

# Beyond Personalized Recommendations: A Study of Algorithmic "Pseudo-Personalized Recommendations" from the Perspective of the "Circle Agenda"

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Abstract. Algorithmic personalized recommendation has become a consensus, but through the existing literature analysis, as well as the interactive search of "news algorithm", we found that there is another side of algorithmic recommendation: "pseudo-personalized recommendation". From this, it is concluded that algorithmic "personalized recommendation" presents a kind of coarse-grained personalization with certain deceptive gimmicks, which in essence tends to be a kind of "pseudo-personalized recommendation". At the same time, in order to verify this characteristic of pseudo-personalized recommendation, we try to take "Today's Headlines" platform as the research object, and conduct a qualitative research on its three publicly available news algorithmic recommendation modes. It is found that "user profile" recommendation tends to personalized recommendation, while "collaborative filtering" recommendation and traditional "ranking" recommendation tend to pseudo-personalized recommendation under the perspective of circle agenda. recommendation. Further, we analyze the reasons for the silence of pseudo-personalization and the interactions between the two, and conclude that, on the one hand, pseudo-personalization has a positive culmination effect, which can provide diversified sources of information and weaken the cocoon effect of personalization. On the other hand, "pseudo-personalized recommendation" and "personalized recommendation" have similarities, i.e., both of them are seeking the ontology of "attention economy". In this paper, we hope to reintroduce the aspect of algorithmic "pseudo-personalized recommendation", recognize the two sides of the algorithmic controversy, and provide different thinking paths for alleviating algorithmic anxiety and constructing a good algorithmic discourse ecology.

Keywords: Personalized Recommendations, Pseudo-Personalized Recommendations, Circle Agenda, Attention Economy

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### 1 Introduction

Algorithms have been embedded in aggregated news since the day it was created. News algorithms take big data as the object of analysis and carry out in-depth learning, so as to fragmenting, cutting, and combining to generate news text and realize automatic distribution and user-matching. Traditional news media organizations can take responsibility for the authenticity and value of the news text, while for which is difficult for big data to achieve. Then the reliability of the data source, the value of the integration process, and the cocooning of the distribution process, these three processes constitute the focus of most controversies surrounding news algorithms. In this paper, we delve into the cocoon effect of personalized recommendation and discover the other side of the algorithmic controversy: pseudo-personalized recommendation. A rising question is whether news algorithms really achieve "personalized recommendation"? Or is it a kind of "pseudo-personalized recommendation"? What is the dialectical relationship between "personalized recommendation" and "pseudo-personalized recommendation"? What kind of resonance effect does the interaction between the two produce? Studying these questions will help us to understand algorithmic recommendation more comprehensively, so as to build a pluralistic and interactive ecology of algorithmic discourse.

#### 1.1 Put Forward

Historical Origins of News Algorithms. With the rapid development of Internet technology, algorithmic techniques based on machine learning, neural networks and so on have emerged. Algorithms are embedded in all walks of life and have had a profound impact, especially in the field of journalism, giving birth to news algorithms, which have largely reshaped the news and other media industries. News algorithm is a computer network technology that takes big data as the object of analysis, and carries out a series of operations of fragmentation, cutting and gluing for the purpose of generating news text to realize automatic production and distribution of news. And the reason why news algorithms are widely used, the booster behind it is algorithmic recommendation. Algorithmic recommendation is a kind of professional computer algorithm, through some set program algorithms. It can speculate what the audience may like, which is originated in the 1990s and initially applied to the film's recommender system. And then, Amazon began to use the recommendation system on the website, the user's browsing and purchasing behavior is analyzed in practice, and try to personalize the recommendation to the users who have ever browsed or purchased goods. This resulted in a 35% increase in sales, and since then, personalized recommendations have been widely used in a variety of fields. In the news field, an aggregated news and information platform was created, such as Today's Headlines platform relying on collaborative recommendation algorithms to collect users' reading interests, successfully attracting a large number of sticky users and ranking among the top three mobile information platforms in terms of user penetration rate. As of August 2023, the 52nd Statistical Report on the Development of the Internet in China showed that algorithmic distribution is gradually becoming the main distribution method of online news, and in the domestic information distribution market, algorithmic content has exceeded 60% [1].

The Impact of News Algorithms and Controversy Sorting. The emergence of algorithms has a positive impact on the news industry based on the following four dimensions. First, from the perspective of the transmitter, intelligent writing liberates news productivity. The writing robot handles the collection of data, completes the script through deep learning, and realizes automatic matching of users, and this efficiency is unattainable for traditional news writing distribution. Secondly, from the channel point of view, the lowering of the threshold has led to the rise of citizen news, and news dissemination has shown a diversified trend, lifting the monopoly of the professional news production organizations in the past, and the authority of the traditional media has gradually been dissolved. Third, from the perspective of the user, algorithmic news makes the rise of personalized customization, screening the user's interest in the content, "user first" concept makes the user needs to be satisfied. Fourth, from the content analysis, technology empowerment makes the news production form richer. Such as the two sessions of the report using "5G + AI", "cloud communication", "VR" and other new technologies to help, making the news report more landscaped, creating a sense of "presence".

On the negative impact, from the main point of view, traditional journalists face survival difficulties, the lowering of the threshold also makes the news gatekeeper mechanism weakened, some media people in order to grab the time to distribute first-hand news, will not be strictly examined, so that the social order has been undermined, resulting in a lot of false news, click-bait. At the same time, personalized recommendations based on user profiles, making the user exposure to homogenized information may increase, the user's interest is limited to a field, then other areas will lack attention, thus producing the information cocoon effect. In addition, the complexity of the algorithms and the deliberate concealment of the users of the algorithms work. To some extent, this has led to the dominance of large technology companies with algorithmic technology, reversing the system-led and user-led models, depriving users of the power to actively choose customized media content, and creating "algorithmic hegemony", which has seriously jeopardized the legitimate rights and interests of news users and consumers, and triggered a series of algorithmic controversies <sup>[3]</sup>.

Based on the above problems arising from news algorithms, the keyword "news algorithm" is searched interactively through web crawlers, and it is concluded that the controversy over news algorithms mainly focuses on two frameworks. One is the controversy around "instrumental rationality" and "value rationality" under the rationality framework, and the other is the controversy around "personalized recommendation" and "pseudo-personalized recommendation" under the algorithm function framework. The second is the controversy around "personalized recommendation" and "pseudo-personalized recommendation" under the framework of algorithmic function. As shown in Fig. 1. The relevant terms retrieved are: "value rationality" (7.55%), "instrumental rationality " (2.83%), "personalized recommendation" (19.81%), "pseudo-personalized recommendation" (0.94%); "information cocoon " (16%), and "news ethics" (14%). The former controversy accounts for about 10%

according to word frequency, while the latter occupies about 20%. For the latter, the literature combing is launched.



Fig. 1. CNKI "news algorithm" cross search results

#### 1.2 Literature Review

Personalized Recommendations. In 1995, Stanford University's Marko Balabanovic and others first introduced a personalized recommendation system in the American Association for Artificial Intelligence, personalized recommendation has been the core function of the algorithmic technology, the idea of its proposition is to provide users with differentiated customized services to meet the different needs of different users. It can be said that for a long time, algorithmic "personalized recommendation" has been occupying the mainstream position. From the existing literature analysis, algorithmic recommendation debate focuses ultimately point to criticize the technical instrumental rationality. Scholar Yu Xin in the "re-understanding" information cocoon "- smart media era of instrumental rationality and value rationality of the symbiotic mechanism of the study" put forward the "cocoon" instrumental rationality and the "break the cocoon". "The symbiotic relationship between instrumental rationality and value rationality. Personalized recommendation is a product of instrumental rationality, emphasizing the power of algorithmic recommendation technology, and can even actively learn to customize information filtering, trapping users in the "cocoon". Value rationality is a "cocoon" process, that is, the individual in the algorithmic context to actively seek a variety of information. The relationship between the two should be complementary. <sup>[2]</sup> Further, in "Information Distribution in the Age of Smart Media: From Instrumental Rationality to Value Rationality", it is said that over-expansion of algorithmic personalized recommendations will lead to an imbalance in the balance between value rationality and instrumental rationality.<sup>[3]</sup>

Pseudo-Personalize Recommendations. Compared with personalized recommendation, there is little literature on pseudo-personalized recommendation, which is only mentioned in the text, but there is no literature specifically discussing it. In the article "Ethical Controversy and Review of Algorithmic News", scholars Yin Kaimin and Liang Yi explain that the value logic behind the push mechanism is "pseudo-personalized recommendation". The article mentions that "algorithmic push based on collaborative filtering aims at reflecting group preferences, and does not completely rely on the interests of the target audience, but instead shifts the decision of reading to the algorithm and the platform <sup>[4]</sup>. On the surface, the push mechanism can improve the distribution efficiency of news content, but the value logic behind it is "pseudo-personalized push" that seeks users' "attention economy". In the article "Beyond the Information Cocoon: A Study of the Diversity of User Information Contacts from a Cross-Media Perspective", Yan Oi and Eddie Hong explain that personalization that ignores the active expression of users is "pseudo-personalization" from the perspective of the contact of active users with cross-media platforms. In the article, it is said that "the fundamental reason why algorithms have fallen into "hegemony" is that they have reversed the system-driven and user-driven models, depriving users of the power to actively choose customized media content<sup>[5]</sup>. This system-initiated personalization is coarse-grained personalization, very different from true personalization.

**Circle Agenda.** Circle agenda is different from the previous mass media agenda, which is the agenda generated by socialization and interaction hierarchy in the new cyberspace. As early as the beginning of the 20th century, Fei Xiaotong put forward the theory of "differential order pattern" in "Native China", which mentioned the existence of "circle" as a unique phenomenon in traditional Chinese society. The rapid development of new media technology and the stratification of network communities have changed the traditional circles based on blood, geography, and industry, and young people have formed new network circles based on interest, emotion, culture, and other "interests". Through the development of subsequent scholars, the concept of "circle" has been more clearly defined. Scholars Wang Jia and Lv Junyi explained in "Youth Online Patriotism under Circularization" that "Circles" is the phenomenon of social activities and information interactions in specific circles and levels in the online living space due to the customization of information acquisition, the socialization of individuals into circles and the hierarchization of interaction relationships<sup>[6]</sup>.

The superposition of circles and agendas makes the agenda no longer controlled by the mass media and gives everyone the right to the agenda. The agenda has shifted from the agenda of the mass media to the hierarchical decentralization of online discourse, resulting in the development trend of flow in the circle, concentration within the circle, and the agenda of the circle. The circle agenda reflects the development of the network from the "decentralization" stage of everyone's equal rights and equality and the noise of the crowd. Circle agenda, first of all, originates from "personalized recommendation", personalized recommendation makes users join different circles with interestoriented, different members in the circle become because of "homogeneous attraction", and produce circle identity, in the process of group polarization by default. In the process of group polarization by default, a small-scale agenda is formed and forwarded to 96 Y. Ye and Y. Zhou

different communities, thus forming resonance and resonance of different circles, thus forming a powerful circle agenda. To a certain extent, personalized recommendation intensifies the circle homogeneous attraction, and in turn, the circle "homogeneous attraction" is more dependent on the algorithm's personalized recommendation.

### 2 Research Process

Based on the above discussion on the relationship between pseudo-personalized recommendation and personalized recommendation, under the perspective of circle agenda, to verify the existence of pseudo-personalized recommendation in algorithmic recommendation, taking Today's Headlines, a typical algorithmic news platform, as the object of research, to carry out a qualitative research on personalized and pseudo-personalized of the three algorithmic recommending mechanisms that are publicly available to it.

#### 2.1 Analyzing "Personalized Recommendations" Based on Today's Headlines

User Profiling Recommendations. Today's Headlines is an aggregated news client based on big data mining, in-depth analysis of user behavior, and personalized recommendation of information services for users. As a leader in providing personalized information in China, its development process is typical, controversial and relatively open. "What you pay attention to is the headline" was the initial slogan of Today's Headlines, and this slogan shows its original intention and product positioning, i.e., to produce news information that serves personalized users. A single personalized recommendation is often the user click, search behavior as its point of interest, in our unconscious click behavior mode, open the platform interface again, will fall into the homogenization of information rather than personalized. With the abuse of algorithmic "personalized recommendation", news with entertainment, thriller or yellow news, focusing on stimulating the user's senses, so as to attract people's attention, coupled with the lack of content auditing, "click-bait ", fake news, vulgar news gradually flooded the platform. In 2017, Today's Headlines were interviewed by the Beijing Internet Information Office and ordered to rectify. This shows that the "personalized recommendation" of Today's Headlines has been alienated.

In 2018, Today's Headlines reorganized its departure, launched a collaborative "personalized recommendation", added three input variables to collect user profiles, first, content characteristics, graphic, video, UGC video, micro headlines, Q&A, etc., respectively, to extract the content type preferences of different users; second, the user features, including occupation Second, user characteristics, including occupation, age, gender, interest labels, etc., to establish a variety of models to explore the hidden interests of users; Third, environmental characteristics, corresponding to different time, location, scene (work/commuting/travel, etc.), the user's preference for information soft and hard is different. It can be said that based on the three characteristics of content, user and environment to collect user profiles, this user profile-based recommendation algorithm tends to be a personalized recommendation.

# 2.2 Analyzing "Pseudo-Personalized Recommendations" Based on Today's Headlines

On January 11, 2018, at the sharing meeting of "Making Algorithms Open and Transparent" held by Today's Headlines, senior algorithm architect Dr. Huanhuan Cao graphically introduced Today's Headlines' algorithmic model, proposing collaborative filtering-based recommendation and leaderboard-based recommendation.

**Circles: Collaborative Filtered Recommendations.** By calculating the similarity of the information interests of two users, we find the cluster of users with similar interests to the target user and recommend the topics of interest to the target user from the cluster with the following simple model. (as shown in Table 1.)

Subscriber	Proactive Attention	Algorithm Recommendation		
user1	1, 2, 3, 4	no referrals required		
user2	2	1, 3, 4		
user3	2, 3	1, 4		

Table 1. User-based collaborative filtering

Based on the simple model diagram for a cluster of 3 people, it can be seen that: user 3 is most likely to be recommended by user 1 for products 1 and 4; similarly; it can also be concluded that it is most likely to be recommended by user 2 for products 1, 3 and 4, which of course is just a simple filtering process to facilitate intuition. In the larger reality of the cluster, it is necessary to use the collaborative filtering algorithm based on the KNN algorithm, increase the weighted weight (as shown in Table 2.)

Friend	Simi- larity	Movie D Rating	Movie D weighted score	Movie E Rating	E weighted score	Movie F Rating	Movie F weighted score
Zhang San	0.99	3.0	2.97	2.5	2.48	3.0	2.97
Li Si	0.38	3.0	1.14	3.0	1.14	1.5	0.57
Wang Wu	0.89	4.5	4.02			3.0	2.68
Zhao Liu	0.92	3.0	2.77	3.0	2.77	2.0	1.85
Qian Qi	0.66	3.0	1.99	3.0	1.99		
Weighted sum			12.89		8.83		8.07
Sum of weights			3.84		2.95		3.18
Weighted average			3.35		2.83		2.53
Note: Similarity and distance show an inverse relationship, i.e., the closer the distance the higher the similarity; weighted score = similarity * movie rating							

Table 2. Demonstration of the KNN algorithm

The user page shows the order of recommendation based on the weighted average score. Such as the table at the end of the weighted average score of the movie D3.35>E2.83>F2.53, so when users browse the platform movie recommendation board, will be in accordance with the first movie D, and then the movie E, after the movie F order to give you recommendations. This is the algorithm behind the recommendations that users often see on shopping or content websites, such as "people who like to read XXX also like...", "people who bought XXX also bought..." and so on. The algorithm behind the recommendations.

This algorithm relies on a variety of circles, there are traditional circles based on blood, geography, and industry, and there are also new network circles formed by interest, emotion, culture, and other "interesting" ties. Such as Pinduoduo's small circle, as long as and WeChat binding, you can see your family, friends to buy goods, and based on the ByteDance's Today's Headlines, naturally and Tik Tok binding, to give you recommended Tik Tok friends interested in the content of the information. It can be said that the circle of personal socialization, interaction and the formation of hierarchical relationships in a specific circle is the basis for the operation of the recommendation algorithm. It has little to do with the original mining user "personalized recommendations", the purpose is to reflect the circle group preferences, and does not rely entirely on the interest of the target audience, the decision to read the right to transfer to the algorithm and the platform algorithm. It can be said that this is a kind of coarsegrained personalization. In other words, the collaborative recommendation based on the circle perspective is a kind of "pseudo-personalized recommendation".

Agenda: Charted Recommendations. It is not difficult to study the "Tot Board" of Today's Headlines to find that this kind of mobile ranking has both personal topic list and topic list composed of commercial, non-commercial or professional news organizations. In a way, it reflects the dynamic balance of agenda construction by different social roles, and also reflects the openness, plurality and interactivity of the agenda in the context of new media. It also reflects the open, diversified and interactive nature of the agenda in the new media context, and gets rid of the dilemma of more serious issue setting, single communication and low public participation in traditional media. While focusing on analyzing the dynamic changes behind the agenda, it is the result of the joint action of clicking, forwarding and commenting by netizens at each node. Each body can be regarded as a communication node in the chain of information dissemination, will spread the topic to other nodes and comments, continuous radiation spread, and then encounter those who have more "attention" and "fans" of the key nodes, such as When encountering those key nodes with more "attention" and "fans", such as KOLs, the spread of the topic will be in a fission-like radiation, rushed to the hot search, the formation of the agenda ranking. At the same time, the information platform will be these agenda topics as "big events" to be ranked, will attract public attention to the topic, thus forming a strong agenda effect. According to the theory of the American communication scholar McMasters in "the agenda-setting function of the mass media", the media give different degrees of coverage to a series of topics in accordance with a certain order of priority, which will affect the public's judgment on the order of importance of these topics [9].

It can be said that, based on the click-through rate, reading volume, retweeting volume, commenting volume, etc. of the topic, automatically push the news with high attention, this kind of ranking algorithmic recommendation reverses the system-led and user-led model, in a way, occupies the public media resources, hogs the user's time and attention, and undermines the power to choose the media content, which is very different from the real "personalized recommendation". Personalized recommendation" is very different from the real "personalized recommendation", therefore, the ranking recommendation under the agenda perspective tends to be a kind of "pseudo-personalized recommendation".

#### **3** Focused Analysis

#### 3.1 Pseudo-Personalized Recommendations "Lost Voice" Reason Analysis

**Commercial interests overshadow "pseudo-personalized recommendations".** Personalized recommendation is a "gorgeous coat" woven by businessmen, which may be deceptive. The relationship between pseudo-personalization and personalization is often difficult to distinguish without rational analysis, and it is confusing to be mistaken for each other. For example, in the above analysis, from the perspective of circles and agendas, cluster filtering recommendation and ranking recommendation can be seen as "pseudo-personalized recommendation". In addition, algorithms tend to treat users' clicking and searching behavior as their interest. But there is no way to discover users' hidden real interests, so they can't achieve real "personalized recommendation". In our inadvertent repetitive clicks to stimulate the algorithm's behavior pattern, and then open the platform interface, will fall into the homogenization of information rather than personalized. It can be said that the essence of "personalized recommendation" is a "pseudo-personalized recommendation".

Driven by commercial interests, "personalized recommendation" caters to anthropocentric thinking, which raises the status of the subject's self and dwarfs the value of the object's others. Businessmen often seize the characteristics of personalized customization to amplify and enhance the identity value of the consumer subject, such as some luxury brands will often boast individuality, high custom, to its scarcity, custom as a selling point. Similarly, personalized customization on the news, also suitable, personalized recommendations can improve the audience subject of the fingertip experience, but also for the platform itself to enhance user viscosity, two birds with one stone. Such as early headlines, NetEase news and other personalized custom information platforms, the number of users, activity than the mainstream media client.

Loss of Voices in the Spiral of Silence. According to the theory of the spiral of silence, the "silence" of one group causes the other groups' opinion to increase in strength. Personalized recommendation has always been the core function of algorithmic technology, and under the clamor of advertisements, the voice of "personalized recommendation" has always been around the ears. On the contrary, in the business weave personalized recommendation "gorgeous coat", naturally will not voluntarily admit the existence of "pseudo-personalized recommendation". The silence of "pseudo-personalized recommendation" makes the superior opinion of "personalized recommendation" seem even stronger, which in turn forces more dissidents to succumb to the pressure of the environment and turn to "silence" or concur. Such a cycle, the formation of a "personalized recommendation" more and more loud, and "pseudo-personalized recommendation" more and more silent, or even "lost voice" spiral process.

Pangloss, in *The Rabble*, talks about how the IQ of individuals in a group is reduced to almost zero, and is comparable to that of animals. Groups within the same circle receive similar homogenized information, forming a "personalized recommendation" mindset dependency, no denial of information within the same circle, and in a spiral of silence, the group goes wild and agrees with the personalized recommendation. Members of the circle are more willing to believe in what they think is correct, and habitually ignore or deny "pseudo-personalized recommendations" that go against what they already know.

#### 4 A Wrap-up discussion

# 4.1 Culmination effect: the positive role of "pseudo-personalized recommendations"

In the context of personalization, users only take in the content they are interested in and actively "build a cocoon", resulting in an information cocoon in which they can only see their own views and opinions, and are unable to connect with the outside world, participate in and discuss public issues. Cluster filtering algorithms and "pseudo-personalized recommendation" formed by ranking algorithms can, to a certain extent, weaken the cocoon effect, help users to access and understand the diversity of information from the outside world, and be in a dynamic interaction with others in the information process.

Although the personalization and relevance of algorithmic recommendations will be weakened, users can break free from the shackles of over-personalization, step out of the echo chamber where they can only hear their own voices, and accept the "assimilation" of other people's views and opinions in the circle. "Concretization" also has the connotation of "assimilation" and "cultural intake", i.e., the phenomenon of change in the original cultural patterns of one or both parties as a result of continuous direct contact between a group of individuals from different cultures [8]. The phenomenon of "assimilation" and "cultural ingestion" is a phenomenon in which a group of individuals from different cultures, through continuous direct contact, causes a change in the original cultural patterns of one or both parties. This model can also be applied to circles, where the interaction of group news preferences and views on current affairs can lead to the fusion of different information cocoons, thus realizing real-time dynamic updating of information from multiple sources. As well as in the agenda, the push change of the hot list can enable users to understand in real time the major events happening in the people's livelihood and society, the attitude of the media, as well as the direction of public opinion, which affects our inherent cognition and attitude towards things, and changes the original cultural pattern. To a certain extent, the collaborative filtering of the circle type and the agenda type ranking recommendation, these two tend to "pseudopersonalized recommendation" algorithm under the culmination effect, can promote the resonance of multi-cultural exchanges and break the predicament of algorithmic hegemony, and is also the positive effect of algorithmic "pseudo-personalized recommendation".

#### 4.2 Two sides of the same coin: the quest for the "attention economy"

In the era of information explosion, the user's time is limited and information is unlimited, attention has become an extremely scarce resource, and mastering attention is mastering the wealth code. To a certain extent, attention has been alienated into another form of "currency", thus developing "attention economy". In *Attention in the New Media Era*, Zhang Guoqing proposes that the attention economy in the Internet era can be regarded as "the struggle of flow" and "the struggle of time", and the main development trend of the attention economy in the Internet era is to maximize the income and value by obtaining the audience's time. Algorithmic recommendation mechanism is also involved in this fight for "attention economy". In order to attract the attention of users, the major platforms are full of tricks, some news apps design the interface to guide the user to scroll down, flip pages and other related behaviors, and some news apps directly push the user's attention to the topic or content in order to extend the user's stay time [7].

Undoubtedly, the algorithmic recommendation mechanism of Today's Headlines is also to continue the attention of users. Whether it is algorithmic personalized recommendation or pseudo-personalized recommendation, it is essentially to seek the essence of "attention economy". When the user profile is accurate enough, personalized recommendation will precisely push the content that users are interested in, so as to obtain more attention "currency". Similarly, collaborative filtering recommendation and ranking recommendation will recommend news that may not interest the user, but is entertaining, thrilling, or pornographic, focusing on stimulating the user's senses, thus attracting people's attention. Under the rationality framework disputed by mainstream scholars, value rationality and instrumental rationality complements each other and balances the two rationalities to a certain extent, but at the same time exacerbating the dispute over the "attention economy" of different platforms.

#### 5 Conclusions

Algorithms, as a key productivity technology in the age of smart media, are naturally caught up in the controversy between instrumental and value rationality. People can't completely rely on their autonomy to get news, and algorithms can't completely replace human autonomy to customize news. Therefore, algorithms cannot realize the real "personalized recommendation", the so-called "personalized recommendation" is a gimmick with a certain kind of gaudy coat that has been woven, and its core is a kind of unwillingness to be disclosed coarse-grained personalization, which is still essentially

for the purpose of gaining the attention economy. Attention economy. The public's excessive pursuit of "personalized recommendation" makes "pseudo-personalized recommendation" lose its voice in the spiral of silence, while "pseudo-personalized" has the positive effect of being able to get rid of the shackles of excessive personalization and weaken the cocoon. The positive effect of "pseudo-personalization" is that it can get rid of the shackles of over-personalization, weaken the algorithmic anxiety caused by the cocoon effect, and realize that we are in a more open, diversified, and dynamically interactive information environment. Further, this paper hopes that in addition to the current perspective of the return of value rationality, active audience, and the diversity of cross-media platforms, algorithmic "pseudo-personalized recommendation" can also be used as an important value thinking to resist algorithmic anxiety, so as to create a good ecology of algorithmic discourse.

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