The Proliferation of 'Conceptual Facades': Cognitive Downgrading and Structural Distortion in Short-Video Knowledge Dissemination

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Abstract: As short video platforms become a primary channel for public knowledge acquisition, the dissemination form of knowledge is undergoing a profound ontological transformation. This paper introduces the core analytical tool of 'Conceptual Facade' for the first time, constructing a three-tier analytical framework of 'media form–symbolic translation–cognitive reshaping' to systematically reveal how short video media strips away the logical structure of knowledge, leading to cognitive degradation and structural distortion. The study finds that within the narrative logic of short videos, complete logical deductions are omitted, complex contextual frameworks are stripped away, and rational argumentation is replaced by emotional stimulation. Knowledge is no longer a rigorous logical system but degenerates into individual 'conceptual facades' solely for display and consumption. The proliferation of such 'conceptual facades' not only creates the illusion of fragmented learning but also breeds audience metacognitive inertia and the loss of critical reflection capabilities. To address this profound cognitive crisis, this paper proposes exploring reconstruction paths for knowledge dissemination in the short video era from three dimensions: upgrading media literacy, introducing cognitive friction into algorithms, and awakening creators' structured narratives.

Keywords: Conceptual Facade; Short Video; Knowledge Dissemination; Cognitive Downgrading; Structural Distortion; Media Form

1 Introduction: The Paradox of Knowledge Dissemination in the Short-Video Era

Over the past decade, short-video platforms represented by Douyin, Kuaishou, and TikTok have swept the globe at unprecedented speed. They have not only profoundly changed popular entertainment, but have also gradually evolved into important channels for information acquisition and knowledge dissemination. According to the 2023 China Internet Audiovisual Development Research Report, pan-knowledge short videos have become one of the content types with the highest viewing share among users. Increasing numbers of experts, scholars, science communicators, and knowledge creators have entered short-video platforms, attempting to popularize scientific knowledge, interpret social phenomena, and teach practical skills to the public within several dozen seconds or a few minutes.

On the surface, the popularity of short videos has greatly lowered the threshold for acquiring knowledge, broken down the barriers of traditional elite education, and appears to have inaugurated a golden age of "inclusive knowledge." Yet beneath this apparent prosperity lies a profound paradox of knowledge dissemination: informational abundance has not brought cognitive deepening, but has instead been accompanied by widespread "cognitive downgrading." People seem to learn new terms and concepts through short videos every day, yet when facing complex real problems, they often exhibit broken logical chains, a lack of critical thinking, and an overflow of polarized emotion.

Where does this paradox originate? Existing communication research mostly focuses on the "fragmented" character of short videos, arguing that short-duration content cannot carry deep knowledge. Neil Postman's critique of television in *Amusing Ourselves to Death*, for example, is often borrowed to analyze the negative effects of short videos [11]. Other scholars discuss the limits that algorithmic recommendation and information cocoons impose on knowledge acquisition [2]. Yet these studies often remain at the level of media surface characteristics or distribution mechanisms, and do not deeply analyze how short video, as a distinctive media form, reshapes the structure of knowledge at the ontological level.

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This paper seeks to remedy that theoretical gap. Drawing on the cognitive ontology of *Knowing and Speaking*, it introduces the analytical concept of "Conceptual Facade" in order to describe more precisely the essential features of knowledge dissemination on short-video platforms. The paper argues that short videos do not simply cut long-form knowledge into fragments. Rather, they perform a destructive "symbolic translation" of knowledge: they strip away the internal logical structure and generative context of knowledge and preserve only a seemingly profound but essentially hollow conceptual facade. The proliferation of such conceptual facades is the deep cause of cognitive downgrading and structural distortion among short-video audiences.

This paper constructs a three-tier analytical framework of "media form–symbolic translation–cognitive reshaping." It systematically analyzes the internal logic of short-video knowledge dissemination and the cognitive crisis it produces, and on this basis explores possible paths for reconstructing the ecology of knowledge dissemination in the short-video era.

2 Theoretical Construction: From "Knowledge Structure" to "Conceptual Facade"

To understand deeply how short videos reshape knowledge dissemination, it is first necessary to clarify the different forms of "knowledge" in traditional media and short-video media. This section defines "knowledge structure" and "conceptual facade" in relation to the theory of *Knowing and Speaking*.

2.1 "Knowledge Structure" in Traditional Media

In *Knowing and Speaking*, Wang Dongyue argues that human cognition is not a direct mapping of the objective world, but a "compensatory mechanism" based on logical inference and conceptual construction [17]. Genuine knowledge is never an isolated fact or a dry noun, but a rigorous system jointly composed of logical chains, contextual frameworks, and value presuppositions.

In traditional media represented by print media, such as books and academic papers, and long-form video, such as documentaries and open courses, the presentation of knowledge usually has three structural features.

First, it contains a complete logical chain. The transmission of knowledge includes not only the conclusion (C), but also the complete process from premise (A), through intermediate inference (B), to conclusion (C). This inferential process is the core of knowledge: it shows "why this is so" rather than merely "what it is."

Second, it provides an explicit contextual framework. Any knowledge is generated within a particular historical background, disciplinary paradigm, or set of presuppositions. Traditional media usually explain these contextual frameworks in detail when transmitting knowledge, clearly indicating the scope and limits of applicability of that knowledge.

Third, it involves rational argumentation. Traditional media tend to appeal to the audience's rationality, or System 2, and establish the authority of knowledge through rigorous argument, detailed evidence, and multidimensional dialectical analysis. Emotion may also be present, but it usually serves as an auxiliary means for rational argument.

This structured form of knowledge requires audiences to possess a high degree of concentration and the ability to delay gratification. When reading an academic work, readers must follow the author's line of thought and complete a step-by-step logical ascent before they can establish a stable conceptual system in their minds.

2.2 The Proposal and Definition of "Conceptual Facade"

When knowledge enters the media field of short video, however, its form undergoes fundamental alienation. To adapt to the fast, simple, and visually intensive rhythm of short videos, creators have to compress and transform knowledge to an extreme degree. In this process, the internal structure of knowledge is ruthlessly stripped away, leaving only a highly recognizable outer shell. This paper names this alienated form of knowledge the "Conceptual Facade."

The term "Conceptual Facade" borrows from the architectural concept of the facade. In architecture, the facade is the exterior wall of a building. It is often richly decorated and designed to leave a strong visual impression on the viewer, yet it does not reflect the building's internal structure or load-bearing logic. Similarly, in short videos, the conceptual facade refers to pseudo-knowledge that has been stripped of logical inference and contextual frameworks, retaining only professional terminology, sensational conclusions, or emotional labels.

Specifically, the conceptual facade has three core features.

First, there is a rupture of logic and a suspension of conclusion. Within several dozen seconds, creators cannot display complex inferential processes and can only directly present conclusions. Knowledge becomes an assertion that "A directly equals C," while the intermediate inference (B) is completely omitted. Such suspended conclusions are easy to remember, but they lose logical support.

Second, there is a stripping away of context and absolutizing generalization. To pursue wide dissemination, short videos often generalize concepts that originally belong to specific contexts into "absolute truths" supposedly applicable everywhere. For example, the economic and sociological concept of "involution" is generalized infinitely into all aspects of daily life, stripped of its original academic connotations.

Third, there is the usurpation of reason by emotion. To seize users' attention within the "golden three seconds," creators tend to package concepts with high-arousal emotions such as anxiety, anger, and surprise. Knowledge dissemination no longer appeals to rational argumentation, but becomes emotional stimulation and resonance.

2.3 The Analytical Framework of "Media Form–Symbolic Translation–Cognitive Reshaping"

On the basis of this definition, the paper constructs a three-tier analytical framework of "media form–symbolic translation–cognitive reshaping."

At the level of media form, it analyzes the physical properties and interaction mechanisms of short videos, such as duration limits, vertical-screen visuals, and endless scrolling. These are the underlying forces that drive the alienation of knowledge.

At the level of symbolic translation, it examines how knowledge is translated from "knowledge structure" into "conceptual facade" when it enters the short-video field. This is the transformation of the ontological form of knowledge.

At the level of cognitive reshaping, it explores the effects of the proliferation of conceptual facades on the audience's cognitive structure, namely cognitive downgrading and structural distortion. This is the final manifestation of the media effect.

The following analysis develops this framework in detail, focusing on structural distortion and cognitive downgrading in short-video knowledge dissemination.

3 Symbolic Translation: Structural Distortion in Short-Video Knowledge Dissemination

The migration of knowledge from traditional media to short-video media is not a simple change of carrier, but a profound symbolic translation. In this process, the structure of knowledge undergoes three forms of distortion.

3.1 The Rupture of Logical Chains: From Inference to Assertion

In the traditions of science and philosophy, the value of knowledge lies not only in the correctness of the conclusion, but also in the inferential process through which the conclusion is reached. Karl Popper's falsificationism argues that a scientific theory is valuable because it provides a logically testable inferential path [9].

Under the media form of short video, however, this inferential path is systematically cut away. Because of duration limits, usually between 15 seconds and 3 minutes, and completion rate, a core metric in algorithmic recommendation, creators face intense narrative pressure. If they spend too much time providing background or logical derivation, users are very likely to swipe away within a few seconds. Therefore, the most effective strategy is to get straight to the point and condense complex theories into highly impactful catchphrases or assertions.

For instance, in short videos explaining "quantum mechanics," creators often directly present fantastic conclusions such as "Schrodinger's cat" or "parallel universes," while completely omitting the complex mathematical derivations and physical experimental background that support these conclusions. After watching the video, audiences may remember these dazzling terms, but still know nothing about the essence of quantum mechanics. This form of knowledge acquisition–knowing that something is so without knowing why it is so–causes knowledge to degenerate into mere mnemonic signs. The rupture of logical chains deprives audiences of the ability to draw inferences from one case to another and to ask critical questions. When facing new problems, they cannot think independently through logic and can only passively await the next assertion to be fed to them.

3.2 The Stripping Away of Contextual Frameworks: Conceptual Generalization and Abuse

All profound knowledge is generated within a specific context. Ludwig Wittgenstein's theory of the "language-game" argues that the meaning of a word depends on how it is used in a specific context [15]. Once removed from a specific context, concepts become vague and may even produce ambiguity.

In short videos, to pursue maximum dissemination or so-called "crossing the circle," creators often deliberately strip concepts of their professional contexts and forcibly attach them to the public's daily life. This decontextualization lowers the threshold of comprehension, but also produces severe generalization and abuse of concepts.

Consider the term "involution." It was initially proposed by anthropologist Clifford Geertz to describe the phenomenon of "growth without development" in Javanese agricultural society, where labor inputs continuously increased without raising per capita output [5]. It was later introduced by Chinese scholars to analyze competitive dilemmas under specific social structures. On short-video platforms, however, "involution" was rapidly stripped of its complex sociological and economic context and generalized into a synonym for all forms of competition, effort, and even fatigue. Students studying late at night are said to be "involuted," employees working overtime are said to be "involuted," and even eating a lavish dinner may be joked about as "dietary involution."

When a concept is infinitely generalized, it loses its precise analytical function and becomes an all-encompassing but empty basket. This stripping away of contextual frameworks means that audiences often use such concepts to vent emotion rather than to conduct rational analysis. Conceptual abuse not only pollutes the precision of public language, but also obstructs deep discussion of complex social problems.

3.3 The Usurpation of Reason by Emotion: The Entertainization and Spectacularization of Knowledge

In traditional media, knowledge dissemination primarily appeals to the audience's reason. In the attention economy of short videos, however, emotion has become the hardest currency. To stand out from massive information flows, short-video knowledge dissemination inevitably moves toward entertainment and spectacle.

On the one hand, creators frequently use exaggerated titles, suspenseful music, and strong visual effects to stimulate the audience's senses. Knowledge is no longer an objective truth requiring serious treatment, but is packaged as an entertainment commodity that provides pleasure. On the other hand, creators tend to choose topics that can trigger strong emotional resonance, such as anxiety, anger, or surprise. In health-science short videos, exaggerated claims about cancer and sudden death are common; in finance-related short videos, anxiety-selling topics such as financial freedom and class solidification are always traffic passwords.

Under this dissemination model in which emotion usurps reason, the audience's cognitive process is seriously distorted. Audiences no longer attend to the logical rigor and factual accuracy of knowledge itself, but become absorbed in the emotional experience generated by the video. This criterion for evaluating knowledge on the basis of "emotional value" rather than "truth value" fundamentally overturns the rational foundation of stabilized human cognition.

4 Cognitive Reshaping: Cognitive Downgrading Under the Proliferation of Conceptual Facades

The large-scale proliferation of conceptual facades on short-video platforms is not only an alienation of knowledge form, but also has far-reaching effects on the cognitive structure of audiences. This paper summarizes these effects as "cognitive downgrading," mainly in the following three respects.

4.1 The Illusion of Fragmented Learning and the Loss of Systematic Thinking

Short-video platforms often present themselves as tools for "fragmented learning," claiming that users can acquire knowledge during scattered moments such as waiting in line or waiting for transportation. Yet fragmented learning based on conceptual facades is often only a false illusion of acquisition.

Genuine learning is a process of integrating new information into existing cognitive schemas, and this requires time and systematic thinking [14]. The conceptual facades provided by short videos are isolated and lack logical connection. After several hours of watching short videos, users may accumulate many new terms in their minds–such as "metaverse," "underlying logic," and "dimensional reduction strike"–but these terms are like scattered pearls without the logical thread needed to connect them.

This false sense of acquisition is extremely dangerous. It makes users mistakenly believe that they have already mastered rich knowledge, thereby weakening their motivation for deep reading and systematic learning. Long-term immersion in this fragmented "conceptual consumption" gradually degrades audiences' capacity for systematic thinking. They become accustomed to viewing problems through isolated points and lose the ability to perceive complex relations and overall structures. When facing complex realities that require comprehensive analysis, they often become at a loss.

4.2 The Growth of Metacognitive Laziness and the Absence of Critical Reflection

Metacognition refers to "cognition about cognition," namely an individual's ability to monitor, evaluate, and regulate their own cognitive process. It is the core of critical thinking. In traditional deep reading, readers must constantly pause and ask: Is the author's argument reasonable? Is the evidence sufficient? Do I agree with the author's view? This "cognitive friction" with the text is an important mechanism for stimulating metacognition.

However, the endless scrolling and high-frequency refresh mechanisms of short videos completely eliminate such cognitive friction. Videos automatically play one after another and leave audiences no time to pause and reflect. At the same time, the assertive expression of conceptual facades implies that audiences need only accept the conclusion and do not need to question it.

Under this feed-style mode of information reception, audiences gradually develop "metacognitive laziness." They abandon the discrimination of truth and falsehood and the examination of logic, becoming accustomed to accepting the conceptual facades thrown out by creators wholesale. The absence of critical reflection makes audiences highly susceptible to manipulation by false information, pseudoscience, and extremist speech. When facing complex public controversies, they often lack the capacity for independent thought and can only blindly follow trends or fall into emotional camp-taking.

4.3 The Flattening of Cognitive Depth and the Solidification of Labeling Thought

The proliferation of conceptual facades ultimately flattens the cognitive depth of audiences. Under the filter of short video, the complex and multidimensional world is simplified into thin labels.

This "labeling thought" is especially evident in evaluations of historical figures, social events, and even everyday interpersonal relations. Complex historical figures may be simply labeled as "scumbags" or "saints," and social tragedies with multiple causes may be reduced to "capitalist greed" or "the distortion of human nature." Labeling thought greatly reduces cognitive cost, but it also deprives things of their inherent complexity and gradation.

Under the domination of labeling thought, audiences' cognitive structures become extremely rigid. They are no longer willing to understand the deeper logic and multiple perspectives behind things, but become accustomed to judging everything through a black-and-white binary opposition. This flattening of cognitive depth not only impedes the maturation of individual minds, but also intensifies estrangement and confrontation among social groups.

5 Case Analysis: The Generation and Dissemination of Typical Conceptual Facades

To show more concretely how conceptual facades are generated in short videos and how they cause cognitive downgrading, this section analyzes three representative cases.

5.1 Case One: "Underlying Logic"–From Philosophical Concept to Success-Studies Label

The term "underlying logic" originally has a certain background in philosophy and systems science, referring to the most fundamental laws or presuppositions that determine the development and transformation of things. In serious academic discussion, exploring underlying logic requires extremely rigorous inference and deep knowledge accumulation.

On short-video platforms, however, "underlying logic" has rapidly become an abused conceptual facade. Countless business bloggers and workplace mentors confidently declare in videos: "Once you master these three underlying logics, you can achieve financial freedom/get promoted/get a raise." In such videos, the so-called underlying logic is often merely commonplace advice, such as persistence, effort, or seizing opportunities, or even specious success-study motivational talk.

In this translation process, rigorous logical inference is completely stripped away, leaving only the outer shell of "underlying logic," which sounds extremely profound and carries the aura of a "dimensional reduction strike." When audiences consume these videos, they acquire a false illusion that they have mastered the secret of how the world operates. Yet when they return to reality, they find that these hollow underlying logics cannot solve any practical problems. This abuse of concepts not only dissolves the seriousness of philosophical concepts, but also encourages social impatience and utilitarian haste.

5.2 Case Two: "Family of Origin"–From Psychological Analytical Tool to Fatalistic Excuse

The concept of "family of origin" comes from family systems theory in psychology and is intended to analyze how an individual's early family environment influences psychological and behavioral patterns in adulthood. In counseling, discussing the family of origin is meant to help individuals understand trauma and achieve self-healing and growth.

In short-video dissemination, however, "family of origin" is quickly simplified into a highly emotionally provocative conceptual facade. Many psychology-popularization accounts and emotional bloggers attribute all personal failure, character defects, and even interpersonal conflicts to "the pain of the family of origin" by extracting extreme cases or exaggerating the negative effects of early family environments.

This stripping of context and absolutization of concept produces severe cognitive distortion. It turns a complex psychological analytical tool into an immutable fatalism. After receiving this conceptual facade, audiences often cease self-reflection and active change, and instead comfortably position themselves as victims, shifting all responsibility to their parents. This usurpation of reason by emotion is not conducive to individual mental health; rather, it intensifies intergenerational conflict and the rupture of family relationships.

5.3 Case Three: "Quantum Entanglement"–From Frontier Physics to Pseudoscientific Endorsement

Quantum entanglement is a core concept in quantum mechanics. It describes the phenomenon in which, after several particles interact, the properties of the individual particles have become integrated into the properties of the whole, so that the particles cannot be described separately and only the state of the whole system can be described. It is an extremely complex frontier concept in physics that requires a deep mathematical foundation to understand.

On short-video platforms, however, "quantum entanglement" is frequently borrowed by pseudoscientific, occult, and mystical accounts to create a highly deceptive conceptual facade. For example, some use quantum entanglement to explain telepathy, past lives and present lives, or even claim that diseases can be treated or the future predicted through quantum entanglement.

In this case, the logical chain of knowledge is completely severed. Creators merely borrow the technological-looking shell of "quantum entanglement" while completely abandoning its rigorous scientific content and experimental verification. Because audiences lack the corresponding professional literacy and capacity for critical reflection, they are easily deceived by this pseudo-knowledge wearing the clothing of science. The proliferation of this conceptual facade not only seriously misleads the public, but also causes major interference with genuine science communication.

6 Reconstruction and Transcendence: Regulatory Paths for Knowledge Dissemination in the Short-Video Era

Facing the cognitive-downgrading crisis brought about by the proliferation of conceptual facades, we cannot simply regard short videos as a destructive force to be banned. As an irreversible trend in media evolution, short videos still have positive significance in lowering the threshold of knowledge acquisition and promoting informational inclusiveness. The key question is how to reconstruct the ecology of knowledge dissemination in the short-video era through institutional design, algorithmic optimization, and literacy improvement.

6.1 Audience Side: Upgrading Media Literacy and Cultivating Structural Identification

In an environment where conceptual facades proliferate, traditional media literacy centered on information acquisition and truth-falsehood discrimination is no longer sufficient. We need to advocate an upgraded form of media literacy whose core lies in cultivating the audience's capacity for "structural identification."

Educational systems and social institutions should guide the public to recognize the limits of short-video media in knowledge dissemination and to break the myth of fragmented learning. Audiences need to learn to distinguish conceptual facades from genuine knowledge. When encountering a highly impactful conclusion, they should actively ask about the logical inferential process behind it; when encountering a widely used buzzword, they should try to reconstruct its original contextual framework.

In addition, the public's metacognitive monitoring capacity should be cultivated. When watching short videos, audiences should consciously maintain a sense of detachment, remaining alert to whether they are being carried away by high-arousal emotion or falling into the trap of labeling thought. Only when audiences possess this critical capacity for structural identification can they sift genuine knowledge from massive

short-video content and avoid being downgraded by conceptual facades.

6.2 Platform Side: Optimizing Algorithmic Logic and Introducing Cognitive Friction

As the infrastructure of knowledge dissemination, short-video platforms must assume corresponding social responsibility. Current algorithmic recommendation logic excessively pursues completion rates and immediate pleasure, and this is a structural incentive for the proliferation of conceptual facades.

Platforms should introduce diversified evaluation indicators into algorithms. In addition to interaction data, they can incorporate evaluation by professional institutions, peer review mechanisms, and users' deep feedback, such as the quality of long comments. For knowledge videos that provide complete logical inference and objectively explain context, algorithms should offer greater traffic support.

More importantly, platforms can moderately introduce "cognitive friction" into interaction design. For example, when playing videos involving complex scientific principles or major social controversies, they can insert brief prompts to pause and think; or they can provide authoritative reading links in relevant fields below the video, such as encyclopedic resources or academic papers, guiding users from the conceptual facade of short video toward deeper knowledge structures. Such deliberately created friction helps break the metacognitive laziness produced by endless scrolling and creates an opportunity for the return of reason.

6.3 Creator Side: Awakening Structured Narrative and Exploring "Slow Video"

Finally, creators of knowledge-oriented short videos also need self-awakening. While pursuing traffic, creators should hold the bottom line of knowledge dissemination and refuse to manufacture hollow conceptual facades.

Creators need to explore a "structured narrative" strategy adapted to short-video media. Although duration is limited, they can still preserve the logical chain of knowledge as much as possible through careful design, such as series videos or visualized mind maps. When introducing professional concepts, they should restrain the impulse to generalize them infinitely and should objectively explain their applicable contexts.

Creators can also explore the form of "slow video." Unlike mainstream short videos that pursue rapid editing and high-frequency stimulation, slow video emphasizes a calm rhythm, rigorous logic, and depth of thought. Although this form may not produce explosive traffic in the short term, it can attract high-quality audiences who genuinely desire knowledge and possess critical thinking, thereby building a more stable influence over the long term.

7 Further Theoretical Genealogy: From "Pseudo-Environment" to "Pseudo-Knowledge"

After discussing the concrete manifestations and regulatory paths of conceptual facades, it is necessary to place them within a broader genealogy of communication theory. In *Public Opinion*, Walter Lippmann proposed the famous theory of the "pseudo-environment," arguing that mass media create a non-objective pseudo-environment for the public through the selection, processing, and reconstruction of information, and that public cognition and behavior are often based on this pseudo-environment rather than on the real environment [6].

In the short-video era, this pseudo-environment is further evolving into "pseudo-knowledge." Conceptual facades are the core components of pseudo-knowledge. Unlike the traditional pseudo-environment, which mainly distorts facts, pseudo-knowledge distorts cognitive structure itself.

7.1 The Deceptiveness of Pseudo-Knowledge

The deceptiveness of pseudo-knowledge lies in the fact that it wears the clothing of knowledge, uses professional vocabulary, and may even cite certain authoritative sources, while its inner logical core has been completely hollowed out. When audiences consume such pseudo-knowledge on short-video platforms, they not only fail to gain a genuine understanding of the world, but are instead bound by hollow concepts and develop a false cognitive confidence.

This false cognitive confidence is more dangerous than ignorance. As Darwin is often paraphrased, ignorance more frequently begets confidence than does knowledge. When a person realizes that they are ignorant, they may still seek to learn and explore; but when a person is armed with pseudo-knowledge and believes that they have already mastered the underlying logic, they close their mind and refuse to accept real information that contradicts it.

7.2 The Industrialization and Fast-Foodization of Knowledge Production

The proliferation of pseudo-knowledge is also the inevitable result of the industrialization and fast-foodization of knowledge production. Driven by the attention economy, knowledge production on short-video platforms has formed a highly standardized assembly line. From topic planning, script writing, and emotional rendering to video editing, every step is precisely calculated to obtain maximum traffic at minimum cost.

In this industrialized production process, the uniqueness, complexity, and depth of knowledge are ruthlessly flattened. Creators are no longer truth-seeking explorers, but "content suppliers" catering to audience tastes. What they produce is no longer spiritual nourishment requiring careful savoring, but knowledge fast food that can be swallowed and digested quickly. Although this fast food can provide temporary satiety and emotional value, it cannot provide genuine cognitive nutrition; long-term consumption only leads to mental malnutrition.

8 Short-Video Knowledge Dissemination from the Perspective of Media Technology History

To understand comprehensively the impact of short videos on knowledge dissemination, we must also examine it within the long history of media technology. Every media revolution in

human history has been accompanied by profound changes in the form of knowledge and modes of cognition.

8.1 The Evolution of Oral, Print, and Electronic Media

In the era of oral media, the transmission of knowledge depended primarily on memory and oral communication. Such knowledge was often concrete, contextualized, and highly dependent on the personal charisma and emotional expression of the narrator. The Homeric epics are a typical representative of knowledge in the age of oral media.

The emergence of print media allowed knowledge to detach from specific contexts and narrators and to be objectively and fixedly preserved in books. Print media require readers to possess high levels of abstract thinking and logical reasoning, thereby giving rise to modern scientific rationality and academic norms. Under the dominance of print media, knowledge took on highly structured and systematic characteristics.

In the era of electronic media, such as television, visual images began to replace text as the dominant communicative sign. Television greatly expanded the breadth of information dissemination through its intuitive, vivid, and immediate character, but it also brought about the entertainment and superficialization of knowledge. Postman's critique of television media is rooted in precisely this background [11].

8.2 Short Video: The Superposition of Visual Spectacle and Algorithmic Logic

As an emerging medium in the mobile internet era, short video may be described as the ultimate evolutionary form of electronic media. It not only inherits the visual-spectacle property of television, but also overlays it with powerful algorithmic recommendation logic.

If television made knowledge entertaining, short-video media fragment and hollow out knowledge through conceptual facades. In short videos, the impact of visual images is pushed to the extreme, while text and logic are compressed to the minimum. At the same time, the personalized distribution mechanism of algorithmic recommendation wraps audiences in highly homogeneous information cocoons, further weakening the publicness and objectivity of knowledge.

In this sense, knowledge dissemination in the short-video era is undergoing a regression from print rationality to a new oralism. Audiences no longer acquire knowledge through logical reasoning, but receive information through emotional resonance and intuitive judgment, as people did in the oral age. Unlike the oral age, however, the emotion in short videos is often deliberately manufactured by algorithms and creators rather than naturally expressed in real interpersonal communication.

9 Case Tracking: The Life Cycle of a "Knowledge Influencer" and the Closed Loop of Cognitive Downgrading

To show more vividly the production and consumption mechanism of conceptual facades, this section traces the life cycle of a typical "knowledge influencer" and reveals how short-video platforms gradually discipline an originally serious knowledge communicator into a mass producer of conceptual facades.

9.1 Startup Stage: "Dimensional-Reduction Trial" of Professional Knowledge

Dr. X, a pseudonym, was once a young teacher at a university whose research field was cognitive psychology. Initially, he entered a short-video platform with the intention of popularizing psychological knowledge. In his early videos, Dr. X attempted to maintain academic rigor by explaining in detail the design of psychological experiments, the control of variables, and the limits of conclusions. Yet these videos performed very poorly. The platform algorithm judged the content to have a low completion rate and poor interaction rate, thereby limiting traffic recommendation.

At this stage, Dr. X faced the Darwinian selection specific to short-video media: either change the narrative strategy to adapt to the algorithm, or be marginalized by the platform. Driven by traffic anxiety, he began to attempt a dimensional-reduction trial.

9.2 Explosion Stage: The Successful Manufacture of Conceptual Facades

Dr. X gradually abandoned complex explanations of experiments and instead extracted core concepts from psychology, forcibly binding them to workplace and emotional topics that concerned the public. He produced a series of short videos such as "How to Use the Anchoring Effect to Make Your Boss Give You a Raise" and "Three Tricks to Break Learned Helplessness and Achieve a Comeback."

In these videos, psychological concepts were stripped of their original experimental contexts and turned into highly inflammatory conceptual facades. Combined with exaggerated facial expressions, tight editing, and suspenseful background music, these videos quickly catered to the public's desire for quick knowledge. The algorithm detected their high interaction rates and began to pour massive traffic into them. Within just a few months, Dr. X gained millions of followers and became a leading knowledge influencer on the platform.

9.3 Solidification Stage: The Formation of a Closed Loop of Cognitive Downgrading

As his follower base expanded, Dr. X became completely trapped on the assembly line of conceptual-facade production. To maintain a high-frequency update rhythm, he no longer had time to read cutting-edge literature. Instead, he relied on his team to collect various specious new concepts online and then used a standardized template of pain-point introduction, conceptual packaging, and motivational conclusion for mass production.

At this point, a perfect closed loop of cognitive downgrading formed between Dr. X and his audience: the creator continuously produced hollow conceptual facades for traffic; the audience continuously consumed these conceptual

facades to relieve anxiety and converted them into false cognitive confidence; and the algorithm continuously reinforced the behavior patterns of both sides. Ultimately, a field that had originally been intended for knowledge dissemination was alienated into a playground of emotional consumption and traffic monetization.

This case shows profoundly that the proliferation of conceptual facades is not the moral decline of individual creators, but a systemic inevitability produced by the joint operation of short-video media form and algorithmic logic.

10 "Conceptual Facade" from an Interdisciplinary Perspective: The Intersection of Linguistics and Neuroscience

To understand more deeply why conceptual facades possess such powerful deceptiveness and transmissibility, we need to step outside the single framework of communication studies and conduct a deeper analysis from the intersecting perspectives of linguistics and cognitive neuroscience.

10.1 Linguistic Perspective: The Carnival of the Signifier and the Hollowing of the Signified

In Ferdinand de Saussure's structural linguistics, the sign consists of the "signifier," namely its sound or written form, and the "signified," namely its conceptual meaning [12]. In traditional knowledge structures, signifier and signified maintain a relatively stable correspondence: a professional term (signifier) necessarily corresponds to a rigorous logical content and context (signified).

In the conceptual facades of short videos, however, this stable correspondence is broken. To pursue visual and auditory impact, creators greatly amplify the role of the signifier while suspending or even hollowing out the signified. Terms that sound extremely profound or dazzling–such as underlying logic, dimensional reduction strike, and quantum entanglement–exist in short videos merely as rhetorical spectacles. When audiences consume these terms, what they enjoy is a "carnival of the signifier," a vanity of possessing advanced discourse power, while they do not truly care about the real meanings behind these terms, namely the hollowing of the signified.

In *For a Critique of the Political Economy of the Sign*, Jean Baudrillard argues that modern consumer society is characterized by the replacement of the consumption of use value by the consumption of signs [1]. The conceptual facades in short videos are precisely sign consumption in the domain of knowledge. What audiences consume is no longer the use value of knowledge, namely the capacity to solve problems, but the sign value of knowledge, namely labels that display intelligence or taste.

10.2 Cognitive-Neuroscientific Perspective: Dopamine and the Temptation of Cognitive Shortcuts

From the perspective of cognitive neuroscience, conceptual facades can easily bypass the audience's rational defenses because they skillfully exploit the brain's cognitive heuristics and dopamine reward mechanism.

In the course of evolution, the human brain has tended to process information in the most energy-saving way possible. This "cognitive miser" characteristic makes us naturally resistant to complex knowledge that requires substantial mental effort for logical inference, and makes us prefer simple, direct, and conclusion-clear cognitive shortcuts.

The conceptual facade is precisely a cognitive shortcut tailored for the brain. It simplifies complex real problems into several simple labels, allowing the brain to obtain within a very short time a false sense of sudden insight. This false insight stimulates the brain's reward system and releases dopamine, thereby producing a strong pleasurable experience.

In addition, the high-frequency refresh mechanism of short videos further reinforces this dopamine release. Every swipe of the screen is a new stimulus, and in this continuous reward loop the brain gradually develops an addictive dependence on conceptual facades. Over time, the neural circuits responsible for processing complex logic, such as the prefrontal cortex, are not exercised and gradually degrade, while neural circuits responsible for emotion and intuition, such as the amygdala, become abnormally developed. This is the material basis of cognitive downgrading at the neurophysiological level.

11 Conclusion

The rise of short video is a major revolution in the history of human media evolution. It transmits information to every corner of the world with unprecedented efficiency, but it also reshapes the ontological form of knowledge in a hidden and profound way. The "conceptual facade" proposed in this paper is a precise summary of this alienated form.

The proliferation of conceptual facades not only strips knowledge of its logical structure and contextual framework, but also silently produces cognitive downgrading among audiences. The illusion of fragmented learning, the growth of metacognitive laziness, and the solidification of labeling thought are eroding the rational foundation and critical spirit of our age.

However, cognitive downgrading is not the destiny of short-video media. If we can deeply understand the generative mechanism of conceptual facades and actively reconstruct audience literacy, platform algorithms, and creative practice, it remains possible to protect the dignity of knowledge in the short-video era. This is not only a rational response to media evolution, but also a defense of the depth and breadth of the human mind amid the flood of information.

Facing the proliferation of conceptual facades and the crisis of cognitive downgrading in the short-video era, we must recognize that this is not merely a problem of communication studies, but a major philosophical issue concerning the development of the human mind and the direction of civilization.

The dignity of knowledge lies in its persistent pursuit of truth, rigorous logical inference, and deep insight into complex reality. When knowledge is downgraded into conceptual

facades and thinking is replaced by emotion, the human mind faces the risk of degeneration. We may possess an unprecedented capacity to acquire information, yet lose the ability to understand the world.

Reshaping the dignity of knowledge requires that while enjoying the convenience and entertainment brought by short videos, we maintain clear critical awareness. Amid the flood of information, we need to reserve a space for deep reading, systematic thinking, and rational dialogue. This is not only a necessary means for resisting algorithmic manipulation, but also the core mark of defending human beings as rational subjects. Only when we rediscover the logical anchor chain in the ocean of knowledge can we preserve mental clarity and resilience in the rapidly changing digital age.

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