

# *Algorithms, Judgment, and Authority: A Critical Normative Rationality from the Perspective of Neo-Kantianism*

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**Abstract.** Whether contemporary algorithmic systems constitute a normatively significant form of authority and what their legitimacy is based on are important theoretical issues in the current digital society. As judgment structures, recommendation and ranking algorithms continuously shape the visibility, temporal order and possibilities of action in the digital environment, thereby influencing individuals' ways of understanding and participating in the public world. Drawing on the theoretical resources of phenomenology, political philosophy and Neo-Kantianism, this paper constructs an evaluation framework for the legitimacy of authority with transcendental validity, reflective accountability and practical autonomy as the core. Relevant analyses show that algorithmic authority, which is often based on empirical statistics yet occupies a quasi-transcendental position, narrows the space for public reflection through opaque mechanisms and guides human behavior via adaptive feedback structures instead of resorting to rational recognition, thus undermining its normative legitimacy. At the same time, algorithmic mediation performs practical functions in the complex information environment, and its legitimacy issue does not stem from technology itself but from whether it is subject to rational scrutiny and institutional constraints. The distinction between technical validity and normative legitimacy helps to deepen the theoretical understanding of the authority structure in the artificial intelligence environment.

**Keywords:** Algorithmic Authority, Neo-Kantianism, Normative Rationality, Transcendental Legitimacy

## 1. Introduction

In contemporary society, individuals' ways of interacting with the world are increasingly dependent on algorithmic systems. Specific algorithmic mechanisms, such as big data recommendation, traffic ranking and content filtering, not only organize the circulation of information but also profoundly influence what people can see, the temporality of the content they experience, and the rationalized actions they are supposed to take. In this sense, algorithms are no longer merely neutral, available technical artifacts, but rather omnipresent judgment structures that permeate daily life [1]. This non-neutral content structure is gradually evolving into a new form of domination that guides people's ideas, behaviors and decision-making. However, the extent to which algorithms have constituted a normatively significant form of domination remains to be clarified.

Existing discussions on algorithms mostly focus on their political and economic consequences, governance risks or social and cultural impacts. For instance, one strand of research defines algorithms as an extension of political tools in capitalist society, emphasizing their regulatory functions in platforms and the economy; another focuses on transparency, accountability mechanisms and regulatory approaches, seeking to enhance the binding force of institutions and rules to mitigate the abuse of algorithms; still others analyze the impact of algorithms on shaping subjectivity and social norms from a cultural or discursive perspective [2-4]. These approaches undoubtedly reveal the key aspects of algorithmic operation, yet they often presuppose an insufficiently examined premise: algorithmic judgment itself possesses a certain unknown rational validity, and its problems mainly lie in who uses it and how it is used. Therefore, the question of whether algorithms themselves, as a form of judgment structure, have normative legitimacy is instead relegated to a secondary position.

This paper no longer regards algorithms as objects to be used, governed or abused, but analyzes them as a form of judgment with potential normativity and binding force, re-examining the question of whether algorithms have constituted a form of authority. By shifting the discussion from "the consequences brought by algorithms" to "on what basis algorithms have the right to make such judgments", this paper attempts to fill the gap in the normative philosophical dimension of current algorithm research. Meanwhile, the analysis in this paper helps to clarify several core controversies surrounding algorithm governance at present. If the problems of algorithmic authority stem not merely from opaqueness or abuse but from the lack of legitimacy in its structure itself, then merely expecting technological optimization or external regulation may be insufficient to respond to the profound challenges posed by algorithmic authority.

## 2. Does algorithmic authority exist

To define whether algorithms "possess authority", it is first necessary to clarify the criteria for judging authority: a structure can be identified as authoritative if it can consistently and stably limit the range of optional actions for individuals or groups, and the actors affected by it cannot engage in equal response, negotiation or effective rejection with it at the moment [5]. The core of this criterion lies in structural power inequality, that is, authority exists in a situation where the possibilities of action are pre-defined and actors cannot break away from this framework immediately. Langdon Winner's classic discussion on technology and politics provides a theoretical basis for the above criteria. He points out that once certain technologies are deployed, they are no longer merely instrumental media but predefine and solidify a social order [6].

### 2.1. The absence of a practically resistant subject

Unlike traditional authority, algorithms do not appear in the form of explicit orders or institutional provisions but function through ranking and recommendation mechanisms embedded in platform operation, thus lacking a clearly identifiable object of resistance. Users are inevitably situated within the algorithmic structure when using platforms; even if they reduce interaction or remain silent, their behaviors are still incorporated into the recommendation logic [7]. Although individuals can formally choose to exit the platform, in a highly platformized public environment, this often means abandoning important social and information resources, and thus hardly constitutes a practically feasible way of resistance. Algorithmic authority is maintained precisely in such a situation where there is no immediate path of rejection. Subjects do not accept its domination through explicit authorization, but are placed in a predetermined structure before their actions take place.

## 2.2. The unequal distribution of the right to know

Platform operators and technical managers grasp algorithmic goals, optimization directions and data structures, and can adjust the logic of content distribution based on system information; in contrast, content creators and ordinary users can only infer its operating mechanism from results and find it difficult to obtain verifiable interpretive resources [3]. This asymmetry is not merely a lack of information but an institutionalized cognitive inequality. Creators can attempt to cater to algorithms but cannot negotiate with them; users can perceive changes in recommendations but find it hard to question their basis. Even if formal interpretive mechanisms exist, their content is usually simplified, ex post and unverifiable. As a result, algorithmic operation gradually presents a state of "being obeyed yet not being questionable", which constitutes an important feature of the authority relationship.

## 2.3. The consolidation of authority in feedback loops

Algorithmic authority is also reflected in the accumulability of action consequences. Every click, stay and interaction of users will be recorded and inversely shape future recommendation results, continuously strengthening this structure [8]. The feedback mechanism of algorithmic authority makes individuals browse and act in a changing environment, and narrows users' preferences unconsciously.

To further elaborate with Bruno Latour's Actor-Network Theory, action is not initiated by a single subject but generated by a network composed of both human and non-human actors [9]. As a non-human actor, algorithms participate in the distribution, translation and amplification of action. User behaviors, data records, recommendation models and interface presentation together form a dynamic network, so that algorithmic authority is not manifested as the external constraint of fixed rules on subjects, but as the continuous constraint of action paths in the network structure. Once the distribution of action is stably embedded in the techno-social network, power no longer needs to take the form of orders or prohibitions. Algorithmic authority presents a depoliticized and de-authorized appearance, as if it is merely a "natural result of user preferences" rather than an authoritative structure continuously generated and maintained by the techno-social network.

## 3. The attributes of algorithmic authority

### 3.1. Determining visibility: algorithmic authority as an appearance structure

The most intuitive feature of algorithmic authority is that it systematically shapes visibility through ranking, recommendation and filtering mechanisms, thereby influencing the composition of the public world without issuing direct orders. Drawing on Hannah Arendt's thought on "appearance", we can see that visibility is only the technical dimension of appearance, and appearance itself concerns how subjects enter the public space as responsive beings [10]. Politics begins with appearance: only those who are seen and heard can become the objects of public discussion and judgment [11]. Therefore, controlling the conditions of appearance is inherently political. By continuously regulating visibility, algorithms establish an asymmetric and non-negotiable appearance structure, making the public sphere no longer based on comprehensible principles of equality but mediated by technical indicators such as relevance and interaction rate, thus altering the equal relationship between actors [12].

Furthermore, algorithms do not merely hide content but "uncover" the world in a specific way. With the help of Martin Heidegger's analysis of technology, we can understand that modern technology makes the world appear in a computable, predictable and schedulable form, and this way of appearance itself contains a dominant nature [13]. Algorithmic authority operates precisely by transforming the world into an object that is "recommendable" and "rankable", so that modes of existence that are difficult to be calculated and incorporated into the recommendation logic—such as contingency, silence or irrelevance—though not explicitly excluded, gradually lose the conditions for appearance.

### 3.2. Determining temporality: algorithmic authority as an order structure

Algorithmic authority is also reflected in its control over temporality, especially the order of presentation. By systematically arranging content, algorithms profoundly influence the way meaning is generated. In the phenomenological tradition, Edmund Husserl points out that experience is not completed in an instant but embedded in the structure of temporal consciousness. Previous presentations form "retentions", which provide a background and expectations for subsequent experiences, and new presentations are understood within this continuous structure [14]. When algorithms constantly rearrange, refresh and replace content, the temporal continuity generated by the subject itself is interrupted, retentions and expectations are difficult to form stably, and experience cannot unfold along a graspable temporal flow but is continuously pulled back to the "present" prescribed by algorithms, thus alienating the subject's temporal consciousness.

In Maurice Merleau-Ponty's writing, meaning does not come from isolated objects but arises from a perceptual structure with directionality, rhythm and internal connection [15]. Objects are understandable precisely because they are embedded in a temporal and spatial context organized by bodily experience. When the order of presentation is long-term manipulated by external mechanisms, the subject's perception is no longer mainly governed by their being-in-the-world but embedded in a heterogeneous temporal logic. Algorithmic recommendation exercises authority precisely at this level: users can hardly independently decide "what to see first" and can only enter a pre-programmed sequence. The content presented first often sets the direction of understanding and emotional tone, making subsequent information interpreted within predetermined expectations. Thus, by reconstructing the temporal structure itself, algorithms indirectly shape the subject's way of perception and the process of meaning generation.

### 3.3. Determining possibilities: algorithmic authority as an action field

Algorithmic authority is also embodied in its structural shaping of the possibilities of action. It does not directly stipulate how individuals "ought to act", but through recommendation mechanisms, feedback systems and interface design, makes certain action paths appear natural and smooth, while others gradually become laborious, marginalized or even unimaginable. Therefore, algorithms do not operate through orders or prohibitions but exert authority by reconstructing the space of possible actions. Michel Foucault points out that modern power mainly acts on the conditions of possibility before actions occur, and influences choices by shaping the form of freedom [16]. Applied to the algorithmic environment, we can see that algorithms do not deprive people of the right to choose, but continuously amplify certain behaviors and compress other possibilities by virtue of reinforcement and feedback mechanisms. In recommendation systems, which expressions are more likely to be exposed, which topics are more favored, and which styles are identified as "high-quality" are repeatedly reinforced in implicit reward and punishment mechanisms and gradually

internalized by individuals. Behaviors that deviate from algorithmic preferences, though not prohibited, are often accompanied by a decline in visibility and weakening of feedback, and even excluded from the public vision. Peter-Paul Verbeek's analysis of technological mediation further reveals this process: technology does not dominate action by issuing orders, but by changing the affordances of the environment, making certain behaviors more "handy" while others seem unnatural or inappropriate [17]. Precisely by shaping the cost structures and return expectations of action, algorithms profoundly influence individuals' action choices without appearing as external coercion.

#### 4. A Neo-Kantian critique of the legitimacy of algorithmic authority

The above analysis shows that algorithmic authority is not merely an external technical tool, but deeply intervenes in the subject's experiential structure and judgment process by continuously shaping visibility, temporal order and possibilities of action. It enters the individual's cognitive horizon in the form of ranking results, recommendation paths and feedback mechanisms, so that what people face is not the algorithm itself but a structured experiential world. This structure is gradually naturalized through long-term use, gains a status similar to cognitive premises, and becomes an important reference framework for understanding the world and organizing actions.

It is in this sense that algorithmic authority has the conditions to be examined by transcendental philosophy. When technical mechanisms are internalized as premises for understanding and judgment, their legitimacy issue is no longer merely a technical one but transformed into a question of normative rationality. Neo-Kantianism focuses precisely on the formal structures that make experience possible, thus providing a key perspective for analyzing algorithmic authority [18]. When algorithms actually perform functions similar to rational judgment, their legitimacy must be examined against the normative conditions of rationality. Based on this, this paper proposes three criteria: transcendental structures must not be disguised as empirical facts; rational forms must be reflectable and universalizable; authority must not eliminate the subject's autonomy [19]. Only by satisfying these conditions can algorithmic authority become a legitimate authority in the normative sense, rather than merely an effective technical mechanism.

##### 4.1. Transcendence is not a disguise for empirical facts

In the Kantian and Neo-Kantian tradition, "transcendental" does not refer to temporal priority but to the formal conditions that make experience possible [20]. It is not a law induced from experience but a structural framework presupposed by any judgment, such as causality, unity and objectivity. For this reason, Neo-Kantianism emphasizes the need to strictly distinguish between empirical facts and normative conditions; otherwise, the descriptive laws and the foundation of rational legitimacy will be confused [21]. If an authority is to occupy a transcendental position, it must have a normative status independent of empirical facts. Replacing transcendental structures with statistical stability or technical efficiency constitutes a confusion of categories from this perspective.

This problem is particularly prominent in the algorithmic environment. Algorithms operate based on historical data and statistical correlation, which are essentially at the empirical level, yet their results are often presented as the default framework of "the most reasonable" or "the most relevant", and gradually shape users' ways of understanding. In the phenomena of echo chambers and filter bubbles, specific information paths are continuously strengthened, and the patterns generated by experience are internalized as cognitive premises [22]. When correlation and behavioral inertia are naturalized as the starting point of "what ought to be", algorithms transform from empirical tools

into pseudo-transcendental structures. The Neo-Kantian critique does not deny the practical value of algorithms, but warns against their empirical operation being solidified into unreflective judgment premises. The key question is not whether algorithms participate in judgment, but whether they cross the boundary between empirical assistance and normative constitution.

#### **4.2. Rational forms must be reflectable**

The Neo-Kantian understanding of rationality emphasizes not only its formal structure but also its reflective characteristics. In *Critique of Pure Reason*, Immanuel Kant points out that reason is not a blind mechanism but a capacity that can examine and limit its own grounds [20]. A judgment has normative validity precisely because it can provide reasons for itself and in principle accept the understanding and examination of others. Neo-Kantianism further develops this into the core criterion of normative legitimacy: any form of judgment with authoritative nature must be accountable, discussable and reflectable. The basis of judgment cannot be closed within the technical system, and its validity cannot be proved merely by the success of results, but must be able to accept rational argumentation and questioning. Otherwise, no matter how efficient the mechanism is, it is only a causal process, not an authority in the normative sense.

Measured against this criterion, algorithmic authority faces significant reflective challenges in reality. Mainstream recommendation and ranking systems rely on complex parameters and dynamic optimization, and their judgment paths are often invisible to ordinary users. Individuals usually only have access to the results but find it difficult to understand their basis; when certain content is downgraded or marginalized, there is a lack of interpretive resources for discussion. This structure makes algorithmic judgment difficult to enter the space of public argumentation and easy to be taken for granted as a technical decision that needs no explanation. However, this does not mean that algorithms necessarily exclude reflectivity. Explainable artificial intelligence, algorithmic auditing and transparent design are precisely responding to the requirement of rational accountability [23]. The key problem does not lie in algorithmic technology itself but in whether it is institutionalized as an "unquestionable judge". When algorithms gain recognition by virtue of "technical necessity" rather than by comprehensible reasons, rational recognition is replaced by technical adaptation, and normative legitimacy gives way to system efficiency and operational stability.

#### **4.3. Authority must not eliminate the subject's autonomy**

In Kant's practical philosophy, autonomy does not mean arbitrary choice but refers to the subject's obedience to the laws that it can recognize as a rational being [20]. The reason why subjects follow norms is not out of external coercion or utilitarian calculation, but because they can understand and recognize their legitimacy. Therefore, legitimate authority does not make the final judgment for the subject, but provides an understandable and recognizable rule framework, so that obedience can be understood as "obeying the laws recognized by oneself". Neo-Kantianism inherits and deepens this idea, regarding autonomy as the core condition of normative legitimacy. If an authority narrows the space for understanding, weakens the capacity for judgment, or replaces normative reflection with a purely technical mechanism, making the subject only able to conform to its rules but unable to recognize them, it constitutes heteronomy rather than autonomy. Even if behaviors still appear "voluntary" in form, they have lost the foundation of rational self-legislation [24]. This criterion has a direct practical implication in the algorithmic environment. In recommendation systems and ranking mechanisms, individuals' choices are often guided and shaped in continuous feedback. Creators cater to algorithmic preferences and users rely on system recommendations; these



adjustments are not completed through explicit orders but gradually internalized into behavioral intuitions in reward and punishment mechanisms. The subject's basis for judgment shifts from "whether I recognize this position" to "whether this behavior conforms to system logic", and normative considerations are gradually replaced by adaptive calculation. Action is no longer mainly based on rational recognition but on strategic responses to the technical environment. From a Neo-Kantian perspective, this does not mean the disappearance of freedom but a transformation in the normative structure of freedom [25]. When rules operate in a way embedded in technical mechanisms, it is difficult for the subject to understand them as "the laws I recognize" and can only regard them as "the environment that must be adapted to". However, this does not mean that algorithms inevitably eliminate autonomy. By improving transparency, enhancing adjustability and providing diverse choice paths, technical systems can still reserve space for subjects to understand and recognize norms, making algorithms a tool that supports judgment rather than replacing it.

## 5. Conclusion

This paper analyzes the question of whether contemporary algorithmic systems constitute a normatively significant form of authority and what their legitimacy is based on, systematically examines the structural role of algorithms in shaping visibility, temporal order and possibilities of action, and on this basis, introduces Neo-Kantian theoretical resources to evaluate the normative status of algorithmic authority. The paper points out that algorithmic systems have gradually assumed the functions of organizing experience and guiding judgment in practice, and their influence has gone beyond the scope of instrumental media, presenting the basic characteristics of an authoritative structure.

At the normative level, this paper constructs a theoretical framework for evaluating the legitimacy of algorithmic authority with transcendental validity, reflective accountability and practical autonomy as the core criteria. The analysis shows that algorithmic authority, which is often based on empirical statistics yet occupies a quasi-transcendental position, restricts the space for public reflection to a certain extent through its operating mechanism and influences the subject's ways of judgment and action via adaptive feedback structures, thus facing the problem of insufficient normative legitimacy on multiple levels. At the same time, the paper emphasizes that the functional value of algorithmic systems in the complex information environment cannot be ignored, and their normative risks do not stem from technology itself but mainly from the operating structure lacking rational scrutiny and institutional constraints.

The main contribution of this paper is to introduce the algorithm issue from the level of efficiency and governance technology into the theoretical context of normative rationality and authority legitimacy. With the help of the Neo-Kantian framework, it distinguishes between technical validity and normative legitimacy, and systematically reveals the structural characteristics of algorithmic authority from the perspective of the legitimacy conditions of judgment forms. Compared with research approaches focusing on the source of power or institutional design, this paper places more emphasis on the normative foundation of the judgment structure itself, thus deepening the philosophical understanding of the social impact of algorithms. Meanwhile, this paper is mainly based on theoretical analysis, with limited empirical investigation of specific platform mechanisms and user practices, and the institutional environments and functional differences of different types of algorithmic systems still need to be further elaborated. Future research can combine empirical research and institutional analysis to explore the transformation mechanism between technical design and normative legitimacy, and deepen the research on the relationship between algorithmic

rationality, public participation and subjectivity from an interdisciplinary perspective, so as to promote the more rational development of algorithmic technology within a normative framework.

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