cultural meanings become 'formulaic'. Standardisation reduces variation of expression and weakens the personal link and inner meaning of creativity ascribed to practitioners.

When traffic rules cultural value in rural digital technology, then diffuse data alone cannot reflect cultural value. Audience scale, audience influence and output size mean little about substance of cultural expression. Rural digital technology facilitates mass dissemination. On the surface, this is progress. On the ground, the

dissemination effect is stronger than cultural value, draws attention to the surface and dominates engagement. Externally data indicators become the major index of measuring cultural products. Rural residents internalize these numbers as a measure of their own cultural worth. Their local culture loses some of its psychological gravity. Cultural belonging is weak. Research on traffic culture will also arrive at the same conclusion: although capital and algorithm are working hand in hand, cultural value has become attention metrics, burying the basic guiding role of substantive cultural value and inducing widespread ideological risks [3]. Rural digital technology foregrounds technologized dissemination of culture. But Cultural studies, Anthropology, Sociology also do not all answer what culture is really such, or how culture is transmitted. Presents culture with comprehensiveness and technicality is less successful. Cultural dissemination caused by technology gives rise only to partial surface features – a digital rendering of a cultural form. Whether genuine cultural inheritance or not, it may be in dispute. Essence is not the same as phenomena. Essence determines what things truly are and where they go. Phenomena are just the external expression of things. Technology likes to pay more attention to dissemination effect and efficiency. Culture pays more attention to the inheritance and development of inner essence. The purpose of rural digital technology is, after all, maximally dissemination and minimum expense. A digital product which does a superficial reproduction of a cultural form often has appearances that are right but have no inner and spiritual connotation. It can attract attention or even become fashionable. It is also fundamentally different from actual cultural inheritance. Treating such content as rural culture reinforces familiar representations and overlooks unknown cultural connotations. All in all, dissemination effect obscures cultural values. What comes about is a gross cultural participation that has measurable effect but little psychological depth.

2.2 Algorithmic Disciplining of Creation: The Erosion of Cultural Diversity and Creative Autonomy

Technological logic, however, does as well: it seeks stability and controllability. Rural digital technology embeds the control of algorithms, which favours standardisation of production.

Human culture has always been an endeavour to turn disorder into order. Under some circumstances, technological control can reduce the uncertainty of cultural delivery and help technology development to adapt to cultural delivery and creation. Even so, we must be careful about this effect. Policy papers and papers often treat digital technology as an important medium of recording, dissemination and reinvention of local culture. Usually, they wish digital technology to document culture, encourage expression, create new cultural products, and promote dissemination. As soon as technology wins, algorithmic recommendations are stable and reliable only to the degree that they use certain inputs to produce reliable results. Predictability then squeezes cultural creation into computability patterns. The psychological space for autonomous, open expressions shrinks. Algorithmic disciplining then translates rural digital culture into a particular kind of culture production. Standardised production occurs, it is easy to handle. Standardised content appears, easy to disseminate. Both are of high standard of predictability and controllability. To promote fairly, rural culture is simplified to a more quantifiable system of labels and then offer to culture fans in a template. Algorithms pick content which are precisely designed and standardised. Take short videos as an example, for instance. Short videos typically need a brisk pace, a certain spotlight, a proper length and smooth transitions. Cultural production is also inclined towards expression that has more visual effect and arousing power. As a by-product, the standards that algorithms use to judge culture content are heavily quantified. Cultural dissemination thus becomes easy to measure, easy to control and more conducive to scale-up. Intelligent recommendation technologies have already changed the way content is displayed according to the preferences of the users, at least to increase their engagement and activity. Under these conditions, creators would gradually copy the standards of algorithms as their own quality standards and reduce their dependence on intrinsic motivation and personal taste. This tendency fits well with the view that algorithmic bias functions not only at the technical level but also at a psychological level: users can selectively accept algorithmic outputs that fit what they already expect and treat them as objective and legitimate, respectively [4]. Meanwhile, rural digital technology also

increasingly breaks up creation for algorithmic consumption. Technology and culture are related in a more strong way. Controlling features of algorithms must not be ignored. Algorithms do not simply record and circulate culture. Algorithms define culture, mould culture and discipline culture. Algorithms flow throughout the entire cultural production process. Control over cultural development by technology comes, side by side. Two factors explain this: the technology of algorithms and the wider communication environment of modern society. Modern communication technologies have a stronger weight for measured impact and controlled production. They widen managerial control, sometimes against cultural pluralism. Cultural production finds its way to a standardized track. There is a rhetoric of technological 'empowerment' there too. Traditional culture can still give resistance but it steadily also weakens its lead. Evaluation rules this communication environment. Cultural content is defined by performance dimensions. So cultural innovation is autonomous: it is supposed to be disruptive to tradition. But under the pressure of algorithmic recommendations, the scope and even the direction of cultural innovation is sharply restricted. Space for culturally independent outputs diminishes. The algorithmic preferences dictate creative direction. Fixed time limits regiment the pace of narratives. Standardized forms regiment formulas. The narrowing is not formal. It is also psychological. Creators may feel less creative agency. They may also feel a greater pull towards conformity to algorithmic wishes. In the case of mixed human–algorithm settings, algorithmic limitations are hard to set aside. The diversity of cultural creation does indeed diminish. Creators often change their strategies when confronted with salient agencies, as cultural adaptation theory prescribes. Rural bloggers, for instance, might purposively provide some ingredients each member of urban audience presumes to like that are 'rustic' to be curious. They might transform complex craft skills into 'simple' 'experiential' courses. Or they may focus on visual impact when displaying typical events and neglect their cultural meaning. These adaptations may work instrumentally. They can also further undermine the psychological sense of ownership experienced by creators of their cultural expressions and compel creative work toward an extrinsic approach.

2.3 Data Reversing the Subject–Object Relation: The Weakening of Farmers' Subjectivity and Psychological Ownership

Disqualifying data as value-free tools for recording and reflecting, even sophisticated algorithms, also means no autonomy or creativity. Even sophisticated algorithms are based on human value judgements and models. Humans are culturally subjective and practical agents. They are therefore almost always represented as the ones deciding what technology does. On this view, data are only tools. Digital platforms have, however, expanded extremely rapidly. Traditional skills have disintegrated.

Algorithm-based recommendations have replaced much of autonomous decision-making. Digital technology has thus increasingly deprived the cultural subjectivity of the people of the countryside. Data objects have displaced what remains of human agency. Under the digital capitalism, human beings become more and more the producers and suppliers of data—what the platforms call 'digital labour' [5]. Creative capacity disappears. Data objects take over more. Algorithms imply that cultural development is dictated in the directions. This reversal hits very hard psychologically. Of course, farmers might start to feel relatively helpless in what they can produce. Their sense of personal ownership or responsibility for cultural products fades. Under the right circumstances, digital tools can also promote cultural dissemination, and enable rural culture to realize its value. Cultural dissemination is related to human subjectivity. Cultural transmission shows as cultural self-consciousness and creativity. Culture is contextual and fluid. It resists the full standardization—this resistance is what makes cultural innovation possible. In the policy drive to rural cultural revitalization, digital technology is involved in new forms of expressions, and it is used to create new channels of cultural communication. The intention is to enable rural culture to become lively and influential, and strengthen farmers' own cultural subjectivity. Practice of rural digital technology is not only for dissemination improvement. It blurs the boundary between cultural content creation and cultural dissemination. Standardized content that suits algorithm preference is used to increase the traffic of a platform. Digital technology seems a neutral technology. In fact, it distills the culture

creation. Intelligent platforms monitor viewing time, the rate of interaction with content, and other behaviours. They modify the strategy for recommending content based on how well it is doing. They rate quality according to completion rates, shares and the tone of comments. Intelligent platforms apply deep learning algorithms to gigabytes of user data. They construct models of what users will like and optimize content dissemination. Creators thus surrender more and more control over the direction of their own work—often unwittingly. This surrender of control is not purely technical. It is psychological as well. Creators come to depend on data signals, rather than their own aesthetic taste and intentions.

What we see, then, is an inversion of the subject–object relation that data imposes. In theory, creators remain in control as they create content. In practice, it is the data logic that binds creators. Their constant adjustment of content to algorithmic tastes shows how people have to transform themselves into data logic. The trap of technological empowerment is often due to too much dependence. Rapid advances in digital technology can also blur and dilute human subjectivity. After all, laws of cultural creation, rules of algorithm design and conditions of technology use are all characterized by uncertainty. Rural digital technology reveals data objects as mastering human subjects in a relatively under-the-pink way, especially in terms of data-driven creation. Technology does not simply amplify cultural diffusion; it tries to change the way that culture is created by data logic, submerging the basic status of humans as creators of culture. The digital technology enters the field of creative subjectivity in the role of object. Platforms usually claim that they are serving the user experience. Technology prevails over creation. Technology shapes public cultural judgement. Of course, people regard the works that suit particular data as high quality cultural products. Recent research shows that algorithms affect cultural cognition, and especially aesthetic feelings, and create algorithm dependence. At present, many rural creators "create for data" already. They pay less attention to cultural value, and pay more attention to "back-end data" to perfectly manoeuvre the works they are producing. With the battlefoot of data standards, against human 'art' judgment, the boundary between subject and object of culture creation "dissolves". This blurs farmers' cultural

subjectivity and hurts their psychological possession of the art practice; meanwhile, it augments such dependence with its outside data feeding effect on the position of creative works, rather than farmers' inside cultural value and individual requirements for expression and creation. Once data-dominated creation and weakening—some would say loss—of human cultural subjectivity take place, alienation risks will only escalate. Deep involvement of algorithms in cultural creation has even provoked discussion on creative subjectivity.

3. The Psychological Origins of Alienation Risks in Rural Digital Culture

Discussion of the split between instrumental rationality and value rationality also makes sense of what has gone wrong in rural digital culture. The two aspects were always out of balance. Capitalism and bureaucracy have been growing hand in hand. Modern society's rationalization developed into a constant growth of instrumental rationality. Efficient, adaptable instrumental rationality can now fit into the nearly whole world of social life. Instrumental rationality shapes the culture's development largely unnoticed. This is not a structural problem. This is also a psychological problem. Rural cultural players also start to regard their own subjectivity, their cultural identity and creative independence differently. Alienation in rural digital culture has deeper roots: the unswerving success of instrumental rationality. Efficiency oriented thinking conceals the culture's value. It forces the culture toward sameness. Control orientation computational logic pushes culture creation under technological control. Reductionist logic confuses and reverses how do cultural subjects and objects relate. The psychological consequences of such a logic are serious. Cultural identity weakens. Creative autonomy weakens. People lose their feeling of ownership over cultural production. Instrumental rationality is expanding at all costs. The structural and psychological risks of alienation are becoming harder and harder to ignore.

3.1 Platform Capital's Expansionary Logic and the Psychological Marginalization of Rural Cultural Meaning

Platform capital does not simply let rural culture haw over from the outside. Its logic squeezes into the culture field itself. Capital accumulation does this. It pushes away the meanings and

values that culture has for a community. Classical criticism of capitalism took this route. Social relations slip over into self-interest and cash transactions. Platform capitalism has a tendency to do this even more. Rural culture gets lifted out of the contexts in which it once mattered. It gets projected into a digital setting largely centred on data and traffic, so capital can keep growing. There is a wrinkle from recent scholarship: platform capitalism should not be viewed as a single homogeneous system. It presents in different forms in different contexts. The state–platform–culture nexus plays an important role in determining what form culture production will take and how much precariousness will be shared out between culture workers [6]. As a result, it is not just a change in the conditions for culture to be made. It is also reducing the psychic link between rural people and their culture. The sense of attachment to and continuity from tradition that local culture provides fritters away.

But when cultural practices become data, they have become mobile. Data can be detached from the settings that made them meaningful and traded in as commodities. Algorithmic sorting detaches local practices from context. It converts them into labels that are easy to index and categorize and to recommend to users. Culture is no longer most or primarily a shared-meaning system through which communities form their identities and collective memories. Instead, it becomes tradable data. Its worth can best be assessed in terms of what it means to a community, not by what it can attain or perform on a platform. Click rates, completion rates, conversion rates. For a cultural producer from the countryside, this generational change can be subtle but important. Their own expressions might start to be read through the goggles of outsiders. And this weakens their psychological investment in cultural meaning. It also diminishes their intrinsic motivation to be engaged with culture.

As time passes, the logic of capital accumulation develops as to how culture makes meaning. Platforms constantly suggest symbols that capture attention and traffic. Values such as creating an ethical culture, building a nice community, having inner history, and enjoying aesthetic beauty do not readily flow through the logic of capital. Often, they are seen to be 'lower commercial efficiency' and purged to the margins. It is not an accident. It follows from the

filter logic of capital itself. As platform publishers pursue the high traffic content, they relax complex meanings. They replace them with generic visual hits and feelings of elation. Cultural production is less guided by an inner meaning, and more guided by an outer accumulation. Culture becomes a means, rather than an end. As such processes advance, subjectivity in cultural practice fades. Practitioners might start to treat their creative work instrumentally—by commercial return rather than by cultural importance or personal relevance.

3.2 The Expansion of Technological Rationality and the Algorithmic Reshaping of the Rural Public Sphere: Psychological Implications

Another way digital platforms give instrumental rationality an embodiment: a dominating logic of algorithms that determines how the rural public sphere works. In theory, the public sphere is a space where people communicate their opinion in a reasoned process of discussion. The logic of algorithmic recommendation, on the other hand, transforms public information into points and metrics. The backbone of the process is eroded. A good public sphere has citizens free to participate in public issues and discussion on those issues in a fairly manner. When personalized algorithms build what a rural person will read, these preconditions are no longer met in the same way. Psychological effects are nontrivial: people will feel less capable of being good communicators; people will feel like less powerful players in public life. These effects are not balanced: widening information gaps along urban–rural, generational and class differences already include limitations to digital participation by some rural people [7]. Algorithms distort the public sphere in one way, that is, by fragmenting and depoliticizing public issues. Platforms sort out information according to individual preferences. A set of parallel 'information cocoons' emerges. Villagers are inside their own filter bubbles, built up from their past interests. They encounter nothing other than public issues that they like—their own individual interests are not public issues affecting the whole community—for example, village planning, environmental management, planning village facilities. Instead, what they encounter is highly personalized entertaining information. Shared topics decrease. Spaced-out,

depoliticized individual consumption replace them. A rural public sphere is a place to discuss 'matters of common concern'. This purpose is based on commonality. Algorithms diminish it systematically. As exposure to matters of common concern narrows, the psychological ground for identity and common concerns among villagers starts to weaken. Psychological digital divides can also shut out some rural persons even more, especially older people. Other research provides evidence for social exclusion and technology anxiety as drivers of the psychological digital divide, which aggravate digital disengagement of disadvantaged groups [8].

Another effect to notice. Algorithms fragment public issues. Algorithms fragment what people say about issues too. A good public sphere requires actors exposed to diverse views and who are willing to puzzle over complex issues. Platforms are designed to hunt for engagement. Engagement spikes when the content causes a fast emotional reaction (anger, surprise, amusement). It does not spike when it elicits careful thought. The case of rural digital spaces is the same. Serious discussion of land contracts or village rules seldom draws as many viewers as a funny video or quarrelling neighbours. There is an underlying change here. Most people do not even notice it happening. Public dialogue drags away from facts and reasons. It drags towards emotional release and the comfort of taking sides. And the algorithm's partiality for content that elicits emotion and arousal shapes habits of mind too. As people come to expect immediate stimulation rather than patient judgement, their capacity for sustained public opinion also weakens. Algorithms are not set up to encourage rational public opinion. Through their design, they tend to reward exactly the opposite.

Over time, the rural public sphere itself thins out. Algorithmic logic controls how information moves and opinions form. Platforms which might have provided space for public discussion become what I would describe as "formalised public spaces." Platform rules govern the action of these public spaces. They govern the community's needs. They appear open. Anyone can post. Under their surfaces lie technical rules that rule which subjects become salient and which voices count. Value rationality with its concerns for public good and the slow process of consensus is replaced by efficiency thinking of

instrumental rationality. Villagers no longer produce public space only by means of their own dialogue. 'Hostile' technological and commercial interests do that. The public functions of these public spaces are consumed. Their psychological side effect is to create distance. People feel less engaged in their civic lives. They are less able to influence public decisions.

3.3 Changes in Communicative Practices and the Psychological Reconfiguration of Social Relations through Digital Interfaces

What happens when rural social life transports to digital platforms? The shift is not just a tool change. Digital platforms embody their own technology. And that technology logic over time impacts how people connect, how social ties change. The form of relationship mediated by a platform denudes what used to be a geographic and kin-parental one. It exchanges it for something more transactional. The deputational cost is real. The depth of affect, the sense of attachment that constituted rural ways of interacting from below begin to get lost.

So the first change is why we interact at all. Traditional rural life had no strategy in visiting relatives or helping neighbours. They were simply life. The point was to be close to each other and feel each other, share each other's identities. Digital channels make all of this different. Every interaction is data that needs to be counted and improved. The villagers who are messaging in WeChat and posting on short video platforms may not be interacting spontaneously. Their actions might have their hidden objectives, give a presence, accumulate capital, disseminate content. Communication, in other words, is no longer a matter of expressing something that is true. It becomes a matter of getting a certain effect. The emotional enjoyment brought along with social interaction might disappear. The interaction is not for sincerity.

Then there's the social ties people make. Traditional rural society was built on ties of acquaintance. Relationships were thick, enduring, laden with obligations. Digital interfaces give rise to a different pattern. Weak ties proliferate on the Internet in likes and flings. Relationships become thin, short-lived and instrumental. A villager may sit silently in a village affairs group that has hundreds of villagers in it. But in the same way, that villager may be eloquent to a stranger several thousand miles away about an addiction they have in common. Blood ties and

geographical closeness no longer anchor a community's social life the same way they did. What happens instead is a more temporary, more interest-based form of attachment—functional, not organic. The centre of gravity shifts from a stable community rooted in land to a temporary, mobile community. It also has psychological effects. Sense of belonging is weakened. Social support becomes less reliable. The emotional foundation becomes more fragile than stable community bonds used to provide.

Over time, communication itself becomes instrumentality. It devotes less to mutual emotional support. It devotes more to controlling images and output. Once everyday exchange becomes digital channels, embodied, face-to-face exchanges are replaced by texts and emojis and bites. These face-to-face exchanges originally carried underlying signals and a common understanding. These flattened forms do not carry the burden of real emotional connections. People might be lonely even if they are always connected. Evidence from rural China suggests a similar concern: loneliness among left-behind children is closely related to social anxiety and a lack of psychological toughness; in other words, digital space rather seems to increase people's emotional vulnerability than to cancel it out [9]. At the same time, villagers are scattered their attention to huge numbers of online weak ties. Investment in real local community is eroded. The psychological sense of community—built on shared difficulty and mutual care—gets diluted as communication habits change.

4. A Governance Pathway for Alienation Risks of a Rural Digital Culture: Psychological Aspects

Against the wave of digitization penetration in remote agrarian regions, researchers are aware of various kinds of estrangement pitfalls that emerge with the seepage of digital culture into those remote agrarian areas. That estrangement has real psychological impact on those people. On the surface, technology empowers culture. Beneath that surface, technology logic quietly dictates how culture is created and how it is experienced. The dilemma is clearly visible in the technologization, blossoming of cultural practice. That process causes cultural dislocation and cultural dislocation at a deeper psychological level for rural people. The bottom line problem is imbalance. Instrumental reason

goes beyond its proper domain. Value reason has been tossed overboard. It is this instrumental reason that exposes the risks looming on culture development. At the same time, it provides opportunities to ponder and rebuild a more balanced relationship between technology and culture. To curtail the drift to alienation, development itself needs reconsideration. But attention needs to go back to the cultural base and culture needs to be valued in reshaped process. Psychologically speaking, that means restore rural cultural artists' culture identity, creative autonomy, psychological ownership. Systematic governance realizes a balanced value rationality- instrumental rationality in rural digital culture. That it can reactivate abandoned value rationality one hand, restrain instrumental rationality from expanding from another hand. This line of thinking provides a guided flow path between the two types of rationality. This flow path opens a re-return to culture self-consciousness, psychological well-being and human sentiment in the digital age.

4.1 Value Reconstruction: Beyond "Traffic GDP" and Refocusing on Psychological Well-Being and Human Development

Whatever well known research reports and implementation efforts of the policy for countryside digital cultural development put forwards countryside digital cultural development inducement in different aspects, such as expanding the efficiency of cultural flow, expanding the scope of some sector of certain industrialization and receiving some benefits, the great majority of academic research exploration takes efficiency-oriented attitude in instrumental rationality, and does not engage in an in-depth investigation of the question-value dimension of development: initiative beneficiary and essence of intention. Digital culture in countryside has its own characteristics, as one social practice associated with people's psychological wellbeing and subjectivity growth in countryside. Such predicaments such as the involution-related, over-superficial inclinations of countryside culture brought about by traffic framework of evaluation of development require us to reflect upon value targets of development, while insisting on the efficiency of technological application, the construction of value orientation keeping the all-round, psychologically-orientational growth of country urban residents as the core content should be formed as soon as

possible.

When we look at the state of rural digital culture in this day and age, it still adopts the quantitative systemic viewpoint at the centre of which what we call "traffic GDP" resides. Click rate, subscribers, transaction trade volume are the basic measuring gear. Instrumental rationality deeply penetrating the defining mode of cultural value becomes the essential gear of the measure. This category of expansion logic pushes cultural advancement to be the involution of data-centred things: content producers suffer burnout after pursuing user traffic, algorithms preferentially deploy homogenous content, and deeper culture roles such as community cohesion, individual capacity building, local cultural identity, etc. are neglected because they do not allow for intensive quantification. Creators whose output is under such scrutiny in a traffic-driven way will also in the end have their built-in drive and authentic psychological sense of ownership run down, because the external dashboards doing the content performance start to compute what a success looks like. Should the whole field proceed to normalize concerns about investment return, and manipulating platform algorithm values, the source of cultural creation will be inching backwards. Arranging the deadlock out of the box requires a switch from expansion logics to advancement logics—from measuring how much has happened to recording the cultural richness and psychological significance that content creates.

From the perspective of human development progress, the basic value of countryside digital culture is to help people in the countryside to all-round development and the growth of mind and spirit of village community. Assessment, thus, wants to divert less effort from data acquired outside to more effort to deepen taste of culture, sense of gain, respect, independence, subjective initiative. In practice, this means to build up an assessment system that includes the heritage of cultures, large range participation of the villagers, community construction, strengthening of individual potential, mental health of people. In practice, governments are encouraged to consider programs which have a limited online public attention but are involved with cultural essence and social interests - the online digitization and relay of rare historic cultural documents, for example, or the preservation and recording of oral literature from local old people. Such initiatives preserve

cultural memory of local areas and foster consolidation of indigenous distinctiveness and sense of attachment. Their digital service providers also have a corresponding duty: they can refine their moral algorithms and also test "social value algorithms" that offer exposure to gradual, deep, locally embedded content. This would aid recovery of the psychological value of creative products and protect heterogeneous cultural distinctiveness.

On the whole, the basic mission of the above-mentioned value reconstruction work is to transform the rural digital culture into a kind of practice made by the general people and for the general people rather than a virtual number that can be quantitatively observed by data indicators. Its inherent developmental logic ought to go beyond the logic of instrumental rationality to transition over to the logic of value rationality, so that digital technology serves the full development of cultural matter and the well-being of people, rather than promote people's undevelopment and negative anxiety and anxiety. Technology can be the entry point of applications, content diffusion can be the intermediate implementation system, while the ultimate endpoint is the full realization of human beings—taking into consideration the state of human mental well-being and achieving cultural well-being. If this development orientation can be maintained through the whole process, rural digital culture is probably possible to break out from the involution trap dominated by traffic data, and the sustainable values in the social, cultural and psychological aspects can be fully tapped out.

4.2 Psychological Empowerment: From "Digital Labor" to "Reflective Cultural Subjects"

Also, a whole gang of rural inhabitants live today in roles of a digital work force that they have not at all chosen. They produce content and do data labour but value of what they produce, who benefits from it, and even when they produce it is generally set by online platforms and their algorithmic rules. The line between play and paid labour gets blurred. Content creators often feel that they are playing games and doing what they want of their own free will, but in fact they are often transferring excess value to online platforms for a fraction of wage or no wage at all. These all-trampling stresses do not have their effects on everybody. Social

marginalisation and technology anxiety give rise to psychological digital gaps: some rural inhabitants are more likely to find themselves chipped by algorithms and their labour. Unfairness [3]. Being forced to preserve the visibility of their accounts, some content producers simply think that they have no choice but to adapt to the flows of traffic provided by the platform itself, to produce highly attractive and generalised content. This costs them the exertion of their own drive, and defeats the psychological functioning of their cultural engagement. This is an administrative problem and a psychological concern: people who are culturally agents in principle are governed by the very data they produce. People 'consume' their condition as digital workforce, but they lose the awareness of self-government, and their authority over themselves.

Escaping this dilemma is a transition from 'digital labour' to something that one might quite well prefer to call 'reflective cultural subjects'. This transition does not imply that inhabitants of rural areas are cutting off from digital tools. It means that they begin to understand themselves to be active bequeathers and producers of the inheritance and preservation of their cultural assets rather than users of data resources. They acquire the competence to use digital technology for the promotion of their own self-expression, and – much more importantly – they acquire the competence to question and manage the logic of technology rather than simply attending to it as their only function or main use. Accomplishing this transition rests on empowerment of the psychological status and on the development of concrete competencies. Collectives and people living in rural areas must again renegotiate the entitlement to create their own forms of culture, to tell their own stories, and to benefit from both of these things. This is not only a matter of enhancing a type of technical proficiencies. This is a matter of activating culture consciousness and culture-related individual activism - of a shared effort to claim one's consciousness of culture in the age of digital environments.

Enabling this switch to this direction calls for a structured, analytically ordered approach, not for fragments of intervention measures. A key part of such an appropriately structured scheme is an enhancement of cognitive capacity which aims at a better (public) recognition of their own product subject status and psychological status. Interactive workshops, case-aware training

seminars, like the ones discussed above, can help community inhabitants to understand the underlying logic of the platform economy, the working logic of the algorithm, their data entitlement that they have a legal right to acquire. Only then they can start to see themselves not as mere uncoordinated prosumers of the traffic flow, but indeed as cultural performers, as people who produce value for their professional output (and not merely for traffic quantity) out of local difference and factual genuineness. After attaining such cognitive clarity, we are able to revive latent drive and recover a stronger sense of personal power. Competency cultivation is the second priority area, and the scope needs to be extended beyond manipulating one's smartphone to the development of skills of strategic operation. An educational program needs to include content going beyond simple device use and video shot skills. This means enhancing the residents' ability to 'build up a digital story'; develop a story and message content; manage online user-groups; and convert indigenous cultural assets into digital assets. We do not want to urge local residents to just try hard to mimic templates of current popular content, but help people to tell their own local community stories through their own narrative ways. Advanced from mimicking behaviour to expressing real self-expressiveness occupies a central position in the recovery of creative freedom and a sense of lordship over cultural production-related activities. Institutional support and resource provision is also an indispensable supplement. It should provide a developing environment offering psychological comfort and an impression of working collectively. The village collective organization and the cooperative connection can organise scatter content creators, for example, by forming "rural digital culture cooperative groups", and helping them to negotiate with platform powers operators for a fairer benefit distribution arrangement and more generous creative working environment. Administrative departments and public welfare organizations can provide seed money, technical expertise, pathways for info exchange, preferential treatment on plans or initiatives to carry out in-depth investigation and innovative transformation of existing culture resource. Supportive measures in this category alleviate the anxious feeling and uncertain prospect that tend to accompany reliance on platform ecosystems and provide a more solid footing for

users' cultural engagement behaviors.

Our overall aim for our research is to support and help rural cultural operators to stop being algorithm governed and 'digital worker' of the online shop, and shift into being serene cultural owners – people with cultural self-esteem respect, pay digital attention, culture-sighted thinking, psychological self-regulating ability. In practice operation environment, operators can independently and appropriately apply digital mode of operations according to their own actual situation, not for being 'published online' for the sake of the 'online publishing', but for the sincere 'presentation' behaviour of their speech, cultivate cultural inheritance, revive their own rural villages, etc. This practice change means the transition, step by step, from the mode of 'product creation according to the demand of platform' to the mode of 'product creation according to need of rural revitalization'. As for a psychological status, it can also help individual recovers inner motivation, culture identity, starting point of cultural activities and creative activities.

4.3 Collaborative Governance: Constructing a Psychologically Balanced Ecology of Capital, Technology, and Rural Society

Against the backdrop of current rural revitalization, we have explored the interactive status among the three major players engaged in county-level revitalization. The undertaking of this exploration begins by clearly distinguishing the intention for resource allocation from the real livelihood needs of grassroots social groups and paying more attention to some coordination mechanisms that mitigate potentially destructive friction among market-seeking engagement and public interests-seeking engagement. Rural digital culture alienation does not have one single origin. It arises from the imbalance between capital, technology and rural society. Platform capital has its own market power and technology capacity, it has a tendency to grow rough. The logic of technology is efficiency. It relentlessly deepens its implantation in cultural life. Rural society itself should be cultural subject. Rural society is instead pushed to the margins and left quite passively. That this one-sided dominance, with its not equally distributed power, is a major reason the whole ecology has deteriorated. The imbalance is not structural. It also changes people's feeling. Rural residents' sense of community belonging,

collective efficacy and psychological security are all lower. Governance should never dismiss the value of any one actor. The duty is to foster it through institutional innovation, build a balanced ecology where capital, technology and rural society restrain and withstand each other and exist productively.

Collaborative governance at its heart means do away with domination by one actor. It means give a space where several actors can engage in equal standing with easy-to-separate responsibilities. Capital still needs space to do what it does well under market allocation; technology still needs to be allowed to innovate and search for new possibilities. All of them have to serve (and be scaled back by) the deeper underlying aim of building the rural subjectivity, psychological robustness and traditional cultural transmission. Going in this direction does require a governance community in government but put forward by many of the relevant parties. Rules and negotiation can tame expansive power of capital and the instrumental part of technology under the force of logic of value rationality. They can switch from one-sided domination to the collaborative development of the system. This kind of cooperation can also enable rural residents to feel more participation and control. That sense is an important psychological foundation for governing collectively.

There are a number of functional functions that can feed into the establishment of such an ecologically balanced ecosystem. Regulatory changes for capital start with a 'negative list', and, indeed, its 'positive list'. Administrative departments should step up their role as regulators and coordinators and impose unfettered rules on platform capital. The negative list limits data monopoly and algorithmic corruption, unfair competition in markets, and so on, preventing unregulated growth of capital. The positive list together with incentive policies should guide capital to those industries that provide deep cultural value but have scarce and short-term commercial output, such as rural digital libraries and the digitalization of intangible cultural heritage so that capital is also carrying out its social responsibilities. These inputs help to protect the underlying assets of local identity, and consolidate culture, identification and a sense of belonging. Technology advancing in an appropriate direction requires also a

directionality, so as to conduct "algorithm auditing" and "ethics integration". An "algorithm ethics committee" consisting of technical experts, cultural scholars and representatives of village residents should regularly audit recommendation algorithms used in rural China by mainstream platforms, improving fairness, openness and cultural diversity. At the same time, "rural-appropriate" technological approaches, such as speech recognition to protect local dialects, and platforms to facilitate community communication, etc., deserve encouragement and financial support so that value rationality can be embedded from the design stage, which helps to eliminate algorithm anxiety and strengthen villagers' confidence in digital settings. Proposals recently put forward for the rural digital governance also highlighted the integration of public values in algorithm development and digital platforms seen as public properties, to direct technology towards commonality [10]. Empowering rural communities is also of equal importance. Village collective economy organization, farmer cooperative and so on should be supported as the negotiation representatives of villagers' culture interests and enter equal consultation with the platform enterprise and platform suppliers. For example, "village-enterprise data cooperative" should assist speak out the data ownership rights and benefits-giving rights of the culture data, so as to make the value from the culture data spill back to village places. This process can help villagers' culture ownership psychology on the village local culture assets, and increase villagers' culture collective efficacy on digital culture governance. Also, village digital culture prime parties should be supported as the key intermediary of outside resources and inside needs, so as to increase villagers' community cohesion and mutual trust. This is important because digital participation formats, though promising to improve access, fail to involve the groups that are underserved by participation activities in general [11].

Ultimately, collaborative governance of this type has to come to an organic whole. Capital is limited. Technology is bound for socially responsible ends. The cultural subjectivity of rural society is in sight. Situated within this ecology, instrumental and value reasoning lose their reference to domination and submission. Instead, these possibilities reach a dynamic balance. And that balance in turn has

psychological weight. It re-recontributes community belonging, sense of community efficacy, confidence of the community's cultural capacity: ingredients for creative reconversion and original development of rural culture in the digital context.

5. Conclusion

Our study has also reflected the tension between instrumental and value rationality in rural digital culture. Our paper argues for the predicament of rural digital culture in the present—loss of culture authenticity, reduced expression plurality, reduced culture subjectivity and psychological alienation—not only the "by-products" of technological change but also the symptoms of an internal disharmony between platform capital, technological logic and rural society. As digital expansion deepens in rural areas, instrumental rationality increasingly defines the cultural value in terms of traffic, data, performance that is measurable, widening meaningfulness, commonalities, cultural cohesion, psychological wellbeing to the margin. We show that this disharmony is structural and psychological. Structurally, platform, algorithm determines cultural production and cultivation, and including the rural residents as a digital labourer with limited voice to the value they create; psychologically, it weakens culture identification, culture creativity autonomy, culture group efficacy and ownership of local culture resources. Examining this contradiction clarifies not only how technology and culture interact differently in the digital age, but also what such shifts mean for rural inhabitants' psychological status.

Resolving this paradox does not call for discarding digital technology, and subordinating value rationality to efficiency, either. It rather calls for reflective equilibrium between instrumental rationality and value rationality, a reflective middle position between instrumental technology empowerment and culture inheritance. Value goals and technical means need to be reflexive to each other so that instrumental rationality does not silently trump and technology does not substitute for cultural ends. With such a type of reflective equilibrium, rural digital culture can abide by technology rules, as well as abide by human-oriented cultural purposes.

Theretically, this study deepens rural digital culture, digital governance and cultural sustainability to connect different features

(conflict between instrumental–value rationality) from cultural and psychological levels; depicts rural residents as a culture-reflexive subject instead of just a casual user or a digital worker; provides a formula for integrating capital regulation, technology adaptation, community empowerment, and psychological support. Practically, governance should deviate from traffic benchmark to a value-oriented benchmark, which stresses culture heritage, villagers' participation, community affinity, capacity and psychological welfare. Negative and positive list restricts platform capital to cover people's enduring but low-volume (commercially) valuable purpose and activities. Algorithm audit, algorithm ethics integration, social-value algorithm, village–enterprise data cooperatives, capacity construction facilitate rural players "taking over from algorithms-based digital work to become cultural-reflexive subject of cultural confidence, digital capacity, cultural judgment, psychological self-governance".

There are also limitations. Our analysis is conceptual and does not systematically do cross-platform or cross-regional comparisons. Psychological aspects vary between age, gender, digital skills, and local context. Platform algorithm design and platform policies change fast; any equilibrium is dynamic. Future research can adopt longitudinal, comparative, experimental and participatory designs to test for the interaction of algorithmic governance, cultural participation and psychological well-being, to develop indicators of cultural depth and psychological flourishing, rather than just traffic.

Ultimately, it is not about digital technology entering rural cultural life or not, but how digital technology can enter rural cultural life without taking away rural residents' cultural subjecthood and psychological well-being. If rural digital culture is to be created by and for the public, it must be guided by value rationality, a logic that is people oriented, culture oriented and society oriented. It can only move from traffic-driven involution and tap its sustainable social, cultural and psychological values.

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