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# Editorial

## (Un)Real. Curating the Digital in the Age of AI

### Birgit Mersmann, Hauke Ohls, and Xie Wen

The experience of the “(Un)Real” is interwoven with digital technology, blockchain, and AI. It is not opposed to reality but deeply embedded within it, reshaping and even replacing our known world. In the art sphere, it is shaped by virtual galleries, crypto art markets, and generative AI imaging, forming new sensory interfaces for perceiving self and society. In this context, curating — once centered on organizing objects and narratives in physical space — now navigates a far more complex arena. It must redefine its cultural and ethical role amid collisions between the virtual and physical, human and machine, and ultimately, the real, hyperreal and unreal.

This issue’s articles collectively ask: How does the practice of art-curating change through its migration into virtual spaces, cross-realities and automated scenographies? What new display, mediation and participation possibilities do digital, net-based and AI-induced exhibition formats offer? As digital capitalism fuels sensory alienation, AI disrupts creative foundations, and blockchain’s decentralized promises spawn new illusions. Can curating be turned into an art-systemic critique and practice of resistance?

The bilingual *(Un)Real* issue brings together diverse theoretical, practical, and empirical perspectives from researchers, curators, and artists. It was initiated as a collaboration between Comple-X.NET and OnCurating within the framework of “UN-Curating: Arts and Interdisciplinary Collaboration”—a multi-year project dedicated to examining the evolving role of art and curating across intersecting fields. The current issue is a joint publication, based on a selection of articles from the *Paraverse* issue of OnCurating (no. 63, ed. by art historians Birgit Mersmann and Hauke Ohls) and enriched with new contributions from Chinese curators and artists selected by co-editor and curator Xie Wen. A long-standing engagement with potential forms of collaborative futures within complex socio-technical systems directly informs her selection. The Chinese artists and curators included in the *(Un)Real* issue are not only deeply immersed in the global digital technology wave, but also maintain a critical awareness of China’s specific conditions, offering an indispensable critical perspective and a body of practical case studies.

Curating the digital today exceeds selecting works or crafting narratives. It must confront the fundamental shift of the unrealization of reality, as technologically enacted upon bodily experience in virtual spaces and AI-generated ecosystems. In this embedding, digital immersion masks crises of alienation and reification.

In *(Un)Real Worlds of Digital Curating*, curatorial scholar Dorothee Richter reactivates Marxist and Situationist theories, arguing that the digital age imposes “passive contemplation,” replacing sensory engagement with spectacle consumption. NFTs epitomize this by transforming conceptually fluid digital art into speculative objects that are then displayed conservatively in white cubes for validation. The author proposes “situated

“curating” as resistance — emphasizing bodily presence and shared environments to re-anchor art in tangible reality, countering digital “placelessness.”

Wang Yiquan’s artistic archival practice of collecting little videos as *Pearls in the Digital Sea* echoes the critique of the spectacle of consumption from a social-media perspective of viral video cultures. Under the moniker “ghost curator” of platform algorithms, his gathering becomes active archiving — a digital ethnography preserving memory against accelerated information erosion, revealing everyday digital alienation.

Curators are testing new display grammars and spatial logics in hybrid realms. Curator and curatorial scholar Lívia Nolasco-Rózsás discusses her international collaborative project *Beyond Matter*, a practice-based research on exhibition-making under virtual conditions. *Beyond Matter* revives historical exhibitions like *Les Immatériaux* digitally, not to replicate, but to reactivate their ideas. Its open-source tools suggest an AI-assisted, decentralized curating future, where algorithms dynamically relate artworks to space, challenging the curator’s singular authority.

In *Ctrl + Curate: About Online Exhibitions*, digital art curator Peggy Schoenegge traces the emergence and transformation of curating web-based exhibition spaces. Including projects by the curatorial collective *peer-to-space*, she argues that online curating is a site-specific practice enabling the creation of innovative speculative forms beyond physical limits.

The curator Nina Roehrs comprehends her exhibition *DYOR—Making Sense of the Crypto Art World* as a radical institutional experiment. Embracing Web3’s “Do Your Own Research” ethos, the DYOR exhibition at the Zurich Kunsthalle embedded crypto art’s decentralized, community-driven ethos into its framework. By sharing curatorial power, it became a social experiment in decentralized curating, testing new values within traditional walls.

Artificial Intelligence poses the deepest challenge for art-curating in these current times, acting not only as a technological tool but also as an institutional force of system change.

Under the title *Agent and Agency*, the conversation between Wang Yini, curator of the exhibition *Bable Bottle* (2025), and artist Wu Ziwei sheds light on interactive exhibition-making with generative AI. Drawing upon the *Mimicry* series by Wu Ziwei, as presented in the exhibition, they discuss how AI is treated as an ALife system component, exploring «distributed agency» between humans and machines. In this line, the art system becomes an ecological field for collaboration that extends into social-media environments.

In *All that is solid is melting*, art historians Birgit Mersmann and Hauke Ohls explore the (un)real conditions of curating and exhibiting AI art in physical space. They also discuss the institutionalization of AI art curation and academic research in China in conversation with Li Xi, art director and co-founder of the Aiiiii Art Center in Shanghai.

According to curator Ma Nan, the “Future Art Ecosphere,” a landscape of art and advanced technology, exposes the brutal logic of automated (AI) art: human time compressed and culture reduced to algorithmic “illusions.” Under these conditions, *Curating as Resistance in the Age of AI* means creating fissures — introducing error, delay, and uncertainty — shifting curating from organization to ecological critique.

Collectively, the contributions in this issue chart a collaborative curatorial future defined by sober negotiation with technology. The *(Un)Real* credo thus evolves from condition to methodology — a form of curation that navigates between worlds, making critical interventions into its core principles. In this future of collaborative co-creation, the curator becomes a synthesizer of roles: setting markers in algorithmic seas, creating pauses in accelerated cultures, and reaffirming human agency amid automation's tide.

We would like to express our sincere thanks to all authors and interview partners for their insightful and enriching contributions, to Dorothee Richter and Ronald Kolb, chief-editors of the journal *OnCurating*, for their continuous editorial support, and to the Pro Helvetia Swiss Arts Council for its generous support to enable this open access publication.

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**Birgit Mersmann** is Professor of Contemporary Art and Digital Image Cultures at the University of Bonn, Germany. Her interdisciplinary research covers modern and contemporary Western and East Asian art, global art history, migratory aesthetics, museum and exhibition studies, digital art, image and media theory, visual cultures and visual translation, interrelations between script and image, and history and theory of photography. Recent book publications include: *Kritik des Neo-Extraktivismus in der Gegenwartskunst* (ed. with Hauke Ohls, Lüneburg 2024); *Image Controversies. Contemporary Iconoclasm in Art, Media, and Cultural Heritage* (ed. with Christiane Kruse and Arnold Bartetzky; Berlin/Boston 2024); *Okzidentalismen. Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik* (ed. with Hauke Ohls, Bielefeld 2022); *Über die Grenzen des Bildes. Kulturelle Differenz und transkulturelle Dynamik im globalen Feld der Kunst* (Bielefeld 2021); *Bildagenten. Historische und zeitgenössische Bildpraxen in globalen Kulturen* (ed. with Christiane Kruse; Paderborn 2021); *Handbook of Art and Global Migration. Theories, Practices, and Challenges* (ed. with Burcu Dogramaci; Berlin/Boston 2019).

**Hauke Ohls** is a postdoctoral researcher with the Chair of Contemporary Art and Digital Image Cultures at the University of Bonn, Germany. His research focuses on theoretical, sociological, and philosophical questions of modern and contemporary art with particular emphasis on eco-relational art and ecological aesthetics, neo-extractivism, ecofeminist, pluriversal, posthuman theory, the discourse on objects, materiality and images, as well as the relationship between art, economy, and neoliberalism. Additional areas of interest include the intersection of art and music, artists' writings, media art, and transcultural art history. Recent book publications include: *Kritik des Neo-Extraktivismus in der Gegenwartskunst* (ed. with Birgit Mersmann, Lüneburg 2024); *Many-Valued Aesthetics. Interconnections in the Work of Mary Bauermeister* (Bielefeld 2024); *Okzidentalismen. Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik* (ed. with Birgit Mersmann, Bielefeld 2022); *Objektorientierte Kunsttheorie. Graham Harman's speculative Philosophy in the Context of a (non-)relational Ästhetik* (Hamburg 2019).

**Xie Wen** is art-transdisciplinary researcher. Proceeding from art, she is dedicated to building collaborative networks that respond to social complexity. Her recent focus lies in art-driven social innovation and the co-construction of knowledge and ecological connectivity within global-local contexts. As the founder of the Comple-X.NET®, she has established a platform that equally emphasizes action and research. Through the “art-transdisciplinary workstation” model, she fosters in-depth dialogue among art, technology, ecology, and social issues: For example, the “Green Meets Blue” she curated in 2024 conducted an inter-city research tour, using mangroves as a medium to explore cross-cultural emotions and ecological connections; in 2023, as a joint component of the World Laureates Forum, she initiated the “Question Accelerator” project, introducing artistic thinking to catalyze socially transdisciplinary discussions on global scientific issues; and recent projects like “DAO Garden” and “Herewell Time” explore the integration of art, technology, and sustainable care pathways within elderly communities.

# 前言： (非)现实：人工智能时代的数字策展

比尔吉特·默斯曼 (Birgit Mersmann)  
和豪克·奥尔斯 (Hauke Ohls), 谢雯

关于“(非)现实”的体验由数字技术、区块链和人工智能这几个元素交织而成。它并非与现实对立,而是深深扎根于现实之中,正在重塑甚至取代我们所知的世界。在艺术领域,这种体验由虚拟画廊、加密艺术市场和生成式人工智能成像技术所塑造,成为了人们感知自我和社会的新的感官接口。策展工作在过去以在物理空间中组织物品和叙事为主,如今在上述语境下,却面临着更为复杂的局面。在虚拟与实体、人与机器、以及最终在现实、超现实与非现实之间的碰撞中,策展在文化和伦理层面所发挥的作用必须被重新定义。

本刊邀请作者们共同探讨以下几个问题:艺术策展实践如何随着其转向虚拟空间、跨现实和自动化场景的过程而发生改变?数字化、基于网络和由人工智能驱动的展览形式带来了哪些关于新的展示方式、媒介使用和公众参与的可能性?随着数字资本主义加剧了人们的感官异化,人工智能颠覆了创意基础,区块链的去中心化承诺催生了新幻象,策展能否转变为一种对艺术体系的批判和抵抗性实践?

本期双语特刊《(非)现实》汇聚了研究者、策展人与艺术家的多元视角,融合理论思考、实践探索与经验反思。该出版项目由复杂问题研究所Comple-X.NET与OnCurating共同发起,以“UN-Curating: 艺术与跨学科合作”为框架展开深入对话。“UN-Curating”作为一项持续多年的中国-瑞士合作项目,致力于探讨艺术与策展在交叉领域不断演变的角色与可能性。

本刊内容精选自OnCurating旗下期刊《平行宇宙》(Paraverse) 第63期(由比尔吉特·默斯曼与豪克·奥尔斯主编),并收录了由主编谢雯邀约中国策展人与艺术家撰写的新作。谢雯长期关注社会技术复杂系统中潜在的未来协作形态,这一研究引导她持续探索跨学科、跨文化的实践可能,并由此邀约相关学者与创作者参与本期撰写。在全球数字技术浪潮中,他们立足中国具体语境,保持批判性视角,为讨论提供了不可或缺的观点与实践案例。

如今,数字策展已不再局限于筛选作品或构建叙事。数字策展必须直面非现实的现实所发生的根本性转变,即在虚拟空间和人工智能生成的生态系统中发生的

技术实践和身体体验。在这种嵌入式的现实中,数字化体验掩盖了关于异化和物化的危机。

在《数字策展的(非)现实世界》中,策展学者多萝西·里希特(Dorothee Richter)为马克思主义和情境主义理论赋予了新的意义,她认为数字时代强加了“被动沉思”这一现象,并使消费景观取代了感官参与。非同质化代币(NFT)正是这种现象的典型体现:概念上流动的数字艺术被转化为投机对象,并在之后被保守地陈列在白立方空间中等待得到认证。她提出“情境化策展”作为一种抵抗方式——即通过强调身体在场和共享环境,将艺术重新锚定于有形的现实,以此对抗数字化的“无地方性”状态。

王懿泉关于收集“小视频”的艺术档案实践《数字沧海遗珠》呼应了从社交媒体病毒式视频文化视角出发对消费景观的批判。在被戏称为平台算法“幽灵策展人”的影响下,他的收集行为变成了积极的归档行动——即完成一部数字民族志,保留记忆,对抗信息的加速消逝,并揭示日常生活中的数字异化。

策展人们正尝试在混合领域中实践新的展示语法和空间逻辑。策展人兼策展学者莉维亚·诺拉斯科-罗萨斯(Lívia Nolasco-Rózsás)探讨了她的国际合作项目“超越物质”(Beyond Matter)。这是一项实践型研究,探讨了虚拟状况下的布展。“超越物质”以数字化的方式重现了诸如“非物质”(Les Immatériaux)等在过去举办过的展览。这并非是为了将这些展览照搬一遍,而是为了重新激活这些展览的理念。“超越物质”的开源工具预示了一个由人工智能辅助、去中心化的策展未来。在这个未来中,算法能够将艺术作品与空间动态相联,挑战策展人的单方面权威。

在《Ctrl+Curate:关于线上展览》中,数字艺术策展人佩吉·舍内格(Peggy Schoenegge)追溯了基于网络展览空间的策展是如何兴起与演变的。她以其参与的策展团体“peer-to-space”的项目等为例,阐释了线上策展是一种基于特定场所的实践,能够超越物理限制,激发出创新性的思辨形式。

策展人妮娜·罗尔斯(Nina Roehrs)将她策划的展览“DYOR——解读加密艺术世界”(DYOR—*Making Sense of the Crypto Art World*)视为一次激进的机构实验。于苏黎世美术馆举办的“DYOR”展览秉承Web3“自己做研究”(Do Your Own Research)的精神,在其框架中融入了去中心化、由社群驱动等加密艺术理念。该展览通过开放共享策展权,变成了一场去中心化策展的社会实验,在传统框架内检验新价值。

人工智能不仅是种技术工具,更是种推动系统变革的制度性力量。它对当今的艺术策展发起了最严峻的挑战。

在《代理与能动》中,展览“巴别瓶”(2025年)的策展人王旖旎与艺术家吴子薇探讨了如何利用生成式人工智能进行互动式布展。她们以展览中吴子薇的《拟态》系列作品为例,讨论了人工智能如何被视为人工生命系统的一个组成部分,并探索了人与机器之间的“分布式能动性”。由此,艺术系统变成了一个扩展至社交媒体环境的协作生态域。

在《一切坚固的都在融化》中,艺术史学家比尔吉特·默斯曼和豪克·奥尔斯探讨了基于物理空间策展人工智能艺术的(非)现实状况。他们还与上海艾厂人工智能艺术中心的艺术总监兼联合创始人李茜对谈,讨论了中国人工智能艺术策展和相关学术研究的制度化等内容。

在策展人马楠看来,“未来艺术生态球”——一幅艺术与先进技术交织的图景——揭示了自动化(人工智能)艺术的残酷逻辑:人类的时间被压缩,文化被消减为算法“幻象”。在这样的背景下,“人工智能时代的策展抵抗性”意味着制造裂痕——引入错误、延迟和不确定性——使策展从组织活动转变为对艺术生态的批判。

本刊的作者们共同描绘了一个协作式的策展未来,在这个未来中,人和技术可以冷静交涉。由此,《(非)现实》从探讨“状况”演变为探讨“方法论”——即一种穿梭于不同世界之间、对核心原则进行批判性干预的策展形式。在这个协作共创的未来里,策展人成为了各种角色的整合者:在算法的海洋中设立标志,在加速演变的文化下制造停顿,并在自动化进程的浪潮中重申人类的能动性。

我们衷心感谢所有作者和采访者为本刊贡献的文章,这些文章充满洞见,非常精彩。感谢*OnCurating*期刊的主编多萝西·里希特和罗纳德·科尔布(Ronald Kolb)为编辑工作持续做出的努力。感谢瑞士文化基金会的支持,使得本刊得以出版。

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**比尔吉特·默斯曼(Birgit Mersmann)**是德国波恩大学当代艺术和数字图像文化专业(Contemporary Art and Digital Image Cultures)的教授。她的跨学科研究涵盖现当代西方和东亚艺术、全球艺术史、移民美学、博物馆和展览研究、数字艺术、图像和媒体理论、视觉文化和视觉翻译、脚本和图像之间的关系以及摄影史和理论。她最近出版的书籍包括:《对当代艺术中新资源开采主义的批判》(*Kritik des Neo-Extraktivismus in der Gegenwartskunst*,与豪克·奥尔斯合编,吕讷堡,2024年);《图像争议:艺术、媒体和文化遗产中的当代反传统主义》(*Image Controversies. Contemporary Iconoclasm in Art, Media, and Cultural Heritage*,与克里斯蒂安·克鲁斯和阿诺德·巴特茨基合编;柏林/波士顿,2024年);奥兹认同主义。《西方在艺术、文化和美学中的投射与反映》(*Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik*,与豪克·奥尔斯合编,比勒费尔德,2022年);《超越图像的局限:全球艺术领域中的文化差异与跨文化动态》(*Über die Grenzen des Bildes. Kulturelle Differenz und transkulturelle Dynamik im globalen Feld der Kunst*,比勒费尔德,2021年);《全球文化中的历史和当代视觉实践》(*Historische und zeitgenössische Bildpraxen*

in globalen Kulturen, 与克里斯蒂安·克鲁斯合编;帕德博恩 2021年);《艺术与全球移民手册:理论、实践和挑战》(*Handbook of Art and Global Migration. Theories, Practices, and Challenges*, 与布尔库·多格拉马奇合编;柏林/波士顿, 2019年)。

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# (Un)Real Worlds of Digital Curating

## Dorothee Richter

In order to explore the (un)real worlds of digital curating, I will focus less on different digital possibilities in the narrower field of art but rather try to understand how digital media produce, influence, and situate us as social and political subjects. Since we understand curating as a cultural and political practice and exhibitions as spaces for negotiating various politics, I will build on this to derive proposals for curatorial action.

As Karl Marx's once titled "Die Historizität der menschlichen Sinne" (the historicity of the human senses) proposes, the human senses are historically, if not fully determined, then at least developed in close proximity to the materiality of a society; this simply means that the human imagination evolved as soon as optical devices opened up new ways of seeing. This goes beyond the well-known material bases and the superstructure of ideology. It literally means that the human constitution, the senses, the bodily functions, the possibilities to transfer any input from outside, is developed in close entanglement with material, mechanical, and now digital possibilities.

In the context of curatorial practice, it is essential to discuss this radical upheaval of the epistemic arrangement of body/image/technology and the associated re-situating of subjects and communities. This involves a dissociation of sensual impressions from the body; it is a new form of alienation. From this perspective, too, the traditional mere "hanging", the mere "stringing together" of individual images in a room seems like an almost poignant retrograde act. However, this gesture of pointing is also a statement, an attempt to insist on a world of irreducible distances and ancient media. Connected to this is also the obvious effect of seeing "artworks" primarily as commodities that are and remain transportable and tangible. This conservative, if you will, way of "hanging", usually accompanied by a backward-looking concept of art, is still a widespread curatorial act today. But we must also take into account the possibilities and problematic effects of the digital on cultural techniques such as curating. Therefore, the digital condition today is the (un)real backdrop of contemporary curating.

### From Digitalisation to Alienation

But how did we come to this point? This deep alienation, triggered by digitalisation was initiated by the global corona pandemic, which not only provided new images and a previously unimagined dependency of all communication on digital media, but also enabled a new form of governance, a new form of struggle over hegemony. I refer here, for example, to digitally transmitted graphics on the pandemic with corresponding behavioral recommendations, provided by experts and self-proclaimed experts from the conspiracy theory camp. The moment facts and emotionalised images lost their connection, conspiracy ideologies could float freely: At the same time, the pandemic isolated people, and social contacts were suddenly radically reduced.

In a talk, Johan Hartle argues that the Covid 19 pandemic was a specific aesthetico-political constellation with drastic implications — how the crisis changed our perceptive apparatus, our relationship to the world, and with his analysis, the problem of the fetishization in the arts can be understood.<sup>1</sup> In his view, the crisis was not only a massive crisis in itself in terms of organising social affairs, but it also deepened several

forms of crises: economic crises, political crises, and on top of that, it also somewhat takes away people's capacity to react politically. This dilemma, as Johan Hartle continues, increases the crisis in terms of economic problems, and at the same time it diminishes the capacities to confront the crisis. His argumentation develops the understanding of our current situation in three steps. First, he examines the concept of alienation as developed by Karl Marx; second, he argues the extent to which Georg Lukács' understanding of reification develops this approach; and third, he elaborates on Guy Debord's concept of spectacle as its contemporary extension and what follows for our understanding of the contemporary aesthetico-political constellation. I roughly rely on Hartle's argument and will discuss what implication this ultimately has for curating. He develops the argument in a series of thoughts related to alienation. Alienation is here understood as the term that Karl Marx used to describe the specificity of work in capitalism.

Following Hartle in the fetishism chapter (chapter one of *Capital: A Critique of Political Economy*), it is demonstrated that we keep reproducing social conditions even if we might simply be market agents. We reproduce all implications of a market society: the increasing social inequality and reproduction of social inequality that are implied in the very act of market exchange.

Marx's argument is in some way quite obvious, as Hartle lays out: by exchanging commodities, we reproduce the idea of the exchange of equivalence. This is problematic because there is one commodity that is worth more than it costs, and that is the commodity of labour power. One can buy labour power for its "fair price"; the fair price is the cost of reproduction — historically, not going directly to the producer of new bodies and of care work, (since this would be women's work), labour power is capable of producing worth that is more than what it costs; this is the so-called surplus. By buying labour power and having the labourer produce, the buyer or capitalist gets richer, although he pays the labourer fairly. That is implied in the very act of commodity exchange, because it is implied in the principle of the exchange of equivalence, which is in short Marx's concept of fetishism.

This thought on alienation was further exemplified, as Hartle points out, when the most renowned Marxist cultural critic Georg Lukács wrote *History and Class Consciousness* in 1923. In this book, he develops this idea further and stops speaking about fetishism; he now speaks about reification. Reification means turning social relations or processes into "things". This concept implies that something is turned into a thing that shouldn't normally be treated as a thing. (In German, this sounds even clearer, because it is called *Objektifizierung*). Hartle emphasises that one could say that Marx's understanding of commodity fetishism already implies such a dynamic of turning social relations into things because in the act of exchanging commodities or in the act of thinking there is a necessary value to an object, this commodity has a monetary value. From a feminist perspective, it also means that the relations in the family become objectified, especially as the economic side of a union becomes more and more romanticised. This is typical for ideology, where a narrative or myth in a Barthesian sense confuses the clear vision of what is what. This makes the economic aspects invisible but no less pressing. What Lukács basically says is that, under capitalist circumstances, more often than not, we tend to take processes and relations as what they are not, namely as things. They are being reified, and as Hartle concludes, we do so by acting as individual commodity processors, meaning, we act as individual market agents rather than seeing ourselves as the collective producers of our own lives.

This means, in Hartle's perspective, that we are individual commodity processors who exchange individual commodities — labour power, for example, or whatever we have to sell. But this is a misconception, because the way in which we perceive the world from this angle leads to the misunderstanding that we are confronted with individual objects that we are exchanging as individual agents. Instead, we should see the whole social reality as a process and as a set of relations that we are part of and that we might collectively change. The general understanding is that relations and processes, or society as a whole, now appear to us fragmented, as a set of individual objects and a set of individual agents. This implies that in the neoliberal economy we have a sense of fragmentation and isolation, of being individual market agents, and we have this refined reality of millions of objects in front of us that all seem to restore and contain social reality as an objective fact. When Lukács calls this "reification," he means that the world appears to us as if it was a set of things rather than a set of forces, relations, and dynamics that we ourselves could change. And by being confronted with such a thing as "objective reality," we end up in a "contemplative relationship" with the world: our impression is that we can no longer change this reality; we can only look at it from a certain distanced contemplative point of view.

And this is precisely what Guy Debord develops further in his *Society of the Spectacle* in 1967. Debord also speaks of a world that appears as objectified — but his point is slightly different: we can only approach the objectified reality with which we are contemplatively confronted as passive consumers. The idea of consumption is increased because the world now replicates itself in a world of images, in a world of representations.

In the world of politics, this means that reactions to the emotionalised, unreal world of (fabricated) images are increasingly emerging and taking on concrete forms of public expression. This is partly a reaction to being trapped in distorted doubled images. I cannot go into the problem in detail here, but we see the basic problem as already formulated by Theodor W. Adorno and Max Horkheimer in the *Dialectic of Enlightenment* (1944). The problem here is massive projections into which — precisely without knowledge of the real situations or the real subjects — one's own problems and desires are projected onto substitute subjects that do not actually exist. For this reason, it is not possible to counter racist prejudices with arguments for example; the psychological benefit of such a displacement of one's own wish production is too great.<sup>2</sup> This can be described as an active reaction to a passive contemplative attitude, because it is not oriented towards historical or other knowledge or any kind of differentiated understanding or oriented solution.

### **NFT— contemplative objectification?**

In the world of the arts, the overall digitalisation has other effects. With digitalised artistic works, like NFTs for example, the process of objectivation is increased ad absurdum; unreal digital images primarily serve speculation to which the art market is particularly susceptible, as it is largely unregulated with no ban on insider trading, for example.<sup>3</sup> In November 2021, the price of the digital currency Bitcoin began to plummet, dragging the other major cryptocurrencies down with it. When Russia attacked Ukraine in February 2022, the world changed, share prices collapsed and the appetite for risky investments waned. In the meantime, the cryptocurrency market has lost more than half of its volume. In July 2022, OpenSea, the largest NFT art department store, laid off 20 percent of its staff. The once coveted profile pictures of the *Bored Ape Yacht Club*, an edition of 10,000 computer-generated cartoon monkey faces, are still available to buy. Ape #7827 with earrings, yellow cap and glasses was sold for 8,794

Ether, which was worth 19 million euros at the time, today, you can buy #7827 for the equivalent of around 172,000 euros. Objects, some of which were sold for many millions at the beginning of the year, have lost an average of 92 percent of their value. Today, the general mood on the market is rather subdued, and in a way the valorisation is now institutionalised. Collectors and artists are meeting on the platform X, and it is a small group of white (fe)male people who form the core of the experts. One of these experts, Anika Meier, explains:

“You can roughly break it down and say: NFTs are digital certificates of authenticity, and you can see on the blockchain whether, for example, the artwork exists as an edition of ten or whether it is unique and who the artist is. And if it has been sold, in which wallet—that’s the name of the wallet in which NFTs are held. This can all be viewed transparently on the blockchain. It is interesting that artists have now started to combine NFTs, i.e. digital works of art, with physical works of art.”<sup>4</sup>

As a general rule, NFTs represent a logical development in hyper-capitalism; the works are bought primarily as objects of speculation. From a curatorial perspective, their forms of presentation are often astonishingly conventional and uninteresting; obviously, the reference to the art space, the white cube, must be maintained as a guarantee of ennoblement and value attribution. In order to transfer these rather theoretical considerations on alienation to curating, one can look at the NFT offer of the Belvedere in Vienna as an example, which borders on irony: The Belvedere in Vienna sold imaginary puzzle pieces of Gustav Klimt’s painting *The Kiss* (1908–1909). The sale takes place via a website and brought in a large sum for the museum, which suffered huge financial losses during the pandemic. Even if this reinforces the contemplative, passive attitude described in social theory, as buying suggests a kind of participation in decisions, I don’t want to condemn this type of financing altogether. On the one hand, museums and art institutions are indeed often underfunded, and on the other hand, it



An example of a NFT gallery on OnCyber. Credit: blog.zenft.xyz

is important for the future of museums to offer something that resembles a game as an entry point. Like other editions, NFTs and other digital works are now often cheaper than regular artistic works. This would suggest a certain democratisation. Nevertheless, it shows a supposed participation that replaces a serious possibility of participation. The museum exists in the struggle for the attention economy and adopts the capitalist logic of exploitation; the real act of buying remains in the unreal/digital, or to put it bluntly, is irrelevant in terms of social, i.e. political influence. Furthermore, the traditional gender relations are also inscribed in the act of purchase in the example of *The Kiss* and also in the clique of experts who constitute the market).

### Hyperreality as a third space

As these examples show, to gain a better understanding of the phenomenon of deterritorialised digital images, it is necessary to move away from the dualism of real and unreal.

The hyperreal project in Jean Baudrillard's *Simulacra and Simulation* (1981) questions how the unlimited circulation of images becomes an essential rhythm of postmodernism and foreshadows our (post)digital present.<sup>5</sup> This includes both the circulation of images on social media and the estrangement of images, which are found under the polemical variants like deepfakes and fake news. Digital worlds allow the real and the unreal to coincide and form a third space: the hyperreal. The subject is no longer able to distinguish between the real and the fake, thereby collapsing the concrete, fact-based truth value of information. In distinction to Marshall McLuhan's "the medium is the message," the digital creates its own real worlds with a set of rules.

When Hito Steyerl introduced the "poor image" in 2009, a general critique of the truthfulness of the image began, along with an embrace of the reproduced, often flawed copy-and-paste images that currently flood the meme-driven internet.<sup>6</sup> This makes Steyerl not only politically fruitful but also proves that there can indeed be a real political dimension to these images, namely in their pure "conditions of existence." These exist independently of their origin and the logic of a mission-conscious subject that creates these images. Steyerl examines many more of the effects of images that have a practical and real impact on our present. The essential point is that, although one can assume the unreal origin of an image, one should nevertheless examine its real political implications, uncover them, and thus bring them into the discourse on art.

In his post-Corona crisis essay, Benjamin Bratton asserts unequivocally that crisis situations expose emergency conditions and restore the visibility of reality.<sup>7</sup> Thus, since 2021, a noticeable tendency has emerged to reconnect the immateriality and unreality of the surrounding images with their material conditions during moments when the overwhelming flow of information fails to function "frictionlessly." The moment of disruption, the struggle that Bratton links to the pandemic years, raises questions about the conditions and origins of the digital condition.

Jussi Parikka already expresses this idea in his book *A Geology of Media*, in which he writes: "Data mining might be a leading hype term for our digital age of the moment, but it is enabled only by the sort of mining that we associate with the ground and its ungrounding."<sup>8</sup> Parikka thus made it clear as early as 2015 that the exploitation and destruction of the environment to create digital images can be traced back to a material basis. The immateriality that is so often assumed not only has real impetus, but also has immediate consequences on the physical world. The question therefore arises as to how digital art can be (re)located in curation and art.

### **Situated and localised curatorial practices**

A critical curatorial approach now seeks to counteract contemplative objectification, i.e., a passive attitude toward the world, as intensified by digital art, through active participation, critique, and speculation. To that end, I have selected digital art projects developed in recent years within the *OnCurating* context. This, in our understanding, aims to re-engage with the physical world in bodies, places, and the political dimensions through which knowledge is generated and experienced.

In a way, we follow a logic of situated knowledge that takes image production and its consequences seriously, making the conditions of artistic production visible and anchoring them in place and time. This may involve, as Parikka suggests, exposing the technological conditions of extraction of nature to the viewer or allowing a performative reconfiguration of the image or artwork through participation and a conscious return to physical space.

Ultimately, the goal is to continually integrate the responsibility of producers, as Donna Haraway proposes, into the viewer's interpretive context: "Also, one cannot relocate to any possible vantage point without being accountable for that movement. Vision is always a question of power to see."<sup>9</sup> Relocation, in our understanding, refers to the linking of knowledge about the systems, conditions, and structures inscribed into the artwork with a call for (self-)reflection among all participants. In this sense, I aim to build upon what we developed in the *Scores* project, as described in *OnCurating Issue 53*, and expand this logic to post-digital formats — toward what we call a political form of thinking, one not rooted in representational power but in activation and reflection. This approach strives to create empathy, cultural exchange, and relationality.<sup>10</sup> In sum, recent theory across media and curatorial studies converges on the idea that placing art and audiences back "on the ground"—literally and metaphorically—is necessary to counteract the pitfalls of digital placelessness. Relocation provides the friction, context, and shared space needed for deeper participation and critical insight.

Three projects in particular exemplify how curatorial work can enable this relocation of subjects and artworks: *Are We All Here? Exploring Embodied Virtuality Today* (2021), *Small Projects for Coming Communities* (2019-ongoing), and *Attention Is All I Need*. (2025) Each of these initiatives responds to digital placelessness by creating experiences that physically or contextually anchor participants through participation, critique, or engagement with shared material environments.

#### ***Are We All Here? Exploring Embodied Virtuality Today***

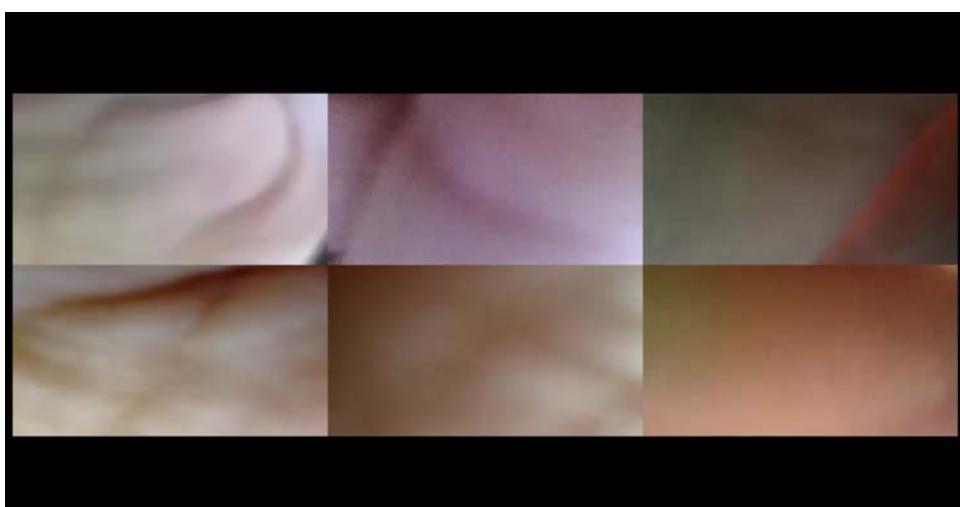
At the OnCurating Project Space, we presented early net art in the exhibition *Are We All Here?* (2021). The exhibition focused on the central themes of the contradictions between presence and absence, as well as passivity and participation. One example is Eduardo Kac's work *Teleporting an Unknown State* (1994–1996, adapted 2021), in which light can (and must) be sent digitally to a plant; the light always corresponds to the light of the place from which something is sent. Basically, this is an attempt to counteract the placelessness described by Peter Weibel.<sup>11</sup> This piece involves a live stream and a living plant that grows only by the light of a projection, thus mixing telematics (distant) presence with a tangible, local organism. By staging Kac's work in a concrete room, visitors can walk around the installation, water the plant, or see their bodies juxtaposed with the live video feed. The curators grounded a discussion of virtual connectivity in a physical encounter by reinforcing site-specificity and temporality, treating the online space not as a timeless digital archive but as an event tied to a specific moment and location. For the audience, this was produced by an erosion of the virtual

and the real space. The spectator is visiting a feedback loop, whether online or in person, viewers were prompted to reflect on their own embodied standpoint. The exhibition made “embodied virtuality” tangible and prompted critical questions about online presence and the obsolete nature/culture dichotomy.

We also invited the choreographer Be van Vark to work with the isolated students, who were only connected via Zoom during the Corona Crisis. The result of three workshops with the isolated students, most of whom had never met in a shared real space, was a video; it shows moments of discomfort and intimacy made possible and enforced by digital means. The protagonists reflect on their situation, their fears and isolation while the video is being made. And yet it hints at ways of escaping isolation and relating to each other, through small gestures, through dance, through funny moments. The video ends with close-ups of skin surfaces. In this respect, the video essay on digital intimacy (video *Are We all Here*, 2021, 7:13) addresses (self) isolation, the loss of physical contact and singularity, and shows an active reflection on this situation, with new ways of relating to each other and exploring the contexts.<sup>12</sup>



*Are We all Here?*, 2021, Video 7:13, Be van Vark, Students of the MAS in Curating, 2021



*Are We all Here?*, 2021, Video 7:13, Be van Vark, Students of the MAS in Curating, 2021



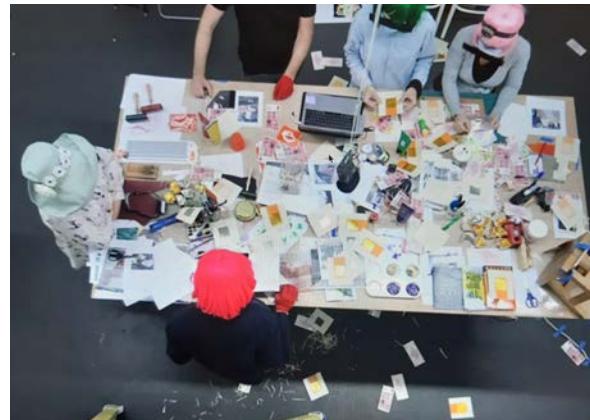
Exhibition view, *Are We All Here?*, OnCurating Project Space, Zurich, 2021



*Are We All Here?*, Eduardo Kac's work *Teleporting an Unknown State*, 1994–1996, adapted 2021



*Small Projects for Coming Communities*, here at ARKO, Seoul, 2024



*Small Projects for Coming Communities*, here: online, collaboration with Martin Guinard and the 12th Taipei Biennial Rethinks Globalisation, 2021

### ***Small Projects for Coming Communities***

A turn toward performative formats can also be observed in digital practice — one that emphasises liveness and shared presence between audience and performers. A compelling attempt to resist digital delocalisation was launched during the Covid-19 pandemic: *Small Projects for Coming Communities*.<sup>13</sup>

This project operated in virtual space but adapted to each context by incorporating local positions. Together with a student group, we invited artists to design scores — short instructions for action inspired by the Fluxus movement. The scores offered a fascinating moment to observe one's body in front of the screen — situated both in an abstract digital space and a real, embodied setting.

We deliberately departed from the institutional white cube and radically opened authorship. The project consisted of diverse scores that allow rethinking the present in terms of collective futures.

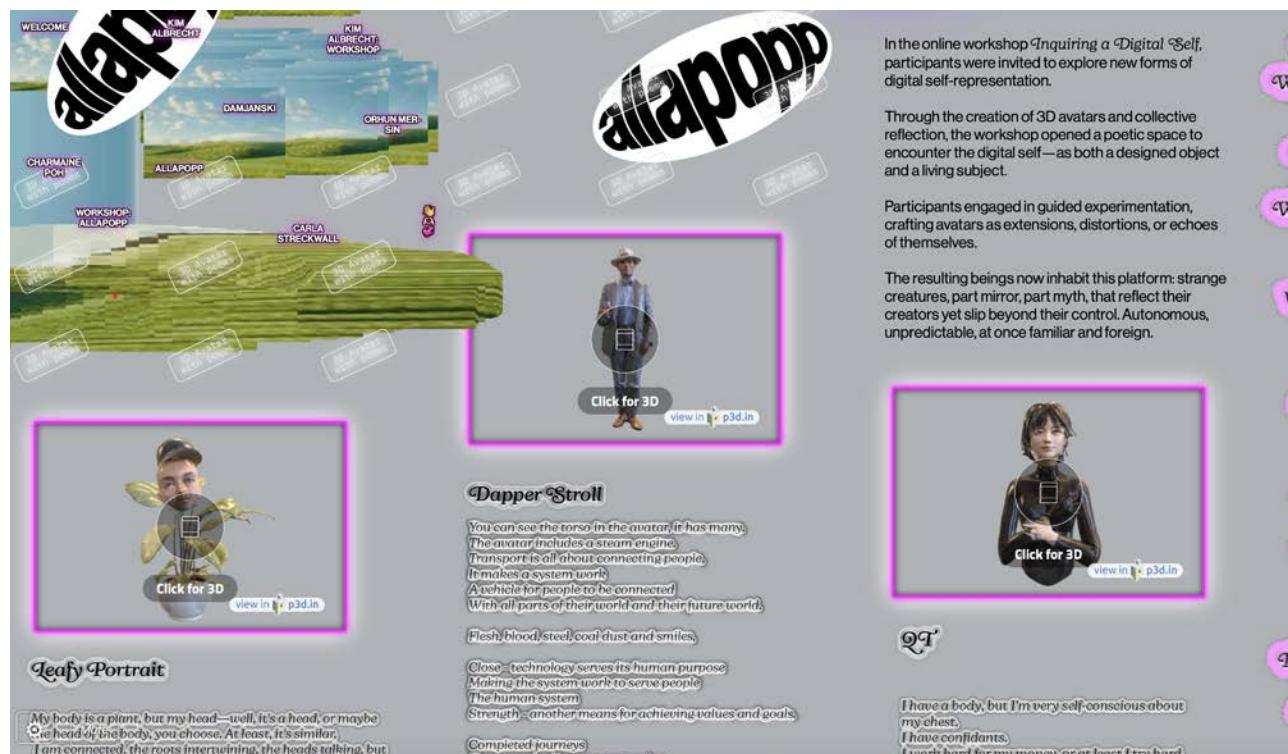
One such score by the collective Neue Dringlichkeit, “Future Storytelling,” invited participants to imagine a time 50 years from now, when society’s problems have been solved, and to look back together, recalling how they achieved that future. This exercise sparked unfamiliar thoughts and joyful strategies. By formulating those visions together, participants no longer saw themselves as isolated, powerless individuals but created a shared room for visionary thinking and inspiration.

This speculative logic can be read as a reference to Roland Meyer's theory of the conjunctive digital image.<sup>14</sup> "Future Storytelling" becomes a reappropriation of the "as-if", transferred into a decidedly analog practice. Imagination and speculation intersect here as forms of relocation. The latest activation of *Small Projects for Coming Communities* happened through a project, an exhibition with ongoing workshops, curated at ARKO in Seoul. As a historical reference the film on Fluxus, *Flux Us Now, Fluxus explored with a camera* was shown. During workshops alongside the exhibition, the scores from the website of *Small Projects* were used to gather and explore new forms of making art in the exhibition space.<sup>15</sup>

### **Attention Is All I Need**

Curated in 2025 by Jonny-Bix Bongers in collaboration with the House of Electronic Arts (HEK) Basel and the OnCurating Academy, *Attention Is All I Need* was an online exhibition that investigated digital self-representation within the logic of today's attention economy. The title echoes the foundational AI paper *Attention Is All You Need*,<sup>16</sup> nodding both to algorithmic mechanisms of visibility and to the human struggle for meaningful focus. The project treated the self as a curatorial site, suggesting that in the digital age, the self becomes a curatorial practice. Through avatars, profiles, and performative personas, the users on the internet engage in the constant, aestheticised labor of online self-curation.<sup>17</sup>

Rather than present this condition as a fixed critique, the curatorial format itself enacted a counter-strategy: by relocating these virtual self-performances into an art context and eventually into physical space, the project reframed identity not as a disembodied abstraction but as a site of shared reflection and discourse. Throughout its online phase, *Attention Is All I Need* activated the web as a live, participatory site. Artists not only contributed deepfakes, 3D avatars, and browser experiments but also



*Attention is all I need*, online, collaboration with HEK Basel, and students from OnCurating Academy Berlin, 2025

engaged with the students of the OnCurating Academy in three participatory online workshops. For example, Orhun Mersin's remote workshop, "Dragging the Self," invited participants to manipulate their image with deepfake and reflect upon it by engaging with queer feminist theory. Though held online, these workshops emphasised situated action: every participant was somewhere — on a couch, in a kitchen, in their city — performing identity through real gestures and creating video material that was later bricolaged by the artists. The digital, instead of replacing presence, became a portal toward embodied, critical coexistence and collective learning.

By doing that, the exhibition did not treat digitality as neutral ground. Instead, the infrastructure itself became part of the materiality on display. Works like Damjanski's *Sie liebt mich, sie liebt mich nicht* (She loves me, she loves me not) (2023), which exposes algorithmic logics and censorship in a fragile interplay of two chatbots, make visible the constraints within which digital identities circulate. In this sense, *Attention Is All I Need* enacted a reflective interface, encouraging users to slow down and consider how their subjectivity is shaped by visibility metrics and platform norms.

The final gesture of the exhibition — its in-person gathering at DOCK 11 in Berlin — was not an add-on but a pivotal moment of relocation. Despite our initial plan for the exhibition to be entirely online, we could not resist inviting artists and visitors for the exhibition's finale in Saal4 at DOCKdigital. What had been individual navigation(s) across screens, became embodied again in a final coming together that placed the discourses in a mutual, affective, and dialogic setting. In collaboration with the talk series "Realtime Affairs," participating artists, like Allapopp, Carla Streckwall, and Kim Albrecht, held inspiring, rather improvised talks about their work that generated informal conversation and mingling with the audience.



*Attention is all I Need*, collaboration with HEK Basel, and students from OnCurating Academy Berlin, 2025

In this way, *Attention Is All I Need* demonstrated a powerful model for curating digital subjectivity and self-representation. It refused both technophilia and nostalgia, instead building relational bridges between the virtual and the physical in a network of artists, internet users, friends, workshop participants, and collaborators. The exhibition treated online identity as contingent and performative — but also as something that could be grounded, collectively reflected upon, and transformed through communal experience.

### Preliminary conclusion

From across *Are We All Here?*, *Small Projects for Coming Communities*, and *Attention Is All I Need*, a shared conviction emerges: that curating in the digital age must involve deliberate acts of relocation and re-contextualisation. This is not a nostalgic return to physicality, but a strategic rebalancing of the real and unreal, shaping and reacting to socio-political contexts. Relocation, then, is not merely a spatial tactic. It is a curatorial practice that insists on friction, presence, and context as antidotes to placeless consumption and disembodied spectacle. These projects illustrate how curators can craft environments — physical, virtual, or hybrid — that allow audiences not just to view or click, but to be somewhere and to reflect from that position.

The displayed exhibitions suggest that yes, there is power in being there, in standing beside others, and in slowing down to inhabit a moment collectively. Whether through a plant that only grows by light sent across networks, a score that asks you to walk barefoot in your apartment, or a livestream that culminates in eye contact across a room.

In an age of ambient distraction, curating relocation is a political gesture. It creates time and space for situated reflection. It acknowledges the erosion and redefinition of spectatorship as participatory co-presence, where the roles of viewer, participant, and co-producer blur. It also opens up speculative zones — “as-if” communities, future imaginaries, temporary assemblies — where alternative modes of being together can be tested.

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### Notes

**1** Johan Hartle, “Corona/Spectacle,” Online talk in the MAS in Curating Programme, Zurich University of the Arts, 2 October 2020, see [www.curating.org](http://www.curating.org).

**2** Theodore Adorno, Max Horkheimer, *Dialectic of Enlightenment. Philosophical Fragments* (Stanford: Stanford University Press, 2002), see chapter on “Elements of Anti-semitism.”

**3** See translation from the radio feature: *Kryptowelt. Haftstrafen, Schadenersatzforderungen, Imageverluste – die Aufarbeitung geplatzter NFT-Träume hat begonnen* (Crypto World: Prison sentences, claims for damages, loss of reputation—the aftermath of shattered NFT dreams has begun), Deutschlandfunk, “What exactly are NFTs? NFTs are digital identifiers. They are unique, irreplaceable, and cannot be copied. They can be used to mark files such as images, trading cards, music, tweets, or other items. By purchasing an NFT, which is ultimately a type of title deed and certificate of authenticity, you acquire the exclusivity of any digital work. NFTs are therefore attractive to collectors, for example. Prices depend on demand. NFT stands for non-fungible token, i.e., a non-exchangeable object.”, 24 August 2023, accessed September 30, 2025, <https://www.deutschlandfunk.de/haftstrafen-schadenersatzforderungen-imageverluste-die-aufarbeitung-geplatzter-nft-traeume-hat-begon-100.html>

**4** Anika Meier in a talk at the OnCurating Academy, venue Radialsystem Berlin, 6 December 2024.

**5** Jean Baudrillard, *Simulacra and Simulation* (Ann Arbor: University of Michigan Press, 1994).

**6** Hito Steyerl, "In Defense of the Poor Image," *e-flux journal 10*, November 2009, <https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image>.

**7** Benjamin H. Bratton, *The Revenge of the Real: Politics for a Post-Pandemic World* (London: Verso Books, 2021).

**8** Jussi Parikka, *A Geology of Media* (Minneapolis, London: University of Minnesota Press 2015), 58.

**9** Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Philosophical Literary Journal Logos* 32, no. 1 (January 1, 2022): 237–71. <https://doi.org/10.22394/0869-5377-2022-1-237-268>.

**10** "Scores—From Situated Knowledges to Shared Action—ONCURATING," n.d., <https://www.on-curating.org/issue-53-reader/scores-from-situated-knowledges-to-shared-action.html#:~:text=We%20see%20this%20project%20therefore,instructions%20on%20exercises%20and%20group>.

**11** Peter Weibel, "Die Geschichte der Ortlosigkeit und die Entstehung der Ferngellschaften," Talk in the series *The Iconic Turn*, Felix Burda Memorial Lectures, published on YouTube on 23 August 2012, accessed September 30, 2025, <https://www.youtube.com/watch?v=5llpNADoqYM>.

**12** *Are We All Here? Exploring Embodied Virtuality Today* was a group exhibition in the OnCurating Project Space. The focal point of the exhibition space was Eduardo Kac's work *Teleporting. An Unknown State* (1994/96), an early interactive biotelematic work that was being reconceptualised for the exhibition in 2021. The installation combines a telematic presence (live streaming webcams) with the planet in the form of a plant that receives light only via the screen. Other forms of participatory work is the film produced with the choreographer van Vark, see Be Van Vark, *Video essay on digital intimacy*, 2021, video, 7:13, see <https://www.curating.org/digital-choreography/>

**13** See <https://www.comingcommunities.org/> and "Scores—From Situated Knowledges to Shared Action—ONCURATING," n.d. <https://www.on-curating.org/issue-53-reader/scores-from-situated-knowledges-to-shared-action.html#:~:text=We%20see%20this%20project%20therefore,instructions%20on%20exercises%20and%20group>.

**14** Roland Meyer, Lecture at the *International Festival of Photographic Images 2023*, LVR-LandesMuseum Bonn, 2023, YouTube video, 14:34, <https://www.youtube.com/watch?v=ag1k1Ujb7PY&t=874s>

**15** The project *Into the Rhythm – From Score to Contact Zone* was co-curated by OnCurating (Dorothee Richter, Ronald Kolb,) and ARKO (curator Haena Noh, producer Haebin Lee); artists include Small Projects for Coming Communities, Maya Minder, !Mediengruppe Bitnik with Sakrwoiski and Baruch Gottlieb, San Keller, Sohn Younwon, Stirnimann-Stojanovic, Yagwang, Elisabeth Eberle, Yo Daham, Tangerine Collective, Paloma Ayala; collaborations include Green Recipe Lab, Re#sister Korea, Louise the Women, art parenting social club, Piece of Peace, jongdarjung, Eunbeen Ha.

**16** Vaswani, Ashish, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N. Gomez, Łukasz Kaiser, and Illia Polosukhin, "Attention Is All You Need," *Advances in Neural Information Processing Systems*, Vol. 30, 2017, 5998–6008. arXiv:1706.03762.

**17** Berlin, Dock 11 & Eden. "Attention Is All I Need — DOCK 11", 30 May 2025, Attention Is All I Need, n.d., <https://dock11-berlin.de/en/digital/program/schedule/attention-is-all-i-need#:~:text=Join%20us%20on%20May%2030th,installation%2C%20music%2C%20drinks%2C%20and%20dialogue>.

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# 数字策展的(非)现实世界

多萝西·里希特 (Dorothee Richter)

当探索数字策展的(非)现实世界时,我将更多地去尝试理解数字媒介如何生产内容、给世界带来影响并将人们定位为社会和政治主体,而非仅限于关注艺术领域中各种数字化的可能性。我们认为策展是种文化和政治实践,展览则是协商各种政治的空间,因此,我将在此基础上提出有关策展行动的建议。

正如卡尔·马克思在其著作《人类感官的历史性》(*Die Historizität der menschlichen Sinne*)中所言,历史上,人类的感官即使没有完全被社会物质性所决定,也至少与社会物质性紧密相关;这意味着,在人们运用光学设备开辟新的观看方式后,人类的想象力也随之进步。这超越了众所周知的物质基础和意识形态的上层建筑。从字面上看,这意味着人体的构造、感官、机能以及将任何信息从外界世界转化到内心的可能性,均在与物质、机械以及如今数字化的可能性紧密交织中发展。

在策展实践的语境中,探讨这一关乎身体/图像/技术认知体系的彻底变革以及对相应的主体和社群的重定位至关重要。这涉及到感官印象与身体的分离;这是种新的异化形式。从这一角度来看,传统的单纯“悬挂”做法,即在房间里将单独的图像“串在一起”,似乎是近乎感人的倒退行为。然而,这种指向的姿态也是种声明,是在对不可缩短的距离和古老媒介的坚守。这还令人想到因将“艺术品”主要视为可运输、可触摸的商品所带来的明显影响。这种保守的(如果你愿意这么说)“悬挂”方式,通常伴随着向后看的艺术观念,而“悬挂”在当今仍是种普遍的策展行为。但我们也必须考虑到数字化对策展等文化技术带来的可能性及其带来的问题性影响。因此,当今的数字化状态是当代策展的(非)现实背景。

## 从数字化到异化

我们是如何走到这一步的?这种由数字化引发的深刻异化,是由全球新冠疫情引发的。疫情不仅带来了新的图像,使所有传播都对数字媒介产生了前所未有的依赖,还催生了新的管理形式,即新的霸权斗争形式。这里指的是,例如,来自阴谋论阵营专家和自封专家的、通过数字传输的疫情相关图片以及相应的行为建议。一旦事实与情绪化的图像失去关联,阴谋论意识形态便会肆意泛滥。与此同时,疫情使人们隔离在家,人与人之间的社会联系骤然减少。

约翰·哈特尔 (Johan Hartle) 在一次演讲中谈到,新冠疫情使得特定的政治美学化现象聚集,并且带来了重大影响。他提到了这场危机如何改变了人的感知机制及人与世界的关系,通过他的分析,艺术领域中的拜物教问题变得一目了然。<sup>1</sup>在哈特尔看来,新冠疫情不仅在组织社会事务方面引发了一场巨大的危机,而且还加深了经济危机、政治危机等几种形式的危机。最关键的是,疫情在某种程度上剥夺了人们在政治上做出反应的能力。正如约翰·哈特尔所言,新冠疫情使经济问题变得越发严重,同时也削弱了人们应对危机的能力。他分三步论述了当下人们所面对的形势。首先,他探究了卡尔·马克思提出的异化的概念;其次,他论证了格奥尔格·卢卡奇对物化的理解在多大程度上发展了异化的概念;第三,他阐述了居伊·德波提出的“景观”的概念作为异化的当代延伸意义,并以此帮助人们理解当代政治美学化现象的聚集。我们的观点大致借鉴了哈特尔的论点,我还将探讨这一观点最终对策展的意义。哈特尔通过一系列与异化相关的思考来阐述他的论点。在此,“异化”一词指卡尔·马克思用来描述资本主义劳动特殊性的术语。

根据哈特尔提到的拜物教(《资本论:政治经济学批判》第一章),即使人是市场的动因,人也在不断再生产社会条件。人们使得市场社会带来的所有影响不停重现,也就是说,社会不平等现象日益加剧,市场交换行为中隐含的社会不平等现象在不断上演。

马克思的论点在某种程度上很鲜明,正如哈特尔所述:通过商品交换,人们重现了等价交换的概念。但这其中存在问题,因为有一种商品的价值高于其成本,那就是劳动力商品。人们可以以“公平价格”购买劳动力;公平价格是再生产成本——历史上,劳动力不直接流向新生命和从事照料工作(因为这些被视为是女性的工作)的生产者,而是指能够生产高于其成本的价值;这就是所谓的剩余价值。买方或资本家通过购买劳动力并让劳动者进行生产会变得更富有,尽管其以公平价格支付劳动者报酬。这一事实隐含在商品交换行为中,因为这也是等价交换原则中的事实,简而言之,也是马克思所说的拜物教的概念。

如哈特尔所指出的那样,这种关于异化的思考在最著名的马克思主义文化评论家格奥尔格·卢卡奇于1923年所著的《历史与阶级意识》(*History and Class Consciousness*)中进一步得到了论证。在该书中,卢卡奇进一步发展了“异化”这一概念。他不再谈论拜物教,而是谈论物化。物化意味着将社会关系或过程转化为“物”,意味着有什么被转化为了通常不应被视为物的东西。(“物化”在德语中是Objektifizierung,意思更一目了然)。哈特尔强调,可以说,马克思对商品拜物教的理解已经暗示了将社会关系转化为物的这一动态。因为在商品交换行为中,或者在思考一个物品存在必然价值中,该商品具有货币价值。从女权主义的角度来看,这也意味着家庭关系被物化了,尤其是在家庭经济关系越来越被浪漫化的情况下。这在意识形态中很常见,罗兰·巴特提出的意义上的叙事或者说神话混淆了人对事情真相的清晰认知。这使人看不到经济层面的问题,但却丝毫未缓解

该问题的紧迫性。基本而言,卢卡奇说的是,在资本主义环境下,我们往往倾向于将过程和关系视为并非其本来的模样,即将它们视为物。过程和关系正在被物化。正如哈特尔总结的那样,人们通过各自充当商品加工者来物化过程和关系。也就是说,人们不将自身视为自己生活的集体生产者,而是充当市场个体动因。

在哈特尔看来,这意味着人们是个体商品加工者,交换个体商品——例如劳动力,或者任何要出售的东西。但这是错误观念,因为这会使人误认为其面对的是人作为个体动因交换的个体物品。反之,我们应将整个社会现实视为一个过程,一组我们参与其中并可以共同改变的关系。人们普遍认为,关系和过程,或者说整个社会,现在是以碎片化的形式呈现,正如一组个体物品和一组个体动因。这意味着在新自由主义经济中,人们有一种碎片感和孤独感,感到自己是市场个体动因。而人们所面对的是由数百万个物品构成的精细现实。所有的这些物品似乎将社会现实重建并将其归为客观事实。当卢卡奇将这称为“物化”时,他指的是世界在我们看来更像是一组事物,而不是一组我们凭借自身可以改变的力量、关系和动态。而当我们面对“客观现实”这样的事物,我们最终与世界形成了一种“沉思式关系”,即我们认为自己再也无法改变这种现实;只能从有一定距离的沉思角度来看待它。

这正是居伊·德波在其于1967年出版的《景观社会》中进一步阐述的内容。德波也谈到了世界看似正在被物化——但他的观点与哈特尔略有不同,他认为只有当人们是被动消费者时,才能称为人们是以沉思的方式在面对物化的现实。他之所以强调了消费的概念,是因为如今世界在图像和表征里自我复制。

在政治世界中,这意味着人们对富含情感的、非现实的(虚构的)图像世界的反应越来越多,并以具体的公共表达形式呈现出来。这在一定程度上是对被困在扭曲的加倍图像里的反应。在此我无法对该问题进行详细探讨,不过,该问题基本上已在西奥多·W·阿多诺和马克斯·霍克海默的《启蒙辩证法》(1944)中得到阐述。这里的问题在于大量的投射——恰恰是在不了解现实情境或真实主体的情况下——自身的问题和欲望被投射到实际上并不存在的替代主体上。因此,举例来说,我们不可能用论证的方式来反驳种族偏见;这种对自身欲望生产的转移所带来的心理益处过大。<sup>2</sup>这可以说是对被动沉思态度的主动反应,因为它不以历史或其他知识为导向,也不以任何差异化的理解或定向解决方案为导向。

### NFT——沉思式物化?

在艺术界,整体数字化还带来了其他影响。例如,物化的过程被像非同质化代币(NFT)这样的数字艺术作品不合理地放大;非现实的数字图像主要被用于投机,而艺术市场尤其容易受其影响,因为艺术市场很大程度上不受监管,比如说,其内幕交易没被禁止。<sup>3</sup>2021年11月,数字货币比特币的价格开始暴跌,其他主要加密货币的价格也随之下跌。2022年2月,俄罗斯对乌克兰发起袭击,世界局势

变化,股市崩盘,人们对风险投资的热情消退。与此同时,加密货币市场的成交量减少了一半以上。2022年7月,全球最大的NFT艺术百货公司OpenSea裁员20%的员工。无聊猿游艇俱乐部(Bored Ape Yacht Club)头像包含10,000张电脑生成的卡通猴脸作品,曾被众人渴望拥有,现在仍在出售。无聊猿7827号戴着耳环、黄色帽子和眼镜,曾以8794以太币的价格被售出,在当时该价格相当于1900万欧元。如今,7827号的售价大约为17.2万欧元。加密货币市场上的一些藏品在年初时以数百万美元的价格售出,现在却平均贬值了92%。如今,市场整体情绪相当低迷,而且某种程度上而言,价值评估已制度化。艺术藏家和艺术家在X平台上碰头,形成以一小群白人女性和男性为主的核心专家。其中一位专家阿尼卡·迈尔(Anika Meier)解释道:

“简单来说,NFT是数字鉴定证书。而且你可以在区块链上查看,例如,艺术品是否为包含了十件作品的系列创作,是否仅此一件,以及是哪位艺术家所作。还有,如果该作品已售,它是被存放在了哪个钱包里——即NFT被谁所拥有。所有的这些信息在区块链上都是透明公开的。有趣的是,艺术家们现在开始将NFT(即数字艺术作品)与实体艺术作品相结合。”<sup>4</sup>

一般而言,NFT代表着超资本主义的逻辑发展;这些作品主要作为投机对象被购买。从策展的角度来说,这些作品的呈现形式往往极其传统且乏味;显然,对艺术空间——“白立方”的借鉴必须被保留,以保证作品的高贵地位和价值归属。这些关于异化的理论性思考是如何体现在策展中的?维也纳美景宫的NFT作品即是一个例子。这近乎是种讽刺:维也纳美景宫出售了有关古斯塔夫·克里姆特



OnCyber平台上的NFT画廊示例。来源:blog.zenft.xyz

(Gustav Klimt) 的画作《吻》(The Kiss, 1908-1909年) 的虚拟拼图碎片。这笔交易在网站上进行, 为在疫情期间蒙受了巨大经济损失的博物馆带来了一大笔收入。这强化了社会理论中所描述的沉思式的被动态度, 因为购买意味着一种决策参与。但我不想完全谴责这种融资方式。一方面, 博物馆和艺术机构确实常常面临资金匮乏的难题。另一方面, 对于博物馆的未来来说, 以提供类似游戏的东西作为着手点至关重要。与其他类似的情况一样, NFT 和其他数字作品现在通常比普通艺术品更便宜。这似乎在暗示某种民主化。然而, 这其实表明了一种所谓的参与取代了真正参与的可能性。博物馆处于注意力经济的争夺中, 并采用了资本主义的剥削逻辑; 真正的购买行为仍然处于非现实/数字的状态, 或者说的更直白点, 与社会(即政治)影响无关。此外, 传统的性别关系体现在购买行为中, 《吻》就是例子, 而且体现在构成市场的专家小圈子中。

### 超现实作为第三空间

正如以上这些例子所示, 为了更好地理解关于去领土化数字图像的现象, 有必要在讨论时抛开现实与非现实的二元论。

让·鲍德里亚在其著作《拟像与仿真》(1981年) 中提出了超现实主义项目, 质疑了图像的无限流通如何成为了后现代主义的基本节奏, 并预示了我们面对的(后)数字时代的当下。<sup>5</sup>这既包括社交媒体上图像的流通, 也包括图像制造的隔阂, 这些隔阂体现在诸如深度伪造和假新闻等颇具争议性的图像变体中。数字世界使现实与非现实重合, 并形成了第三空间: 超现实。主体不再能够区分真实与虚假, 信息具体的、基于事实的真值因而被推翻了。有别于马歇尔·麦克卢汉提出的“媒介即信息”, 数字化的真实世界基于一套规则诞生。

2009年, 黑特·史德耶尔提出“弱影像”(poor image) 的概念, 引发了一场对图像真实性的普遍批判。同时, 人们也开始接纳那些如今充斥在表情包驱动的互联网上的、被再制造的、往往有缺陷的复制粘贴的图像。<sup>6</sup>这不仅让史德耶尔在政治上颇有建树, 也证明了这些图像确实可以位于一个真正的政治维度, 即它们纯粹的“存在状态”。这些图像的存在独立于图像的来源, 独立于创作这些图像的使命意识主体的逻辑。史德耶尔着重探讨了图像产生的效应, 这些效应对当今社会产生了实际而真实的影响。关键在于, 尽管人们可以假设图像来源于非现实, 人们仍然应该审视图像真实的政治意义, 揭示这些意义, 并将其带入艺术讨论中。

本杰明·布拉顿(Benjamin Bratton) 在其关于后新冠疫情危机的文章中明确指出, 危机局势暴露了紧急状况, 并恢复了现实的可见性。<sup>7</sup>因此, 自2021年以来, 有一种明显的趋势出现了, 即当信息铺天盖地涌来, 但却无法“顺畅地”发挥作用时, 人们将随处可见的图像的非物质性和非现实性与图像的物质状态重新联系起来。这种混乱的时刻, 即布拉顿所提到的与疫情时期有关的挣扎, 引出了关于数字条件状态和来源的问题。

尤西·帕里卡 (Jussi Parikka) 在其著作《媒介地质学》中已表达了这一观点, 他写道: “数据挖掘或许是当今数字时代的热门词汇, 但唯有使挖掘与根基 (ground) 及其脱根基 (ungrounding) 联系在一起, 我们才能实现数据挖掘。”<sup>8</sup>早在2015年, 帕里卡就明确指出, 创造数字图像所带来的环境开发和环境破坏可追溯至物质基础。人们常常认为非物质性不仅具有真正的推动力, 而且会对物理世界产生直接影响。因此, 问题在于如何在策展和艺术领域中(重) 定位数字艺术。

### 情境化和本土化的策展实践

如今, 批判性策展方法力求以积极参与、批判和思辨的方式, 来抵消数字艺术所强化的沉思式客体化现象, 即用被动态度面对世界的现象。为了对此进行说明, 我将以近年来在 *OnCurating* 框架下开发的数字艺术项目为例。我认为这些项目能使人通过身体、场所以及产生和体验知识的政治维度, 重新与物质世界互动。

某种程度上, 我们遵循一种情境化知识的逻辑, 即认真对待图像生产及其带来的后果, 使艺术生产的条件可见, 并赋予其固定的地点和时间。正如帕里卡所建议的那样, 这可能包括了向观众揭示涉及自然开采的技术条件, 或允许图像或艺术作品的表演性重构通过参与和有意识地回归实体空间发生。

正如唐娜·哈拉维 (Donna Haraway) 所言, 策展的最终目标是将生产者的责任不断融入观众的解读语境: “此外, 一个人不可能在对这一发展过程不承担任何责任的情况下, 将自己重定位于有利位置。视野始终关乎观看的力量。”<sup>9</sup>在我看来, 重定位是指将关于艺术作品所具有的关于系统、状态和结构的知识与所有观展观众的(自我) 反思联系起来。从这个意义上来说, 我旨在以在 *OnCurating* 第53期中所述的“乐谱” (Scores) 项目为基础, 将这种逻辑扩展为后数字形式——使其成为我们所说的政治思维形式, 这种思维形式并非植根于表征权力, 而是植根于激活和反思。这种策展方法致力于创造同理心、文化交流和关联性。<sup>10</sup>总之, 近期关于跨媒介和策展研究的理论都趋向于一个观点, 即将艺术和观众重新“落地”——无论是字面意义上还是比喻上——对于对抗数字作品无地方性的陷阱来说至关重要。重定位为人们更加深入地参与到展览中和进行批判性思考提供了其所需的摩擦、语境和共同空间。

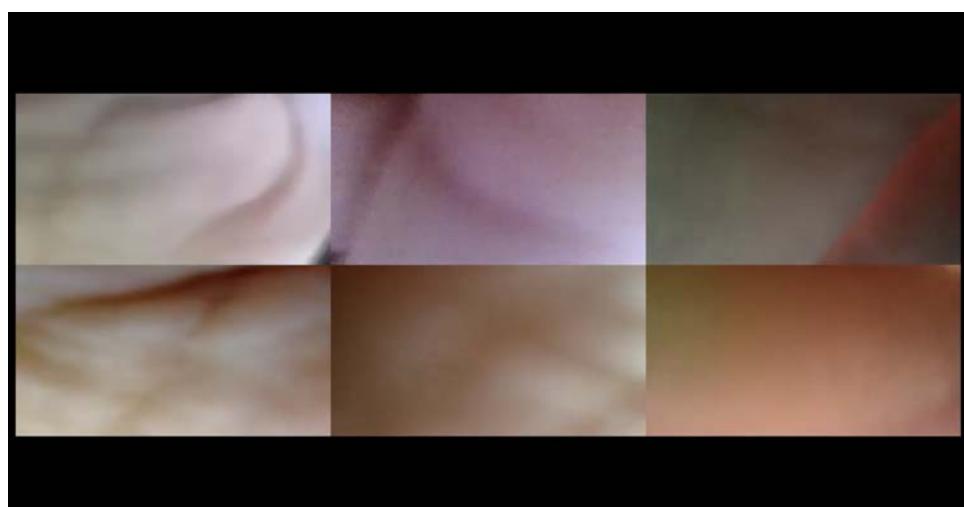
“我们都在这里吗? 探索当今的具身虚拟性” (*Are We All Here? Exploring Embodied Virtuality Today*, 2021年)、“未来社群的小型项目” (*Small Projects for Coming Communities*, 2019年至今) 和“我需要的只是注意力” (*Attention Is All I Need*, 2025年) 这三个项目尤其体现了策展工作如何对策展主题和艺术作品重新定位。这些项目都通过创造体验来应对数字作品的无地方性, 项目所带来的参与、评论或与共享物质环境互动等体验能够在物理上或情境上吸引观众。

### “我们都在这里吗?探索当今的具身虚拟性”

在OnCurating项目空间(OnCuratingProjectSpace),我们在“我们都在这里吗?”(*Are We All Here?*, 2021年)中展示了早期网络艺术。该展览的核心主题聚焦于存在与缺席、被动与参与这两组概念性的矛盾。例如,在爱德华多·卡茨(Eduardo Kac)的《传送无名国度》(*Teleporting an Unknown State*, 1994-1996年, 2021年再演绎)中,光可以(而且必须)以数字方式传送到植物上;这里的光始终与发送点的光相对应。从根本上来说,这是在尝试对抗彼得·韦贝尔(Peter Weibel)所描述的“无地方性”。<sup>11</sup>这件作品包含一个直播流媒体和一株仅靠投影光线生长的植物,将远程信息处理与有形的本地生物体相结合。卡茨的作品被放置在一个混凝土房间中,观众可以绕着装置走动,给植物浇水,或者看到自己的身体与提供光线的实时视频设备并列。策展人通过强调场域特定性和时间性,将关于虚拟连接性的讨论置于实体互动中,将线上空间视为与特定时刻和地点相关的事



“我们都在这里吗?”(*Are We All Here?*)展览现场图,项目空间,苏黎世,2021年



“我们都在这里吗?”(*Are We All Here?*)展览现场图,项目空间,苏黎世,2021年



“我们都在这里吗?”(Are We All Here?) 展览现场图, 项目空间, 苏黎世, 2021年



爱德华多·卡茨(Eduardo Kac),《传送无名国度》  
(*Teleporting an Unknown State*, 1994-1996年, 2021年再演绎), “我们都在这里吗?”展览现场图



“未来社群的小型项目”(Small Projects for Coming Communities) 展览现场图, ARKO艺术中心, 首尔, 2024年



“未来社群的小型项目”, 与马丁·吉纳德(Martin Guinard)及第十二届台北双年展“重新思考全球化”合作完成, 线上展出, 2021年

件, 而非不受时间束缚的数字档案。对于观众来说, 这源于对虚拟空间与现实空间的区分不再那么清晰。观众身处一个反馈环中, 无论是在线上还是线下看展, 都被期待着反思自身所处的具身立场。展览使“具身虚拟性”变得可感知, 并引发了人们对关于线上在场和过时的自然/文化二分法的批判性思考。

我们还邀请了编舞家贝·范·瓦克(Be van Vark)与在疫情期间仅通过Zoom有联系的、在家隔离的学生合作。我们与这些在家隔离的学生进行了三次工作坊, 其中大多数学生从未在共同的现实空间中见过面。工作坊的最终成果是一部视频作品, 该视频展现了数字手段制造并加强了人与人之间的不适感和亲密感。在视频拍摄的过程中, 视频主角们反思了自己的处境、恐惧和孤独感。然而, 该视频也暗示了如何通过一些肢体上的小动作、舞蹈和有趣的时刻来摆脱孤独感, 建立人与人的联系。视频以对皮肤表面的特写镜头作为结尾画面。对此, 关于数字亲密感的影像论文《我们都在这里吗?》(Are We all Here, 2021年, 7分13秒)讨论了(自我)隔离、实体接触的丧失和单一化这些议题, 并展现了对数字亲密感的积极反思, 以及对新的联系方式和相关语境的探索。<sup>12</sup>

## “未来社群的小型项目”

在数字实践中,我们也能观察到很多作品在转为表演形式——这种转变强调现场感以及观众与表演者之间的共同在场。新冠疫情期间诞生的“未来社群的小型项目”致力于抵制数字去本地化的现象,因而引人关注。<sup>13</sup>

该项目在虚拟空间中进行,但通过融入本地立场,能适应于不同语境。我们邀请艺术家设计乐谱——创作受激浪派运动启发的简短行动指南——并与一个学生小组合作。这些乐谱构建了迷人的时刻,使人们在屏幕前观察自己的身体——这既在抽象的数字空间,也在现实的具身场景中发生。我们有意摆脱了机构化的“白立方”,从根本上开放了创作权。该项目由多种乐谱组成,使人们能够从集体未来的角度重新思考当下。

Neue Dringlichkeit 团体创作的一首名为《未来故事》(Future Storytelling) 的乐曲,邀请观众想象五十年后社会问题得到解决的情景,并让他们共同想象这样的未来是如何实现的。这项练习激发了人们新的思考,带来了令人愉悦的展望。通过共同构思这些愿景,观众不再将自己视为孤独而渺小的个体,而是共同创造了一个产生前瞻性思考和灵感的空间。

这种思辨逻辑可以被解读为对罗兰·迈耶 (Roland Meyer) 提出的连接的数字图像 (conjunctive digital image) 理论的借鉴。<sup>14</sup>《未来故事》是对“如果”(as-if) 的重新挪用,并将其转化为确切的模拟实践。想象与思辨在此交汇,成为重定位的形



“我需要的只是注意力”(Attention is all I need),与巴塞尔电子艺术馆(HEK Basel)及柏林OnCurating学院的学生们合作完成,线上展出,2025年

式。“未来社群的小型项目”通过一个项目——在首尔ARKO举办的展览及持续举办的工作坊——实现了最新一次激活。展览上放映了关于激浪派的影片《激浪现在,用摄像机探索激浪派》(Flux Us Now, Fluxus explored with a camera)作为历史参照。在展览同期举办的工作坊中,“小型项目”网站上的乐谱被用于收集和探索在展览空间中创作艺术的新形式。<sup>15</sup>

### “我需要的只是注意力”

“我需要的只是注意力”是一场于2025年举办的线上展览,旨在探讨在当今注意力经济的逻辑下的数字自我呈现,由change to “容尼-比克斯·邦格斯(Jonny-Bix Bongers)”策划,与巴塞尔电子艺术馆(HEK)和OnCurating学会合作完成。展览标题呼应了人工智能领域的奠基性论文《你需要的只是注意力》(Attention Is All You Need)<sup>16</sup>,既致敬了算法机制的可见性,也体现了人类追求有意义的关注。该项目将自我视为一个策展场所,并以此表明,在数字时代自我成为了策展实践。互联网用户通过虚拟形象、个人资料和表演性角色,参与了持续的、审美化的线上自我策展劳动。<sup>17</sup>

策展形式本身并未将这种状态呈现为固定的评论,而是呈现了反策略:通过将这些虚拟自我表演在艺术语境中以及最终在实体空间中重新定位,该项目不再将身份视为去具身性的抽象概念,而是将其视为共同反思和讨论的场所。“我需要的只是注意力”在整个线上阶段将网络激活,使网络成为一个实时的参与式场所。艺术家们不仅贡献了深度伪造、3D形象和浏览器实验,还与OnCurating学



“我需要的只是注意力”,与巴塞尔电子艺术馆及OnCurating柏林学会的学生们合作完成,线上展出,2025年

会的学生们一起完成了三场参与式线上工作坊。例如,奥尔洪·梅尔辛(Orhun Mersin)的远程工作坊“拖拽自我”(*Dragging the Self*)邀请参与者使用深度伪造技术处理他们的图像,并通过运用酷儿女权主义理论对这一过程进行反思。尽管这些工作坊均为线上举办,但它们强调了情境化动作:每位参与者都身处某个地方——在沙发上、厨房里、其所处的城市——通过现实中的姿态来演绎身份,并创作视频素材,随后这些素材又被艺术家们拼接起来。数字化并没有取代在场,而是成为了通向具身化、批判性共存和集体学习的门户。

在这种策展形式下,展览中的数字化并非中立地带。相反,基础设施本身成为了被展示的物质性的一部分。例如,在达姆扬斯基的《她爱我,她不爱我》(*Sie liebt mich, sie liebt mich nicht*, 2023年)中,两个聊天机器人有着脆弱的互动。该作品揭示了算法逻辑和审查制度,展现了因数字身份流通出现的限制。从这个意义上说,“我需要的只是注意力”构建了一个具有反思性的界面,鼓励用户慢下来,去思考可见性指标和平台规范是如何塑造了他们的主观性。

“我需要的只是注意力”的闭幕式——于柏林DOCK 11举办的线下聚会——并非附加环节,而是关于重定位的关键时刻。尽管我们最初计划完全采用线上形式举办该展览,但还是忍不住邀请艺术家和观众在DOCKdigital的Saal4空间参加闭幕式。我们原本计划在线上呈现个人导航,如今这在闭幕式的相聚中再次被具身化,有关闭幕式的讲话也因此被放置在充满互动、情感和对话的情形中。在闭幕式上,我们与“实时事务”(*Realtime Affairs*)系列讲座合作。阿拉波普(Allapopp)、卡拉·斯特雷克沃尔(Carla Streckwall)和金·阿尔布雷希特(Kim Albrecht)等艺术家就其创作进行了鼓舞人心、颇有即兴意味的演讲,引发了与观众的非正式对话和交流。

由此,“我需要的只是注意力”证明了一种针对数字主观性和自我呈现的、强有力策展模式。这种模式拒绝技术迷恋或技术怀旧,而是在艺术家、互联网用户、朋友、工作坊参与者和合作者的网络中,在虚拟与实体之间架起联系的桥梁。在展览中,线上身份被视为会改变的和表演性的存在,同时也被视为一种可扎根和承接集体反思的,并可通过共同体验转化得来的东西。

## 初步结论

在“我们都在这里吗?”“未来社群的小型项目”和“我需要的只是注意力”这三个展览中,我们形成了一个共同信念:数字时代的策展必须包含有意的重定位和再语境化。这并非怀旧地回归物质性,而是战略性地对现实与非现实进行重新平衡,塑造并回应社会政治语境。因此,重定位不仅仅是一种空间策略。重定位是一种坚持摩擦、在场和语境的策展实践,是对抗无地方性消费和非具身景观的解药。这些项目展现了策展人如何打造实体、虚拟或两者混合的环境,使观众不仅是观看或点击展览,而是置身其中,并从其所在立场进行反思。

无论是借助由网络传输的光线才能生长的植物,还是要求观众通过赤脚在公寓里走路来体验的乐曲,亦或是最终以目光跨越房间交汇而结束的直播。这三个展览表明,置身其中,与他人并肩同在以及一起慢慢感受某个瞬间,这些行动中都蕴含着力量。

在这个注意力分散的时代,策展的重定位是一种政治姿态。重定位为情境化的反思创造了时间和空间。重定位承认了观众身份作为参与式共同在场所带来的消解和重新定义,在这种情况下,观众、参与者和共同创作者的角色变得不分彼此。重定位也开辟了遐想空间——“如果”社区、关于未来的想象、临时集会——供人们试验不同的共处模式。

## 注释

**1** 约翰·哈特尔,《新冠疫情/景观》(“Corona/Spectacle”),苏黎世艺术大学MAS策展项目线上讲座,2020年10月2日,详见[www.curating.org](http://www.curating.org)。

**2** 西奥多·阿多诺、马克斯·霍克海默,《启蒙辩证法:哲学断片》(*Dialectic of Enlightenment. Philosophical Fragments*,斯坦福:斯坦福大学出版社,2002年),详见“反犹太主义的要素”一章。

**3** 详见相关广播专题节目的译文:《监禁、索赔、名誉受损——破碎的NFT梦想的后续影响已开始》,德国广播电台,“NFT究竟是什么?NFT是数字识别码。它们独一无二、不可替代且无法复制。它们可用于标记图像、交易卡、音乐、推文等文件。通过购买NFT(本质上是一种所有权证书和鉴定证书),您将获得该数字作品的独家使用权。因此,NFT对藏家等群体具有吸引力。价格取决于需求。NFT代表非同质化货币,即不可交换的物品。”2023年8月24日,2025年9月30日参阅,<https://www.deutschlandfunk.de/haftstrafen-schadenersatzforderungen-imageverluste-die-aufarbeitung-geplatzter-nft-traeume-hat-begon-100.html>

**4** 阿尼卡·迈尔于OnCurating学会的演讲,柏林Radialsystem,2024年12月6日。

**5** 让·鲍德里亚,《拟像与仿真》(*Simulacra and Simulation*,安娜堡:密歇根大学出版社,1994年)。

**6** 黑特·史德耶尔,《为弱影像辩护》(“In Defense of the Poor Image”),e-flux期刊第10期,2009年11月,<https://www.e-flux.com/journal/10/61362/in-defense-of-the-poor-image>。

**7** 本杰明·H·布拉顿,《现实的复仇:后疫情时代政治》(*The Revenge of the Real: Politics for a Post-Pandemic World*,伦敦:Verso Books,2021年)。

**8** 尤西·帕里卡,《媒介地质学》(*A Geology of Media*,明尼阿波利斯、伦敦:明尼苏达大学出版社,2015年),第58页。

**9** 唐娜·哈拉维,《情境化知识:女权主义中的科学问题与局部视角的特权》(*Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective*)。*Philosophical Literary Journal Logos*,第32卷,第1期(2022年1月1日):237-271页。<https://doi.org/10.22394/0869-5377-2022-1-237-268>。

**10** “乐谱——从情境化知识到共享行动——ONCURATING”(“Scores—From Situated Knowledges to Shared Action—ONCURATING,”),日期不详,<https://>

[www.on-curating.org/issue-53-reader/scores-from-situated-knowledges-to-shared-action.html#:~:text=We%20see%20this%20project%20therefore,instructions%20on%20exercises%20and%20group。](https://www.on-curating.org/issue-53-reader/scores-from-situated-knowledges-to-shared-action.html#:~:text=We%20see%20this%20project%20therefore,instructions%20on%20exercises%20and%20group。)

**11** 彼得·韦贝尔,《无地方性的历史和远程信息社会》(*Die Geschichte der Ortlosigkeit und die Entstehung der Ferngesellschaften*), 费利克斯·布尔达纪念讲座“标志性转变”(*The Iconic Turn*), 系列讲座之一, 2012 年 8 月 23 日发布于 YouTube 平台, 2025 年 9 月 30 日参阅, <https://www.youtube.com/watch?v=5llpNADoqYM>。

**12** “我们都在这里吗?探索当今的具身虚拟性”是于OnCurating项目空间举办的群展。展览空间的重点是爱德华多·卡茨的作品《传送无名国度》(1994年/1996年), 这是一件早期的互动式生物远程信息作品, 该作品于2021年的展览中被再概念化。该作品中的装置将远程信息存在(实时流媒体网络摄像头)与地球这个概念结合在一起, 在这里地球这个概念用一株仅通过屏幕接收光线的植物来代表。其他参与式作品包括与编舞家范·瓦克合作制作的影片, 参见贝·范·瓦克,《关于数字亲密关系的影像论文》(*Video essay on digital intimacy*, 2021年, 视频, 七分十三秒), 参见<https://www.curating.org/digital-choreography/>

**13** 参见<https://www.comingcommunities.org/>和“乐谱——从情境化知识到共享行动——ONCURATING”, 日期不详。 <https://www.on-curating.org/issue-53-reader/scores-from-situated-knowledges-to-shared-action.html#:~:text=We%20see%20this%20project%20therefore,instructions%20on%20exercises%20and%20group。>

**14** 罗兰·迈耶, 2023年国际摄影影像节演讲, 波恩VR-波恩博物馆, 2023 年, YouTube 视频, 14分34秒, <https://www.youtube.com/watch?v=ag1k1Ujb7PY&t=874s>

**15** 项目“进入节奏——从乐谱到接触地带”(*Into the Rhythm - From Score to Contact Zone*)由 OnCurating(多萝西·里希特、罗纳德·科尔布)和 ARKO(策展人海娜·诺、制作人海彬·李)共同策展;参与的艺术家包括“未来社群的小型项目”、玛雅·明德(Maya Minder)、!Mediengruppe Bitnik with 萨克罗夫斯基(Sakrwoiski)和巴鲁克·戈特利布(Baruch Gottlieb)、桑·凯勒(San Keller)、Sohn Younwon、施蒂尔尼曼-斯托亚诺维奇(Stirnimann-Stojanovic)、亚格旺(Yagwang)、伊丽莎白·埃伯勒(Elisabeth Eberle)、约·达哈姆(Yo Daham)、艺术空间Tangerine Collective、帕洛玛·阿亚拉(Paloma Ayala);合作者包括 Green Recipe Lab、Re#sister Korea、Louise the Women、art parenting social club、Piece of Peace、jongdarjung、河恩宾(Eunbeen Ha)。

**16** 瓦斯瓦尼 (Vaswani), 阿希什 (Ashish), 诺姆·沙泽尔 (Noam Shazeer), Niki Parmar (尼基·帕尔玛), 雅各布·乌斯科雷特 (Jakob Uszkoreit), Llion Jones, 艾丹·N·戈麦斯 (Aidan N. Gomez,) 卢卡斯·凯撒 (Łukasz Kaiser), 和伊利亚·波洛苏欣 (Illia Polosukhin), 《你需要的只是注意力》, *Advances in Neural Information Processing Systems*, 第30卷, 2017年, 5998-6008. arXiv:1706.03762。

**17** 柏林, Dock 11 & Eden。“我需要的只是注意力—DOCK 11”, 2025年5月30日, “我需要的只是注意力”, 日期不详, <https://dock11-berlin.de/en/digital/program/schedule/attention-is-all-i-need#:~:text=Join%20us%20on%20May%2030th,installation%2C%20music%2C%20drinks%2C%20and%20dialogue。>

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**多萝西·里希特 (Dorothee Richter)** 是英国雷丁大学当代策展专业 (Contemporary Curating) 的教授, 同时也是该校策展实践博士项目的负责人。她曾任瑞士苏黎世艺术大学策展研究生项目 (CAS/MAS) 负责人。里希特拥有丰富的策展经验: 她发起“策展零度档案库” (Curating Degree Zero Archive), 并曾担任不来梅艺术家之家 (Künstlerhaus Bremen) 的策展人, 策划了多场关于当代艺术中的女性主义议题的研讨会, 以及一个名为“材料/材料” (Materials/Materials) 的女性主义实践档案库。里希特还与罗纳德·科尔布 (Ronald Kolb) 共同执导了关于激浪派的影片《激浪现在, 用摄像机探索激浪派》 (Fluxus Now, Fluxus Explored with a Camera)。她最近的项目是2024年在首尔ARKO艺术中心举办的合作展览“进入节奏——从乐谱到接触地带” (Into the Rhythm: From Score to Contact Zone)。该项目由OnCurating (多萝西·里希特、罗纳德·科尔布) 和ARKO (策展人海纳·卢、制作人海彬·李) 联合策划。里希特是OnCurating.org的执行编辑兼主编, 并于近期创立了OnCurating柏林学会。

# Beyond Matter. An Inquiry into the Modes of Exhibition Practices in the Virtual Condition

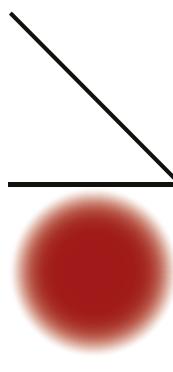
## Lívia Nolasco-Rózsás

Beyond Matter. Cultural Heritage on the Verge of Virtual Reality (2019-23) was an international, collaborative, practice-based research project engaged with a contemporary shift in the production and mediation of visual art within institutional frameworks. The context of the project is largely attributable to the rapid development and ubiquitous presence and use of computation and information technology, specifically augmented and virtual reality alongside artificial intelligence.

The shift is seismic and it is leading to a condition that may be summarized as “the virtual.” If the postmodern condition was a “crisis of narratives,” as Jean-François Lyotard put it,<sup>1</sup> then the virtual condition reveals a crisis of dichotomies. Its analysis suggests that dichotomies are losing their validity: presence and absence, physical and computer-generated, real and simulated. The algorithmically-generated actuality increasingly dominates our reality, intertwines the physical with the virtual, and skews the linearity of time. This has extensive implications for the spatial aspects of the curation and mediation of visual arts, as well as their reception by a public whose affinity for technology is ever-increasing. The museum transmogrifies into a hybrid entity whose geographical location is extended by various digital platforms; instead of one there is a confluence of exhibition spaces, an extended but also porous system of multiple dimensions.

The virtual condition is thus a tendency in cultural spheres toward the interdependence of physical and digital spaces, as well as the coexistence of multiple exhibition temporalities for art’s mediation and reception. It is based on an ontological perspective of virtual realism, which considers the virtual to be as real as the physical. It relates to and results from a dynamic genealogy of culture-related general conditions, such as Jean-François Lyotard’s postmodern condition (1979), in which the metanarratives that were a quintessential feature of modernism became generally untenable. These include the post-medium condition described two decades later by Rosalind Krauss (1999), or Peter Weibel’s post-media condition (2012) as new technologies and tele-communications infiltrating the arts. It overlaps with various other contemporary conditions, such as the digital condition identified by Felix Stalder (2017), the planetary condition by Yuk Hui (2020), and the curatorial condition by Beatrice von Bismarck (2022).<sup>2</sup> The Beyond Matter project scrutinized the virtual condition in art production and mediation by means of practice-based research, resulting in a plurality of media that includes virtual and augmented realities, digital models and digital artworks, presented in a network of computer-based and physical exhibition spaces that generated hybrid experiences.

The creation of generative networked spaces to display art and produce knowledge is not a novelty; it has unfolded hand in hand with the development of computation’s ability to visualize simulated or generated spaces that may or may not resemble our observable surroundings and the ways in which we perceive them.



# Beyond Matter Cultural Heritage on the Verge of Virtual Reality

Logo of the project Beyond Matter, 2020. Design by AKU Collective

Throughout the Beyond Matter project, various activities took place as a result of the practice-based research on the virtual condition undertaken by the partner institutions. Through our common endeavor, the partners aimed to produce a “pool of tools”<sup>3</sup> and related knowledge to help arts practitioners, curators, and museum professionals understand the shift described above and then plan and implement best practices. Putting an emphasis on the spatial aspects of art production, curation, and mediation, the project included the digital revival of selected past landmark exhibitions, the curation of new art and archival exhibitions, conferences, artist residency programs, an online platform, and publications. These multiple actions were based on the virtual condition but also reflected on it.

Beyond Matter was led by ZKM | Center for Art and Media Karlsruhe, and the collaborators comprised of researchers and curators at: Aalto University, Espoo; Centre Georges Pompidou, Paris; Ludwig Múzeum – Kortárs Művészeti Múzeum (Ludwig Museum – Museum of Contemporary Art), Budapest; Tallinna Kunstihooone (Tallinn Art Hall); Tirana Art Lab – Center for Contemporary Art; and the associated partners EPFL Pavilions, Lausanne; HAWK – University of Applied Sciences and Arts, Hildesheim, GIM Gesellschaft für Innovative Marktforschung GmbH, Heidelberg and Bio Design Lab at Karlsruhe University of Arts and Design (HfG). These are institutions of varied scales and profiles with a shared interest in the innovative use of digital technologies to reach non-local audiences, to expand their exhibition spaces digitally, and to create hybrid access to the content they wish to mediate. With this project they each ventured into new territory.

At the heart of Beyond Matter was an exploration of the potential harbored in computer-generated exhibition spaces. The key focus areas, examined through an array of approaches, were formed by notions of space and their meaning in the context of artistic and exhibition practice, as well as by perceptions of the reciprocal relationship between computer-generated virtual and physical spaces — and the immersive features in them — from the points of view of all actors of the constellation within an exhibition.<sup>4</sup> This exploration manifested in various ways throughout the projects; for example in the modeling of two historical exhibitions or through inviting artists to elaborate their take on the virtual from diverse angles.

In the context of art production and mediation, the word “virtual” often appears together with “reality.” Virtual reality is predominantly understood as a term for computer-aided interactive and immersive environments accessed via screened images and in many cases additional devices (such as head-mounted displays). Dissecting the

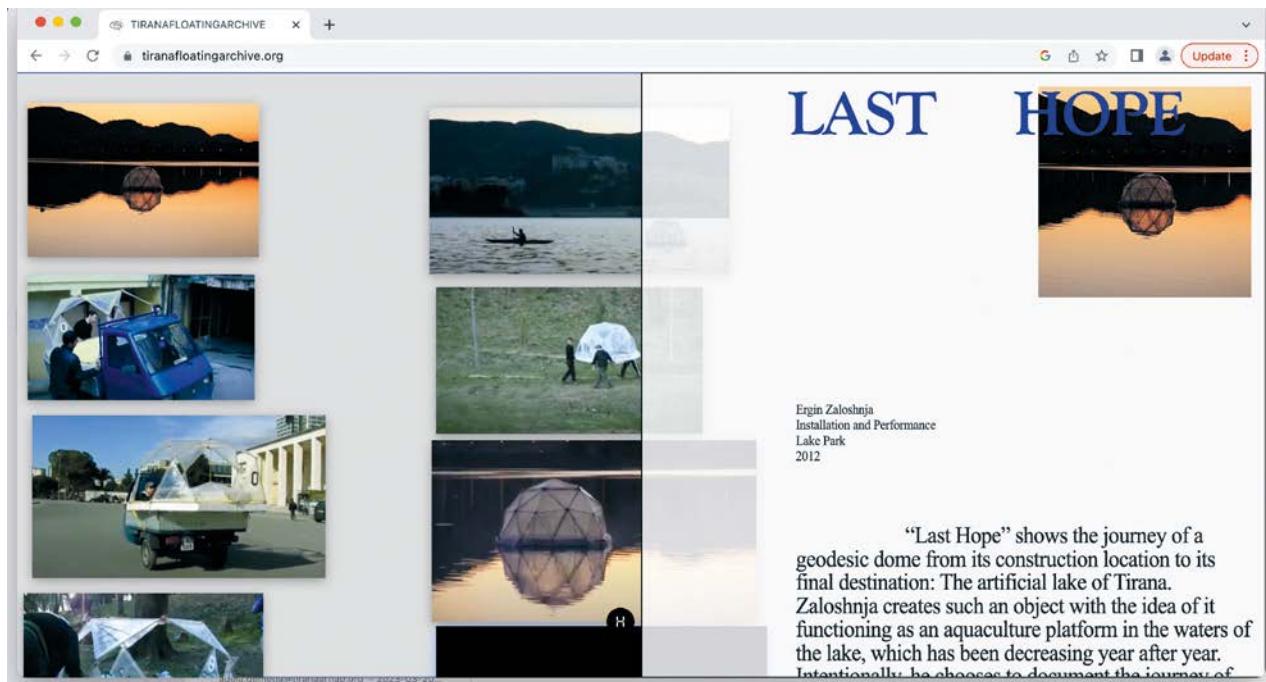
term “virtual reality,” including its etymology, aids in understanding the condition brought about by the technological opportunity to create relatively sophisticated representations of anything we can perceive and calculate digitally. Indeed, deconstruction serves as a basis for constructing new terms, which in turn serves to contextualize art production and mediation. Donna Haraway came up with an apparently deconstructive yet genuinely constructive method to evolve the abbreviation SF into versatile pairings of words.<sup>5</sup> Generally standing for science fiction, SF was subjected to a word game as Haraway formulated other terms that it could stand for, all of which relate in meaning to science fiction or offer an alternative to it, such as “speculative fabulation” and “string figures.” Inspired by how all these new SF terms joined Haraway’s arsenal of methodologies, we applied her formula to VR and found that it could stand for a variety of terms beyond virtual reality: viral radiation, valid readings, vaporous restoration, variable relations, visible revision, visionary ramblings, and many more.

The final publication that summarized the project under the title *Beyond Matter. Within Space. Curatorial and Art Mediation Techniques on the Verge of Virtual Reality*<sup>6</sup> took these envelopments of VR as an initial set of points to frame the Beyond Matter endeavor. Each chapter took one enfolding as its departure point to elaborate on the newly coined term through commissioned essays and descriptions of the outputs of the practice-based research conducted throughout the project, or, in the case of the last chapter, through interviews with the artists and scholars who participated in the Beyond Matter residency program.

The first large-scale exhibition organized in the framework of Beyond Matter: *Spatial Affairs* took place in 2021, in the midst of the Covid-19 pandemic. The various waves of lockdowns made planning of public events, travel, and workflows challenging. Throughout this time art institutions largely relied on online formats. Spatial online art mediation formats had constituted the main focus of Beyond Matter before the pandemic-related lockdowns accelerated this process of digital expansion.



Screenshot of the online exhibition *Spatial Affairs. Worlding - A tér világára* (2021), <https://spatialaffairs.beyondmatter.eu/en>. Design and programming by The Rodina. Curated by Giulia Bini and Lívia Nolasco-Rózsás.



Screenshot from the *Tirana Floating Archive* (2022), <https://tiranafloatingarchive.org/>. Curated by Adela Demetja, design by Denislav Golemanov.

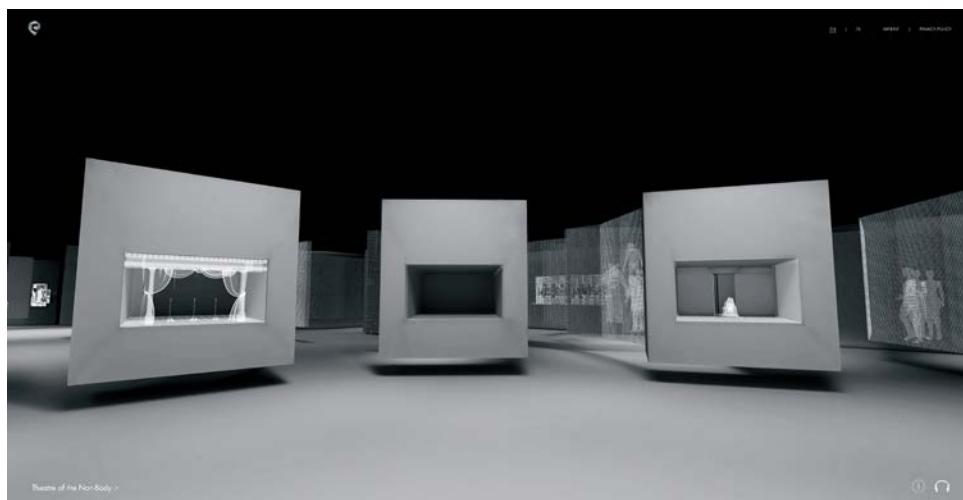
Along with the physical international group show *Spatial Affairs*, presented at Ludwig Museum / Museum of Contemporary Art in Budapest in 2021 and the online environment that enhanced it under the title *Spatial Affairs. Worlding—A tér világája*<sup>7</sup>, the Hybrid Museum Experience Symposium (HyMEx)<sup>8</sup> laid the groundwork for long-term collaborative research regarding the complex dichotomy between the virtual and actual exhibition space. Pre- and post-computational approaches from the interwar avant-garde period through Conceptualism to very recent works of art were selected for *Spatial Affairs*, and they point at the mutual dependence between the algorithmically created and the palpably real. At its conceptual core, the exhibition investigated the binary relationship between the actual and the virtual, the real and the possible, as it evaporates into a multidimensionality in which dualism is undermined, leading to an exploded axes of complex and multiplied notions of space.

Beside *Spatial Affairs*, the *Tirana Floating Archive*<sup>9</sup> was conceived as a virtual space that mediates curated artistic knowledge and aesthetic components unbound from where their physical carrier is actually situated, or where their exhibition takes place. These spaces offer answers to queries about the significance of the space of the exhibition after the post-digital turn, and how art institutions can react to this paradigmatic shift.

Furthermore, on the verge of the physical and digital was also the traveling exhibition *Matter. Non-Matter. Anti-Matter*<sup>10</sup> with a specific focus on its extended iteration at ZKM | Karlsruhe. Each presentation of this exhibition, varying in size and context, had the same element at its core: *The Immaterial Display*, a hardware installation developed to present digital exhibition spaces. The two digital exhibition models shown in the display engaged with *Iconoclash* and *Les Immatériaux*. Based on those two paradigmatic exhibitions, the exhibition and its accompanying program explored the possibilities of virtual exhibition histories.

Taking up the case studies of *Les Immatériaux* (Centre Pompidou, 1985) and *Iconoclash*. *Beyond the Image Wars in Science, Religion, and Art* (ZKM | Karlsruhe, 2002), Centre Pompidou and ZKM | Karlsruhe committed themselves to examining the possibilities of exhibition revival through experiential methods of digital and spatial modeling. Both past exhibitions constituted complex thought experiments deployed through and manifested in space. Both also experimented with innovative ways of juxtaposing scientific, technological, and artistic practices. In their respective ways, *Les Immatériaux* and *Iconoclash* proposed the exhibition as both a medium and an interface with a different level of reflection and creativity.

The models were created with a non-physical and non-reconstructive approach, denoted as “Vaporous Restoration” aiming at the emulation, modeling, or proxy-creation of the two selected past spatial assemblies of artworks. These virtual exhibition models<sup>11</sup> are based on extensive archival research, interviews with experts and the



Screenshot *Les Immatériaux: A Virtual Exhibition* (2022) <https://lesimmateriaux.beyondmatter.eu/>. Concept by the New Media Department of the Musée national d'art moderne—centre de création industrielle, design concept by Aalto University, project management by Matthias Heckel, software development by Netzbewegung GmbH, archival research by Andreas Broeckmann and Marie Vicet.



Screenshot from *Iconoclash as a Digital Experience* (2022), <https://iconoclash.beyondmatter.eu/>. Concept by Lívia Nolasco-Rózsás, UI / UX and motion design by Matthias Heckel, software development by Netzbewegung GmbH, archival research by Felix Koberstein. © ZKM | Zentrum für Kunst und Medien Karlsruhe

curators, and an iterative design process among a large interdisciplinary group. The chosen exhibitions were well-known, complex, self-reflexive instantiations of the medium that outlined escape routes from modernity while elaborating on notions of representation and materiality. The digital models inevitably prompt the question of whether the aura of an artwork, or even of the entire exhibition, can be migrated into the digital realm.

Inspired by a quote from Walter Benjamin,<sup>12</sup> one of the main objectives of *Matter. Non-Matter. Anti-Matter* was to revisit, restore, and re-present these past exhibitions in our spaces using digital technology. The exhibition presented digital models of the two past exhibitions on *The Immaterial Display*, alongside a novel hardware apparatus that was developed specifically for explorations of virtual exhibitions. The models' online launch took place in conjunction with the exhibition opening on December 2, 2022. A selection of artworks and artifacts attested to art's conceptual dematerialization and digital rematerialization. Some artworks were specially commissioned for the exhibition, while others largely came from the collections of Centre Pompidou and ZKM | Karlsruhe, many of which were exhibited in *Les Immatériaux* or *Iconoclash* or both.<sup>13</sup>

The tension between presence and absence and the digital dissolution of the dichotomy between the two phrased as "Variable Relations" throughout the project, which connotes the multiplicity of connections between visitors, artworks, artifacts, scenographies, curatorial concepts, artists, scholars, museum professionals, objects, and subjects. These new relations across virtual and physical spaces give rise to an epistemological shift that manifests in the *Beyond Matter VIEW Platform*,<sup>14</sup> or in the virtual exhibition platform of Tallinn Art Hall.<sup>15</sup>



Exhibition view of *Matter. Non-Matter. Anti-Matter. Past Exhibitions as Digital Experiences* (2022-2023) at ZKM | Center for Art and Media Karlsruhe. Photo: Esteban Gutierrez Gimenez. © ZKM | Zentrum für Kunst und Medien Karlsruhe

The evaluation methods were part of the project. Performance-oriented research and audience and community studies<sup>16</sup> were conducted and followed *The Immaterial Display* on its journey through Europe, while an evaluation automaton was developed and used to evaluate the digital content and interfaces in a hybrid exhibition qualitatively and quantitatively.

Parallel to practice-based research, Beyond Matter enabled artistic research and creation. A residency program<sup>17</sup> enabled fourteen artists to join one of three participating institutions and ramble—in their minds at least. Due to pandemic travel restrictions, not all resident artists and researchers could be present at the host institution and some had to develop and/or exhibit their residency project online. The *Beyond Matter VIEW Platform* contains the entirely online environments and the online parts of larger projects by some of the artists. Despite these logistical challenges, all the results of the residencies could be exhibited or performed in one or more of the frameworks provided by the Beyond Matter project—in the *Matter. Non-Matter. Anti-Matter* exhibition in Tirana, at ZKM, or as part of the group show *Immerse!* at Tallinn Art Hall.<sup>18</sup>

Beyond Matter entangled and intertwined formats, actions, processes, and results and had a complex project architecture. Each partner contributed a layer of research and was involved with different activities. Beyond Matter has also engendered new content—through exhibitions, symposia, discussions, and publications. It also facilitated professional exchange between art institutions, mainly within European countries, and contributed to cultural professionals' skillsets around digital mediation formats by fostering a transnational mobility of artworks and arts professionals. The project also contributed to the digital commons through digitized archival materials and the development of open-source software that is available online and usable by any other cultural organization wishing to provide online access to the cultural heritage in its guardianship.

A further outcome of the Beyond Matter project is the *Generic Exhibition Platform*. Primarily developed for the digital emulation of *Iconoclash*, it is an AI-based software tool that facilitates the generation of digital exhibition spaces. An exemplary online environment demonstrates the features of the software which seeks to encourage museums, art organizations, and cultural professionals to benefit from the open-source tool for the creation of digital exhibitions of their own. In the interest of the participatory and democratic sharing of resources, the software is freely available on the GitHub account of ZKM | Karlsruhe.

For the creation of a new digital exhibition, digital objects (in the form of digital 3D assets) must be uploaded into the respective Content Management System of the generic exhibition platform, alongside information on the assets (author, title, description, etc.), and keywords. Without the digital objects, the exhibition space is an uninterrupted plane. The space is defined by the objects and the user, and the ever-evolving relation between these two agents.

The algorithm developed for the generic exhibition platform determines the position of the digital 3D objects within the digital exhibition space. The profile of an exhibition piece is described by the values of predefined tags. By observing an exhibition piece over a certain period of time and spending time in its activity zone, the user profile of the visitor is defined. The similarity between all exhibits and the visitor is calculated continuously. The visitor attracts exhibits that share coinciding levels of similarity as their user profile.

As the examples show, the project put forward possible directions for practice-based research and creation in non-academic environments such as art centres, museums, art halls, or art labs in the hope that not only the outcomes but the devised methodologies will prevail, and that art institutions will carry on with digital world-making and create online platforms that function as assemblies, so that hybrid experiences in art mediation will soon be widely accepted, and AI-based construction of digital platforms for sharing knowledge will become ubiquitous.<sup>19</sup>

Tackling the dichotomy between virtual and physical exhibition spaces has been the central tenet of Beyond Matter, directly resonating with the concept behind ParaVerse. The examples and case studies above aptly illustrate a tendency that the project refers to as the formation of a multiverse composed of various parallel universes. The potential existence of computer-generated realities enables such parallelisms, positioning curatorial work as an act of world-building.

*This text is a reprint. It is based on the publication Beyond Matter. Within Space. Curatorial and Art Mediation Techniques on the Verge of Virtual Reality, edited by Lívia Nolasco-Rózsás and Marianne Schädler, Berlin: Hatje Cantz, 2024, (<https://withinspace.beyondmatter.eu/>) and was published in Curating Superintelligences: A Reader on AI and Future Curating, Data browser, vol. 10, edited by Joasia Krysa and Magdalena Tyzlik-Carver, London: Open Humanities Press, 2025. (<http://www.data-browser.net>; <http://www.openhumanitiespress.org/books/series/data-browser/>)*

## Notes

**1** Jean-François Lyotard, *La condition postmoderne: rapport sur le savoir* (Paris: Éditions de Minuit, 1979).

**2** These terms reoccur in the texts of the authors, and are elaborated on in the following texts:

Rosalind Krauss, *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition* (London: Thames & Hudson, 1999), 53.

Peter Weibel, “The Post-Media Condition,” *Mute*, March 19, 2012, <https://www.meta-mute.org/editorial/lab/post-media-condition>.

Felix Stalder, *The Digital Condition* (Cambridge: Polity Press, 2017).

Yuk Hui, “For a Planetary Thinking,” *e-flux*, no. 114 (2020), <https://www.e-flux.com/journal/114/>.

Beatrice von Bismarck, *The Curatorial Condition* (London: Sternberg Press, 2022).

**3** The expression “pool of tools” was used by Peter Weibel in the context of the exhibition *Renaissance 3.0* (2023–2024, ZKM | Karlsruhe).

**4** The term “constellation” is used here in the sense Beatrice von Bismarck used it in *The Curatorial Condition* (Berlin: Sternberg Press, 2022).

**5** See Donna Haraway, *SF: Speculative Fabulation and String Figures / SF: spekulative Fabulation und String-Figuren, So Far, 100 Notes—100 Thoughts / 100 Notizen—100 Gedanken*, documenta (13) (Ostfildern: Hatje Cantz, 2011).

**6** Lívia Nolasco-Rózsás, Marianne Schädler, eds., *Beyond Matter, Within Space. Curatorial and Art Mediation Techniques on the Verge of Virtual Reality* (Berlin: Hatje Cantz, 2023). The online version of the book is available open access: <https://withinspace.beyondmatter.eu>

**7** *Spatial Affairs* was curated by Giulia Bini and Lívia Nolasco-Rózsás. The catalog of the exhibition includes texts by Sven Lütticken, Ádám Lovász, Ceci Moss and the curators. Giulia Bini, Lívia Nolasco-Rózsás, Jan Elantkowski, Fruzsina Feigl, Borbála Kálmán, eds., *Spatial Affairs* (Berlin: Hatje Cantz, 2021).

**8** The Hymex Symposium was convened by Borbála Kálmán and Lívia Nolasco-Rózsás. The proceedings of the symposium are available online: <http://hymex2021.ludwigmuseum.hu/>.

**9** Adela Demetja, the director of Tirana Art Lab.

**10** The exhibition travelled to Tallinn Art Hall (2021), Tirana Art Lab (2022), Oodi Library Helsinki, Design Museum Helsinki, Aalto University. Its extended version includes a large selection of artworks based on both past exhibitions that was presented at ZKM | Karlsruhe (2022-2023). Another selection with the focus on *Les Immatériaux* was on display at the Centre Pompidou, Paris (2023-2024)

**11** Both can be visited online: <https://iconoclash.beyondmatter.eu> and <https://lesimmateriaux.beyondmatter.eu>.

**12** “The true method of making things present is to represent them in our space (not to represent ourselves in their space).” Walter Benjamin, *The Arcades Project*, trans. Howard Eiland and Kevin Mc Laughlin (Cambridge, MA: The Bellknapp Press, 1999), 206. First published as *Das Passagen-Werk*, in *Gesammelte Schriften*, vol. 5.1, ed. by Rolf Tiedemann and Hermann Schweppenhäuser (Frankfurt/Main: Suhrkamp, 1982).

**13** Creation of the exhibition models was the collaborative effort of many researchers. They couldn't have been realized without the MA Fellowship Program of the Aalto University, coordinated by Cvijeta Miljak.

**14** <https://beyondmatter.eu/projects>

**15** <https://kunstihonne.virtualexhibition.eu>

**16** Lily Díaz-Kommonen and Cvijeta Miljak, affiliated with Aalto University conceived and conducted the evaluation.

**17** The residency program took place in three institutions: Tallinn Art Hall (curated by Corina Apostol), Tirana Art Lab (curated by Adela Demetja), ZKM | Karlsruhe (coordinated by Felix Koberstein).

**18** The exhibition *Immerse!* (2023) was curated by Corina Apostol and Lívia Nolasco-Rózsás. Its catalog was published with texts by Matthew Fuller, Helen Kaplinsky, Lukáš Likavčan, Zsolt Miklósvölgyi, Mário Z. Nemes, and the curators. Corina L. Apostol, Lívia Nolasco-Rózsás, eds., *Immerse!* (Berlin: Hatje Cantz, 2023).

**19** This text is largely based on the introduction to the project in the publication *Beyond Matter. Within Space*.

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**Lívia Nolasco-Rózsás**, curator, researcher, and writer, specializes in the intersection of art, media, and information technology. She has collaborated with institutions such as ZKM | Karlsruhe, Chronus Art Center (Shanghai), Nam June Paik Art Center (Yongin), and Ludwig Museum Budapest. Her curatorial work investigates the genealogy and societal impact of planetary computation, electronic surveillance, and the possibilities of the virtual condition. She has conducted extensive research in curatorial studies, particularly on the “virtual condition” and its role in exhibition spaces. From 2019 to 2023, she led the *Beyond Matter* project at ZKM, working with partners such as Centre Pompidou (Paris), Aalto University, and Tallinn Art Hall. She has published widely and recently edited *Beyond Matter, Within Space: Curatorial and Art Mediation Techniques on the Verge of Virtual Reality* (2023). Since 2023, she has been a lecturer in curation and media practice at University College London and serves as a curatorial and research fellow for Paik Replayed at ECAL, Lausanne. As an independent curator, she has collaborated with Giulia Bini on the online platform and traveling exhibition ARE YOU FOR REAL, commissioned by ifa – Institut für Auslandsbeziehungen since 2023, and has convened solo and group exhibitions for the Goethe Institute and Kunsthalle Praha.

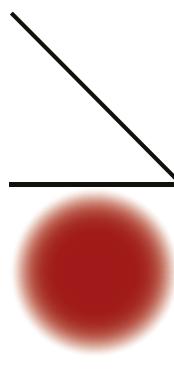
# 超越物质：虚拟状态下的展览 实践模式探究

莉维亚·诺拉斯科-罗萨斯  
(Lívia Nolasco-Rózsás)

“超越物质：虚拟现实边缘的文化遗产”(Beyond Matter. Cultural Heritage on the Verge of Virtual Reality, 2019-2023年)是一个国际合作的实践型研究项目，旨在探讨机构框架内关于视觉艺术生产和媒介的当代转变。该项目的语境很大程度上基于计算和信息技术，尤其是增强现实、虚拟现实和人工智能的快速发展和其广泛的存在与使用。

这种关于视觉艺术生产和媒介的当代转变极具颠覆性，并且正在引领一种可概括为“虚拟”的状态。如果说后现代状态是让-弗朗索瓦·利奥塔(Jean-François Lyotard)所说的“叙事危机”<sup>1</sup>，那么虚拟状态则揭示了二分法的危机。相关分析表明，存在与缺席、实体与计算机生成、真实与模拟等二分法正在失去其有效性。算法生成的虚拟现实日益主导着人们的现实，使实体与虚拟事物交织在一起，扭曲了时间的线性。这对视觉艺术策展和媒介的空间层面，以及公众对其接受度都产生了深远的影响，而公众对技术的热情正在持续增长。博物馆转型为混合实体，其地理坐标被各种数字平台扩展；博物馆不再是单独的空间，而是多个展览空间的汇合，是具有多维度、多空间的延伸系统。

因此，虚拟状态成为了文化圈的一种趋势。在该趋势下，实体空间与数字空间相互依存，多种展览作为艺术的媒介和反响接收一同进行。虚拟状态以虚拟现实主义的本体论视角为基础，该视角认为虚拟现实与实体同等真实。虚拟状态关乎文化相关普遍状态的动态谱系，并诞生于此。例如让-弗朗索瓦·利奥塔提到的后现代状态(1979)中，作为现代主义特征的元叙事变得普遍令人怀疑。文化相关普遍状态的动态谱系包括了二十年后罗莎琳德·克劳斯(Rosalind Krauss, 1999)描述的后媒介条件，以及彼得·韦贝尔(Peter Weibel, 2012)提出的后媒体条件，即新技术和电信技术正在渗透艺术领域。虚拟状态与其他各种当代状态相重叠，例如，费利克斯·斯塔尔德(Felix Stalder, 2017)所定义的数字条件、许煜(Yuk Hui, 2020)的行星条件以及贝阿特丽斯·冯·俾斯麦(Beatrice von Bismarck, 2022)的策展条件<sup>2</sup>。“超越物质”项目通过实践型研究，审视艺术生产和媒介中的虚拟状态，最终形成了包含虚拟现实和增强现实、数字模型和数字艺术作品在内的多元媒介，并在基于计算机和实体的展览空间网络中呈现，给予观者混合体验。



# Beyond Matter Cultural Heritage on the Verge of Virtual Reality

“超越物质”项目标志,2020年。设计:AKU Collective

创建生成性网络空间来展示艺术并生产知识的做法已很常见;将生成性空间与计算能力的发展相结合,可使得模拟或生成的空间可视化,而这些空间可能与我们可观察的周围环境及我们感知环境的方式有相似性,也可能没有。

在“超越物质”项目中,合作机构基于其对虚拟状态的实践型研究成果,开展了各种活动。通过我们共同的努力,合作伙伴们努力构建了一个“工具池”<sup>3</sup>,产出相关知识,帮助艺术从业者、策展人和博物馆专业人士理解上述转变,并规划方案,竭尽全力付诸实践。该项目注重艺术创作、策展和媒介的空间层面,项目内容包括对精选的标志性过往展览的数字化复兴、关于艺术和文献的新策展、会议、艺术家驻留项目、在线平台以及出版物。项目的种种行动都基于虚拟状态,并且也是对虚拟状态的反思。

“超越物质”项目由卡尔斯鲁厄艺术与媒体中心(ZKM)领头,项目合作方包括多家机构的研究人员和策展人,这些机构是:阿尔托大学(埃斯波)、巴黎蓬皮杜艺术中心(巴黎)、路德维希博物馆(路德维希博物馆-当代艺术博物馆)、塔林艺术馆(塔林艺术厅)、地拉那艺术实验室-当代艺术中心;相关合作伙伴包括洛桑联邦理工学院的艺术中心EPFL Pavilions、希尔德斯海姆应用科学与艺术大学(HAWK)、海德堡创新市场研究所(GIM)以及卡尔斯鲁厄艺术与设计大学(HfG)的生物设计实验室。这些机构有着不同规模和背景,但都致力于创新性地运用数字技术连接非本地观众,以数字形式拓展展览空间,并创建混合访问方式,让观众访问其想要传播的内容。通过该项目,这些机构均在新的领域进行了实践。

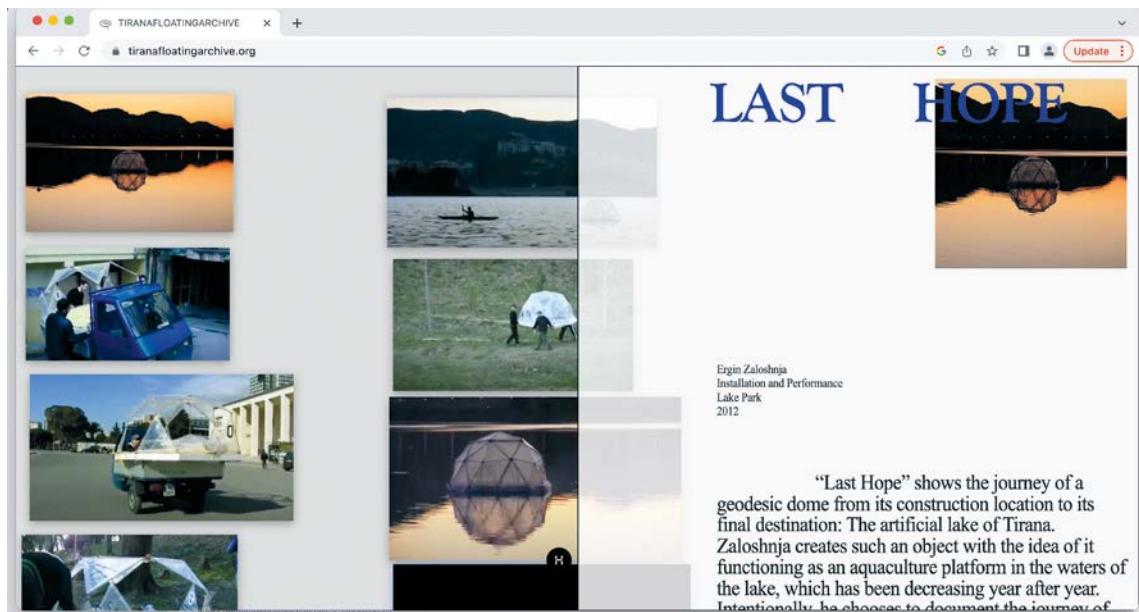
“超越物质”项目的核心在于探索计算机生成的展览空间蕴藏的潜力。通过一系列方法,我们重点关注的领域涉及艺术和展览实践语境下的空间概念及其含义,以及从展览中群集的所有参与者的视角出发,对计算机生成的虚拟空间与实体空间相互之间的关系及其沉浸式特征的理解。<sup>4</sup>这种探索以多种方式贯穿整个项目;例如,对两个过往展览的建模,或邀请艺术家从不同角度阐述他们对虚拟现实的见解。

在艺术创作和媒介的语境中，“虚拟”往往与“现实”同时出现。虚拟现实这一术语主要指通过屏幕图像以及许多情况下都需要的附加设备（如头戴式显示器）访问由计算机辅助的交互式和沉浸式环境。剖析“虚拟现实”一词及其词源，有助于理解技术机遇带来的现状，并使我们能够创造出以数字方式感知和计算的相对复杂的虚拟现实。事实上，解构主义是构建新术语的基础，而新术语又有助于将艺术创作和媒介置于语境中。唐娜·哈拉维（Donna Haraway）提出了一种看似解构却又真正具有建设性的方法，该方法将缩写“SF”演变为各种词组。<sup>5</sup>SF作为缩写词通常代表科幻小说，而哈拉维构想了一个文字游戏，创造了其他可以用SF代表的术语，例如“推想虚构”（speculative fabulation）和“翻花绳”（string figures）。这些术语均有着与科幻小说相关的含义或替代含义。哈拉维将新的SF术语融入其方法库中，对此我们深受启发。我们将哈拉维的公式应用于虚拟现实（VR），并发现除了虚拟现实之外，VR还可以代表其他诸多术语，如病毒式传播（viral radiation）、有效解读（viral radiation）、雾状修复（vaporous restoration）、可变的关系（variable relations）、可见的修订（visible revision）、漫无边际的闲谈（visionary ramblings）等等。

《超越物质，空间之内：关于虚拟现实边缘的策展与艺术媒介技术》<sup>6</sup>作为“超越物质”项目的最终出版物，是对该项目的总结。该书以涉及虚拟现实的内容为一系列写作要点，将项目实践娓娓道来。每章都围绕一个相关内容，邀请作者撰写论文或阐述整个项目期间的实践型研究成果。在最后一章中，还收录了对“超越物质”驻留项目艺术家和学者的访谈。书中谈论的内容都在阐释VR这个新创造的术语。



线上展览“空间事务：世界化——创造虚拟空间”（2021年）截图。来源：<https://spatialaffairs.beyondmatter.eu/en>  
设计和编程：工作室The Rodina 策展：朱莉娅·比尼和莉维亚·诺拉斯科-罗萨斯



地拉那浮动档案馆 (2022年) 截图。来源:<https://tiranafloatingarchive.org/> 策展:阿德拉·德梅贾 设计:丹尼斯拉夫·戈莱曼诺夫 (Denislav Golemanov)

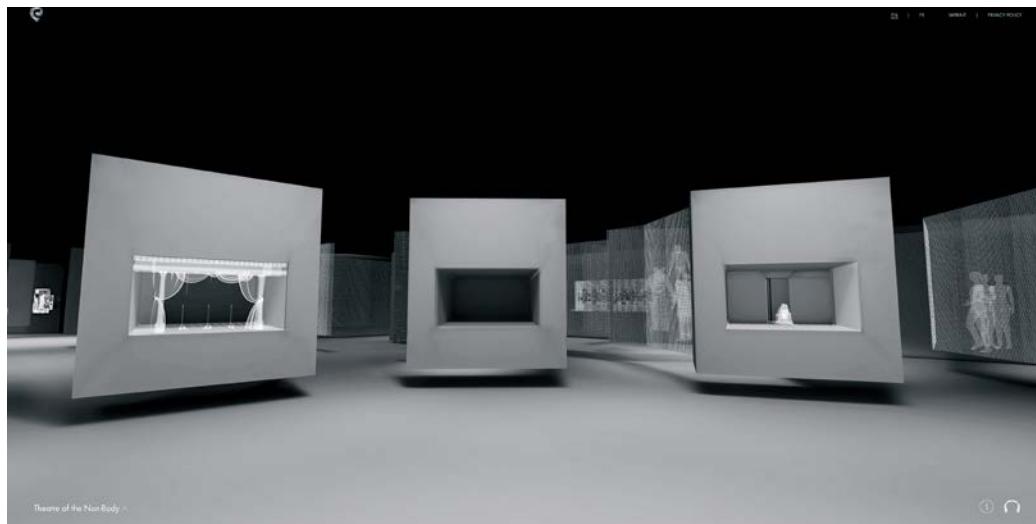
“超越物质”项目框架内的首场大型展览《空间事务》(*Spatial Affairs*) 于2021年举办。当时正是新冠疫情期间,一波波的封锁措施使我们策划公共活动、出行和工作流程都变得极具挑战性。在那时,艺术机构主要以线上形式运营。疫情前,线上空间这种艺术媒介形式一直是“超越物质”的关注重点,而疫情相关的封锁加速了“超越物质”的数字化扩张进程。

2021年,国际群展《空间事务》(*Spatial Affairs*) 于布达佩斯路德维希博物馆/当代艺术博物馆举办。该展览以及其线上展览《空间事务:世界化——创造虚拟空间》(*Spatial Affairs. Worlding—A tér világása*)<sup>7</sup>,还有混合博物馆体验研讨会(HyMEx)<sup>8</sup>,共同为长期合作研究虚拟与实体的展览空间之间复杂的二分法奠定了基础。展览选取的作品包括了两次世界大战期间的概念主义先锋作品和近期最新的艺术作品,作品涵盖了预算方法和过去的计算方法,这些方法体现了算法创造的现实与可触现实之间相互依存关系。展览主要探讨了现实与虚拟、真实与可能的二元关系,这种关系在多维性中渐渐消失,二元论随之被颠覆,这使得复杂而多样的空间概念爆炸式出现。

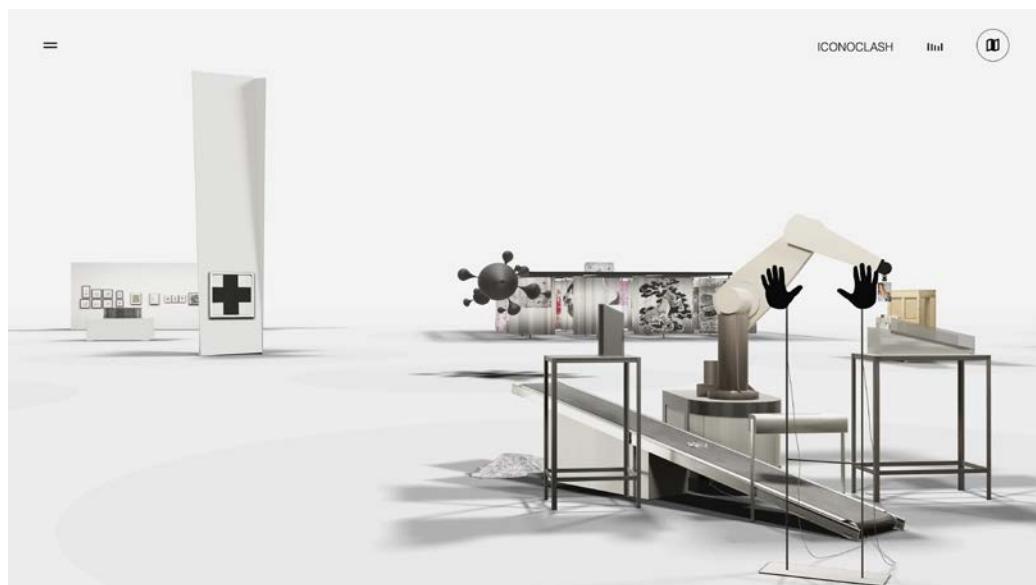
除了《空间事务》以外,《地拉那浮动档案馆》(*Tirana Floating Archive*)<sup>9</sup>以虚拟空间的形式呈现了精心策划的艺术知识和美学元素,这些内容摆脱了其物理载体所在位置或展览地点的束缚。在后数字时代,展览空间的意义是什么?艺术机构如何应对这种范式转变?这些空间对此给出了答案。

此外,巡展《物质,非物质,反物质》(*Matter. Non-Matter. Anti-Matter*)<sup>10</sup>也体现了实体与虚拟现实的交汇。该展览尤其关注其在卡尔斯鲁厄艺术与媒体中心

(ZKM) 延伸展出的部分。在该展览上,每件展品无论有着怎样的规模和语境,都具有相同的核心元素,即非物质展示(*The Immaterial Display*),一个为呈现数字展览空间而开发的硬件装置。其中,两个数字展览模型与展览《打破偶像》(*Iconoclash*)和《非物质》(*Les Immatériaux*)相关。基于这两个典型展览,《物质,非物质,反物质》及其相关项目探索了虚拟展览史的可能性。



《非物质:虚拟展览》(*Les Immatériaux: A Virtual Exhibition*, 2022年) 截图。来源:  
<https://lesimmateriaux.beyondmatter.eu/>。概念构想:国立现代艺术博物馆——工业创意中心新媒体部,概念设计:阿尔托大学项目管理:马蒂亚斯·赫克尔(Matthias Heckel),软件开发:网络运动有限公司(Netzbewegung GmbH)档案研究:安德烈亚斯·布鲁克曼(Andreas Broeckmann)和玛丽·维塞特(Marie Vicet)



《打破偶像作为数字实验》(*Iconoclash as a Digital Experience*, 2022年) 截图。来源:  
<https://iconoclash.beyondmatter.eu/> 概念设计:莉维亚·诺拉斯科-罗萨斯, UI/UX和动效设计:马蒂亚斯·赫克尔 软件开发:网络运动有限公司(Netzbewegung GmbH),档案研究:费利克斯·科伯斯坦(Felix Koberstein) ©卡尔斯鲁厄艺术与媒体中心

蓬皮杜艺术中心和卡尔斯鲁厄艺术与媒体中心以《非物质》(*Les Immatériaux*, 蓬皮杜艺术中心, 1985年)和《打破偶像:超越科学、宗教与艺术中的图像战争》(*Iconoclash. Beyond the Image Wars in Science, Religion, and Art*, 卡尔斯鲁厄艺术与媒体中心, 2002年)作为案例研究, 致力于通过数字和空间建模的体验式方法, 探索展览复兴的可能性。这两个展览都构成了复杂的思想实验, 这些实验充分利用空间并在空间中体现。两个展览也都尝试了以创新的方式将科学、技术和艺术实践放在一起。《非物质》和《打破偶像》以各自的方式, 将展览视为媒介和包含了不同层次的反思和创造力的界面。

这些模型采用非实体和非重建的方法创建, 被称为“雾状修复”, 旨在模拟、建模或创建代理所选的两个已有的空间艺术品组合。这些虚拟展览模型<sup>11</sup>的搭建基于广泛的档案研究、对专家和策展人的访谈, 以及一个大型跨学科团队的迭代设计流程。被挑选用于建模的展览是知名的、复杂的、具有自反性的媒介实例, 这些实例勾勒出逃离现代性的路径, 同时阐述了表征和物质性的概念。这些数字模型不可避免地引发了一个问题, 即能否将一件艺术品呈现的灵光, 或者甚至整个展览的气息, 迁移到数字领域中。

受瓦尔特·本雅明名言<sup>12</sup>的启发, 《物质, 非物质, 反物质》的主要目标之一是利用数字技术在我们的空间中重新审视、恢复和再现这些过往的展览。该展览在“非物质展示”以及专为探索虚拟展览而开发的新型硬件设备上展示了两个过往展览的数字模型。展览于2022年12月2日开幕, 与此同时, 这些模型在线上发布。一



“物质, 非物质, 反物质:过往展览的数字体验”(2022-2023年), 展览现场图, 卡尔斯鲁厄艺术与媒体中心。  
摄影:埃斯特班·古铁雷斯·希门尼斯(Esteban Gutierrez Gimenez) ©卡尔斯鲁厄艺术与媒体中心

系列精选的艺术品和模型证明了艺术在概念上的去物质化和在数字上的再物质化。一些艺术品是展览专门委托创作的,其他艺术品则主要来自蓬皮杜艺术中心和卡尔斯鲁厄艺术与媒体中心的收藏,曾在《非物质》《打破偶像》两个展览上分别或均有展出。<sup>13</sup>

存在与缺失之间的张力,以及关于这两个术语的二分法在数字化过程中的消解,被表述为贯穿整个项目的“可变关系”。这意味着观众、艺术品、人工制品、布景设计、策展理念、艺术家、学者、博物馆专业人士、客体和主体之间的多重联系。这些覆盖虚拟和实体空间的全新关系引发了人们在认识论上的转变,这种转变体现在“超越物质”的VIEW平台<sup>14</sup>,以及塔林艺术厅的虚拟展览平台<sup>15</sup>上。

评估方法是本项目的一大内容。在“超越物质”的欧洲巡展中,我们开展了以表演为导向的研究以及针对观众和社区的研究<sup>16</sup>,并根据“非物质展示”在欧洲的旅程进行。同时,我们还开发了一个自动化评估系统,对混合展览中的数字内容和界面进行量性和量化评估。

除了实践型研究以外,“超越物质”项目还促进了艺术研究和创作。驻留项目<sup>17</sup>使十四位艺术家得以加入三家项目合作机构其中之一,并且在机构里——或至少在他们心中自由漫步。由于疫情期间的出行限制,并非所有驻留艺术家和研究人员都能去到主办机构,部分艺术家不得不在线上开发和/或展示他们的驻留项目。“超越物质”VIEW平台具有全然的线上环境,展示了部分艺术家大型项目的在线内容。尽管遭遇了这些驻留安排上的挑战,所有驻留成果仍在“超越物质”项目的一个或多个框架内完成了展出或表演——例如,参展于地拉那和卡尔斯鲁厄艺术与媒体中心举办的《物质,非物质,反物质》,以及作为塔林艺术厅群展《沉浸!》<sup>18</sup>的一部分呈现。

“超越物质”将各种形式、行动、过程和结果相互交织,建立了复杂的项目架构。每个合作伙伴都贡献了各自的研究成果,并参与了不同的活动。“超越物质”项目也通过展览、研讨会、讨论和出版物等形式,创造了新的内容。它还促进了主要位于欧洲国家的艺术机构之间的专业交流,并通过促进艺术品和艺术专业人士的跨国流动,帮助文化专业人士提升了有关数字媒介形式的技能。该项目还通过数字化档案材料和开发开源软件,分享了数字共享资源。任何其他文化组织想要在线访问该项目所管理的文化遗产,都可以在线使用这些数字共享资源。

“超越物质”项目的另一项成果是通用展览平台(*Generic Exhibition Platform*)。这是一款AI软件工具,主要开发用于《打破偶像》的数字仿真,可以促进生成数字展览空间。一个示范性的线上环境展示了该软件的功能,旨在鼓励博物馆、艺术机构和文化专业人士利用该开源工具创办自己的数字展览。为了促进参与式和民主化的资源共享,我们使该软件可在卡尔斯鲁厄艺术与媒体中心的GitHub账户上免费获取。

要创建一个数字展览，必须将数字对象（以3D模型形式）上传到通用展览平台相应的内容管理系统，并附上模型信息（作者、标题、描述等）和关键词。在没有数字对象的情况下，展览空间是一个延续的平面。该空间由对象、用户以及两者之间不断变化的关系定义。

为通用展览平台开发的算法确定了3D对象在数字展览空间中的位置。展品简介由预定义标签的值描述。通过在一定时间段内对某个展品和其活跃度进行监测，可以定义平台访客的用户概况。所有展品与平台访客之间的相似性会被持续计算。访客会被与其用户概况有相同相似性的展品所吸引。

正如这些例子所示，该项目为在艺术中心、博物馆、艺术馆或艺术实验室等非学术环境中进行实践型研究和创作提供了可能的方向。我们致力于推广该项目的成果及其构建的方法论。我们希望艺术机构继续构建数字世界，并创建具有集合功能的在线平台，以便有关艺术媒介的混合体验能够在未来短时间内被广泛接受，基于人工智能构建的共享知识数字平台能够被普及。<sup>19</sup>

有关虚拟展览空间与实体展览空间的二分法是个难题。解决这一难题一直是“超越物质”的核心宗旨，这一宗旨直接呼应了“平行宇宙”（ParaVerse）背后的理念。上述示例和案例研究恰如其分地展现了该项目所指的趋势，即多元宇宙由多个平行宇宙构成。计算机生成的虚拟现实将策展工作定位为一种构建世界的行为，并具有实现这种平行宇宙的潜力。

本文为再发表。原文发表于出版物《超越物质，空间之内：虚拟现实边缘的策展与艺术媒介技术》，莉维亚·诺拉斯科-罗萨斯、玛丽安·舍德勒编，柏林：哈特耶·坎茨出版社，2024年，[\(https://withinspace.beyondmatter.eu/\)](https://withinspace.beyondmatter.eu/)，并发表于《策展超级智能：关于人工智能与未来策展》（*Data browser*，第10卷），乔西亚·克丽萨（Joasia Krysa）和玛格达莱娜·泰兹里克-卡弗（Magdalena Tyzlik-Carver）编，伦敦：开放人文出版社，2025年。<http://www.data-browser.net>;<http://www.openhumanitiespress.org/books/series/data-browser/>

## 注释

**1** 让-弗朗索瓦·利奥塔，《后现代状态：关于知识的报告》（巴黎：午夜出版社，1979年）

**2** 这些术语在各位作者的文本中被反复提及，具体阐释可参见以下文本：

罗莎琳德·克劳斯，《北海之旅：后媒介条件时代的艺术》（伦敦：泰晤士与哈德逊出版社，1999年），第53页。

彼得·韦贝尔，《后媒介条件》（“The Post-Media Condition”），《Mute》，2012年3月19日，<https://www.metamute.org/editorial/lab/post-media-condition>。

费利克斯·斯塔尔德，《数字条件》（*The Digital Condition*，剑桥：政体出版社，2017年）。

许煜，《一种行星思维》（"For a Planetary Thinking"），《e-flux》，第114期（2020年），<https://www.e-flux.com/journal/114/>。

贝阿特丽斯·冯·俾斯麦，《策展条件》（*The Curatorial Condition*，伦敦：斯特恩伯格出版社，2022年）。

**3** “工具池”(“pool of tools”)这一表达为彼得·韦贝尔在展览《文艺复兴 3.0》(Renaissance 3.0, 2023-2024年, 卡尔斯鲁厄艺术与媒体中心)”的背景下所使用。

**4** 这里使用的“群集”(constellation)一词含义与贝阿特丽斯·冯·俾斯麦在《策展条件》(柏林:斯特恩伯格出版社, 2022年)中使用的该词的含义相同。

**5** 详见唐娜·哈拉维,《SF:推想虚构和翻花绳》(SF: Speculative Fabulation and String Figures / SF: spekulative Fabulation und String-Figuren, So Far, 100 Notes—100 Thoughts / 100 Notizen—100 Gedanken, documenta, 13) (奥斯特菲尔登:哈特耶·坎茨出版社, 2011年)。

**6** 莉维亚·诺拉斯科-罗萨斯、玛丽安·舍德勒 (Marianne Schädler) 编,《超越物质, 空间之内:关于虚拟现实边缘的策展与艺术媒介技术》(柏林:哈特耶·坎茨出版社, 2023年)。电子版可详见:<https://withinspace.beyondmatter.eu>

**7**《空间事务》由朱莉娅·比尼 (Giulia Bini) 和莉维亚·诺拉斯科-罗萨斯策展。展览目录包括斯文·吕蒂肯 (Sven Lütticken)、阿达姆·洛瓦兹 (Ádám Lovász)、塞西·莫斯 (Ceci Moss) 和策展人的文字。朱莉娅·比尼、莉维亚·诺拉斯科-罗萨斯、简·埃尔科斯基 (Jan Elantkowski)、弗鲁西娜·费格尔 (Fruzsina Feigl)、博尔巴拉·卡尔曼 (Borbála Kálmann) 编著,《空间事务》(柏林:哈特耶·坎茨出版社, 2021年)。

**8** 混合博物馆体验研讨会由博尔巴拉·卡尔曼和莉维亚·诺拉斯科-罗萨斯共同主持召开。研讨会论文集可在线获取:<http://hymex2021.ludwigmuseum.hu/>

**9** 阿德拉·德梅贾 (Adela Demetja) 是地拉那艺术实验室的主任。

**10** 该展览曾于塔林艺术厅 (2021年)、地拉那艺术实验室 (2022年)、赫尔辛基颂歌图书馆 (Oodi Library)、赫尔辛基设计博物馆 (Design Museum Helsinki,) 和阿尔托大学巡展。展览的扩展版包含了多件基于卡尔斯鲁厄艺术与媒体中心 (2022-2023年) 过去两次展览的精选作品。展览上另一部分以“非物质”为主题的精选作品曾在巴黎蓬皮杜艺术中心 (2023-2024年) 展出。

**11** 两个展览都可在线浏览, 详见<https://iconoclash.beyondmatter.eu>和<https://lesimmateriaux.beyondmatter.eu>。

**12** “使事物呈现的真正方法是将它们呈现在我们的空间中(而不是使我们呈现在它们的空间中)。”沃尔特·本雅明,《拱廊计划》,霍华德·艾兰德和凯文·麦克劳克林译 (马萨诸塞州剑桥:贝尔纳普出版社, 1999年), 第206页。《拱廊计划》最初发表于罗尔夫·蒂德曼和赫尔曼·施韦彭豪瑟编的《综合汇编》第5卷第1册 (法兰克福/美因河畔:苏尔坎普出版社, 1982年)。

**13** 展览模型由众多研究人员合作完成。模型能够得以最终呈现, 还要感谢茨维杰塔·米尔雅克 (Cvijeta Miljak) 协调的阿尔托大学硕士奖学金项目。

**14** <https://beyondmatter.eu/projects>

**15** <https://kunstihonne.virtualexhibition.eu>

**16** 评估方法由阿尔托大学的莉莉·迪亚兹-科莫宁 (Lily Díaz-Kommonen) 和茨维杰塔·米尔雅克构思并执行。

**17** 驻留项目在三个机构开展:塔林艺术厅 (科琳娜·阿波斯托尔策划)、地拉那艺术实验室 (阿德拉·德梅贾策划)、卡尔斯鲁厄艺术与媒体中心 (费利克斯·科伯斯坦协调)。

**18**《沉浸!》(Immerse!, 2023年)由科琳娜·阿波斯托尔和莉维亚·诺拉斯科-罗萨斯策展。展览目录由马修·富勒 (Matthew Fuller)、海伦·卡普林斯基 (Helen Kaplinsky)、

卢卡斯·利卡夫坎 (Lukáš Likavčan)、兹索尔特·米克洛斯沃吉 (Zsolt Miklósvölgyi)、马里奥·Z·内梅斯 (Márió Z. Nemes) 和策展人撰写。科琳娜·阿波斯托尔, 莉维亚·诺拉斯科-罗萨斯编著,《沉浸!》(柏林:哈特耶·坎茨出版社, 2023年)。

**19** 本文的撰写主要基于《超越物质, 空间之内》出版物中对该项目的简介。

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**莉维亚·诺拉斯科-罗萨斯 (Lívia Nolasco-Rózsás)** 是策展人、研究员和作家, 她专注于艺术、媒体和信息技术的交叉领域。她曾与卡尔斯鲁厄艺术与媒体中心、克罗诺斯艺术中心 (上海)、白南准艺术中心 (龙仁) 和布达佩斯路德维希博物馆等机构合作。她的策展工作涉及的探讨范围包括全球计算及其谱系和社会影响、电子监控以及虚拟状态的可能性。她对策展研究进行了广泛的调查, 她尤其关注“虚拟状态”及其在展览空间中的作用。2019年至2023年期间, 她领导了卡尔斯鲁厄艺术与媒体中心的“超越物质” (Beyond Matter) 项目, 并与蓬皮杜艺术中心 (巴黎)、阿尔托大学和塔林艺术馆等机构合作。她发表了大量著作, 近期还编辑了《超越物质, 空间之内, 虚拟现实边缘的策展与艺术媒介技术》(*Beyond Matter, Within Space: Curatorial and Art Mediation Techniques on the Verge of Virtual Reality*, 2023年)。自2023年起, 她担任伦敦大学学院策展与媒体实践专业 (curation and media practice) 的讲师, 并在洛桑艺术设计学院 (ECAL) 担任“白南准重现” (Paik Replayed) 项目的策展和研究员。作为独立策展人, 她与朱莉娅·比尼 (Giulia Bini) 合作, 自2023年起参与了由对外关系研究所 (Institut für Auslandsbeziehungen) 委托创作的线上平台及巡回展览“你是否为了真实” (ARE YOU FOR REAL), 并为歌德学院和布拉格美术馆策划过个展和群展。

# Ctrl + Curate: About Online Exhibitions

## Peggy Schoenegge

New technologies have not only influenced artistic practice, shaping new forms of art, but have also had an impact on curatorial work. Technological progress enables artists to explore innovative forms of expression that often demand different viewing habits. Consequently, new approaches to exhibition necessitates new modes of presentation. This has been evident with mediums like video and recent immersive technologies such as augmented reality (AR) or virtual reality (VR). In particular, the widespread use of the internet has had a profound impact on the art world, opening up an entirely new space for artists and curators.

The transition to web-based realm opens up a different framework for action. Online art spaces offer possibilities that go far beyond physical or traditional exhibition spaces. The physical is defined by its architectural structure, material interior, and structural aspects like opening hours and entry regulations. Here, the exhibition must conform to the requirements of the venue. In contrast, online spaces are shaped by digital elements such as graphics, animations, or interactive features. These digital components are typically flexible and can be customized to suit the exhibition's needs. The online framework is thus more adaptable, and as a result, it allows for 24/7 global reach, unlimited spatial possibilities, and dynamic content updates. In this environment, online exhibitions promote barrier-free access and direct participation, reaching audiences in their immediate everyday lives on devices such as laptops, tablets, or smartphones. For this reason, as Katarína Rusnáková writes, the internet enables real communication with the audience, based on new forms of discourse such as chat rooms.<sup>1</sup> It offers a democratic approach, enabling projects that deal with the socio-political questions of our time.<sup>2</sup> This accessibility supports a more inclusive art world that embraces current technical advancements. Furthermore, it pushes the boundaries of perception and encourages a rethinking of how art is presented, experienced, and made accessible.

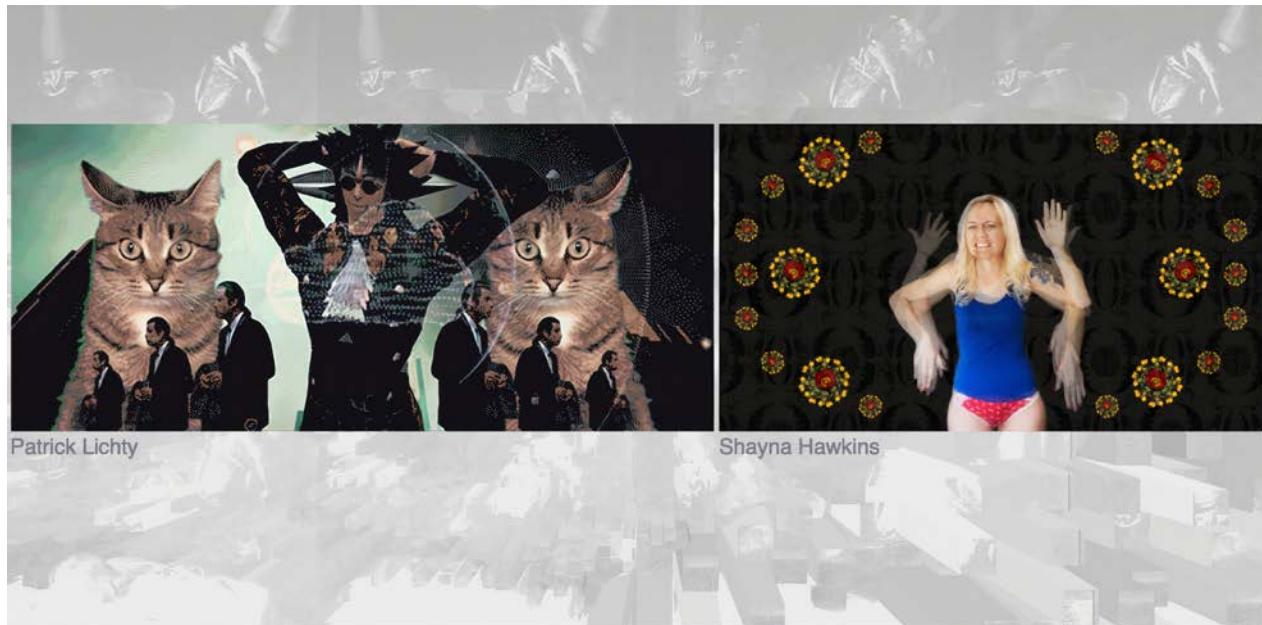
With the widespread accessibility of the internet since the early 1990s, it is finding its way into the art world. Artists and curators use the web as a platform for presenting and distributing art, opening up a web-based space for experience. One of the earliest projects worth mentioning is *The Thing* (1991), founded by Wolfgang Staehle, which served as a forum for the exchange of art and artists. Another notable platform is *Hyper X* (1995), a digital exhibition space for net art, curated by Alt-X in collaboration with other curators such as Mark Amerika, Christiane Paul, and Marisa Olson. Similarly, *Splashback: Rhizome's Splash Pages* (1998–2002) aimed to provide immediate online access to art while simultaneously reflecting the speed of the internet. In addition, whitneybiennial.com presented the works of the 2002 Whitney Biennial digitally as a supplement to the physical art show. Since its founding in 2013, Panther Modern has continuously expanded its virtual exhibition space, allowing for a spatial experience of the artworks. This list can be continued into the present day of Web 3.0; however, it is still very fragmentary.<sup>3</sup>

These early online spaces were often quite experimental and technically limited. They either adapted to or built their own framework on platforms.<sup>4</sup> Such early examples laid the groundwork for what followed in the digital art world. Many of these websites are

no longer accessible and only partially documented, which therefore leaves a large research gap in the field. This also underlines the fact that the internet is a constantly evolving medium, as can be seen in concepts like Web 2.0, Web 3.0, and the metaverse.<sup>5</sup> Websites are generally not permanent. They depend on ever-changing browser technologies as well as providers and maintenance. However, with technical advancements, new opportunities for digital art and online exhibitions continue to emerge—especially with the current development of WebXR<sup>6</sup>.

Due to the measures taken during the COVID-19 pandemic and the resulting shift to the internet, not only did numerous online projects emerge again, but their reflection and contextualization also gained traction. In this context, the discourse has primarily been descriptive, focusing on structural and formal potentials that enhance accessibility and visibility of contemporary art by outlining characteristics of the digital. A media-theoretical approach is often taken, tracing the development of the internet as a whole and the specific development of various platforms and technologies such as VR. Contributions from Francesca Baglietto (2016)<sup>7</sup>, David England (2016)<sup>8</sup>, Annet Dekker (2021)<sup>9</sup> or Lívia Nolasco-Rózsás with Marianne Schädler (2023)<sup>10</sup>, illustrate this development. While the influence of technology is frequently acknowledged, a deeper analysis of the internet as an artistic space remains largely unexplored. This gap, however, presents an opportunity for further investigation and critical engagement.

The evolving platforms and their underlying technologies enable varying approaches to spatial work. So far, this aspect has largely been overlooked in terminology. However, since these factors fundamentally shape both curatorial and artistic practice and the experience of the artwork, an attempt at a conceptual differentiation will be made here. Accordingly, a distinction can be made between two forms: the *digital* and the *virtual* online exhibition. While the former operates on the two-dimensional surface of the website, the latter allows for a three-dimensional experience. To illustrate the characteristics of these two forms in more detail, projects realized by the independent curatorial collective *peer to space* are presented below. Since 2016, the curatorial network has been realizing online exhibitions across various platforms, employing differ-



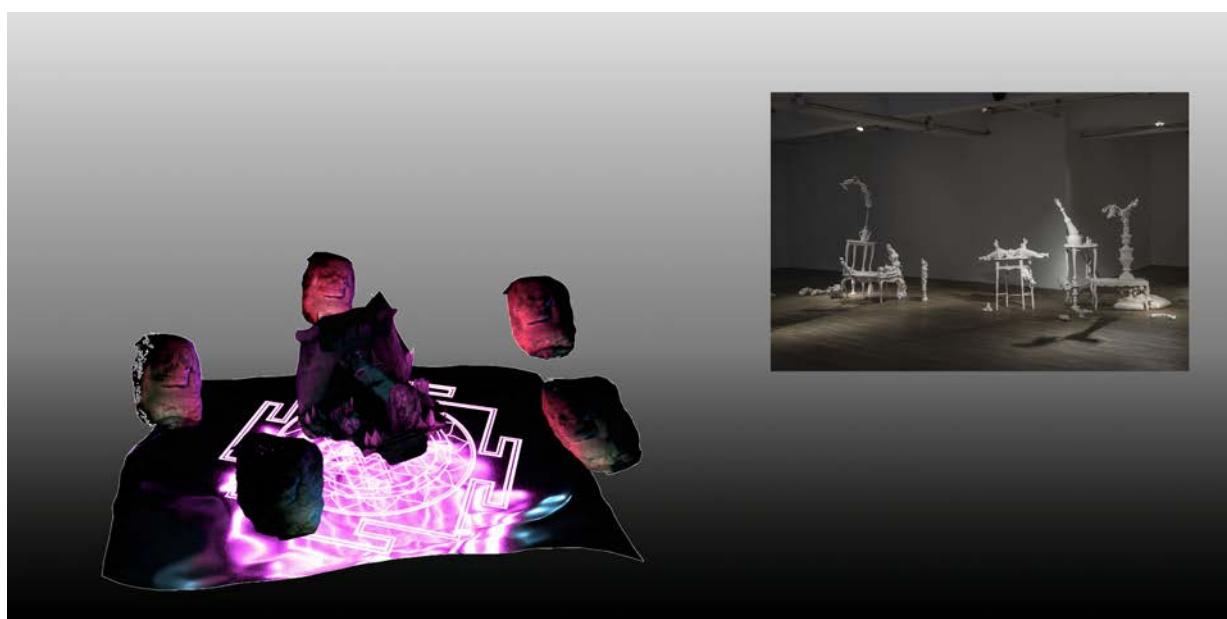
Exhibition view of *NARGIFUS—ANIMATED SELF PORTRAITS*, 2016–2019, curated by Carla Gannis and Tina Sauerlaender on NewHive (online), on view: Patrick Lichy and Shayna Hawkins. Photograph by Tina Sauerlaender © peer to space

ent approaches to presentation and interaction as well as integrating media such as VR. The projects offer the opportunity to present artworks to a global audience and to make them experienceable beyond the white cube of institutions or galleries. The ability to exhibit a significantly larger number of artistic positions enables a broader discourse and a more complex presentation of the respective topics.

For example, *NARGIFUS—ANIMATED SELF PORTRAITS* (2016–2019) explores animated self-portraits, while *CAT HEROICUS SUBLIMIS* (2016–2019) examines how artists develop an abstract visual language using digital tools.<sup>11</sup> These exhibitions were originally hosted on the platform NewHive, which is no longer available. The online



Exhibition view of *CAT HEROICUS SUBLIMIS*, 2016–2019, curated by Tina Sauerlaender and Peggy Schoenegge, on NewHive (online), on view: Od Niwr and Mathieu St-Pierre. Photograph by Tina Sauerlaender © peer to space



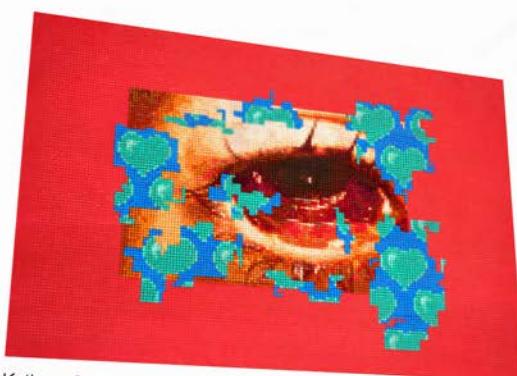
Exhibition view of *MERMAIDS & UNICORNS*, 2017, curated by Carlotta Meyer and Tina Sauerlaender (online), on view: Alfredo Salazar-Caro and Shyra De Souza. Photograph by Tina Sauerlaender © peer to space

exhibitions are now offline, once again highlighting the medium's reliance on providers and technical infrastructure. In response, the team has realized further shows on their own domains. *MERMAIDS & UNICORNS* (2017)<sup>12</sup>, for instance, addresses the hybrid structures of contemporary times, arguing that the image on the screen, and thus the digital sphere, is real — contrary to the habit of describing this world as not being real. Here, rather than scrolling vertically, visitors navigate horizontally through the works. The group show *CLAIMING NEEDLES—Positions of Contemporary Embroidery Art* (2018)<sup>13</sup> examines contemporary embroidery art as a critical tool, expanding the meaning of female employment. As users move their mouse over the artworks, they become animated, and with a click, the audience can access additional information and detailed images. A similar approach is applied in *PARADOXICAL OBJECTS—Video Sculpture Art from 1960 to Today* (2021)<sup>14</sup>, which reflects on the complexity of video sculpture, merging the temporality and dynamism of the moving image with the static nature of the screen. By applying various filters, visitors can alter the curatorial arrangement of the exhibited works, creating new connections. This produces new perspectives that extend beyond the curator's narrative.

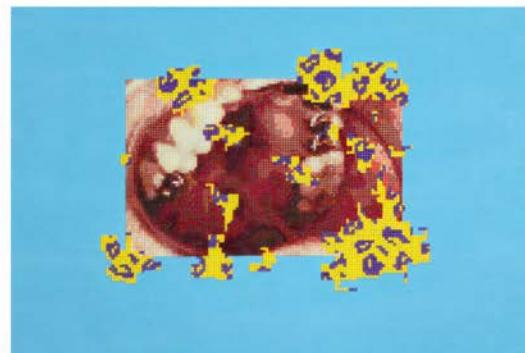
These examples utilize the two-dimensional, partially infinite surface for a curated composition of works. New approaches were sought that go beyond the usual habitus, particularly with regard to the interactive possibilities for visitors. In the process, new forms of viewing and presentation were created.



Birgit Dieker, *Arme*, 2011

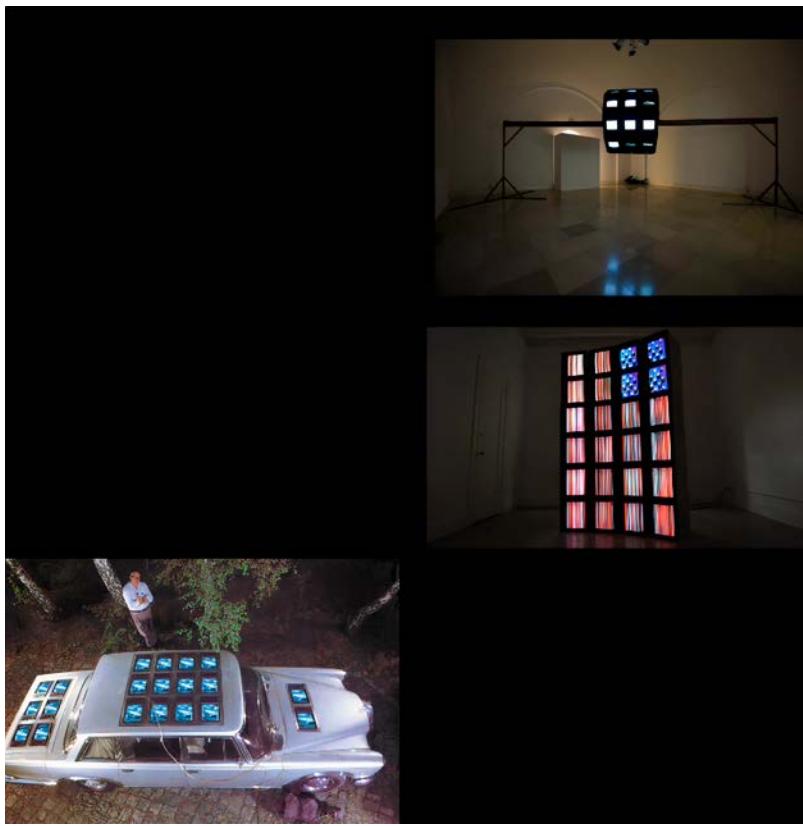


Kathryn Shinko, *Wounds Slowly Being Covered Up (Eye)*, 2015



Kathryn Shinko, *Wounds Slowly Being Covered Up (Mouth)*, 2015

Exhibition view of *CLAIMING NEEDLES – Positions of Contemporary Embroidery Art*, 2018, curated by Peggy Schoenegge and Darja Zub (online), on view: Birgit Dieker and Kathryn Shinko. Photograph by Peggy Schoenegge © peer to space



Exhibition view of *PARADOXICAL OBJECTS—Video Sculpture Art from 1960 to Today*, 2018, curated by Sue Bachmeier and Peggy Schoenegge (online), on view: Frank Balve, Bainbridge Benton and Wolf Vostell. Photograph by Peggy Schoenegge © peer to space

Another example of implementing the internet in curatorial practice is presented in the hybrid project *EVOLVING KINETICS—Transformations of Kinetic Art in the Post-Digital Age* (2023). This group exhibition at the Kunstmuseum Gelsenkirchen was also translated into an online format on the platform *Common Garden*, founded by the artist Constant Dullaart.<sup>15</sup> In the digital space, visitors also move across an infinite, two-dimensional tableau, where they appear as colorful Easter eggs — avatars representing their presence. When two or more users approach each other on the website, they can communicate with one another — much like in a video conference — and explore the exhibition together. This transforms the digital visit into a social experience, enabling a common online space.

*EVOLVING KINETICS* integrates digital structures into the art museum, not only creating a meaningful avenue to engage with emerging technologies but also laying the groundwork for the project's long-term sustainability and accessibility. By embedding digital elements within the museum's infrastructure, the project ensures that audiences can interact with artworks in innovative ways while also expanding the museum's reach beyond the physical audience. This approach supports the museum's adaptation to a digitally driven future, making art more accessible to diverse audiences and promoting continuous technological integration.

In this process, the examination of virtual space and thus virtual exhibitions is relevant—particularly in light of recent developments in WebXR technology. During the pandemic lockdown in 2021, *peer to space* collaborated with the gallery PRISKA PASQUER. As part of the *ONE TO ONE* series, *peer to space*'s curators worked with one artist to

develop an exhibition concept for the virtual gallery, hosted on Mozilla Hubs. The platform was discontinued in May 2024. Until then, it offered low-threshold access to the three-dimensional virtual realm through a multimedia approach. Visitors were able to enter the spaces via smartphones, tablets, computers, or even VR headsets, and interact with each other in real time as avatars. The ONE TO ONE series tackled a range of contemporary topics, reflecting artistically on the post-digital conditions of our time. Furthermore, all iterations share the exploration of the virtual as a new space for experiencing art. While the exhibitions at PRISKA PASQUER did not fully abandon traditional spatial structures — since the physical location was digitally replicated — the series harnessed the potential of the virtual world in how the artworks were presented and perceived.

This was also applied in the case of *PORTRAIT OF A FUTURE* (2021–2024), which was part of the ONE TO ONE series. Here, artist Charlie Stein and I brought depictions of robots and AI applications to life, transforming them into animated sculptures embedded like driftwood or boulders along the gallery's virtual shore. In addition to these installation-like interventions, the dimensions of the artworks were adjusted as some of the paintings and drawings were either enlarged or reduced in scale, partly floating on the sea of the void. What is physically impossible due to material limitations and conditions can easily be altered with a single click in virtual space. This flexibility introduces a playful exploration of dimensions and settings. As a result, a new form of art experience emerges that pushes physical space into the background. In this context, the virtual becomes an object of experience, raising questions about our understanding of reality. Our physical reality becomes a memory in the virtual exhibition. Bound to our bodies, the immaterial environment makes us aware of our biological status, which is visually mirrored by avatars. In this framework, users experience a disembodied state of being, which in turn reflects back on the visitors themselves. This results in an exciting correlation between offline and online presence.



Exhibition view of *PORTRAIT OF A FUTURE*, 2021–2024, curated by Peggy Schoenegge at the Virtual Gallery PRISKA PASQUER on Mozilla Hubs (online), on view: Charlie Stein. Photograph by Peggy Schoenegge © peer to space

A similar situation prevailed in peer to space's inaugural Virtual Art Space exhibition *(IM)MATERIAL MATTER* (2021–2024), also realized on Mozilla Hubs. The group show explored the nature of digital sculptures, showcasing works by Banz & Bowinkel, Entangled Others (Sofia Crespo and Feileacan McCormick), Mohsen Hazrati, Armin Keplinger, Nadine Kolodzey, Lauren Moffatt, Chiara Passa, Sabrina Ratté, and Dagmar Schürrer. Beyond the physical realm, these digital works take on new forms of sculpture, illustrating the potential of digital materiality, which is also reflected in the space itself as both break away from traditional forms. There is no floor and there are no plinths or walls to present the works. Instead, floating platforms connected by a blue moving band illustrate the center of the void. Here, visitors have to fly or teleport themselves into the space in order to fully explore the exhibition, following a virtual approach to movement. The virtual sculptures float in space too. The three-dimensional artworks are not static, but dynamic and in constant motion. The works and the textures of the void appear as a seemingly tactile materiality. Their surfaces evoke physical materials like metal, plastic, and clay. Unlike in the physical sphere, these forms become permeable as visitors can walk through them. The dissolution of physical boundaries once again highlights the unique potential of the virtual. The artworks and the space oscillate between the material and the immaterial, revealing a virtual materiality. In deconstructing physical properties, the parameters of traditional definitions of sculpture and exhibition spaces shift, underlining digital conditions.

The transition to the web opens up a unique realm of art experience. Everything that can be imagined becomes possible, realizable, and thus experienceable. Exhibition visits transform into interactive digital experiences, free from physical constraints like gravity. Visitors navigate the space differently, exploring entirely new ways of engaging with the artwork — seeing them from the bottom to the top, from the outside to the inside. Particularly in combination with a VR headset, the computer-generated image



Exhibition view of *PORTRAIT OF A FUTURE*, 2021–2024, curated by Peggy Schoenegge at the Virtual Gallery PRISKA PASQUER on Mozilla Hubs (online), on view: Charlie Stein. Photograph by Peggy Schoenegge © peer to space



Exhibition view of *(IM)MATERIAL MATTER*, 2021–2024, curated by Peggy Schoenegge on Mozilla Hubs (online), on view: Banz & Bowinkel, Entangled Others (Sofia Crespo and Feileacan McCormick), Mohsen Hazrati, Armin Keplinger, Nadine Kolodziey, Lauren Moffatt, Chiara Passa, Sabrina Ratté, and Dagmar Schürrer. Photograph by Peggy Schoenegge © peer to space

shifts into an immersive three-dimensional space, where we perceive and explore the virtual space as an actual environment. Through this, a different and dynamic understanding of space itself develops, allowing us to rethink exhibitions.

Curating web-based spaces therefore goes beyond the mere discussion of the topics represented by the artworks. It shifts from a process that is object-orientated to one that is dynamically technology-orientated, understanding the internet as both an experiential space and a curatorial tool. Institutions and cultural practitioners require a thoughtful engagement, a deep understanding, and, above all, a useful application of the digital context. In the broadest sense, online curation can be seen as a site-specific installation that considers and integrates local and therefore technical conditions.

From this perspective, the web can also be understood as a form of *paraverse* — a parallel, yet deeply interconnected universe within the multiverse of the digital realm. It shapes and redefines perspectives on curation, challenging conventional notions of reality and space. In this context, it is subject to creative and artistic creation, allowing for entirely new, self-contained worlds. Within this space, reality is not merely replicated but actively redefined, creating speculative exhibition formats that go beyond traditional presentation methods. By integrating interactive elements, dynamic structures, and boundless spatial configurations, online exhibitions dissolve the limitations of the physical and open up entirely new dimensions of art experiences.

This digital turn calls for the exploration and establishment of technologically driven methods that create a modern form of access. Its application serves as a mirror of our time, dealing with a technologized reality that curators are also called upon to convey. They help foster a critical awareness of the digital landscape, encouraging audiences

to engage with contemporary art in a web-based realm. In this context, the medium itself becomes an object of contemplation, enabling a deeper understanding of the internet as a specific medium and 'zeitgeist' in general. This approach helps to break down barriers in engaging with new technologies. Strengthening media competence thus becomes essential for the inclusive formation of our digital future and thus for contemporary art exhibitions, promoting social participation. In this way, online exhibitions become more than digital displays; they transform paraversal spaces that reflect, challenge, and expand our understanding of art, technology, and reality in the present.

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## Notes

- 1** Katarína Rusnáková, "Internet Art and Its Formats," in *#mm net art. Internet Art in the Virtual and Physical Space of Its Presentation*, ed. Marie Meixnerová, Link Edition, Brescia + PAF, Olomouc, 2019: 15.
- 2** Rusnáková, "Internet Art and Its Formats": 20.
- 3** A detailed timeline can be found on Oliver Laric's website. <http://oliverlaric.com/timeline.html>
- 4** Ghidini Marialaura, "Curating on the Web: The Evolution of Platforms as Spaces for Producing and Disseminating Web-Based Art," *Arts* 8, no. 3 (2019): 2, <https://doi.org/10.3390/arts8030078> (24.10.24).
- 5** In contrast to the static websites of earlier phases of the internet, web 2.0 refers to the era of the internet characterized by user-generated content, interactivity, and social platforms, which started in the early 2000. Web 3.0 is often associated with blockchain technology, decentralization, and semantic web concepts, envisions a more autonomous and user-controlled digital environment. This era began around the 2015s. The metaverse, on the other hand, describes immersive, shared virtual worlds where users interact with each other and digital content in real time, often leveraging virtual reality (VR) and augmented reality (AR) technologies. There are initial approaches to the latter, but it has not yet been fully implemented.
- 6** WebXR is a technology that allow users to experience AR and VR content directly within web browsers without the need for external applications. It facilitates immersive and interactive experiences by integrating 3D environments, objects, and spatial interactions into standard web interfaces, enabling new possibilities for digital art and online exhibitions.
- 7** Francesca Baglietto, "Curating across interfaces: an Account of a(Hybrid) Expanding Exhibition", PhD thesis, University of the Arts London, London, 2016.
- 8** David England, Thecla Schiphorst, Nick Bryan-Kinns (Ed.) „Curating the Digital. Space for Art and Interaction”, Springer. Switzerland, 2016.
- 9** Annet Dekker, «Curating Digital Art», Valiz Amsterdam, Amsterdam, 2021.
- 10** Lívia Nolasco-Rózsás with Marianne Schädler (Ed.), "Beyond Matter, within Space. Curatorial and Art Mediation Techniques on the Verge of Virtual Reality", Hantje Cantz, Karlsruhe, 2023.
- 11** Find more details under: <http://www.peertospace.eu/onlineexhibitions>.
- 12** <http://www.mermaidsandunicorns.net>
- 13** <http://www.claiming-needles.net>
- 14** <http://paradoxical-objects.net>
- 15** <http://evolvingkinetics.common.garden>

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**Peggy Schoenegge** is an independent curator, writer and project manager at peer to space, as well as the head of the board of the Media Art Association in Berlin. Her work focuses on the conditions and challenges of the post-digital age and its impact on our everyday life, culture and society. Specifically, she addresses topics such as gender, performance, and artificial intelligence in the context of current technological developments. By curating digital art, internet art and art created with new media such as VR or AR, she realizes international group exhibitions in both physical and virtual spaces. In this framework, she explores strategies for contemporary and media-based forms of presentation. In addition, she lectures and participates in panel discussions at international conferences, symposia and events. She teaches at the University of Applied Sciences Darmstadt and HTW – University of Applied Sciences Berlin. Currently, Peggy Schoenegge is pursuing a PhD on the theoretical and practical implications of web-based art spaces and their development from the initial stages of the internet until today at the Institute of Art History at the University of Bonn.

# Ctrl + 策展: 关于线上展览

## 佩吉·舍内格 (Peggy Schoenegge)

新技术不仅影响着艺术家们的艺术实践,使其塑造新的艺术形式,也为策展领域带来了改变。技术进步使艺术家们能够探索创新的表达形式,而这些形式往往需要不同的观看习惯。因此,新的策展方式意味着新的呈现模式。这一点已体现在视频等媒介以及增强现实(AR)或虚拟现实(VR)等新出现的沉浸式技术中。互联网的广泛应用尤其对艺术界产生了深远的影响,艺术家和策展人因此开辟了全新的策展空间。

基于互联网的策展方法引入了不同以往的行动框架。相比实体或传统展览空间,线上艺术空间带来了更多的可能性。实体空间由其建筑结构、室内设计以及开放时间和入场规定等结构性因素所定义。在实体空间中举办的展览必须遵循场地要求。相比之下,线上空间则由图形、动画或互动功能等数字元素构成。这些数字组件通常具有灵活性,可以根据展览的需求而变化。因此,线上框架更具适应性,能在展览中实现全天候的全球覆盖、无限延展的空间可能性以及动态内容的更新。在该框架下,线上展览促进了无障碍观展和观众的直接参与。观众通过笔记本电脑、平板电脑或智能手机等设备,每时每刻都能看展。正如卡塔琳娜·鲁斯纳科娃(Katarína Rusnáková)所言,互联网能够让人们基于聊天室等新的讨论形式,进行现实的交流。<sup>1</sup>互联网提供了一种民主的方法,使那些关于当代社会政治问题的项目得以开展。<sup>2</sup>这种可达性有助于艺术界的氛围变得更有包容性,能够接纳当前的技术进步。此外,互联网还拓展了人们的认知边界,并鼓励人们重新思考艺术的呈现、体验和传播方式。

自20世纪90年代初互联网普及以来,互联网逐渐进入艺术世界。艺术家和策展人利用网络平台展示和传播艺术作品,创造了基于互联网的体验空间。值得一提的互联网早期项目之一为沃尔夫冈·施泰勒(Wolfgang Staehle)创立的关于艺术和艺术家的交流平台“The Thing”(1991年)。另一个著名的平台为“Hyper X”(1995年),该平台是由Alt-X与马克·阿梅里卡(Mark Amerika)、克里斯蒂安·保罗(Christiane Paul)和玛丽莎·奥尔森(Marisa Olson)等其他策展人共同策划的有关网络艺术的数字展览空间。类似的平台还有“Splashback: Rhizome's Splash Pages”(1998-2002年),该平台提供即时的在线艺术浏览窗口,同时反映了互联网的速度。此外,whitneybiennial.com曾以数字形式呈现2002年惠特尼双年展的作品,作为对其实体展览的补充。Panther Modern自2013年成立以来,不断拓展其虚拟展览空间,使观众能够获得线上观展的空间体验。诸如此类的例子可以例举到如今的Web 3.0时代;然而,这份清单尚未得到系统的梳理。<sup>3</sup>

这些早期的线上空间往往带有实验性,对技术的运用较为有限。这些空间已适应了现有平台,或在这些平台上构建了自己的框架。<sup>4</sup>这些早期的空间为后来出现的数字艺术世界奠定了基础。不过,很多这样的网站如今已无法访问,而且仅有部分相关文档记录被保留下来,因此该领域尚有很大研究空间。这也凸显了一个事实,即互联网是不断进化的媒介,这也体现在Web 2.0、Web 3.0和元宇宙等概念中。<sup>5</sup>一般来说,网站并非永久存在。网站的存在依赖于不断变更的浏览器技术、供应商和维护工作。然而,随着技术的进步,有关数字艺术和线上展览的新机遇不断出现——尤其是在WebXR<sup>6</sup>技术正在发展的当下。

由于新冠疫情期间的相关措施以及由此促使的转向互联网的活动,出现了许多线上项目,与这些项目有关的反思和语境化也引发了关注。在这一语境下,相关讨论主要是描述性的,通过勾勒数字技术的特征,重点探讨如何在结构和形式上增强当代艺术的可达性和可见性。相关讨论常使用一种媒体理论方法,即追溯互联网整体的发展,以及VR等各种平台和技术的具体发展。弗朗西斯卡·巴格列托(Francesca Baglietto, 2016)<sup>7</sup>、大卫·英格兰(David England, 2016)<sup>8</sup>、安妮特·德克尔(Annet Dekker, 2021)<sup>9</sup>以及莉维亚·诺拉斯科-罗萨斯和玛丽安娜·舍德勒(Lívia Nolasco-Rózsás, Marianne Schädler, 2023)<sup>10</sup>等人的研究成果体现了这一探讨趋势。尽管人们对技术带来的影响已达成广泛共识,但仍然很少有人对互联网作为艺术空间这一议题进行更深入的分析。然而,这一研究领域的空缺也为进一步的研究和批判性探讨提供了契机。

不断发展的平台及平台具有的技术为空间创作提供了多种创作方法。迄今为止,这一方面在很大程度上缺少术语为其定义。然而,由于这些因素从根本上塑造了

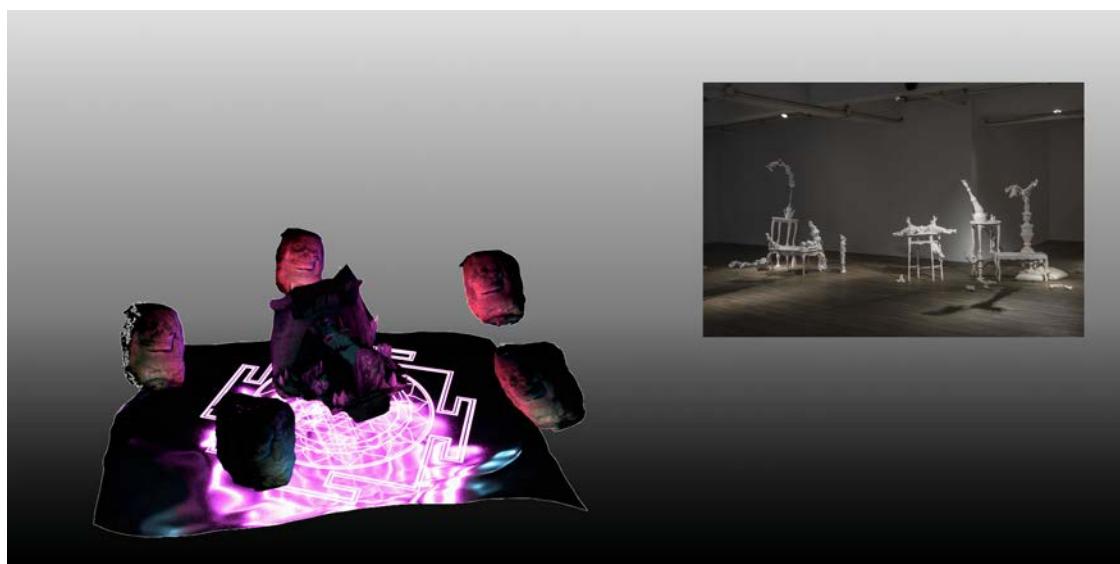


“NARGIFUS – 动态自画像”(NARGIFUS—ANIMATED SELF PORTRAITS, 2016–2019年)展览现场图 策展:卡拉·甘尼斯(Carla Gannis)和蒂娜·绍尔兰德(Tina Sauerlaender),于NewHive(线上) 艺术家:帕特里克·利希蒂(Patrick Lichy)和萨娜·霍金斯(Shayna Hawkins)。摄影:蒂娜·绍尔兰德© peer to space

策展和艺术实践以及关于艺术作品的体验,本文将从概念上尝试区分这些因素。由此,相关展览可分为两种形式:数字线上展览和虚拟线上展览。前者在网站的二维平面上运作,后者则能带来三维体验。本文将以独立策展团体 peer to space 的项目为例,详细说明这两种展览的策展形式有何特点。自 2016 年以来,该策展团体一直在各种平台上举办线上展览,采用不同的展览呈现和互动方式,并整合了 VR 等媒介。这些项目使艺术作品得以向全球观众展示,并使观众拥有了在机构或画廊的“白立方”空间以外的观展体验。这些项目展现了更多的艺术立场,引发了更广泛的讨论,关于不同话题的探讨得以以更加复杂的方式呈现。

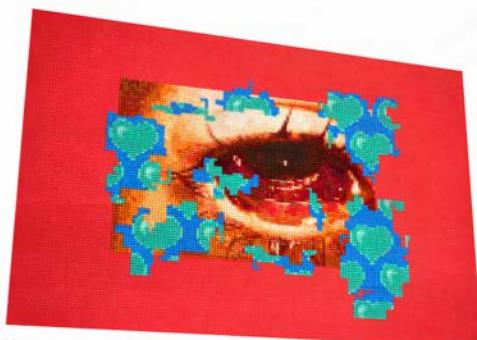
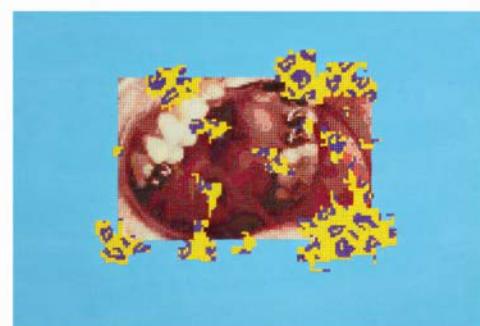


“CAT HEROICUS SUBLIMIS”(2016–2019年)展览现场图 策展:蒂娜·绍尔兰德和佩吉·舍内格,于NewHive(线上)  
艺术家:奥德·尼乌尔(Od Niwr)和马蒂厄·圣皮埃尔(Mathieu St-Pierre) 摄影:蒂娜·绍尔兰德© peer to space

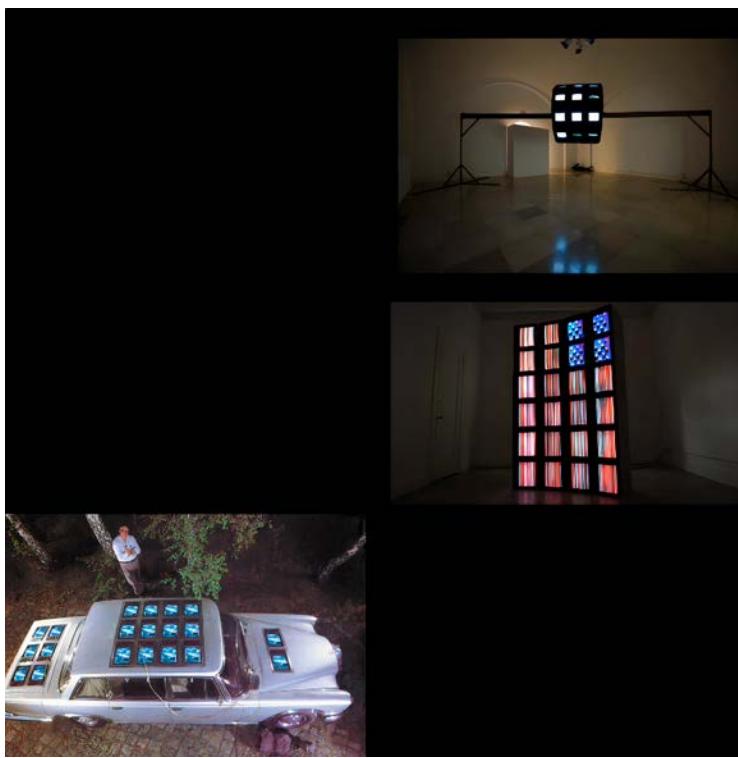


“美人鱼与独角兽”(MERMAIDS & UNICORNS, 2017年)展览现场图 策展:卡洛塔·迈耶(Carlotta Meyer)和蒂娜·绍尔兰德,线上 艺术家:阿尔弗雷多·萨拉萨尔-卡罗(Alfredo Salazar-Caro)和希拉·德·索萨(Shyra De Souza)。摄影:蒂娜·绍尔兰德© peer to space

例如,“NARGIFUS——动态自画像”(*NARGIFUS—ANIMATED SELF PORTRAITS*, 2016–2019年)探索了动画自画像,“CAT HEROICUS SUBLIMIS”(2016–2019年)审视了艺术家如何运用数字工具发展抽象的视觉语言。<sup>11</sup>这两个展览最初都于NewHive平台上举办,但该平台现已关闭。这些展览目前已无法在线浏览,这再次凸显了互联网这一媒介依赖于供应商和技术基础设施。由此,peer to space团队在自己的网域上呈现了更多展览。例如,“美人鱼与独角兽”(*MERMAIDS & UNICORNS*, 2017年)<sup>12</sup>探讨了当代的混合结构,并提出无论是屏幕上的图像,还是由此产生的数字范围,都是现实的——人们通常认为数字世界是非现实的,该展览带来的观点与此截然相反。在该展览上,观众并非以垂直观看的方式,而是以水平观看的方式浏览作品。群展“针的宣言——当代刺绣艺术的立场”(*CLAIMING NEEDLES—Positions of Contemporary Embroidery Art*, 2018年)<sup>13</sup>将当代刺绣艺术视为批判性工具,拓展了女性就业的意义。当用户让鼠标图案停留在艺术作品上,该作品会显现动画效果;点击艺术作品,观众可获取更多信息,并将图像放大后浏览。类似的策展方式同样体现在“矛盾之物——1960年至今的影像雕塑艺术”(*PARADOXICAL OBJECTS—Video Sculpture Art from 1960 to Today*, 2021年)<sup>14</sup>中,该展览反映了影像雕塑的复杂性,将动态影像的时间性和动

Birgit Dieker, *Arme*, 2011Kathryn Shinko, *Wounds Slowly Being Covered Up (Eye)*, 2015Kathryn Shinko, *Wounds Slowly Being Covered Up (Mouth)*, 2015

“针的宣言——当代刺绣艺术的立场”(*CLAIMING NEEDLES – Positions of Contemporary Embroidery Art*, 2018年)展览现场图,策展:佩吉·舍内格和达尔娅·祖布(Darja Zub),线上艺术家:比尔吉特·迪克(Birgit Dieker)和凯瑟琳·申科(Kathryn Shinko)摄影:佩吉·舍内格© peer to space



“矛盾之物——1960年至今的影像雕塑艺术”(PARADOXICAL OBJECTS—Video Sculpture Art from 1960 to Today, 2021年)展览现场图 策展:苏·巴赫迈尔(Sue Bachmeier)和佩吉·舍内格,线上 艺术家:弗兰克·巴尔维(Frank Balve)、班布里奇·本顿(Bainbridge Benton)和沃尔夫·沃斯特尔(Wolf Vostell) 摄影:佩吉·舍内格 © peer to space

态性与屏幕的静态性相结合。观众通过应用各种滤镜,可以改变展览作品的策展布局,与展览建立新的连接。这一做法为展览增添了策展人叙事以外的新视角。

上述这些策展例子利用二维的、部分无限延伸的表面,呈现了精心策划及布置的作品。这些展览体现了突破常规的新策展方法,尤其是在为观众提供互动体验上。在此过程中,新的观看和展示形式随之诞生。

另一个将互联网应用于策展实践的例子是混合项目“发展的动力学——后数字时代动态艺术的转型”(EVOLVING KINETICS—Transformations of Kinetic Art in the Post-Digital Age, 2023年)。该展览于盖尔森基兴美术馆举办,而且也以线上形式在艺术家康斯坦特·杜拉特(Constant Dullaart)创立的平台“共同花园”(Common Garden)上展示。<sup>15</sup>在数字空间中,观众以五彩的复活节彩蛋虚拟形象,在无限延伸的二维场景中移动。当两个或多个观众在展览网站上相遇时,他们可以像在视频会议中那样交流,共同探索展览。这使线上看展成为了一种社交体验,观众构筑了共同的线上空间。

“发展的动力学”将数字结构融入艺术博物馆,不仅为观众提供了与新兴技术互动的重要途径,也为项目的长期可持续性和可达性奠定了基础。该项目通过将数字元素嵌入博物馆的基础设施,确保观众能以创新的方式与艺术作品互动,同时

也将博物馆的影响力扩展到前往参观博物馆的观众范围以外。这种策展方式能够帮助博物馆适应数字未来,更容易使不同背景的观众都能接触到艺术,并促进技术的持续融合。

在此过程中,对虚拟空间以及虚拟展览的探索尤为重要——尤其是在近期WebXR技术发展的情形下。2021年新冠疫情封锁期间,peer to space与PRISKA PASQUER画廊合作,举办了“一对一”(ONE TO ONE)系列展览。作为该系列展览的部分内容,peer to space的策展人与一位艺术家合作,为Mozilla Hubs平台上的虚拟画廊开发展览概念。Mozilla Hubs已于2024年5月关闭。不过,在此之前,该平台通过多媒介为用户提供便捷的三维虚拟空间访问途径。观众可以通过智能手机、平板电脑、电脑,甚至VR头戴式显示器设备进入虚拟空间,并以虚拟形象的形式实时互动。“一对一”系列探讨了一系列当代议题,以艺术形式反思了当代的后数字状况。此外,所有展览作品都围绕虚拟空间作为艺术体验新空间这一主题进行了探索。诚然PRISKA PASQUER的展览并没有完全放弃传统空间结构——因为其通过数字方式复制了物理位置——但该系列展充分利用了虚拟世界的潜力,使艺术作品以新的方式被呈现和感知。

《未来肖像》(PORTRAIT OF A FUTURE, 2021-2024年)也体现了这种策展方式,该作品来自“一对一”系列。在这件作品中,艺术家查理·斯坦和我使关于机器人和人工智能应用的描述变得生动起来,将它们转化为动画雕塑,如同浮木或巨石般镶嵌在画廊的虚拟海岸边。除了这些装置式的介入之外,我们还调整了作品的尺



《未来肖像》(PORTRAIT OF A FUTURE, 2021-2024年)展览现场图 策展:佩吉·舍内格,于Mozilla Hubs的虚拟画廊 PRISKA PASQUER(线上) 艺术家:查理·斯坦(Charlie Stein) 摄影:佩吉·舍内格 © peer to space

寸,将部分绘画和图画作品放大或缩小,使其部分漂浮在虚空之海之上。由于物质的限制和条件,我们无法在物理空间中实现这样的构想,但在虚拟空间中只需轻轻点击鼠标,就能完成策展。这种灵活性使我们得以在作品的尺寸和场景上进行有趣的探索。由此,一种新的艺术体验形式应运而生,在这种体验下,实体空间不再重要。在该语境下,虚拟世界本身成为体验的对象,引发人们思考与现实有关的问题。人们的物理现实在虚拟展览中变成了记忆。非物质环境与人的身体相联系,使人意识到自身的生物状态,而这种生物状态通过虚拟形象在视觉上被反映出来。在该框架下,用户体验到了非具身的存在状态,而这种状态反过来又会在用户身上被反映出来。线上和线下的在场因此产生了一种令人兴奋的关联。

peer to space的首届虚拟艺术空间展览“(非)物质事件”((IM)MATERIAL MATTER, 2021-2024年)同样呈现了类似的情境。该展览同样于Mozilla Hubs 平台上举办。这场群展探索了数字雕塑的本质,展出了Banz & Bowinkel、艺术团体Entangled Others(索菲亚·克雷斯波, Sofia Crespo和菲利亚坎·麦考密克, Feileacan McCormick)、莫森·哈兹拉蒂(Mohsen Hazrati)、阿明·凯普林格(Armin Keplinger)、纳丁·科洛齐耶(Nadine Kolodziey)、劳伦·莫法特(Lauren Moffatt),基娅拉·帕萨(Chiara Passa)、萨布丽娜·拉特(Sabrina Ratté)和达格玛·舒勒(Dagmar Schürrer)的作品。这些数字作品超越了物理范围,具有新的雕塑形式,描述了数字物质性的潜力,而这种潜力也体现在展览空间本身,这意味着艺术品和展览空间都突破了传统形式的束缚。在平台的虚拟空间中,没有地板,也没有基座或墙壁来展示作品。有一条蓝色移动带连接的漂浮平台,勾勒



《未来肖像》(PORTRAIT OF A FUTURE, 2021-2024年) 展览现场图 策展:佩吉·舍内格,于Mozilla Hubs 的虚拟画廊 PRISKA PASQUER(线上) 艺术家:查理·斯坦(Charlie Stein) 摄影:佩吉·舍内格 © peer to space



“(非)物质事件”展览现场图 *(IM)MATERIAL MATTER*, 2021–2024年) 策展:佩吉·舍内格于Mozilla Hubs(线上平台) 艺术家:Banz & Bowinkel、艺术团体Entangled Others(索菲亚·克雷斯波, Sofia Crespo和菲利亚坎·麦考密克, Feileacan McCormick)、莫森·哈兹拉蒂(Mohsen Hazrati)、阿明·凯普林格(Armin Keplinger)、纳丁·科洛齐耶(Nadine Kolodzey)、劳伦·莫法特(Lauren Moffatt), 基娅拉·帕萨(Chiara Passa)、萨布丽娜·拉特(Sabrina Ratté)和达格玛·舒勒(Dagmar Schürrer) 摄影:佩吉·舍内格 © peer to space

出了虚拟空间的中心。想要充分探索展览, 观众必须通过飞行或传送的方式进入空间, 以虚拟方法移动。虚拟雕塑也漂浮在空间中。这些三维艺术作品并非静止不动, 而是动态的, 并且持续运动着。艺术作品和虚拟空间的纹理呈现出似乎可触的物质性。它们的表面让人联想到金属、塑料和黏土等物理材料。不同于物理空间的情况, 这些艺术作品和虚拟空间的形态变得可以渗透, 使观众能够穿行其中。这种物理边界的消解再次凸显了虚拟世界的独特潜力。这种艺术作品和空间于物质与非物质之间的摆动揭示了虚拟物质性。在解构物理属性的策展过程中, 关于雕塑和展览空间的传统定义的参数发生了变化, 这强调了数字状况。

基于互联网的策展方法开拓了独特的艺术体验领域。一切想象皆为可能, 能够被实现, 并最终被体验。观展变为来互动式数字体验, 摆脱了重力等物理限制。观众以不同的方式探索空间, 探索与艺术作品互动的全新途径——即以从下至上, 由外到内的方式欣赏作品。尤其是当观众使用VR头戴式显示器观展时, 计算机生成的图像转变为沉浸式的三维空间, 使观众如同身处现实环境一般感知和摸索虚拟空间。由此, 人们对空间本身有了全新而动态的理解, 对展览有了新思考。

因此, 基于互联网空间的策展不仅限于对艺术作品所表达的主题的探讨。策展从以对象为导向的过程转变为以动态技术为导向的过程, 策展人将互联网视为体

验空间和策展工具。机构和文化从业者需要对这种策展方式进行富有洞见的参与、深刻的理解,以及有效地利用数字语境。从广义上讲,线上策展可以被视为在特定场所进行设置,线上策展考虑并整合了本地的、因而也是技术性的条件。

从该角度出发,互联网也可以被理解为一种平行宇宙的形式——一个在数字范围的多元宇宙内与现实平行却又深度互联的宇宙。人们可运用互联网塑造并重新定义策展的视角,对关于现实和空间的传统观念发起挑战。在该语境下,互联网承载了具有创造性和艺术性的创作,全新的、自成一体的世界随之诞生。在虚拟空间里,现实不仅被复制,而且被积极地重新定义,超越传统展示方式的、具有思辨性的展览形式也由此出现。在线上展览中,策展人通过整合互动元素、动态结构和无限的空间布局,打破了实体空间的局限性,开拓了艺术体验的全新维度。

数字策展在于探索和建立以技术为驱动的策展方法,创造观展的现代形式。这种策展方式犹如一面镜子,映照出我们的时代,帮助策展人表达技术化的现实。这种策展方式有助于策展人形成对数字景观的批判意识,并鼓励观众在互联网空间中与当代艺术互动。在该语境下,媒介本身成为人们的思考对象,人们得以更深入地思考互联网作为特定媒介以及作为“时代精神”的意义。这种策展方式有助于打破壁垒,让人们与新技术互动。因此,提升媒介素养对于构建具有包容性的数字未来至关重要,也对促进当代艺术展览中的社会参与至关重要。这样来看,线上展览不仅仅是在做数字展示;而是使平行宇宙空间变得具有反思性和挑战性,并拓展了人们对当代艺术、科技和现实的理解。

## 注释

**1** 卡塔琳娜·鲁斯纳科娃 (Katarína Rusnáková), “互联网艺术及其形式”, 载于《#mm 网络艺术: 虚拟空间与实体空间中的互联网艺术》 (#mm net art. *Internet Art in the Virtual and Physical Space of Its Presentation*), 玛丽·梅克斯内罗娃 (Marie Meixnerová) 编, 线上版, Brescia + PAF, 奥洛穆茨, 2019年: 第15页。

**2** 鲁斯纳科娃, “互联网艺术及其形式”: 第20页。

**3** 详细的时间线可见奥利弗·拉里克 (Oliver Laric) 的网站 <http://oliverlaric.com/timeline.html>

**4** 吉迪尼·玛丽亚劳拉 (Ghidini Marialaura), “网络策展: 平台作为网络艺术生产和传播空间的演变” (“Curating on the Web: The Evolution of Platforms as Spaces for Producing and Disseminating Web-Based Art”), 《Arts》期刊第 8 期, 第 3 卷 (2019 年) : 第2页, <https://doi.org/10.3390/arts8030078> (2024 年 10 月 24 日)。

**5** 与互联网早期的静态网站不同, Web 2.0 指的是始于 21 世纪初的互联网时代, Web 2.0 的特点是用户生成内容、互动性和社交平台。Web 3.0 通常与区块链技术、去中心化和语义网络概念联系在一起, 设想了一个更加自主和由用户控制的数字环境。这一时代始于 2015 年左右。另一方面, 元宇宙描述了共享的沉浸式虚拟世界, 用户在其中可以与其他用户或数字内容实时互动, 通常这会通过虚拟现实 (VR) 和增强现实 (AR) 技术实现。人们已初步尝试增强现实技术, 但这一技术尚未完全得到实践。

**6** WebXR 是一种用户无需使用外部应用程序即可直接在网页浏览器中体验 AR 和 VR 内容的技术。该技术将 3D 环境、对象和空间交互融入到标准网页界面中, 提供沉浸式和交互式体验, 为数字艺术和线上展览带来了新的可能性。

**7** 弗朗西斯卡·巴格列托 (Francesca Baglietto), “跨界面策展: (混合式) 扩展展览案例分析” (“*Curating across interfaces: an Account of a(Hybrid) Expanding Exhibition*”), 博士论文, 伦敦艺术大学, 伦敦, 2016年。

**8** 大卫·英格兰 (David England)、塞克拉·希普霍斯特 (Thecla Schiphorst)、尼克·布莱恩-金斯 (Nick Bryan-Kinns) 编, 《数字策展: 艺术与互动的空间》 (*Curating the Digital. Space for Art and Interaction*), 施普林格出版社, 瑞士, 2016年。

**9** 安妮特·德克尔 (Annet Dekker), 《数字艺术策展》 (*Curating Digital Art*), Valiz Amsterdam, 阿姆斯特丹, 2021年。

**10** 莉维亚·诺拉斯科-罗萨斯 (Lívia Nolasco-Rózsás) 和玛丽安·谢德勒 (Marianne Schädler) 编著, 《超越物质, 空间之内: 虚拟现实边缘的策展与艺术媒介技术》 (“*Beyond Matter, within Space. Curatorial and Art Mediation Techniques on the Verge of Virtual Reality*”), 哈特耶·坎茨出版社, 卡尔斯鲁厄, 2023年。

**11** 更多内容可详见 <http://www.peertospace.eu/onlineexhibitions>

**12** <http://www.mermaidsandunicorns.net>

**13** <http://www.claiming-needles.net>

**14** <http://paradoxical-objects.net>

**15** <http://evolvingkinetics.common.garden>

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**佩吉·舍内格 (Peggy Schoenegge)** 是独立策展人、作家和 peer to space 的项目经理, 同时也是柏林媒体艺术协会的理事会主席。她的工作聚焦于后数字时代的现状与挑战, 以及这些现状和挑战对日常生活、文化和社会的影响。具体而言, 她在当前科技发展的背景下关注性别、表演和人工智能等议题。她策划数字艺术、网络艺术展览以及运用虚拟现实 (VR) 或增强现实 (AR) 等新媒体创作的艺术作品展, 并在实体空间和虚拟空间举办国际群展。在此框架下, 她探索基于媒介的当代表达策略。此外, 她还在国际会议、研讨会和活动中展开讲座和参与小组讨论。她任教于达姆施塔特应用科技大学和柏林应用科技大学。目前, 佩吉·舍内格正在波恩大学艺术史研究所攻读博士学位, 研究网络艺术空间的理论和实践意义, 及其从互联网初期至今的发展历程。

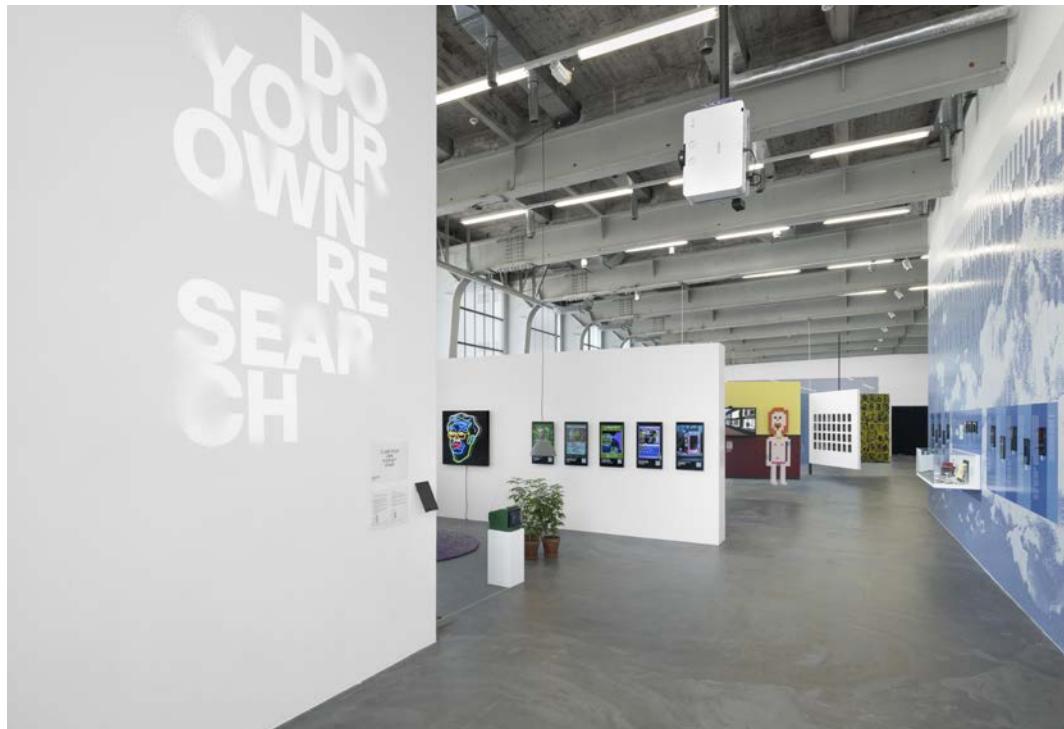
# DYOR—Making Sense of the Crypto Art World<sup>1</sup>

## Nina Roehrs

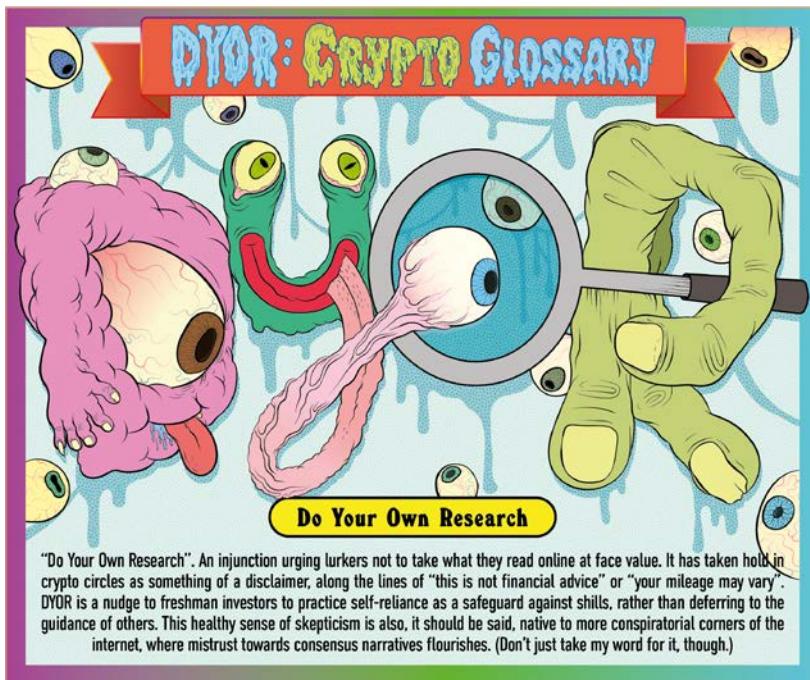
The exhibition *DYOR* at Kunsthalle Zürich, which ran from 8 October 2022 to 15 January 2023, marked a seminal moment in the intersection of traditional art institutions and the burgeoning world of blockchain and crypto art. Curated by Nina Roehrs, who is also the author of this contribution, the exhibition provided a platform to explore the creative and conceptual underpinnings of Web3 technologies<sup>2</sup> — blockchain, NFTs, smart contracts and decentralised networks — through a curatorial approach that embraced the ethos of decentralisation, community and active engagement.

### **DYOR (Do Your Own Research) as a New Maxim in the Age of Web3**

The dictum “Do Your Own Research” epitomises the ethos of the crypto scene, encouraging individuals to do their own research rather than accepting information at face value. The choice of *DYOR* as the exhibition title was deliberate, reflecting the multifaceted nature of this phrase. It acknowledges the complexity of blockchain and NFT technology, and therefore the difficulty of accessing art in this context, while inviting viewers to approach this emerging world with curiosity rather than prejudice. When crypto art burst into mainstream consciousness in early 2021, it was met with scepticism, much like the disruptive art of figures like Joseph Beuys and Andy Warhol in their time, and even Maurizio Cattelan’s *Comedian* (2019) today. *DYOR* is both a challenge and an invitation to enter this new field with an open mind, to question and discover its artistic potential.



Installation view of exhibition *DYOR* at Kunsthalle Zürich & *DYOR* logo by Andreas Gysin (aka ertdfgcvb).  
Photography by Julien Gremaud © Kunsthalle Zürich



DYOR—Card from *DYOR: Crypto Glossary* by Moxarra Gonzales & Adina Glickstein. Developed for the exhibition *DYOR* in collaboration with *Spike Art Magazine*.

As J.J. Charlesworth aptly observes in his *ArtReview* article, “the stylistic range, from academic to self-taught, reminds the more austere artworld of a vast, quotidian culture of imagemaking among amateurs and enthusiasts that was always out there, but that networked culture has, in the last decade or so, magnified and accelerated to an unprecedented degree.”<sup>3</sup> His reflection underscores the exhibition’s openness to embracing the divergences between cultural communities, aligning with the ethos of *DYOR*. By foregrounding this diversity, the exhibition situates itself within the broader dialogue of how Web3 reshapes traditional hierarchies in the art world.

The title *DYOR* also emphasises individual responsibility and self-education. Web3’s decentralisation places autonomy in the hands of the individual: be your own bank, your own gallery. The curatorial strategy extended this maxim, avoiding reductive didacticism and instead creating a dynamic framework for exploration and dialogue.

### **Curatorial Philosophy—Decentralisation in Practice**

The curatorial approach for *DYOR* was deeply informed by the decentralised ethos of Web3. A key concern was to avoid the pitfalls of institutional colonialism by presenting crypto art as an authentic, grassroots phenomenon rather than assimilating it into traditional art world paradigms. This required a balance between contextualising crypto art for new audiences and respecting its distinct cultural and technological frameworks, while “not engaging in the risky endeavour of raising barriers between art and non-art, amateur and professional,”<sup>4</sup> as Domenico Quaranta commented in *Outland*.

By foregrounding community-driven practices and enabling visitor agency, the exhibition embodied the principles it sought to explore. As a result, *DYOR* was not just an exhibition about Web3 but an enactment of its core values: decentralisation, autonomy, and inclusivity.

To curate an exhibition about a world where the principal ideal is decentralisation involves a certain contradiction because curation demands selection, exclusion, and gatekeeping. This tension shaped the curatorial process, necessitating innovative approaches to balance inclusivity and the curatorial need for coherence. Most people would, I think, accept that we need curators who have done their research, and who can identify works and contextualise them thoughtfully. The question is ‘how?’

For *DYOR*, the solution was to involve multiple artists, platforms, curators, collectors, visitors, and even traditional galleries to ensure diversification, decentralisation, and inclusion. The exhibition was therefore structured around nine sub-sections that were co-curated and created by nine co-curators / creators, featured more than 300 artists, co-issued and distributed 7,818 NFTs, minted on three blockchains (Bitcoin, Ethereum, Tezos), and had more than 8,000 visitors. There was also a strong emphasis on projects that enabled participation.

### **The Crypto Art World**

*DYOR* traced the rapid evolution of crypto art, a domain that surged into mainstream consciousness in 2021 with record-breaking auctions, such as Beeple’s *Everydays: The First 5000 Days* at Christie’s.<sup>5</sup> However, crypto art’s origins date back to 2015/2016 with early experiments on the Bitcoin blockchain, and it has since evolved at breakneck speed. To contextualise this evolution, mostly driven by coders, artists and communities, *DYOR* has taken an investigative curatorial approach, starting with its origins and cultural significance.



Installation view of *DYOR—Cumulonimbus Murus* at Kunsthalle Zürich. Photograph by Julien Gremaud  
© Kunsthalle Zürich

## Crypto Art History—A Movement of Values over Aesthetics

Commonly known as a wall cloud, the meteorological phenomenon *cumulonimbus murus* indicates a strong updraft and powerful thunderstorm from which tornados can form — a fitting metaphor for the turbulent and transformative history of crypto art.<sup>6</sup> *Cumulonimbus Murus* (2022), a multi-media installation by artist and crypto art historian Martin Lukas Ostachowski, highlighted key milestones that informed crypto art, serving as a visual and intellectual exploration of its origins and cultural importance.

The installation comprises digital artworks and a detailed essay that contextualised pivotal movements such as cypherpunk ideals, the search for identity within online communities, and the development of platforms that democratised art production and royalties. These milestones were arranged in a manner that mirrors the dynamic and sometimes chaotic growth of the crypto art ecosystem, inviting viewers to trace its evolution from niche innovation to global phenomenon.

Through its layered presentation, *Cumulonimbus Murus* not only provided an engaging historical narrative but also embodied the *DYOR* ethos of investigation and discovery. Visitors were encouraged to delve deeper into the connections between the movements represented, fostering an understanding of how digital art emerged as a response to cultural, technological, and economic shifts.

## Pepe the Frog—How a viral meme went from outcast to art museum<sup>7</sup>

Another section curated by Fabian Wyss (aka FWD) featured the Pepe community in a cypherpunk, “cannabis-plant strewn ‘living room’ dedicated to perhaps one of the earliest examples of an internet meme becoming an NFT: Pepe the Frog. [...] The convivial



Installation view of *DYOR—Pepe the Frog Space* at Kunsthalle Zürich. Photograph by Julien Gremaud © Kunsthalle Zürich

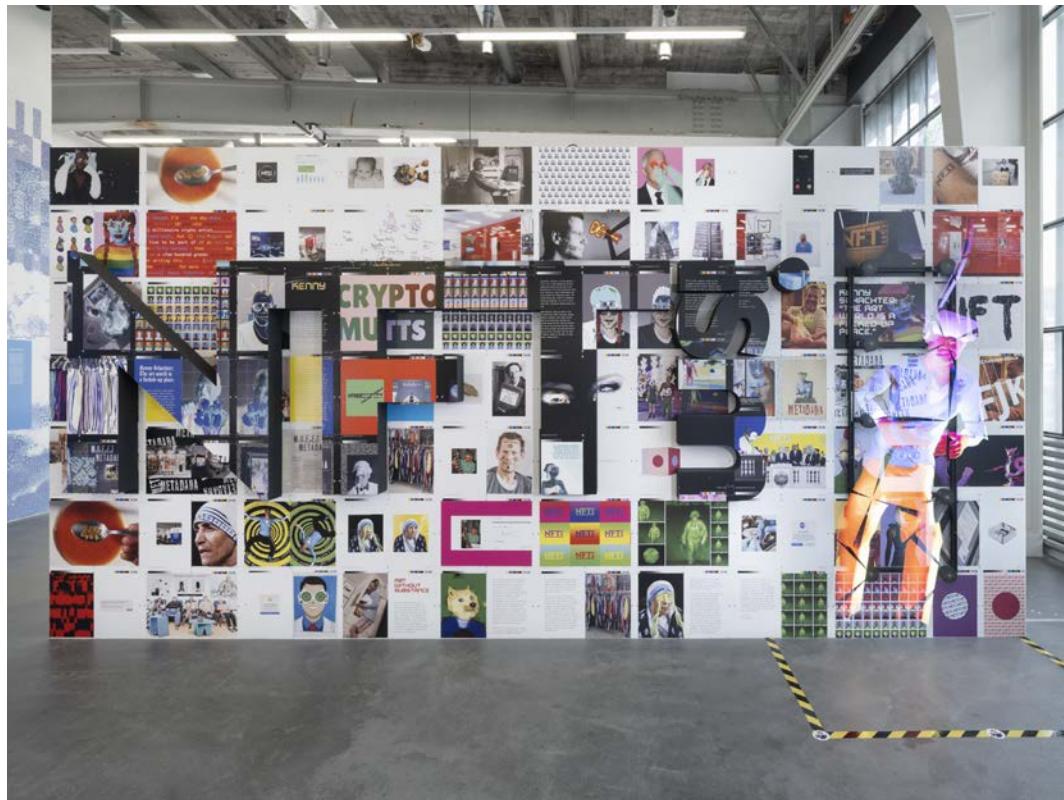
absurdity of Pepe (not notwithstanding his brief hijacking as a mascot of the US alt-right) highlights how much the NFT boom has been rooted in online subcultures that have had little to do with the artworld's more exclusive networks,”<sup>8</sup> as Charlesworth points out in his article for *ArtReview*.

This OG<sup>9</sup> community exemplified early NFT practices, originally termed Rare Art. It celebrates the idea that anyone can be an artist and that great artists steal and fake. What started as a physical trading card type asset was soon transferred to the Bitcoin blockchain and is still a very vibrant community today, with numerous and well-known crypto artists such as ROBNESS, Matt Kane, Dimitri Cherniak, Marcus Connor. It is a community that not only creates memetic digital assets, but often works with physical artwork and combinations of both worlds.

Through physical trading cards and later digital assets on the Bitcoin blockchain, the Pepe community highlights the interplay between humour, artistic innovation, and decentralised collaboration. Merchandise such as posters, stickers, and T-shirts — hallmarks of conventions and community gatherings — further highlighted the commercial and cultural dimensions of the crypto art ecosystem.

### NFTism—Beyond Technology

Elsewhere in the Kunsthalle, Kenny Schachter, a critic, former dealer, and anarchic *Artnet* columnist, was represented through a wallpapering of article printouts, screen-grabs, and even a life-size avatar of himself dancing. As Charlesworth explains in *ArtReview*, this display highlighted Schachter's role in “cheerleading what he saw as the positive disruption that the NFT boom brought to the conventional artworld.”<sup>10</sup>



Installation view of *DYOR—NFTism* at Kunsthalle Zürich. Photograph by Julien Gremaud © Kunsthalle Zürich

Schachter has been an active advocate of NFTs, coining the term *NFTism* (a trademarked concept) to encapsulate his perspective. He has promoted this ideology through his art, writings, curated exhibitions, fairs, and even a social token launched on SushiSwap in December 2021. Charlesworth observes that “Schachter’s provocation needled many in the established artworld (he’s built his reputation on being the ‘insider’s outsider’, after all),”<sup>11</sup> emphasising how the influx of NFTs has challenged traditional gatekeeping and introduced a new cohort of artists and collectors previously sidelined by the art market.

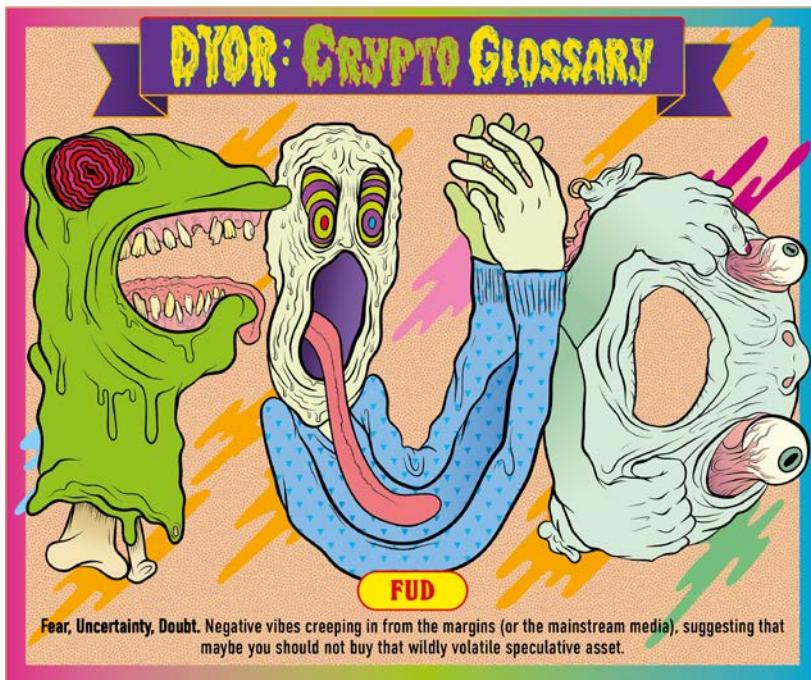
This disruption underscores a broader shift: beyond the technicalities of smart contracts, the essence of NFTs lies in the communities that have emerged around them. These communities transcend the transactional focus of buying and selling digital art, uniting creators and collectors in a shared, humanistic ethos. Here, individuals from diverse backgrounds collaborate and support one another without expectations of direct reciprocity — a stark contrast to the zero-sum and quid-pro-quo dynamics that dominate the conventional art world. Moreover, platforms like Discord have fostered a novel model of discourse, eroding the traditional distance between creators and buyers.

However, Schachter himself acknowledges the darker side of this revolution. Reflecting on the rapid commercialisation and exploitation of the NFT space, he revised his *NFTism* tattoo to read *Post NFTism*. As he describes it, the once-promising arena of crypto and collectible art has “quickly and ruthlessly devolved into a free-for-all cash grab characterised by greed and scams.”<sup>12</sup>

After a couple of quieter years, with more space and time for art and less money involved, it will be interesting to see what the looming bull run will bring.



Installation view of *DYOR: Crypto Glossary* at Kunsthalle Zürich. Photograph by Julien Gremaud  
© Kunsthalle Zürich



FUD—Card from *DYOR: Crypto Glossary* by Moxarra Gonzales & Adina Glickstein. Developed for the exhibition *DYOR* in collaboration with *Spike Art Magazine*.

### DYOR Crypto Glossary—a world with its own jargon

Whether you're an Original Gangster (OG), a crypto-pilled enthusiast, or a steadfast no-coiner, it is hard to miss the distinctive lexicon of the crypto world. The jargon, both playful and perplexing, reflects the culture's intersection of cutting-edge technology, speculative finance, and internet-born irreverence.

For the exhibition, a guide was created to demystify some of this terminology, providing an accessible entry point for audiences navigating this brave new world. Taking inspiration from the iconic Garbage Pail Kids trading cards — a nostalgic nod to one of the cultural precursors to NFTs — the guide offered a concise and engaging glossary to empower visitors to Do Their Own Research (DYOR). It was designed as a counter-measure to Fear, Uncertainty, and Doubt (FUD), equipping readers with the confidence to decode crypto speak.<sup>13</sup>

The *DYOR: Crypto Glossary* was a collaborative effort, pairing the vivid illustrations of Moxarra Gonzales with the sharp and witty text by Adina Glickstein. This collaboration brought to life 23 collectible cards, each defining a key concept in crypto culture. These cards were presented in the exhibition as in installation that consisted of an expansive wall installation and some physical collectible cards, bridging the digital and tangible worlds.

In true crypto fashion, the glossary was also minted as NFTs and released (dropped) on *Nifty*, extending its reach into the blockchain realm and making the cards digital collectibles. The collection can be viewed and collected [here](#).

This fusion of art, education and technology underscored the exhibition's exploration of the ways in which crypto is reshaping cultural production and exchange. To date, the collection has generated primary and secondary market sales totalling 46,200 CHF (5 December 2024).

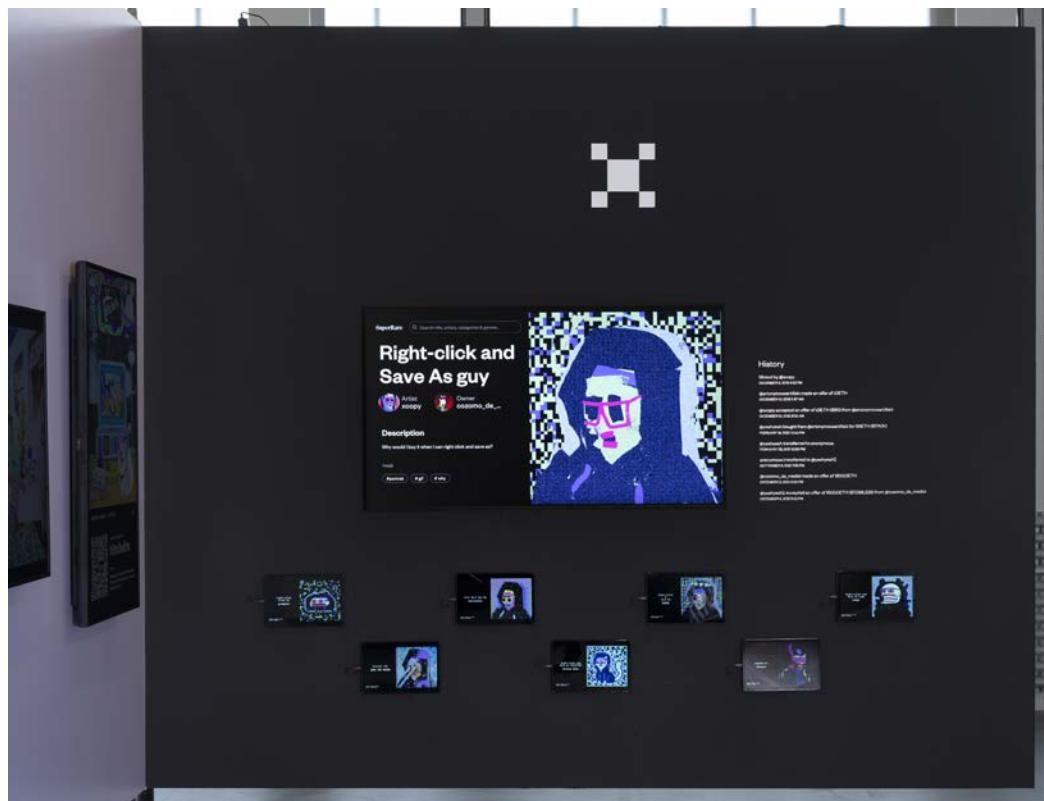
## 24 SEEDERS—Navigating the Blockchain’s Art Pioneers and Curating Autonomy

At the core of the *DYOR* exhibition was the installation *24 SEEDERS*, a physical and conceptual homage to the 24-word seed phrase used to access blockchain wallets conceived by Armin Blasbichler.

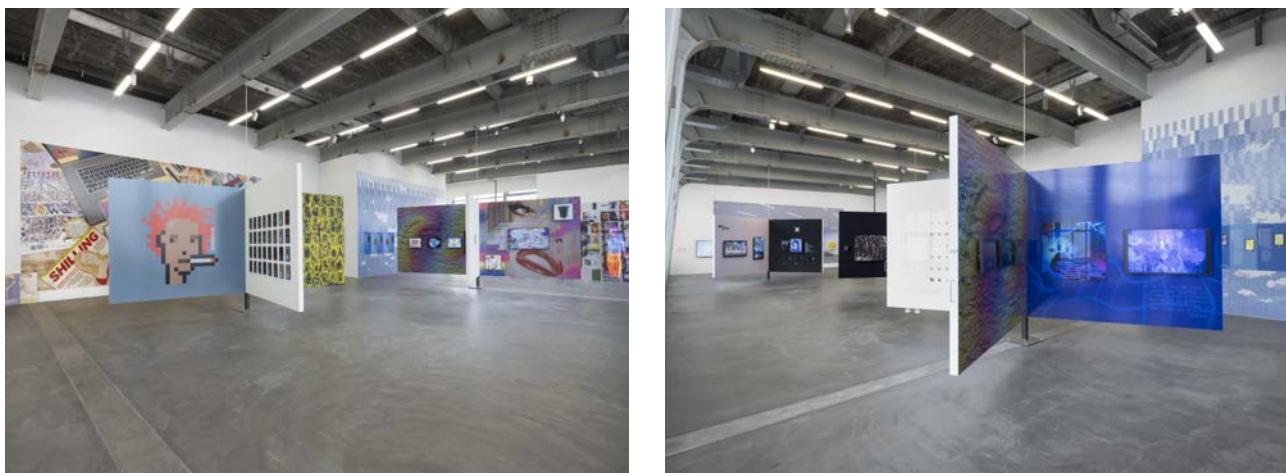
This installation merged physical presence and conceptual depth, utilising three rotating wooden turnstiles to showcase the contributions of pivotal artists and platforms that shaped the crypto art movement. Its design encouraged visitors to physically interact with the panels, forging their own pathways through the curated narratives. As Domenico Quaranta, in his review for *Outland* described, the installation “welcomes viewers into the curatorial process. You can manipulate and rearrange three massive wooden turnstiles with panels featuring artworks, platforms, and collaborative projects that planted influential ideas in the culture of the blockchain.”<sup>14</sup>

The panels highlighted an array of contributors, from acclaimed artists such as Anna Ridler & David Pfau, Botto, Larva Labs, Rhea Myers, Sarah Meyohas, and Simon Denny, to innovative platforms like *Art Blocks*, *Async* and *MOCA*. These participants exemplify the diverse principles of Web3, including royalties, Creative Commons 0 (CC0) licensing, dynamic NFTs, and decentralised autonomous organisations (DAOs).

Initially, each artist or platform was given a dedicated panel to showcase their work. However, as the installation evolved, the number of contributors expanded to an impressive seventy-four through collaborations and the inclusion of additional projects. One notable example was XCOPY’s iconic *Right-click and Save As guy* (2018),



Installation view of *DYOR—24 SEEDERS* | XCOPY (featuring gremplin, JAKE THE DEGEN, Kristy Glas, Lumps, neurocolor, SHZZM and Zenoyis) at Kunsthalle Zürich. Photograph by Julien Gremaud © Kunsthalle Zürich



Installation view of *DYOR—24 SEEDERS* at Kunsthalle Zürich. Photograph by Julien Gremaud © Kunsthalle Zürich

a work that critiques the misconceptions surrounding digital ownership. Right Click Save refers to the possibility to get a copy of any digital image with a right mouse click whereby only the person who owns the NFT owns the original image. XCOPY’s wall not only displayed this seminal piece but also featured derivative works created by seven other artists invited by XCOPY. This act of collective creativity reflected XCOPY’s ethos of open inspiration, bolstered by his adoption of a Creative Commons 0 license to encourage reinterpretation — a fitting strategy for the attention economy.

Through its structure and intent, *24 Seeders* blurred the boundaries between traditional curation and decentralised creativity. It is not only a physical manifestation of block-chain principles but a challenge to the traditional hierarchies of the art world. By actively involving the audience, the installation underscored the transformative potential of Web3 in redefining art’s production, distribution, and engagement paradigms.

### **A Slice of the Pie—Counter-Design to Centralised Curation and Gate-Keeping**

For the duration of the exhibition *DYOR*, a 16 square-metre LED wall displayed a circular pie-like shape divided into six slices. A dedicated website ([a-slice-of-the-pie.live](http://a-slice-of-the-pie.live)) livestreamed the pie 24/7. Via the website, artists were able to purchase (using the cryptocurrency Tezos) one or more slices and fill them with their own artworks, thus becoming full participants in the exhibition. To define the appearance of the whole pie, they had to collaborate or compete or hustle, or simply leave the final composition to chance.

Once per day, at a random time either determined by an algorithm or through a paid option on the website, the current state of the pie was frozen and subsequently minted as an NFT and sold in an auction process on [objkt.com](http://objkt.com). The profits from the sale were shared among the creators of the pie minted and *A Slice of the Pie*. Every 24 hours the whole process started again, resulting in 100 pies created during the exhibition, even while the physical exhibition space was closed to the public.

*A Slice of the Pie* derives from Silvio Lorusso and Sebastian Schmieg’s ongoing reflection on gatekeeping in the art world and the monetisation of access to it. Focusing on the crypto scene, the artwork updates these themes, which Lorusso and Schmieg first explored in *Projected Capital* (2018). *A Slice of the Pie* allows both cooperation and



Installation view of *DYOR—A Slice of the Pie* at Kunsthalle Zürich.  
Photograph by Julien Gremaud © Kunsthalle Zürich

competition, both consensual decision-making and winner-takes-it-all resolutions. The art project is inspired by the dry language of financial charts and dashboards as well as the cutthroat design of ‘battle royale’ games. Launching in a time of backlash towards crypto, *A Slice of the Pie* puts its promises of participation to the test. More than 125 artists took advantage of this opportunity to show their work at the Kunsthalle Zürich in the context of the *DYOR* exhibition and, without invitation, to add their names to the list of artists.

The project also served as a microcosm for broader debates in the art world around decentralisation and participation. By enabling uninvited artists to take part in a major institutional exhibition, *A Slice of the Pie* blurred the boundaries between insider and outsider, raising questions about authorship and curation in the age of Web3.

To date, the collection has generated primary and secondary market sales of 1,360 Tezos (5 December 2024 | 1 Tezos = 1.49 CHF), and all participants — including Kunsthalle Zürich and the two artists behind *A Slice of the Pie* — will receive royalties from future sales. The 100 pies can be viewed and collected on objkt.com.

### **playrecordmint—Interactivity and Collectibles**

Generative art is uniquely positioned to engage audiences in creative processes, offering interactive and participatory experiences that blur the line between creator and viewer.

*playrecordmint* exemplifies this potential by involving artists and audiences in interactive experiments that connect physical engagement with the creation of digital collectibles on the blockchain. During the exhibition *DYOR*, *playrecordmint* collaborated with artists Leander Herzog, Sasha Stiles and Nathaniel Stern, and Zach Lieberman. Each artist presented generative works over a span of five weeks, creating an interactive platform for visitors to co-create NFTs. A screen and sensor setup enabled the artists to invite the audience to co-author animated sequences or still images, which could then be minted as NFTs on the Tezos blockchain.

The project resulted in 745 works being minted, with many more co-creations left unclaimed. This discrepancy highlights the challenges of navigating blockchain ownership for newcomers. Such projects and the insights they generate are invaluable for exhibitors, curators, platform providers, artists, and co-creators alike. For many participants, *DYOR* served as their introduction to blockchain technology, NFTs, and digital wallets, marking their first experience in co-creating, minting, and collecting digital assets.

Initially offered for free to all exhibition visitors, the three collections have since generated primary and secondary market sales totalling 6,180 Tezos (as of 5 December 2024 | 1 Tezos = 1.49 CHF). Royalties from sales are distributed among all contributors — the visitor = co-creator, the artists, Kunsthalle Zürich, and *playrecordmint* — underscoring the collaborative and decentralised nature of the project.

In addition to the NFTs co-created on-site, visitors could collect two other digital assets for free. One was a live-coded artwork — the *DYOR logo* — created by Andreas Gysin (aka ertdfgcvb) and distributed as a *Proof of Attendance Protocol* (POAP)<sup>15</sup> on Ethereum. The other was one of six artworks by selected Pepe artists, offered as Bitcoin paper wallets in editions of 1,000 each.



Installation view of *DYOR—playrecordmint* featuring *Haystacks* by Leander Herzog at Kunsthalle Zürich.  
Photograph by Julien Gremaud © Kunsthalle Zürich



*DYOR* logo by Andreas Gysin (aka ertdfgcvb). © Kunsthalle Zürich

This integration of collectibles underscores the dual role of crypto art as both an experiential and transactional medium, bridging digital and physical realms. Through exhibitions like *DYOR*, the potential for generative art and blockchain technology to foster interactive, educational, and artistic opportunities becomes ever more apparent.

### Digital Space

The sudden development of the NFT market is closely linked to the Covid crisis, which gave digital exhibition formats and marketplaces pre-eminence in times of physical isolation. Over the past years it has become very clear that while physical works can be presented digitally, digital spaces, whether two or three-dimensional, are not their natural habitat. As a rule, key characteristics, such as texture or materiality, are lost in translation. The situation is quite different for native digital works. These were developed employing hardware and software and visualised on a monitor throughout the creation process, thus already inhabiting their native environment.

Nevertheless, the presentation of digital work, and in particular sculptural works, in physical space brings about significant challenges. On a digital display they remain flat, while often they cannot be brought into the physical space without many of their characteristics being lost, such as movement or overcoming gravity. In this respect spatial technologies such as virtual reality offer advantages by making it possible to experience digital spaces in an immersive manner. Virtual reality architecture seems to be the logical environment for digital art, particularly three-dimensional art.

In this context the physical *DYOR* exhibition space has been complemented with a digital space — a digital twin of the Kunsthalle Zürich's third floor gallery as well as the roof of the Löwenbräukunst building. Created by Manuel Rossner, the space showed native digital and largely sculptural works by nine artists and duos.

Initially only accessible through a VR (Virtual Reality) headset within the exhibition, since 8 October 2023 the digital space is also available worldwide via web, mobile or VR.<sup>16</sup>

### Exhibition *DYOR* – Impact and Implications

*DYOR* represents a significant step in bridging the gap between the traditional art world and the crypto art community. It provided a platform for education, dialogue, and experimentation, challenging preconceived notions and encouraging a deeper engagement with blockchain technologies and their artistic applications. More than a showcase, *DYOR* was an invitation to embrace complexity, take ownership of knowledge, and reimagine the possibilities of curation in the digital age.



DYOR—Digital Space at Kunsthalle Zürich. Photograph by Julien Gremaud © Kunsthalle Zürich



DYOR—Digital Space at Kunsthalle Zürich | GM RIGHT CLICKERS! by Moxarra Gonzales and Scrollbar Composition by Jan Robert Leegte. © Kunsthalle Zürich



Spatial Painting (Kunsthalle Zürich) by Manuel Rossner, 2022. © Kunsthalle Zürich

As the art world continues to grapple with the implications of Web3, *DYOR* stands as a testament to the potential of thoughtful, decentralised curation to foster understanding and innovation. To close with the words of Domenico Quaranta, “*DYOR* renovates curatorial practices in the light of the transformations introduced by this new, more decentralised ecosystem.”<sup>17</sup>

Closing remark: This contribution can only highlight parts of the exhibition. For a detailed documentation please visit <https://dyor.kunsthallezurich.ch>

## Notes

**1** Parts of this contribution are based on texts developed in the context of the exhibition, which can be found on the exhibition website. The title of this article is inspired by J.J. Charlesworth, “*DYOR*: Making Sense of the Crypto-Artworld”, in *ArtReview*, February 9, 2023.

**2** Web3 refers to the next generation of the internet, built on decentralized technologies like blockchain and smart contracts. It aims to create a more open, secure, and user-controlled digital ecosystem, reducing reliance on centralized entities such as big tech companies and banks. Key features of Web3 include decentralized applications (dApps), token-based economies, and user sovereignty over data and digital identities.

**3** See Charlesworth, “*DYOR*: Making Sense of the Crypto-Artworld”.

**4** See Domenico Quaranta, “HISTORY IN YOUR HANDS. A major exhibition about NFTs at Kunsthalle Zürich invites visitors not just to contemplate but to curate and collect”, Outland, January 12, 2023.

**5** See [https://onlineonly.christies.com/s/beeple-first-5000-days/overview/2020?sc\\_lang=en](https://onlineonly.christies.com/s/beeple-first-5000-days/overview/2020?sc_lang=en).

**6** See [https://mlo.art/research/history-of-crypto-art/#elementor-toc\\_heading-anchor-2](https://mlo.art/research/history-of-crypto-art/#elementor-toc_heading-anchor-2) for a comprehensive overview of the history of crypto art.

**7** See Martin Lukas Ostachowski, “A BRIEF HISTORY OF RARE PEPE. How a viral meme went from outcast to art museum”, Right Click Save, January 14, 2023. Written in the context of the exhibition *DYOR*.

**8** See Charlesworth, “DYOR: Making Sense of the Crypto-Artworld”.

**9** In the crypto space, OG (short for “Original Gangster”) refers to early adopters and pioneers who were involved in cryptocurrency and blockchain before they became mainstream. This term is also widely used in the NFT and digital art scene to describe artists who were among the first to explore and shape the Web3 ecosystem. An OG artist / community in Web3 is someone who started creating and selling digital art on blockchain-based platforms early on, often before NFTs gained widespread popularity. These artists are respected for their vision, innovation, and contributions to the crypto art movement, helping to establish the foundations of decentralized digital creativity.

**10** See Charlesworth, “DYOR: Making Sense of the Crypto-Artworld”.

**11** See Charlesworth, “DYOR: Making Sense of the Crypto-Artworld”.

**12** See Kenny Schachter, NFTism, text for the exhibition DYOR, <https://dyor.kunsthallezurich.ch/#nftism>.

**13** DYOR (Do Your Own Research) and FUD (Fear, Uncertainty, and Doubt) are closely connected in the crypto space, as DYOR serves as a defence against FUD. FUD refers to misleading or exaggerated negative information that spreads fear in the market, often influencing prices and investor sentiment. In contrast, DYOR emphasizes independent research, encouraging individuals to verify facts, analyze sources, and form their own conclusions rather than reacting emotionally to fear-driven narratives. By applying DYOR, investors can make informed decisions and avoid being manipulated by market speculation or misinformation.

**14** See Quaranta, “HISTORY IN YOUR HANDS”.

**15** Visit <https://poap.xyz> to learn more about Proof of Attendance Protocol.

**16** The *DYOR—Digital Space* is accessible on Spatial via this link: <https://www.spatial.io/s/DYOR-Digital-Space-651d87639693d3c35d887110?share=1401402056019771912>.

**17** See Quaranta, “HISTORY IN YOUR HANDS”.

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**Dr. Nina Roehrs** is an expert on art in the digital age who supports players in the cultural sector in their digital programming and projects. After studying business economics in St. Gallen and St. Andrews, she worked for UBS for 14 years before founding Roehrs & Boetsch in 2016. For five years as a gallery and today as a hybrid consultancy, Roehrs & Boetsch is dedicated to examining the influence of digitalisation on art and society. This includes actively discussing and developing new forms of exhibiting where conventional methods fail, often involving new technologies such as augmented reality, virtual reality, applications, networks, websites, artificial intelligence, and blockchain technology. In 2022/2023, Roehrs curated the exhibition *DYOR at Kunsthalle Zürich* — one of the first comprehensive institutional exhibitions on blockchain and NFTs. Since 2023, she has been developing and curating the Digital Sector for Paris Photo, dedicated to photography and the image in the digital age. For Giga / UNICEF, Roehrs organised and curated the *Creating Connections* auction hosted by Christie’s 3.0 in January 2024. Since October 2024, she has been curator of the digital art collection and related initiatives at Arab Bank Switzerland.

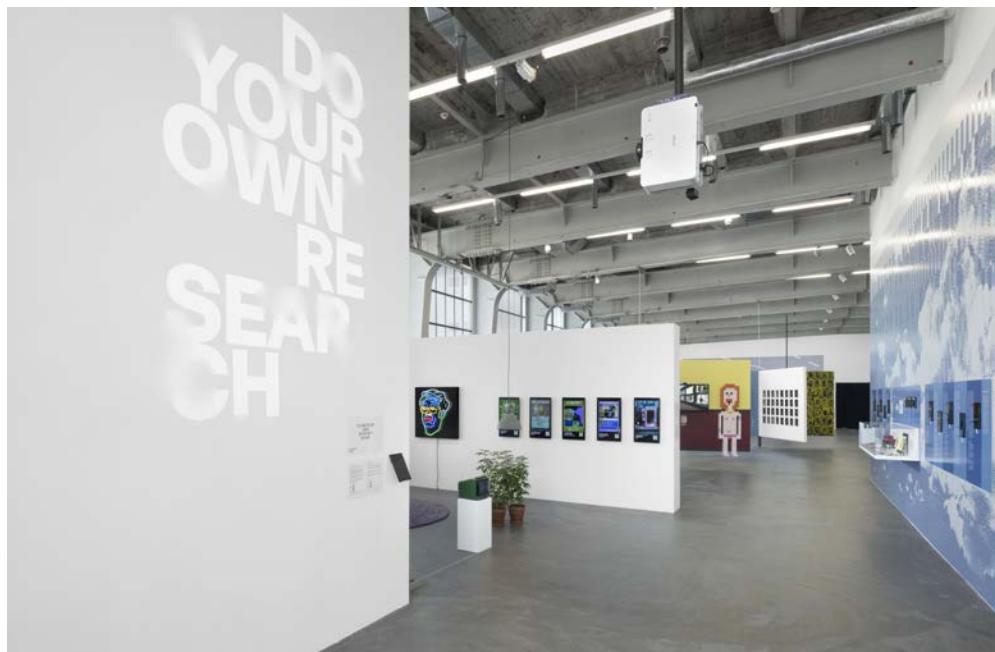
# “DYOR”——解读加密艺术世界<sup>1</sup>

## 妮娜·罗尔斯 (Nina Roehrs)

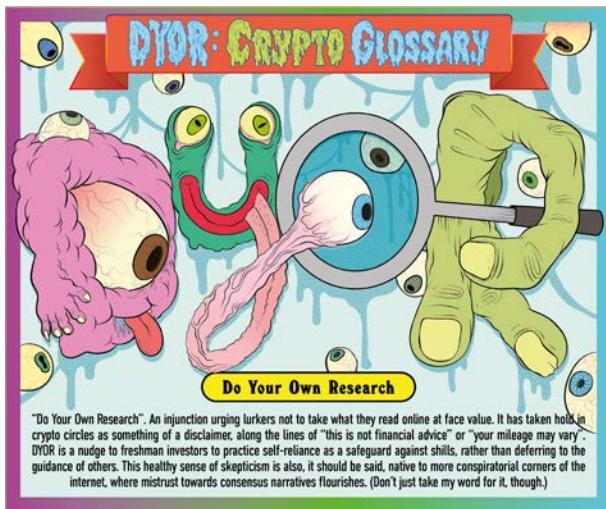
“DYOR”展览 (2022年10月8日-2023年1月15日) 于苏黎世美术馆 (Kunsthalle Zürich) 举办, 见证了传统艺术机构与新兴发展的区块链和加密艺术 (crypto art) 交集的重要时刻。该展览由妮娜·罗尔斯 (即本文作者) 策划, 旨在通过包含去中心化、社群和积极参与等理念的策展方法, 使展览成为一个平台, 鼓励人们探索区块链、非同质化代币 (NFT)、智能合约和去中心化网络等Web3技术<sup>2</sup>相关的创新性和概念性基础事物。

### DYOR (自己做研究) ——Web3时代的新准则

“自己做研究” (Do Your Own Research) 这句宣言诠释了加密货币的理念, 该宣言主张自己做研究, 而不仅仅是接受信息的表面价值。DYOR这一缩写被定为展览标题经过了多重考虑, 它反映了“自己做研究”这一宣言的多面性。该缩写承认区块链和NFT技术具有复杂性, 以及在该语境下接触艺术具有难度。同时, 该缩写也在指引观众, 暗示他们带着好奇而非偏见前来这个新兴世界。加密艺术于2021年初进入大众视野, 并在那时遭到了众人的质疑, 如同当年约瑟夫·博伊斯和安迪·沃霍尔等颠覆性艺术家的作品, 以及如今毛里齐奥·卡特兰的《喜剧演员》 (Comedian, 2019年) 所受到的对待一样。“DYOR”展览既是对人们发起的挑战, 也是在邀请人们以开放的心态进入加密艺术这一新领域, 质疑并发掘其艺术潜力。



装置作品于苏黎世美术馆“DYOR”展览现场图和安德烈亚斯·吉辛 (Andreas Gysin, 又名ertdfgcvb) 设计的“DYOR”标志。摄影:朱利安·格雷莫 (Julien Gremaud) ©苏黎世美术馆



《DYOR卡片》来源:《DYOR:加密货币术语表》(DYOR: *Crypto Glossary*), 莫克萨拉·冈萨雷斯(Moxarra Gonzales)和阿迪娜·格利克斯坦(Adina Glickstein)创作, “DYOR”展览与Spike Art Magazine合作开发。

J.J.查尔斯沃思 (J.J. Charlesworth) 在其于《艺术评论》(ArtReview) 发表的文章中表达了他贴切的观察:“在氛围较为严肃的艺术圈之外,业余艺术创作者和艺术爱好者们一直在发展庞大而日常的图像创作文化,这些图像创作风格多样,囊括了学院派和自学派。不过,过去十年左右的时间里,这种网络文化正在以前所未有的速度传播和发展。”<sup>3</sup>查尔斯沃思的这一观点强调了“DYOR”展览对文化群体差异性的包容态度,这呼应了“自己做研究”(DYOR)的理念。该展览通过强调这种多样性,将自身定位在更广泛的讨论中,探讨了Web3如何重塑艺术界的传统等级制度。

“DYOR”这一展览标题也强调了个人责任和自我教育。Web3的去中心化将自主权赋予个体:建立自己的银行,自己的画廊。该展览的策展策略延伸了这一说法,为有关Web3的探索和讨论构建了动态框架,而非输出简化式的说教。

### 策展理念——去中心化实践

“DYOR”的策展方法深受Web3去中心化理念的影响。该策展方法侧重于避开制度殖民主义的陷阱,并且将加密艺术呈现为真实的草根现象,而非将其融入到传统的艺术界范式中。为不了解加密艺术的观众进行相关解读,在解读的同时也要保留加密艺术独特的文化和技术框架,这是该策展中需要把握的尺度。同时,如多梅尼科·夸兰塔(Domenico Quaranta)在其于网站Outland发表的文章里所称,“要避免冒险在艺术与非艺术、业余与专业之间制造隔阂”<sup>4</sup>。

“DYOR”通过强调以社群为驱动的实践以及赋予观众自主权,体现了展览尝试探索的原则。因此,“DYOR”不仅是关于Web3的展览,更是对Web3的核心价值——即去中心化、自主性和包容性——的践行。

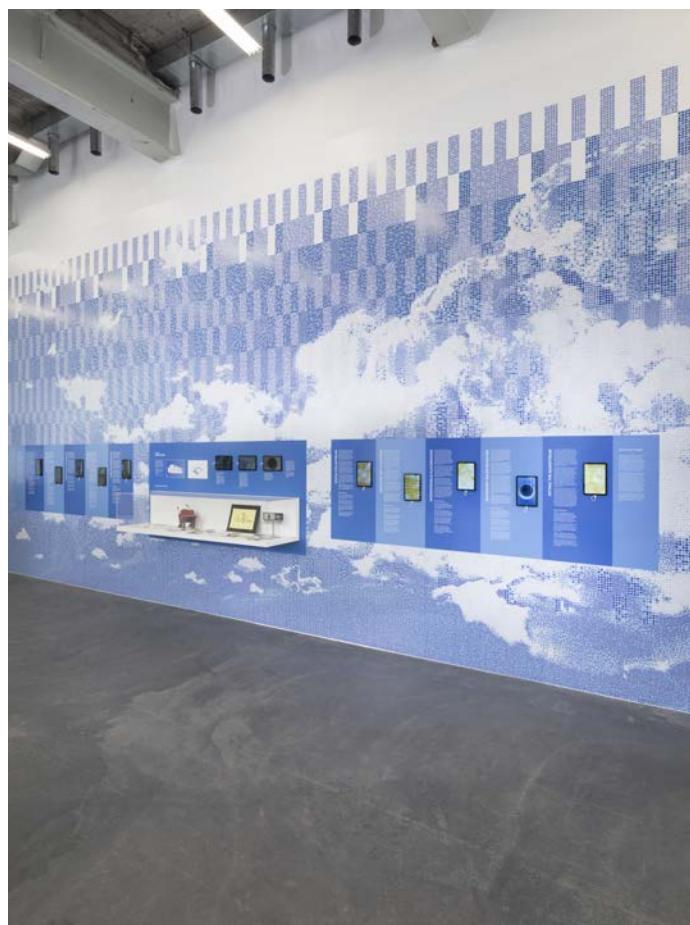
围绕一个以去中心化为基本理念的世界策划一场展览,这本身就有一定的矛盾性,因为策展工作涉及了选择、排除和把关等步骤。这种张力塑造了策展过程,促使策展人采用创新方法来平衡展览的包容性和策展内容所需的连贯性。我认为,

大多数人都会认同,策展人需要做过研究、能够识别作品,并在仔细思考后对作品进行语境化。问题在于“如何做到这一点?”

对于“DYOR”来说,解决方案在于让众多艺术家、平台、策展人、收藏家、观众,甚至传统画廊参与其中,以确保展览的多元化、去中心化和包容性。因此,展览围绕九个子板块展开,由九位联合策展人和创作者共同策划和创作,展出了300多位艺术家的作品,联合发行并分发了7818个NFT,这些NFT在三个区块链(比特币、以太坊和Tezos)上铸造。展览共吸引了超过8000名观众前来参观。此外,展览还着重强调了具有参与性的项目。

## 加密艺术世界

“DYOR”追溯了加密艺术快速演化的过程。2021年,加密艺术领域因一些打破记录的拍卖作品忽然引起大众关注,例如,Beeple的作品《每一天:最初的5000天》(*Everydays: The First 5000 Days*)于佳士得拍卖行的拍卖<sup>5</sup>。然而,加密艺术的起源其实可以追溯到2015年、2016年比特币区块链的早期实验,此后,加密艺术以惊人的速度崛起。加密艺术主要由程序员、艺术家和社群推动发展,为了更好地将这一发展过程语境化,“DYOR”在策展时采取了调查性的策展方法,从加密艺术的起源和文化意义开始研究。



装置作品《积雨云》(*Cumulonimbus Murus*)  
于苏黎世美术馆“DYOR”展览现场图。摄影:朱利安·  
格雷莫 ©苏黎世美术馆

## 加密艺术史——价值大于美学的运动

气象现象积雨云 (Cumulonimbus Murus) 俗称墙状云, 该天气现象意味着有强烈的上升气流和强烈的雷暴雨, 并且可能形成龙卷风——这恰当地隐喻了加密艺术动荡而又充满变革的历史。<sup>6</sup>《积雨云》(Cumulonimbus Murus, 2022年) 是一件多媒介装置作品, 由艺术家兼加密艺术史学家马丁·卢卡斯·奥斯塔霍夫斯基 (Martin Lukas Ostachowski) 创作。该作品着重展现了影响加密艺术发展的关键里程碑, 从视觉上和思想上探索了加密艺术的起源及其文化意义。

该装置包含数字艺术作品和一篇详尽的文章, 文章阐述了一些加密艺术运动的关键点, 如密码朋克 (cypherpunk) 理念、线上社群中的身份认同探索以及某些平台如何致力于将艺术生产和版税民主化。这些里程碑事件的排列方式反映了加密艺术生态系统以动态且有时略显混乱的形态发展, 引导观众追溯加密艺术从小众创新到成为全球现象的演变过程。

《积雨云》有着多层次的呈现方式, 该作品不仅带来了迷人的历史叙事, 也体现了“DYOR”的理念, 也就是自己做调查, 自己去发现。该作品鼓励观众深入探究展览呈现的各种运动之间的联系, 去理解数字艺术作为对文化、技术和经济变革的回应是如何兴起的。



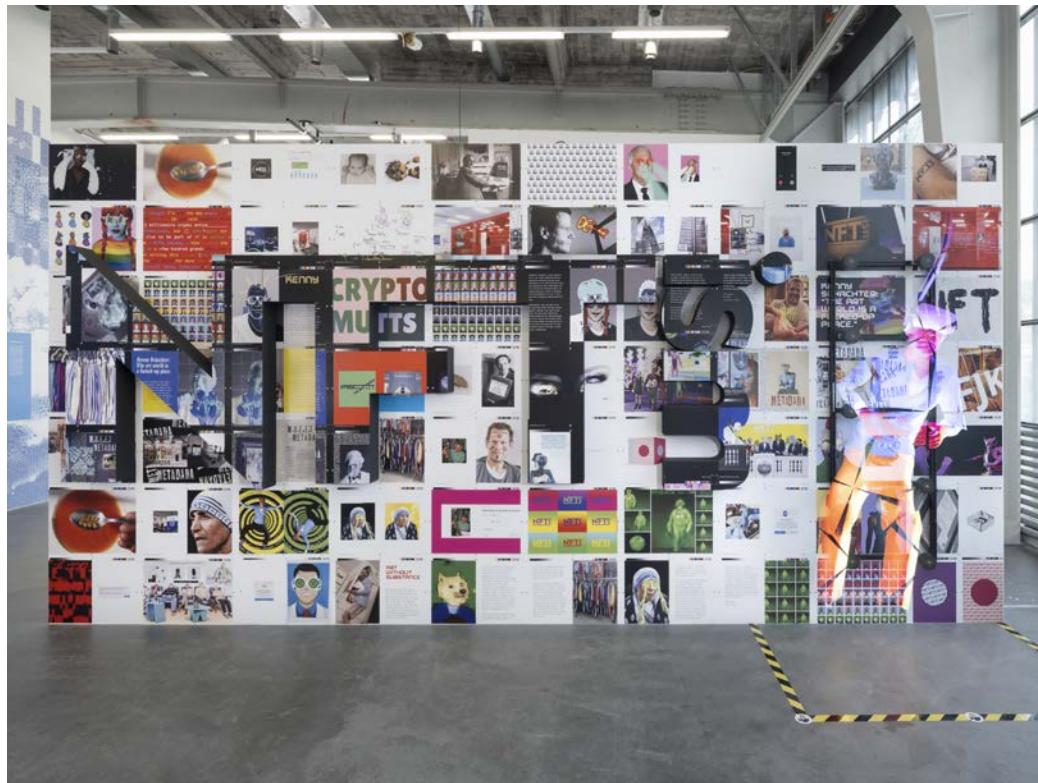
装置作品“悲伤蛙空间”(Pepe the Frog Space)于苏黎世美术馆“DYOR”展览现场图 摄影:朱利安·格雷莫  
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## 悲伤蛙——一个病毒式传播的表情包如何从边缘走向艺术博物馆<sup>7</sup>

在由法比安·维斯 (Fabian Wyss, 又名 FWD) 策划的另一个密码朋克风格展区中, 展示了悲伤蛙社群。“一个散落着大麻植物的‘客厅’, 专门用于展示悲伤蛙——或许是互联网表情包最早演变为 NFT 的案例之一。[...] 悲伤蛙的荒诞趣味 (尽管其曾短暂地被美国另类右翼用作吉祥物) 显现了 NFT 热潮在很大程度上植根于线上亚文化, 而线上亚文化几乎与艺术界更为封闭的圈子毫无关系。”<sup>8</sup> 查尔斯沃思在其为《艺术评论》撰写的文章中这样写道。

这个OG社群<sup>9</sup>是早期NFT实践的典范, 最初被称为稀有艺术 (Rare Art)。该社群推崇人人皆可成为艺术家, 并承认伟大的艺术家也会借鉴和伪造作品。社群成员创作的艺术资产最初以实体交易卡形式出现, 后来很快被转移到了比特币区块链上。如今, 该社群依然活跃, 众多知名加密艺术家, 如ROBNESS、马特·凯恩 (Matt Kane)、迪米特里·切尔尼雅克 (Dimitri Cherniak) 和马库斯·康纳 (Marcus Connor) 都是该社群的成员。成员们不仅创作表情包数字资产, 还经常创作实体艺术作品, 并将两者相结合。

悲伤蛙社群通过实体交易卡以及后来放在比特币区块链上的数字资产, 强调了幽默、艺术创新和去中心化协作这几个元素之间的相互作用。海报、贴纸和T恤等周边产品——这些展会和社群聚会的标志物——进一步显现了加密艺术生态系统的商业和文化维度。



装置作品“NFT主义”(NFTism)于苏黎世美术馆“DYOR”展览现场图 摄影:朱利安·格雷莫 ©苏黎世美术馆

## NFT主义——超越科技

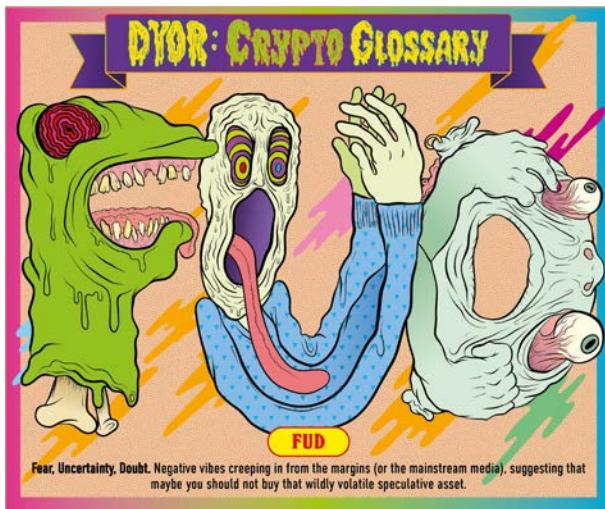
在苏黎世美术馆的另一处，肯尼·沙赫特 (Kenny Schachter)，评论家、前艺术经纪人和《Artnet》杂志专栏作家，将文章打印稿、屏幕截图铺面墙面，甚至还在墙上放置了一个他本人的虚拟形象，该虚拟形象有着真人般大小，跳着舞。正如查尔斯沃思在《艺术评论》的文章中所称，这次展览突显了沙赫特“认为NFT热潮给传统艺术界带来了积极颠覆，并在为此摇旗助威”<sup>10</sup>中发挥的作用。

沙赫特一直是NFT的积极倡导者，他创造了“NFT主义” (NFTism, 一个注册商标概念)一词来概括其观点。沙赫特通过创作艺术作品、写作、策展展览和艺博会，甚至通过在2021年12月于 SushiSwap 上推出社交代币来推广NFT主义。查尔斯沃思观察到，“沙赫特的挑衅激怒了许多颇有声望的艺术界人士 (毕竟，他一直以‘局内人的局外人’而闻名)”<sup>11</sup>。这一观察强调了 NFT 涌入市场如何质疑了策展工作中传统的把关机制，如何引入了一批此前不被艺术市场看重的艺术家和藏家。

这种颠覆性的变化体现了一种更广泛的变化：抛开智能合约的技术层面，NFT 的本质体现于围绕NFT出现的社群。这些社群超越了数字艺术交易层面，将创作者和藏家凝聚在一种共同的人文精神中。在这些社群里，来自不同背景的人们互相合作和支持，并且不要求直接的回报——这与主导传统艺术界的零和博弈和等价交换等动态形成了鲜明的对比。此外，像 Discord 这样的平台也催生了全新的对话模式，消减了通常而言存在于创作者和买家之间的距离。



《FUD卡片》来源：《DYOR：加密货币术语表》(DYOR: *Crypto Glossary*)，莫克萨拉·冈萨雷斯和阿迪娜·格利克斯坦创作，“DYOR”展览与 Spike Art Magazine 合作开发。



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(*DYOR: Crypto Glossary*), 莫克萨拉·冈萨雷斯和阿迪娜·格利克斯坦创作,“DYOR”展览与 Spike Art Magazine 合作开发。

然而,沙赫特也承认这场变革具有黑暗的一面。沙赫特反思了 NFT 领域的快速商业化和过度开发现象,并将自己的纹身图案从“NFT主义”(NFTism)修改为“后NFT主义”(Post NFTism)。如他所言,加密货币和收藏艺术品领域曾经充满希望,却“迅速而无情地上演了一场充斥着贪婪欲望和骗局的财富争夺战”<sup>12</sup>。

未来几年,NFT艺术家将度过一段相对平静的时期,在创作上拥有更多的时间和空间,卷入NFT市场的财富争夺也会相对减少。届时NFT市场的牛市将会带来什么?这将令人期待不已。

### 《DYOR加密货币术语表》——一个有行话的世界

无论你是元老级加密货币持有者(OG)、加密货币的铁杆支持者,还是坚定的无币主义者,你都很难忽略加密货币世界里的独特术语。这些行话既诙谐又难懂,反映了尖端科技、投机金融和随互联网而生的随性态度交织成的独特文化。我们为“DYOR”展览制作了用于解读加密货币术语的指南,为探索这个新世界的勇敢观众提供了便捷入口。指南的制作灵感源自经典交易卡“垃圾桶小孩”(Garbage Pail Kids),以此对这一NFT文化的先驱产物之一表达怀旧的致敬。该指南提供了简洁而有趣的术语表,提倡观众“自己做研究”(DYOR)。这份指南旨在消除“恐惧、不确定性和怀疑”(FUD),帮助读者建立信心,解读加密货币世界的语言。<sup>13</sup>

《DYOR:加密货币术语表》(*DYOR: Crypto Glossary*)是莫克萨拉·冈萨雷斯(Moxarra Gonzales)和阿迪娜·格利克斯坦(Adina Glickstein)共同创作的成果。冈萨雷斯绘制了生动的插图,格利克斯坦为此配以犀利又诙谐的文字。《DYOR:加密货币术语表》共有 23 张收藏卡,每张卡片都定义了加密货币文化中的一个重要概念。这些卡片以装置形式在展览中呈现,该装置作品由大型墙面装置和一些实体收藏卡组成,将数字世界和现实世界连接在一起。

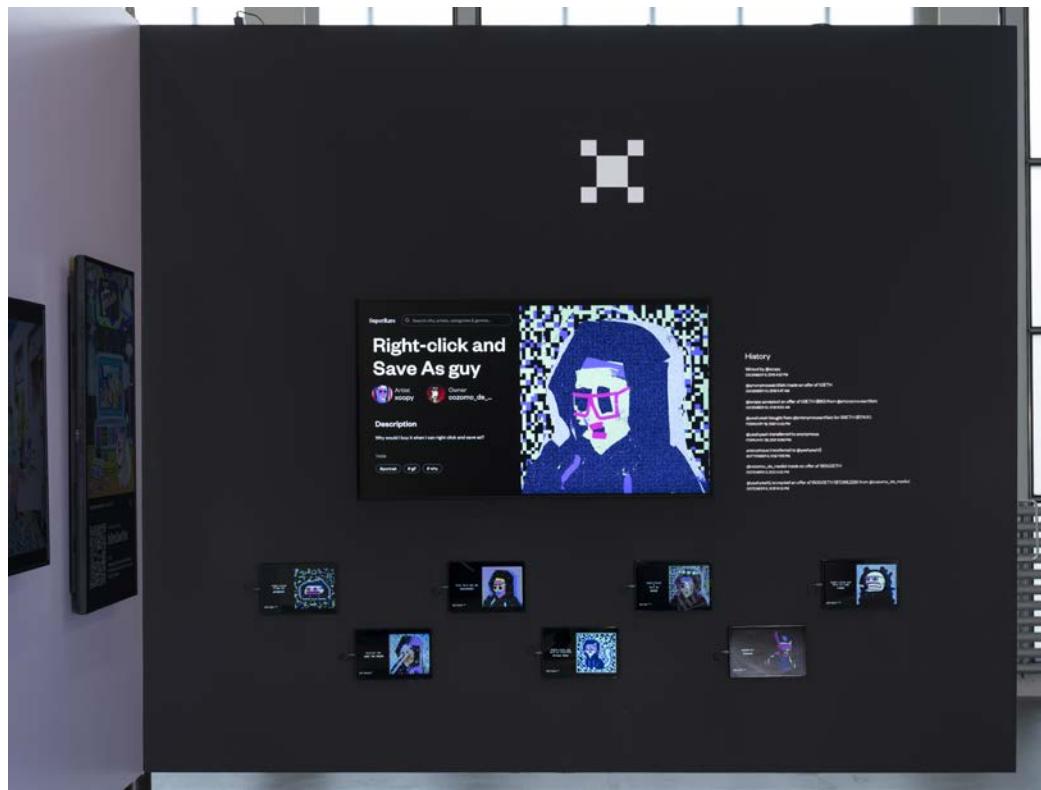
我们遵循加密货币的风潮,也将术语表铸造成NFT,并在Nifty指数上发行,使其影响力扩展到区块链领域,让这些收藏卡成为数字收藏品。想要查看和收藏该系列作品,可以访问此网站。

这一做法融合了艺术、教育和科技几方面,显现了展览致力于探索加密货币如何重塑了文化生产和交流。截至2024年12月5日,该收藏品已在一级和二级市场售出,总成交额达46,200瑞士法郎。

### 《24个种子词》——探索区块链的艺术先驱与策展自主性

“DYOR”展览的核心是装置作品《24个种子词》(24 Seeders)。该作品在物理上和概念上都致敬了阿明·布拉斯比希勒(Armin Blasbichler)设计的用于访问区块链钱包的24个种子助记词。

该装置结合了实体呈现与深度概念,利用三个木制旋转门展示了对加密艺术运动做出贡献的关键艺术家和平台。该装置在设计上鼓励观众与展板互动,在策展的叙事中开辟自己的观展路径。正如多梅尼科·夸兰塔在Outland网站上的评论中所称,该装置“倡导观众参与到策展过程中。观众可以操作和重新排列三个巨大的木制旋转门。门板上展示了艺术作品、相关平台和合作项目,这些项目为区块链文化带来了颇具影响力的理念。”<sup>14</sup>



装置作品《24个种子词》于苏黎世美术馆“DYOR”展览现场图 艺术家:XCOPY(合作艺术家:gremlin、JAKE THE DEGEN、Kristy Glas、Lumps、neurocolor、SHZZM 和 Zenoyis) 摄影:朱利安·格雷莫©苏黎世美术馆



装置作品《24个种子词》(24 SEEDERS)于苏黎世美术馆“DYOR”展览现场图 摄影:朱利安·格雷莫©苏黎世美术馆

展板上重点介绍了一些加密艺术的贡献者,包括安娜·里德勒和大卫·普福(Anna Ridler & David Pfau)、Botto、Larva Labs、瑞亚·迈尔斯(Rhea Myers)、莎拉·梅约哈斯(Sarah Meyohas)和西蒙·丹尼(Simon Denny)等知名艺术家,以及Art Blocks、Async和MOCA等创新平台。这些加密艺术参与者在版税、知识共享零协议(CC0)许可、动态NFT和去中心化自治组织(DAOs)等方面证实了Web3所具有的多元性原则。

在最初的策展构想中,每位艺术家或每个平台都拥有专属展板。然而,随着装置的不断发展以及合作和新增项目的加入,展板贡献者最终增至令人瞩目的74个。其中一个显著的例子是XCOPY的标志性作品《右键另存为》(Right-click and Save As guy, 2018年),该作品批判了围绕数字所有权的种种误解。“右键另存为”指的是只需右键点击鼠标即可复制任何数字图像,而只有NFT的所有者才拥有原始图像的所有权。在XCOPY的展板上,不仅可以看到这件极具开创性的作品,还可看到由XCOPY邀请的其他七位艺术家创作的衍生作品。这种集体创作的行为体现了XCOPY的开放灵感的理念。这一理念也表现在XCOPY采用Creative Commons 0许可协议鼓励作品被重新诠释——这在注意力经济时代无疑是种恰当的策略。

《24个种子词》在结构上和意图上跨越了传统策展与去中心化创意之间的界限。该作品不仅实体呈现了区块链原则,也向艺术界传统等级制度发起了挑战。该装置作品通过积极调动观众参与到展览中,彰显了Web3在重定义艺术的生产、传播和互动模式方面的变革性潜力。

### “分一块馅饼”——反中心化策展与把关的另类设计

在“DYOR”展览期间,一面16平方米的LED墙呈现了一个馅饼状圆形图案,该图案被分割成六块。一个专门网站(a-slice-of-the-pie.live)全天候直播这个馅饼的生成过程。艺术家们可以通过该网站(使用加密货币Tezos)购买一块或多块馅饼,



装置作品《分一块馅饼》(*A Slice of the Pie*)于苏黎世美术馆“DYOR”展览现场图 摄影:朱利安·格雷莫  
©苏黎世美术馆

并用自己的作品填充馅饼,成为展览的正式参与者。艺术家们可以通过合作、竞争、招募合作的形式加入创作,或者干脆以顺其自然的态度,决定整个馅饼的最终形态。

每一天,在由算法随机决定或通过网站付费选项确定的时间点上,馅饼的当前状态会被冻结,随后被铸造成 NFT,并在 objkt.com 上进行拍卖。拍卖所得利润由 NFT 馅饼的创作者和“分一块馅饼”(*A Slice of the Pie*)项目分成。每过24 小时,即使在实体展厅不对公众开放的时间段里,“分一块馅饼”项目也会开始以上新一轮的铸造过程。展览期间,一共有 100 个馅饼产生。

《分一块馅饼》源于西尔维奥·洛鲁索(Silvio Lorusso)和塞巴斯蒂安·施米格(Sebastian Schmieg)对艺术界守门制度及艺术界对货币化标准的持续思考。该作品聚焦加密货币领域,并进一步探索了洛鲁索和施米格在《投射资本》(*Projected Capital*, 2018年)中首次探讨的主题。“分一块馅饼”既允许合作也允许竞争,既允许协商决策也允许赢家通吃的情况发生。该艺术项目的灵感来自金融图表和控制台的枯燥语言,以及“大逃杀”游戏残酷的竞争机制。“分一块馅饼”项目于加密货币遭遇强烈抵制之际启动,这也考验了该项目也对其参与者的承诺。超过125位艺术家利用这一机会,在苏黎世美术馆的“DYOR”展览中展示了他们的作品,并在不受邀请的情况下将自己的名字添加到了参展艺术家名单中。

该项目作为一个缩影,反映了艺术界围绕去中心化和参与性展开的更广泛辩论。通过让未经邀请的艺术家参与大型机构展览,“分一块馅饼”模糊了局内人和局外人之间的界限,引发了人们对Web3时代创作者身份和策展的思考。

截至2024年12月5日,该收藏作品已在二级市场售出1360个Tezos代币(1 Tezos = 1.49瑞士法郎),所有该作品的参与者——包括苏黎世美术馆和创作“分一块馅饼”的两位艺术家——都将从未来的销售中分得版税。想要查看和收藏这100个馅饼,可访问网站objkt.com。

### “playrecordmint”——互动性与收藏品

生成艺术以其独特的优势,让观众参与创作艺术的过程,提供创作者和观众之间不再界限分明的互动式参与体验。

“playrecordmint”通过让艺术家和观众参与互动实验,将实体互动与区块链上的数字收藏品创作相结合,充分展现了生成艺术的潜力。在“DYOR”展览期间,“playrecordmint”与艺术家利安德·赫尔佐格(Leander Herzog)、萨莎·斯泰尔斯(Sasha Stiles)、纳撒尼尔·斯特恩(Nathaniel Stern)和扎克·利伯曼(Zach Lieberman)合作。每位艺术家在为期五周的时间里展示他们的生成艺术作品,打造互动平台,与观众一起创作NFT。艺术家们通过屏幕和传感器装置,邀请观众共同创作动画序列或静态图像,这些作品随后可以在Tezos区块链上被铸造为NFT。



装置作品playrecordmint,以“干草垛”(Haystacks)为特点,于苏黎世美术馆“DYOR”展览现场图 艺术家:利安德·赫尔佐格(Leander Herzog) 摄影:朱利安·格雷莫©苏黎世美术馆



“DYOR”标志设计:安德烈亚斯·吉辛 (Andreas Gysin, 又名 ertdfgcvb) ©苏黎世美术馆

该项目最终铸造了 745 件作品, 并且还有更多共同创作的作品无人认领。这种出入性体现了生成艺术的创作新手在区块链所有权方面面临的挑战。这类项目及相关思考对参展商、策展人、平台提供商、艺术家和共同创作者而言都很宝贵。对许多参与者来说, “DYOR”项目使他们接触到了区块链技术、NFT 和数字钱包, 他们通过该项目首次体验了共同创作、铸造和收藏数字资产。

有三件收藏品最初免费向前往展览的所有公众开放, 此后截至 2024 年 12 月 5 日, 这些收藏品在二级市场共售出 6,180 个 Tezos 代币 (1 Tezos = 1.49 瑞士法郎)。销售所得版税将分给所有的作品贡献者——观众 (即共同创作者)、艺术家、苏黎世美术馆和“playrecordmint”项目——这体现了该项目的协作性和去中心化特性。

除了在现场与艺术家共同创作的 NFT 之外, 观众还可以免费获得另外两种数字资产。一种是由安德烈亚斯·吉辛 (Andreas Gysin, 又名 ertdfgcvb) 创作的实时编码艺术作品——“DYOR”的标志——并通过太坊上的出席证明协议 (POAP)<sup>15</sup> 分发。另一种是六位精选的悲伤蛙艺术家创作的艺术作品之一, 以比特币纸钱包的形式分发, 每款限量 1000 份。

这种收藏品的融合彰显了加密艺术的双重角色: 加密艺术既是体验式媒介, 也是交易媒介, 将数字世界和物理世界相连接。通过诸如“DYOR”这样的展览, 生成艺术和区块链技术日益显示出其在促进互动、教育和艺术发展方面的潜力。

## 数字空间

NFT 市场的迅猛发展与新冠疫情危机有着不可分割的关联。疫情隔离期间, 数字展览形式和数字作品交易市场变得尤为引人注意。过去几年, 人们逐渐意识到, 尽管实体作品能以数字化形式呈现, 但无论是二维还是三维的数字空间, 都并非是适合实体作品的展示环境。通常情况下, 实体作品在被数字化的过程中会失去其具有的关键特征, 如纹理或材质等。而原生数字作品的情况则截然不同。这些



“数字空间”于苏黎世美术馆“DYOR”展览现场图 摄影:朱利安·格雷莫©苏黎世美术馆



“数字空间”于苏黎世美术馆“DYOR”展览现场图 作品:莫克萨拉·冈萨雷斯 (Moxarra Gonzales) 的GM RIGHT CLICKERS!和扬·罗伯特·利格特 (Jan Robert Leegte) 的《滚动条组合》(Scrollbar Composition) ©苏黎世美术馆



曼努埃尔·罗斯纳 (Manuel Rossner) 的《空间绘画》(Spatial Painting, 苏黎世美术馆藏), 2022年 ©苏黎世美术馆

作品从创作之初就运用硬件和软件开发, 并于显示器上可视化呈现, 因此它们本身就在其原生环境中。

然而, 在实体空间中呈现数字作品, 尤其是数字雕塑作品, 面临着诸多难题。在数字显示屏上, 数字作品是平面的; 而一旦将数字作品放置在实体空间中, 它们往往失去诸多特性, 例如动态效果或不受重力束缚。在这方面, 虚拟现实等空间技术具有优势, 能够使人以沉浸式的方式体验数字空间。虚拟现实空间似乎是展示数字艺术, 尤其是三维艺术的理想环境。

在此语境下, “DYOR”实体展览空间有数字空间作为补充——苏黎世美术馆三楼展厅以及罗文布劳艺术空间 (Löwenbräukunst) 建筑屋顶构成了数字孪生体。该数字空间由曼努埃尔·罗斯内 (Manuel Rossner) 设计, 展出了九位艺术家和艺术团体的原生数字作品, 其中大部分为数字雕塑作品。下图展示了苏黎世美术馆三楼展厅以及罗文布劳艺术空间的建筑屋顶。

该数字空间最初只能通过展览内的虚拟现实 (VR) 头戴式显示器访问。自 2023 年 10 月 8 日起, 全球用户都可通过网页、移动设备或 VR 设备访问该空间。<sup>16</sup>

## “DYOR”展览——影响与意义

“DYOR”展览为弥合传统艺术界与加密艺术社群之间的沟壑迈出了重要一步。该展览提供了一个用于教育、对话和实验的平台, 挑战了人们的既有观念, 并倡导人们更深入地了解区块链技术及其艺术应用。“DYOR”不仅仅是一场展览, 更

是在邀请人们拥抱复杂性，掌握知识，并重新构想数字时代策展的可能性。艺术界持续探索 Web3 的意义。在此背景下，“DYOR”展览证明了，经过多重思考、去中心化的策展方式能够促进理解和创新。正如多梅尼科·夸兰塔所言：“‘DYOR’展览以这种全新的、更加去中心化的生态系统带来的变革为契机，革新了策展实践。”<sup>17</sup>

**附注**:本文仅介绍了展览的部分内容。如想了解详细信息,请访问  
<https://dyor.kunsthallezurich.ch>

## 注释

**1** 本文部分内容基于“DYOR”展览相关文本,这些文本可详见该展览的网站。本文标题灵感来源于 J.J.查尔斯沃思于2023年2月9日在《艺术评论》发表的文章《“DYOR”：解读加密艺术世界》(“‘DYOR’ : Making Sense of the Crypto-Artworld” )。

**2** Web3 指的是基于区块链和智能合约等去中心化技术构建的下一代互联网。其目标是创建一个更加开放、安全且用户可控的数字生态系统,使用户减少对大型科技公司和银行等中心化机构的依赖。Web3 的主要特征包括去中心化应用程序 (dApp)、基于代币的经济体系以及用户对其数据和数字身份持有主权。

**3** 详见查尔斯沃思,《“DYOR”：解读加密艺术世界》。

**4** 详见多梅尼科·夸兰塔,《历史由你书写:苏黎世美术馆举办的NFT大型展览邀请观众深入思考,并参与策展和收藏》(“HISTORY IN YOUR HANDS. A major exhibition about NFTs at Kunsthalle Zürich invites visitors not just to contemplate but to curate and collect” ),发表于网站Outland,2023年1月12日。

**5** 详见<https://onlineonly.christies.com/s/beeples-first-5000-days/beeples-b-1981-1/112924>。

**6** 想要全面了解加密艺术历史,可详见[https://mlo.art/research/history-of-crypto-art/#elementor-toc\\_heading-anchor-2](https://mlo.art/research/history-of-crypto-art/#elementor-toc_heading-anchor-2)。

**7** 详见马丁·卢卡斯·奥斯塔霍夫斯基的文章《稀有悲伤蛙简史:一个病毒式传播的表情包如何从边缘走向艺术博物馆》(A BRIEF HISTORY OF RARE PEPE. How a viral meme went from outcast to art museum) ,发表于 Right Click Save, 2023年1月14日。该文以“DYOR”展览为背景所撰写。

**8** 详见查尔斯沃思,《“DYOR”：解读加密艺术世界》。

**9** 在加密货币领域,“OG”(Original Gangster 的缩写)指的是在加密货币和区块链被主流接受前就参与其中的早期接纳者和先驱者。这个词也被广泛用于 NFT 和数字艺术领域,用来描述那些最早探索和塑造 Web3 生态系统的艺术家。Web3 领域的 OG 艺术家/社群指的是那些很早就在基于区块链的平台上创作和销售数字艺术作品的群体,他们的行动往往早于 NFT 在市场上广泛流行之前。这些艺术家因其富有远见和创新精神以及其对加密艺术运动的贡献而备受尊敬,他们为奠定去中心化数字创意基础付诸了努力。

**10** 详见查尔斯沃思,《“DYOR”：解读加密艺术世界》。

**11** 详见查尔斯沃思,《“DYOR”：解读加密艺术世界》。

**12** 详见肯尼·沙赫特,《NFT主义》(NFTism),该文章为展览“DYOR”所撰写,  
<https://dyor.kunsthallezurich.ch/#nftism>。

**13** 在加密货币领域,“自己做研究”(DYOR)和“恐惧、不确定性和怀疑”(FUD)有着紧密关联,因为DYOR可以有效抵御FUD。FUD指的是误导性或夸大的负面信息,这些信息会在市场中散播恐慌,并常常对价格和投资者情绪造成影响。相反,“DYOR”强调独立研究,鼓励个体核实事实、分析信息来源并形成自己的结论,而非被由恐惧驱动散发的言论所左右。通过运用“DYOR”,投资者可以做出明智的决策,避免被市场投机或虚假信息所操纵。

**14** 详见夸兰塔,《历史由你书写》。

**15** 访问 <https://poap.xyz> 可了解更多关于出席证明协议的信息。

**16** “DYOR——数字空间”(DYOR—Digital Space)可通过以下链接在Spatial上访问:<https://www.spatial.io/s/DYOR-Digital-Space-651d87639693d3c35d887110?share=1401402056019771912>。

**17** 详见夸兰塔,《历史由你书写》。

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**妮娜·罗尔斯博士(Dr. Nina Roehrs)**是数字时代艺术领域的专家,她致力于为文化领域的参与者提供数字化项目方面的支持。她曾在圣加仑和圣安德鲁斯学习商业经济学,之后在瑞银集团工作了14年,并于2016年创立罗尔斯与博奇画廊(Roehrs & Boetsch)。

罗尔斯与博奇画廊目前是一家混合型咨询公司,专注于研究数字化对艺术和社会的影响。该公司的业务重点包括积极探讨和开发无法由传统策展方式实现的全新展览形式,这些形式通常涉及增强现实、虚拟现实、应用程序、网络、网站、人工智能和区块链技术等新兴技术。

罗尔斯是苏黎世美术馆“DYOR”展览的策展人,该展览是首批以区块链和NFT为主题的机构艺术展之一(2022年10月-2023年1月)。自2023年起,罗尔斯一直在为巴黎摄影博览会开发和策划聚焦数字时代摄影和影像的全新板块。2024年1月,她为Giga/联合国儿童基金会组织并策划了由佳士得3.0主办的“建立联系”(Creating Connections)拍卖会。她近期还被任命为瑞士阿拉伯银行数字艺术收藏及相关项目的策展人。

# Agent and Agency: Exhibiting Art Systems with Creativity in the Generative AI Age

## Wang Yini and Wu Ziwei

The terms “Agent” and “Agency” are frequently used in discussions about Generative AI (Gen AI). Both come from the Latin *agens*, meaning “to do.” They are also notably ambiguous. In AI, “Agent” sometimes refers to a system that processes information and acts to achieve goals, and sometimes to an acting entity. “Agency” in everyday use means an institution or a representative, while it also refers to activeness or capacity to act in the humanities. These cognate terms shift meaning between subject, intermediary, and tool depending on context. Sometimes their meanings conflict, and sometimes they support each other, creating a dramatic ethical tension.

Discussions of agency in the Gen AI era focus on artificial agency and the new status of human users within AI systems. The concept of “distributed agency”<sup>1</sup> from actor-network theory argues that agency does not belong to a single subject. Instead, it is dynamically distributed across diverse networks. In human-AI systems, humans possess social and individual agency, while AI forms an emergent collective agency—a form of “social artificial agency.”<sup>2</sup> Natural, animal, and artificial entities also have their own agency. When these agencies interact within a system, they collide, creating the core issue of agency in artistic creation under Gen AI.

In artistic creation, the artists agency affects the revaluation of artistic merit. In the Gen AI era, AI participates in creation, and some artworks emerge from database-driven processes. Humans act as temporary data repositories, losing part of the agency derived from embodied perception.

In terms of art viewing, Gen AI lowers the intellectual threshold for art. Conceptually, the discursive energy and cultural subtext behind artworks, which have been key elements of contemporary art exhibitions since the 1970s, are now the easiest content for AI to generate. Formally, visual art that emphasizes form and sensibility becomes more accessible due to Gen AI’s ease of visual generation, raising the audience’s perceptual threshold.

This is the creativity paradox of the Gen AI age. It seems everyone gains the ability to create and evaluate creativity, yet this desire remains insatiable due to machine agency. At the current stage, generative AI still functions as a causal agent, not an intentional agent.<sup>3</sup> It cannot evaluate its own creations, and therefore can only perform, never truly become a creative individual. As a result, the artist-audience users, the AI within the artworks, and the content itself collaboratively form a complex generative and interpretive system through distributed agency.

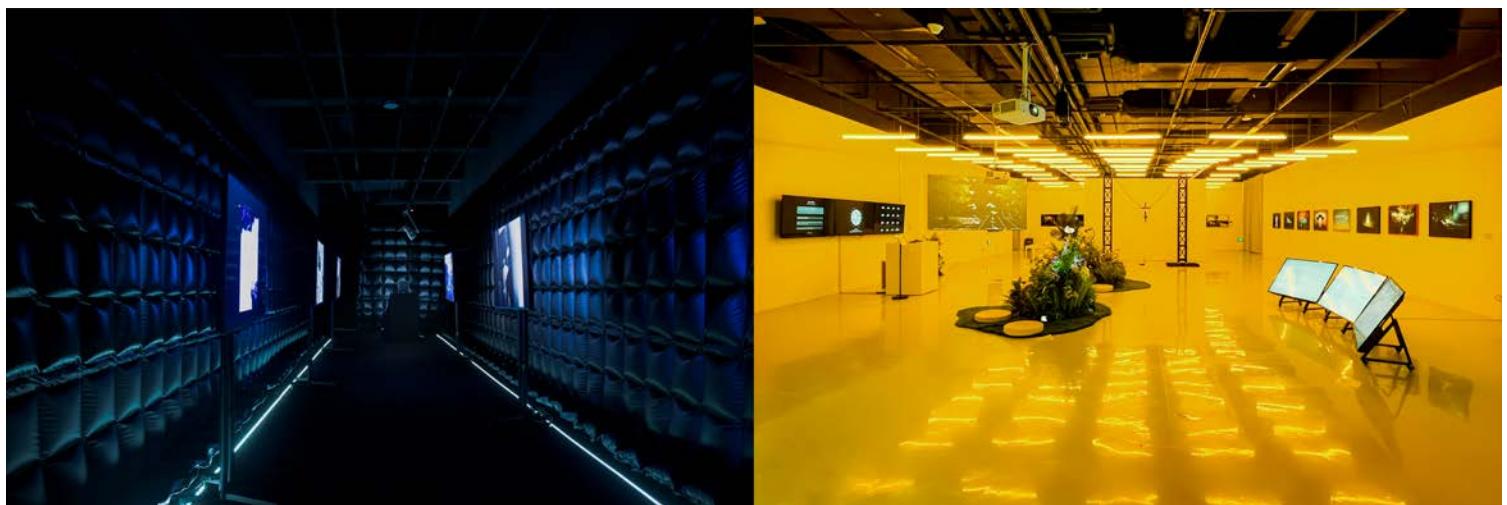
In July 2025, I curated the exhibition *Babel Bottle: Pragmatics, Creativity, and Forms of Life in the Age of Artificial Intelligence*. It explored how creative agency reflexively shapes the generation and interpretation of art under deep Gen AI intervention. The exhibition constructed a fictional spatial model by projecting the Babel Tower into a lower dimension as a Klein bottle. Semantic space was situated within it, as visitors moved like ants across, through, and around the tower, crossing from the interior of meaning toward the exterior. The exhibition was held in a mall-based art museum, where the proportion of general visitors exceeded that of professionals. I aimed for visitors to actively engage with the exhibition, co-constituting the artistic system alongside AI.

Although the theme centered on Gen AI, I emphasized visitors’ embodied experience. They had to traverse a narrow, dark space enclosed by inflatable structures, symbolizing the bottleneck of the Klein bottle, and then enter a yellow—lit area that reset perception. This design aimed to break the daily experience and stimulate exploration. The works on display were created between 2022 and 2025. Adjacent pieces shared semantic themes but highlighted differences across tools and contexts. For example, works generated by Stable Diffusion and Midjourney explored model-specific mechanisms under “memory rewriting.” Other works, based on Stable Diffusion, contrasted “closed-system” versus “open-system” approaches to artistic generation.

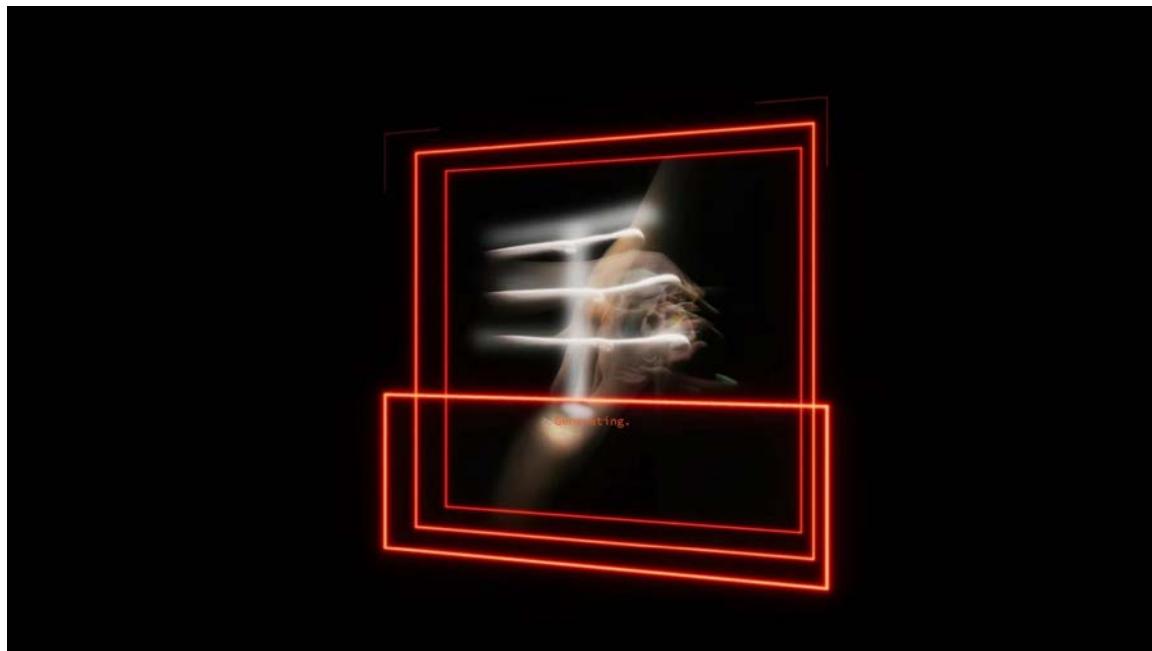
In this exhibition, I invited several art system works incorporating elements of artificial intelligence, to discuss the interplay of systems and achieve an isomorphic mapping of art systems within the context of Generative AI.

For example, the exhibition juxtaposed two works: Wu Ziwei's *Mimicry* series and Fu Dongting's *Reverse Evolution*. They both address "evolution" within digital systems. The former employs a cybernetic system that does not interact with the outside world. It operates in a closed digital space that does not involve the viewer. The work enables viewers to step out of the

black box and re-examine the connection between the Chinese character's shape and its meaning in the mind. At the same time, the artist Fu construct an imaginary environment in which human subjectivity is lost, exploring the development of hieroglyphic Chinese characters in a non-human or human-free world. Here, the art system functions purely as an object of observation. In contrast, Wu's series represents an open system of Artificial Life, emphasizing a dynamic artistic mechanism that is responsive to and interacts with the physical environment.



Wang Yini, *Babel Bottle: Pragmatics, Creation, and Forms of Life in the Age of Artificial Intelligence*, Support by 2025 Emerging Curators Project, Central Art Museum, Hangzhou, China. Photograph by Xu Jian © Wang Yini & Central Art Museum.



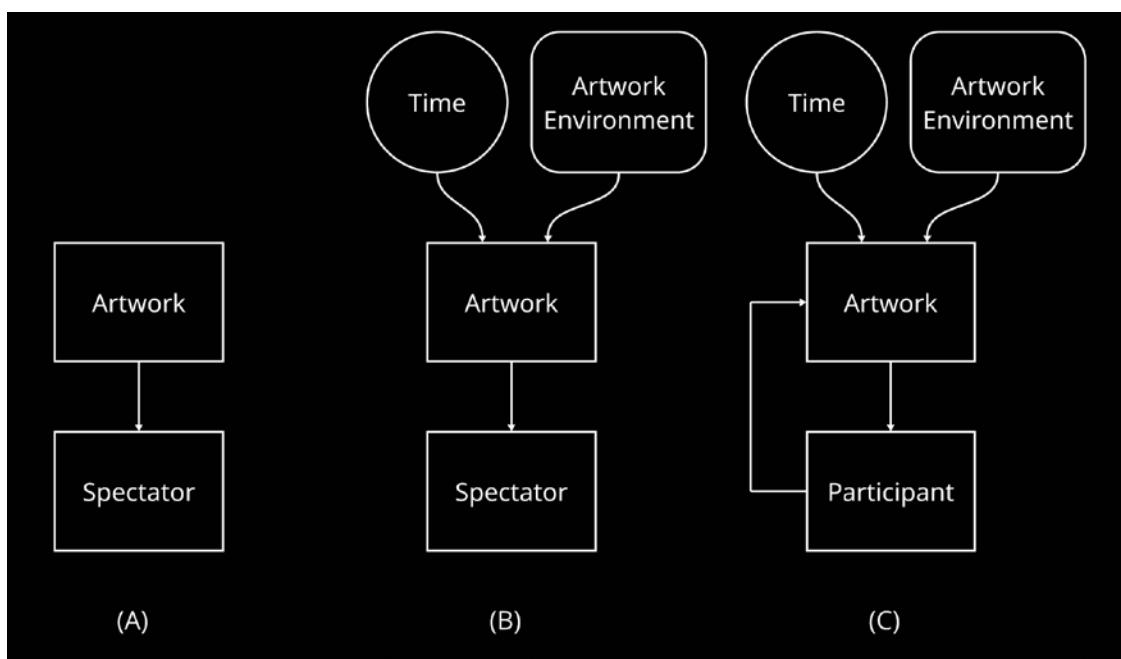
Fu Dongting, *Reverse Evolution*, 2023, AI-generated video, screenshot. © Fu Dongting

When everyone shares a tangible database of collective intelligence and aesthetics<sup>4</sup>, what kind of artistic creation still retains a space for spectatorship? Admittedly, within the development of contemporary art, the concept of artist identity based on creativity—and the resulting mechanisms of ‘star-making’—remains the infrastructure of the art ecology. On the other hand, the ‘presence’ of the viewer and ‘participatory’ approaches have already been subjects of profound discussion. Both paradigms are grounded in an upholding of liberal humanist subjectivity. The practice of generative AI is reminding curators, artists, and audiences that the

agency and fluidity of creativity point toward a disenchantment with the ‘cult of the artist.’ Furthermore, the practice of generative AI prompts a questioning of the human role within the system regarding liberal humanist subjectivity; the panic surrounding the ‘subject of creativity’ seems to stem from this very issue. Our lives are approaching a posthuman state of ‘dry-wet’ co-constitution. As N. Katherine Hayles advocates in *How We Became Posthuman* regarding a positive, embodied form of posthumanism: when humans become components of a distributed system<sup>5</sup>, the full expression of human capability is seen precisely as depending on the articula-



*Mimicry, Mimicry: Mimetic on Simulacra, and Mimicry: News Ecosystem*, 2025, exhibited in Babel Bottle. Photograph by Xu Jian. © Wang Yini, Wu Ziwei & Central Art Museum



A: the static system; B: the dynamic passive system; C: the dynamic-interactive, 2025, system by Cornock and Edmonds, redrawn by Wu Ziwei. © Wu Ziwei

tion with the system, rather than being threatened by it. Reflexive epistemology replaces objectivism; distributed cognition replaces autonomous will; embodiment replaces a body seen as a support system for the mind; and a dynamic partnership between humans and intelligent machines replaces the liberal humanist subject's manifest destiny to dominate and control nature<sup>6</sup>. In the following text, I invite participating artist Wu Ziwei for a dialogue. She is an artist and scholar specializing in artificial life and art systems. Taking Wu Ziwei's practice as a guiding thread, this dialogue will discuss creativity and art systems in the age of generative AI,

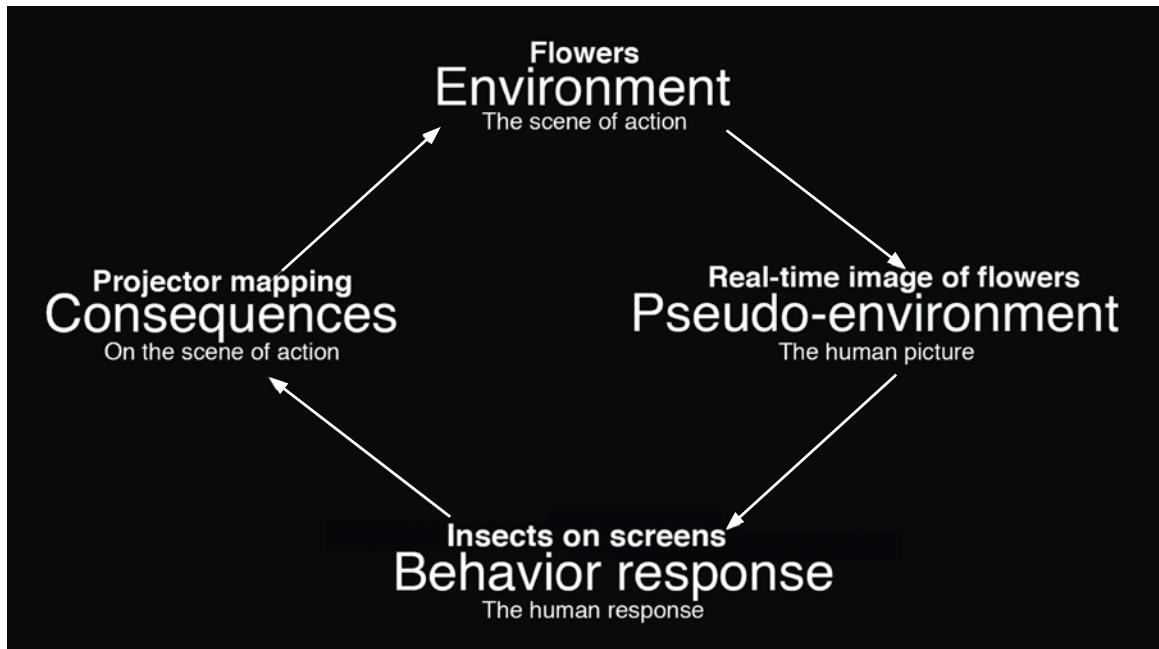
focusing on her *Mimicry* series and her participation in this exhibition."

**Wang Yini:** In the *Mimicry* series, how do you understand the concept of a "system" in Artificial Life, and how do you incorporate it into an artistic language directed towards the audience?

**Wu Ziwei:** Inspired by Stroud Cornock and Ernest Edmonds' work on computer-augmented artistic paradigms, I extended my research into software-driven Artificial Life art. These creative systems can be catego-



Wu Ziwei, *Mimicry*, 2020-2021, flower, camera, screen, Raspberry Pi, projector, Genetic algorithm. © Wu Ziwei



Wu Ziwei, Pseudo-environment in *Public Opinion* and the correspondence relationships In *Mimicry*. © Wu Ziwei<sup>8</sup>

rized into three paradigms: static systems, which maintain a basic viewing relationship between the work and the audience; dynamic passive systems, which introduce time and environmental factors to allow continuous evolution of the work; and dynamic interactive systems, which further incorporate participant feedback and sometimes include mechanisms to enhance diversity.

My work *Mimicry* uses a dynamic passive system to construct an Artificial Life environment. Its inspiration comes from mimicry in the animal kingdom—organisms adapt to survive by changing their patterns or even their shapes. I draw a parallel between this and the human social environment. As Lippmann noted in

*Public Opinion*<sup>7</sup>, people live in the real world but often perceive it through pseudo-environments like news and social networks. Their behaviors, in turn, reshape the real environment, creating a continuous feedback loop.

In *Mimicry*, the four main elements—the flowers, the live video feed of the flowers captured by a camera, the virtual insects, and the projection mapping—correspond respectively to the four components in Walter Lippmann's theory: the environment, the pseudo-environment, behavioral response, and consequence. Together, they form a closed-loop system, illustrating the parallel relationship between *Mimicry* and public opinion.



Wu Ziwei, *Mimicry: Mimetic on Simulacra*, 2025, Algorithm-driven multi-screen interactive installation.  
© Wu Ziwei, Tian Xiyu, and Su Wanchao.



Wu Ziwei, *Mimicry: Mimetic on Simulacra* and *Mimicry: News Ecosystem* with audience interaction  
in the exhibition *Babel Bottle*, 2025. Photograph by Wang Yini © Wang Yini, Wu Ziwei & Central Art Museum

Specifically, the system captures real-time images of plants through a camera and employs a genetic algorithm to analyze their colors and textures. Based on this data, it continuously evolves a group of virtual insects designed to mimic the flowers visually. The simulated processes of reproduction, selection, and mutation are displayed on the screen in real time. Finally, the generated insect images are projected back onto the physical plants, completing the feedback loop between the virtual and the real.<sup>9</sup>

**Wang Yini:** You draw a parallel between mimicry in animals and the pseudo-environment in communication theory. What inspired this comparison?

**Wu Ziwei:** The field of Artificial Life explores both life-as-we-know-it and life-as-it-might-be. It involves studying existing life structures (whether found in nature or artificial systems), and using that knowledge, simulates new forms of life through artificial systems, thus creating possibilities for life-as-it-might-be.

The term “pseudo-environment” comes from communication studies. It refers to a reconstructed environment created by mass media through the selection, processing, and structuring of information—an environment that is not objective reality. Interestingly, in Chinese, this term shares the same translation as “mimicry” in biology, and conceptually, the two are almost structurally isomorphic; both describe adaptive systems that

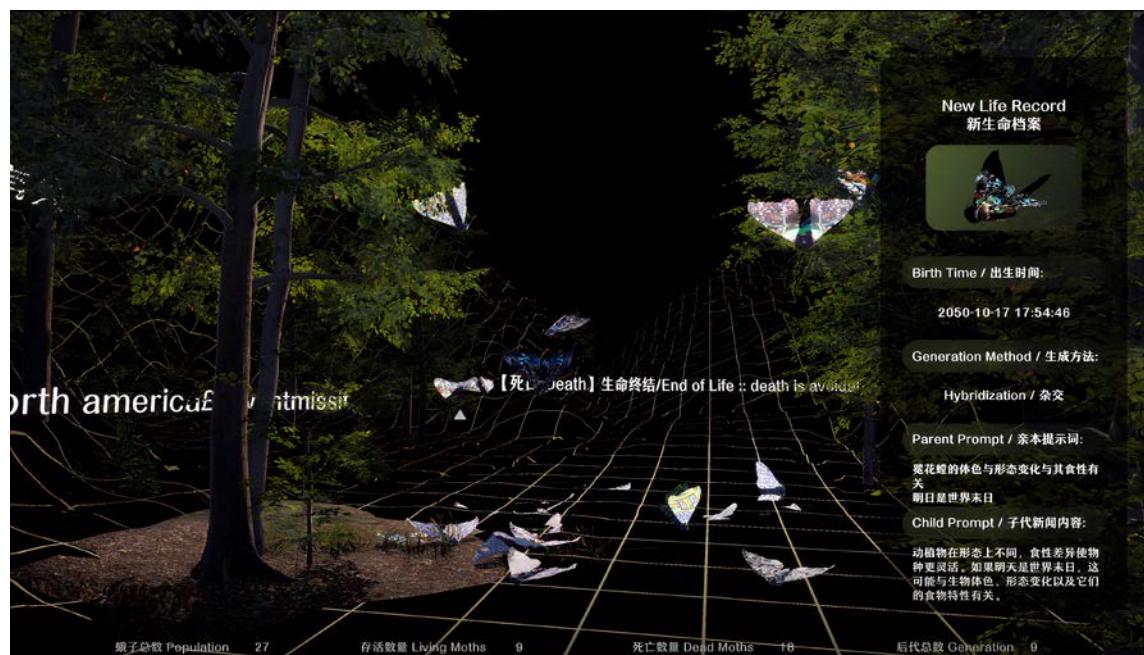
construct mediated realities in order to interact with their surroundings.

In the follow-up works to the *Mimicry* series - *Mimicry: Mimetic on Simulacra* and *Mimicry: News Ecosystem*—I extend the Artificial Life system into today’s social media environment. The sphere of public opinion has transformed as it is now co-created by the masses online, with numerous AI technologies participating in the production and dissemination of discourse.

We have entered a post-truth age, where facts give way to appearances and confirmation bias—a trend amplified by the rise of social media. As Jean Baudrillard observed, “The simulacrum is never that which conceals the truth—it is the truth which conceals that there is none.”

Like the peppered moths, we live in an ever-changing artificial environment. During the Industrial Revolution, the moths’ colors shifted with the darkening and whitening of trees under coal smoke and pollution control. Similarly, our behaviors and perceptions now adapt to the continuously reconstructed digital ecology surrounding us.

**Wang Yini:** How do you design the life forms within these dynamic life systems? What kind of role do the viewers play in these systems?

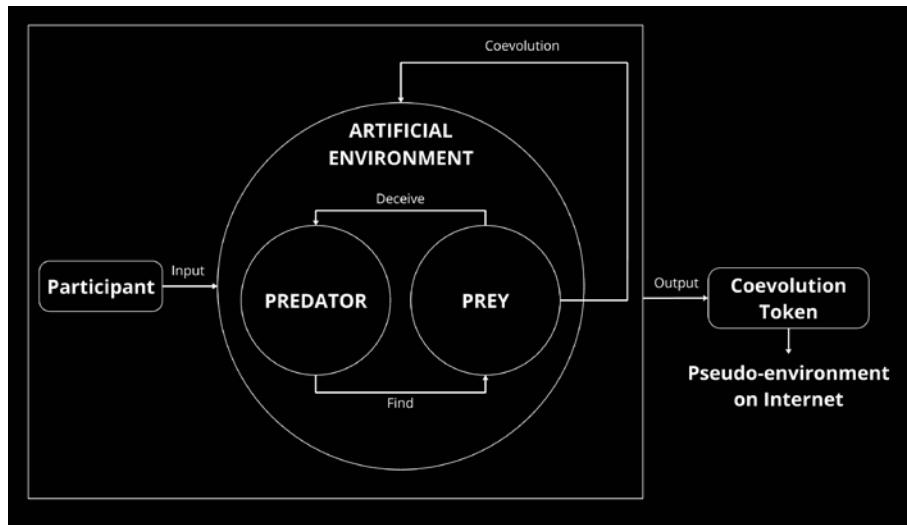


Wu Ziwei, *Mimicry: News Ecosystem*, 2025: The hybrid-generated outputs of fake news with LLM, Real-time interactive virtual ecosystem © Wu Ziwei, Yu Hankun, Lu Yiyang, Su Wanchao

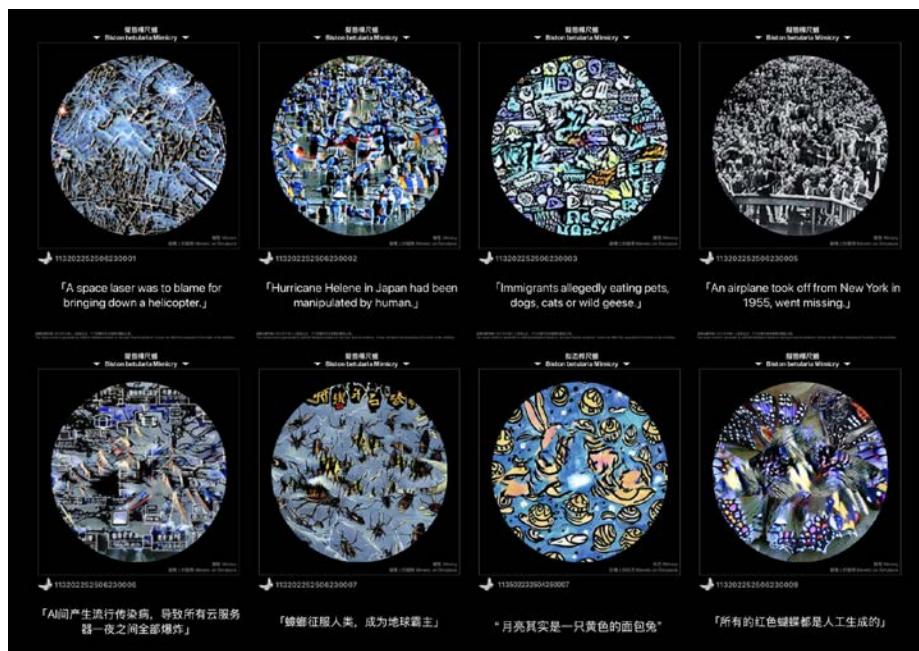
**Wu Ziwei:** In *Mimicry: Mimetic on Simulacra*, the audience participates in constructing the artificial environment through text input. The system then generates a corresponding visual landscape and evolves a group of digital moths. This process inspired the work's title—the moths perform acts of mimesis upon ever-shifting artificial simulacra. Viewers can scan a QR code to retrieve the moths they helped generate and often share them online. Building upon the three paradigms of Artificial Life systems mentioned earlier, this work further explores a new model of ecological dynamic interaction, completing a full cycle from artwork to “pseudo-environment”.

These evolved moths also migrate into another dynamic system, *Mimicry: News Ecosystem*. Here, I simulate the life cycle of the peppered moth—after hatching, it neither eats nor drinks, mates briefly, and then dies.

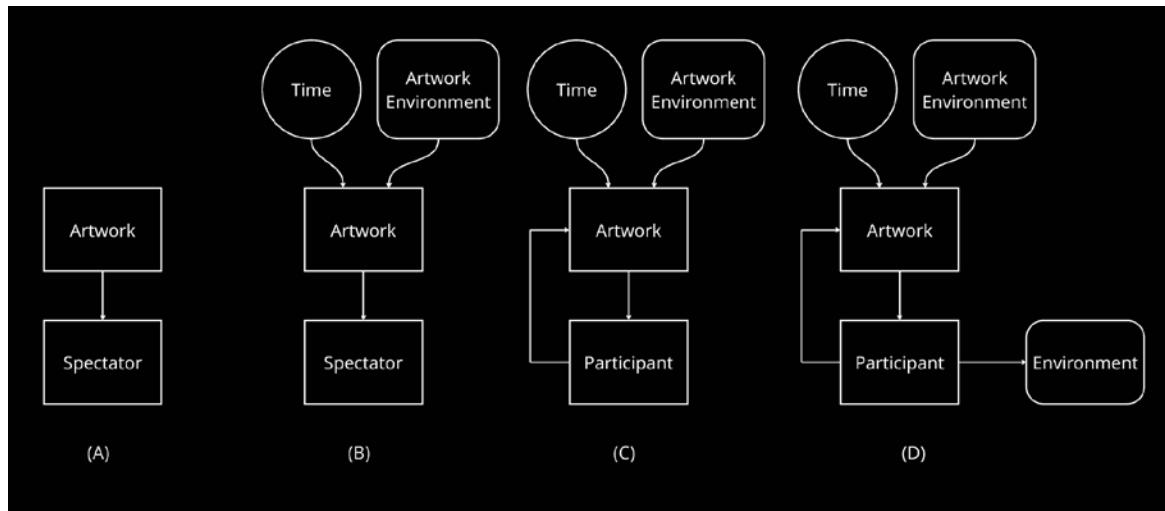
The virtual moths are driven by Boids and genetic algorithms, engaging in mating, competition, and extinction. Their evolution mirrors the life cycle of news: how it enters public awareness, mutates through transmission, and ultimately fades into oblivion.



Wu Ziwei, Illustration of *Mimicry: Mimetic on Simulacra* system design. © Wu Ziwei



Collection of coevolution tokens for sharing online, generated by *Mimicry: Mimetic on Simulacra*, 2025 © Wu Ziwei.



A: the static system; B: the dynamic passive system; C: the dynamic-interactive system;  
D: the ecological dynamic-interactive system, 2025 © Wu Ziwei

**Wang Yini:** Your work presents itself as a human-machine art system, involving Artificial Life, AI algorithms, and human participants who bring their own experiences and data. Compared with conventional digital art, what are the main differences in how an art system is created and exhibited?

**Wu Ziwei:** During the project's early research phase, I approached the work with academic rigor, studying ecology and communication theory in search of a solid conceptual framework. Yet, my mindset shifted once I entered the creative stage of system building. I was motivated by pure curiosity instead of theoretical precision—how might the moths “hybridize”? What new mutations might emerge from combining patterns with text? When the system was finally running, the complex results that evolved through audience interaction far exceeded my expectations, deeply satisfying that curiosity. Looking back, I realize I was never a “creator” controlling everything, but rather an observer—someone who connects the circuits, then watches with anticipation as life grows on its own.

**Wang Yini:** This was also the effect I hoped to achieve when curating this exhibition. After several iterations of implementation, what insights have you gained about the agency mechanisms of audience interaction within the art system?

**Wu Ziwei:** During the interactions, we found that once viewers understood the rules and saw the prompt “Please enter fake news,” some simply copied the preset examples to observe the system’s reactions. However, most chose to create bizarre stories—ranging from cross-species sci-fi and celebrity fabrications to self-

mythologizing narratives. They clearly enjoyed leaving traces of their own creativity in the system and proudly shared their results with others.

Interestingly, when I was testing the system, I found it surprisingly difficult to write such “news.” In contrast, the audience in the exhibition showed astonishing creativity—their ability to invent was genuinely inspiring

This behavior confirms my earlier study based on Baudrillard’s theory; in the post-truth era, what people desire is not truth but spectacle.<sup>10</sup> It is precisely this pursuit of spectacle that drives the audience’s engagement in the system. As Baudrillard reminds us, the public is the most powerful medium of all—mass(age) is message.

**Wang Yini:** Specifically, what kinds of interaction patterns do the audience exhibit?

**Wu Ziwei:** Based on the audience’s interaction behaviors and underlying motivations, they can be roughly divided into three categories:

1. **Fake-news joke makers:** They input widely circulated meme-like fake news (e.g., stories involving Trump or Musk) to exaggerate the system’s absurdity and anticipate a knowing laugh from subsequent viewers.

2. **Participation-focused wishers:** They treat the system as a wishing pool, entering real-life content related to themselves or friends and family, hoping to “wish” for things like gaining muscle or sudden wealth.

3. System disruptors: They attempt to test and challenge the system's stability and boundaries by inputting spoofed or disruptive texts.

An interesting example is a visitor who, in order to increase their moth's "mating" chances, entered dozens of similar self-written news items in a short time and eventually succeeded. He remarked, "Flooding the internet really works." Once viewers realize they can influence the system, it triggers behavior akin to instinctive biological drives.

**Wang Yini:** Yes. In the work, Gen AI's fabrication capacity and unpredictability create a "spectacle-driven" effect. The underlying logic might be that, in the age of Gen AI, the extreme proliferation of social media and the widespread use of AI have significantly raised humans' threshold for spectacle. In contemporary communication systems, human-generated information and AI-generated misinformation reproduce each other reflexively, intensifying the desire for spectacular stimuli beyond pre-AI times.

So, could this craving for human-machine spectacles actually reflect a desire for alternative forms of creativity? How do you see the role of Gen AI in your art system?

**Wu Ziwei:** My attitude toward Generative AI (Gen AI) is to treat it as a system component for constructing the context of the artwork, rather than as a creative agent. In my work, AI is not a generator of style, but a part and accelerator that drives the system. I focus on how to integrate AI into a larger interactive framework so that it serves the core artistic concept.

Compared with my earlier work *Mimicry*, in creating its follow-ups—*Mimicry: Mimetic on Simulacra* and *Mimicry: News Ecosystem*—we have already entered the era of Generative AI. From the creator's perspective, collaborating with Gen AI greatly reduces the burden of creation and frees me from mechanical labor. In the exhibition, I observed that Gen AI significantly stimulates audience creativity; through very simple interactions, they can co-create a diverse range of visual spectacles with the AI. Regarding the generated content, I believe Gen AI demonstrates a unique form of "machine creativity." It relies on massive datasets and algorithms that understand complex semantics, giving rise to collective agency that then feeds back into the system.

Currently, our system has collected thousands of exhibition data points. I am very much looking forward to

future research to deeply analyze the unique patterns shown by audiences and Gen AI in the co-creation process.

**Wang Yini:** "Collaboration" means allowing the creativity of various human and non-human agents within the art system to flow in a certain way. Whether the relationship between these agents is "synergistic" or "instrumental" perhaps only concerns the artist's self-narrative, whereas, at the perceptual level of the artwork, the dynamic changes generated by the system are superior to romantic notions of "artist creativity." Perhaps in the Gen AI era, the establishment, design, and examination of the art system can lead to a more dynamic exhibition state.

## Notes

**1** Law, John. "After ANT: Complexity, Naming and Topology" *The Sociological Review*, vol. 47, no. 1, 1999, pp. 1–14.

**2** Luciano Floridi, "AI as Agency without Intelligence: On Artificial Intelligence as a New Form of Artificial Agency and the Multiple Realisability of Agency Thesis" *Philosophy & Technology* (2025) 38:30

**3** Giorgio Franceschelli, Mirco Musolesi, "On the Creativity of Large Language Models", *AI & SOCIETY* (2025) 40:3785–3795

**4** In this text, this refers to various large AI models.

**5** "Distributed Cognition" posits that cognitive activity is distributed across individuals, artifacts, the environment, and socio-cultural systems, constituting a dynamic unit of analysis that encompasses the interaction between internal and external representations, Proposed by Edwin Hutchins.

**6** N. Katherine Hayles. 1999. "How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics". The University of Chicago Press.

**7** Walter Lippmann. 1946. "Public Opinion". Transaction Publishers.

**8** Walter Lippmann. 1946. "Public Opinion". Transaction Publishers.

**9** Wu Ziwei, and Lingdong Huang. "Mimicry: Genetic-algorithm-based Real-time System of Virtual Insects in a Living Environment-A New and Altered Nature" *Proceedings of the ACM on Computer Graphics and Interactive Techniques* 4.2 (2021): 1-8. <https://doi.org/10.1145/3465615>

**10** Simone D' Alessandro. 2023. "From the Pseudo-environment to the Meta-verse. Recontextualising Lippmann's thought" *Cambio: rivista sulle trasformazioni sociali*: 25, 1, 2023 (2023), 265–275.

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**Wang Yini** is an artist, curator, writer and designer currently living and working in Hangzhou, Zhejiang. She graduated in 2019 with a Master's degree from the China Academy of Art's Visual China Innovation Center. Wang Yini practices in the fields of 3D visualization, mixed reality, curating, and creative writing. Her research interests include visual culture and meta-research of computer-generated imagery, AI art, Chinese science fiction, mixed reality narratives, and Chinese internet pop culture. She employs an actor-network theory-based approach to de-centering the human perspective. In a complex and diverse human-machine-media reality, she constructs intricate and engaging multi-threaded narratives. Wang Yini's works have been exhibited at institutions including the China Academy of Art Museum, San Francisco Art Institute, Hong Kong Shenzhen Bi-city Biennale of Urbanism\Architecture, UFO Terminal, Beijing Times Museum, Hive Center for Contemporary Art, Nanjing Arts University Art Museum, and Powerlong Art Center (Hangzhou). She is the winner of the 2025 Emerging Curators Project of Central Art Museum and has also won the Best Creative Script Award at the 2024 Filmarathon.

**Wu Ziwei** is a media artist and researcher born in Shenzhen, China. She had an outstanding graduate bachelor's degree from the China Academy of Art, School of Intermedia Art (SIMA), and a Master of Fine Art with distinction in Goldsmiths, the University of London in Computational Arts. She had a Ph.D. degree in the Academy of Interdisciplinary Studies, majoring in Computational Media and Arts (CMA) at the Hong Kong University of Science and Technology. Her artworks and research primarily focus on biology, science, and their impact on society, utilizing various media. She engages in the interdisciplinary studies of Artificial Life Art, exploring the intersection of art and research with biology as concepts, bio information as data, and biomaterial as the medium. She is a Lumen prize, Batsford prize winner, and a Longlist in Information is Beautiful Award. Her research was published in the SIGGRAPH Art Program, ISEA, and Artificial Life Journal in MIT Press. She has exhibited at international venues, including Ars Electronica in Linz, CYFEST in Saint Petersburg, ACMI in Australia, Watermans Gallery and Cello Factory in London, Run Run Shaw Creative Media Centre in Hong Kong, among others.

# 代理与能动： 从生成式人工智能时代的创造力 谈谈展览中的艺术系统

## 王旖旎, 吴子薇

“代理”(Agent)与“能动性”(Agency)二词,是生成式人工智能(Generative AI)相关讨论中会出现的高频词汇。它们都源自拉丁文 *agens*,意为“去做”。同时,它们都具有狡猾的多义性:“Agent”,在人工智能语境中有时指“能处理信息并采取行动以实现目标的系统”,有时又指“行动体”。“Agency”在日常语境中指机构或代理,而在人文学科语境下则意为能动性。这两个同源词的意义在不同语境中于主体、中介与工具等概念之间摆动,时而矛盾,时而互证,戏剧性地构建了伦理张力。

在生成式人工智能时代,关于能动性的讨论集中于人工智能的能动性与人类用户在人工智能系统中的新状态。相关讨论源自行动者网络理论的“分布式能动性”概念<sup>1</sup>,这一概念主张能动性并非属于单一主体,而是在多元网络中动态分布。在人机系统中,人具有社会的与个体的能动性,而人工智能则形成了一种新兴的集体能动性形式——“社会人工智能”<sup>2</sup>。自然、动物与人工制品也拥有各自的能动性,当它们在系统中相互关联时,不同能动性相互碰撞,构成了生成式人工智能语境下艺术创作与观看中能动性的核心问题。

从艺术创作方面来说,艺术家的能动性关乎艺术价值的重估。在生成式人工智能时代,人工智能介入创作,一部分艺术成为基于数据库的涌现行为,人则如数据的暂存处,部分失去了源自肉身感知的能动性。

从艺术观看方面来说,生成式人工智能降低了艺术的智识门槛。观念上,作品背后的话语能量和文化深度原本是1970年代以来构成当代艺术展览的重要元素,现在却成为了人工智能最易生成的内容。形式

上,形式与感性的视觉艺术得到了重视,由于生成式人工智能生成视觉的易用性产生的技巧上的民主又提高了观众的感性阈值。

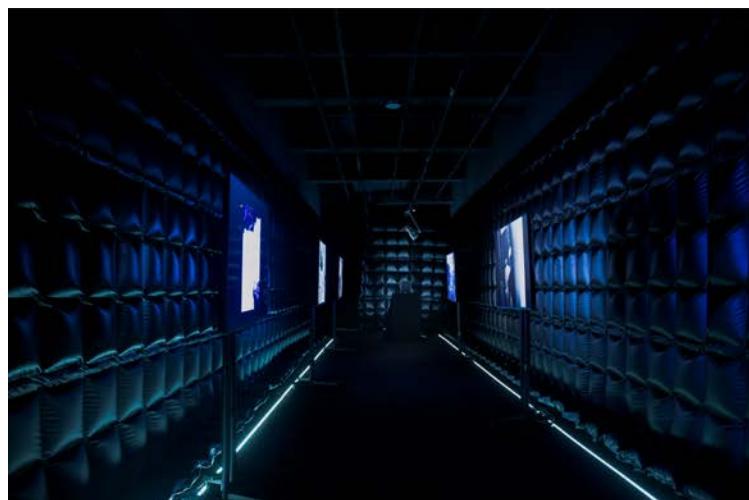
这是生成式人工智能时代的创造力悖论:似乎人人都获得了创造力和评价创造力的能力,似乎创造力又是因机器代理而永无法填满的欲求。目前阶段的生成式人工智能仍属于因果行为体(causal agents),而非意向行为体(intentional agents)<sup>3</sup>,它无法评估自己的创造,因此仍然只能扮演角色,而无法成为真正的创造性个体。至此,作为用户的艺术家观众、作品中的人工智能和作品内容,以分布式能动性共同构建了一个复杂的生成与阐释系统。

2025年7月,我策划了展览“巴别瓶:人工智能时代的语用、创造与生活形式”。该展览探讨了在生成式人工智能深度介入“创造”行为背景下,创造力代理如何反身性地影响艺术的生成与阐释。展览构建了一个虚构空间模型——被降维弯折的巴别塔化为克莱因瓶,语义空间在其中折叠,观众如塔上的蚂蚁,从语义的内部行向外部。展览位于商场内的美术馆中,前来观展的普通观众的比例高于专业观众。我希望让观众带着自身能动性进入展览,与人工智能共同构成艺术系统。

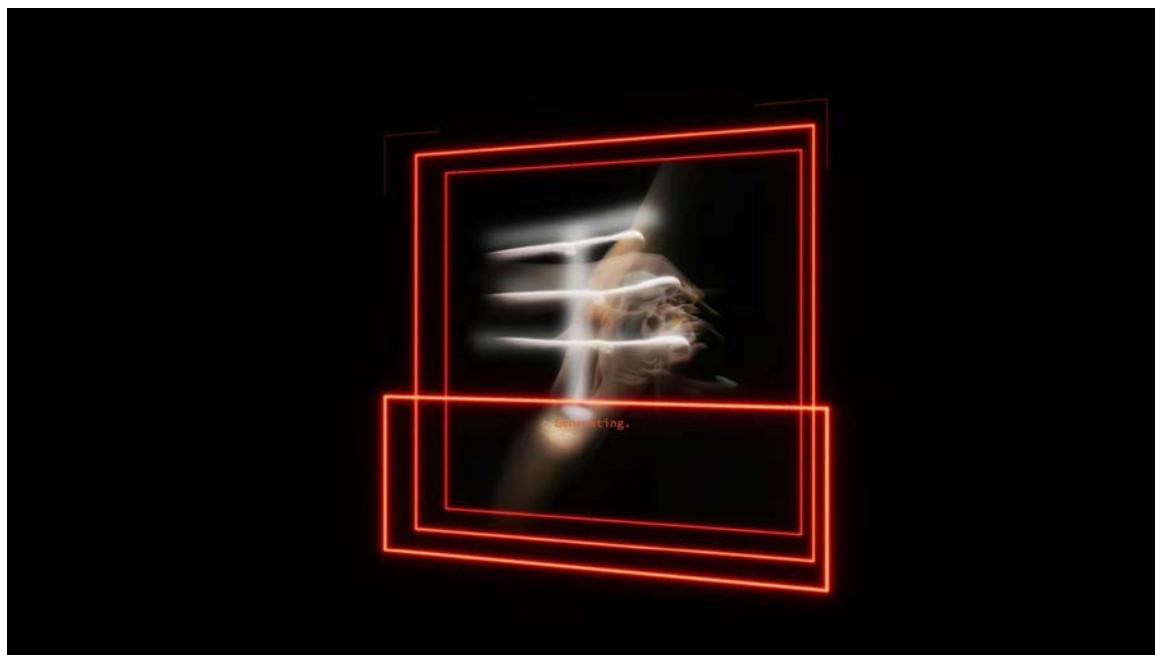
虽然展览的主题围绕生成式人工智能展开,但我强调了观众的具身体验。观众需穿越被气模包裹的狭长黑暗空间(象征克莱因瓶瓶颈),再进入被黄色灯光重置感知的区域,以打破日常经验、激发探索欲。展出的作品创作于2022至2025年期间,每组相邻的作品以共同语义主题呈现不同工具与语境下的生成差异。例如,使用Stable Diffusion与Midjourney

生成的作品在“记忆复写”主题上展现出模型机制差异；而同样基于 Stable Diffusion生成的作品，则对比了“封闭系统”与“开放系统”两种艺术生成路径。在这个展览中，我邀请了部分艺术家创作含有人工智能因素的艺术系统作品，希望以系统讨论系统，在生成式人工智能语境下实现对艺术系统的类同构。比如展览中有两件作品并置，分别是傅冬霆的作品《逆象演进》和吴子薇的作品《拟态》系列。这两件作品

都讨论了数字系统内部的“进化”。前者使用的是控制论意义上跟外界无交互的系统，该系统在封闭的数字空间运行，不受观者的影响。该作品以“手”这个汉字，展示在AI模型的生成系统中，象形文字如何使人类跳出黑箱，重新审视汉字的字形与脑中字义的关联。同时该作品构建了一种没有人类主体性的假想环境，探索象形汉字在非人类或无人类世界中的发展变化。在《逆象演进》中，系统对于观众而言是纯粹的



“巴别瓶：人工智能时代的语用、创造与生活形式”展览现场，中心美术馆ECP星星策展人支持项目，中国杭州。摄影：徐健  
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傅冬霆，《逆象演进》，人工智能影像，截帧，2023年。©傅冬霆

观看对象。而《拟态》是关于人工生命的开放系统,强调向实体环境开放的动态艺术系统机制。

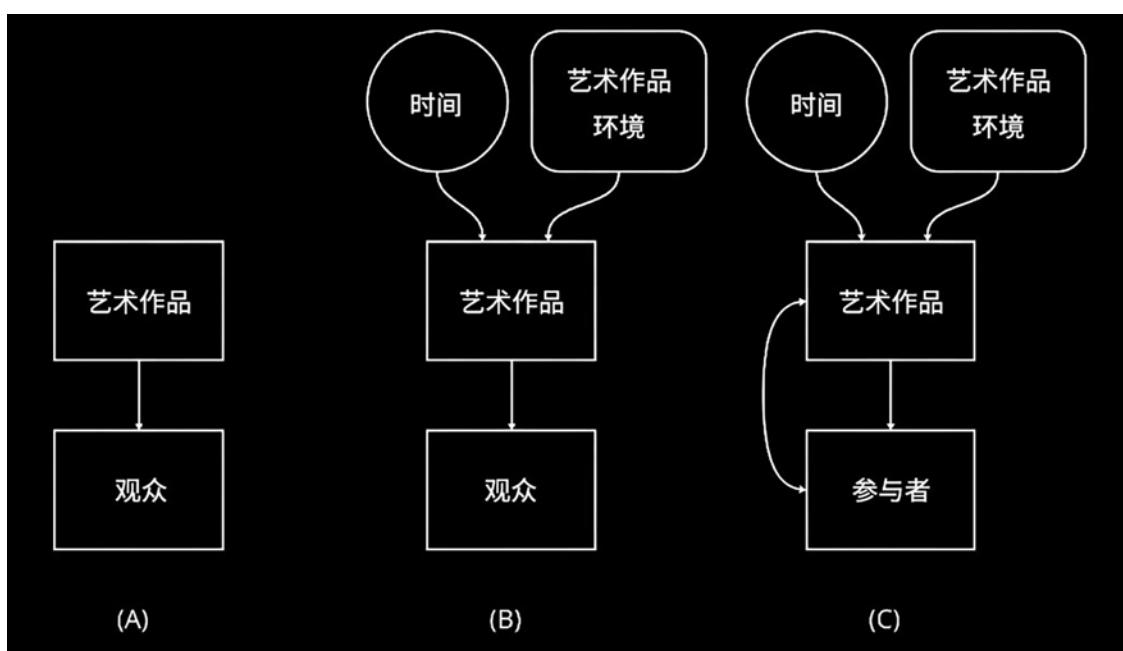
在下文中,我将邀请吴子薇,以她在人工生命和艺术系统上的探索方向为基础,就其《拟态》系列作品,谈谈生成式人工智能时代下的创造力和艺术系统。

**王旖旎:**在《拟态》系列作品中,你如何理解人工生命这一语境下的“系统”概念,并将它置入面向展览观众的艺术语言中?

**吴子薇:**斯特劳德·科诺克 (Stroud Cornock) 与欧内斯特·埃德蒙兹 (Ernest Edmonds) 在计算机技术增强艺术创作范式上使我受到启发,由此我将研究延伸至由软件主导的人工生命艺术领域。此类创作系统可分为三种范式:静态系统,即作品与观众间的基本观看关系;动态被动系统引入了时间与环境因素使作品持续演变;动态交互系统则进一步融入参与者反馈,有时还结合多样性增强机制。



《拟态》《拟态:拟像上的模仿》《拟态:新闻生态》于“巴别瓶”展览。摄影:徐健  
©王旖旎、吴子薇、中心美术馆



A:静态系统;B:动态被动系统;C:动态交互系统  
三种范式的基础由科诺克与埃德蒙兹于1973年提出,由吴子薇于2025年重新绘制。©吴子薇

我的作品《拟态》，运用动态被动系统范式构建了一个人工生命系统。其灵感源于动物王国中的“拟态行为”——生物通过改变自身花纹，甚至形态，来适应环境以求生存。我将这一概念与人类社会的舆论环境相映照。正如李普曼在《公众舆论》中指出，人们生活在真实环境中，却常通过新闻、社交网络等“拟态环境”来认知世界并做出行为反应，这些行为又反过来重塑其所处的真实环境，形成循环。《拟态》装置中的四大元素——花朵、摄像头捕捉的花朵实时影像、虚

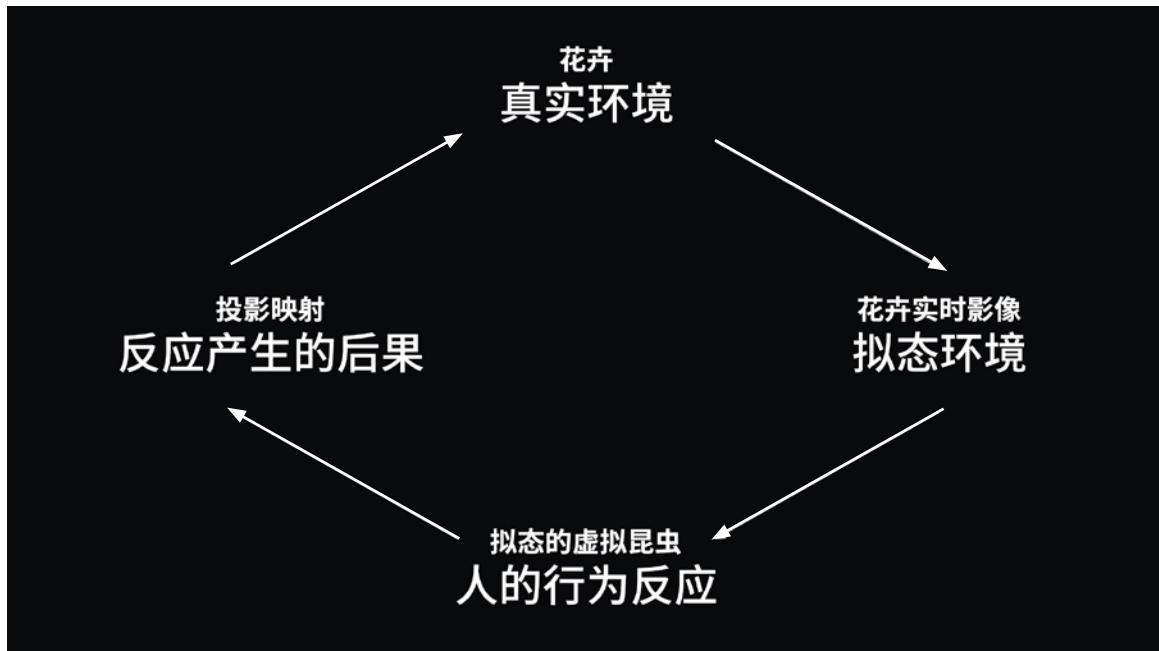
拟昆虫与投影映射——分别对应了李普曼理论中的“环境”、“拟态环境”、“行为反应”与“行为后果”，构成一个首尾相接的闭环系统，以此展现拟态与舆论之间相似的关系。

**王旖旎：**你将动物的拟态行为与传播学中的“拟态环境”作为对照，是基于怎样的思路？

**吴子薇：**人工生命这个领域探索的是我们已知的生命 (life-as-we-know-it) 和生命的可能性 (life-as-it-



《拟态》，花卉、相机、屏幕、树莓派、投影仪、遗传算法，2020-2021年©吴子薇



《公众舆论》中的伪环境及其在拟态中的对应关系。©吴子薇

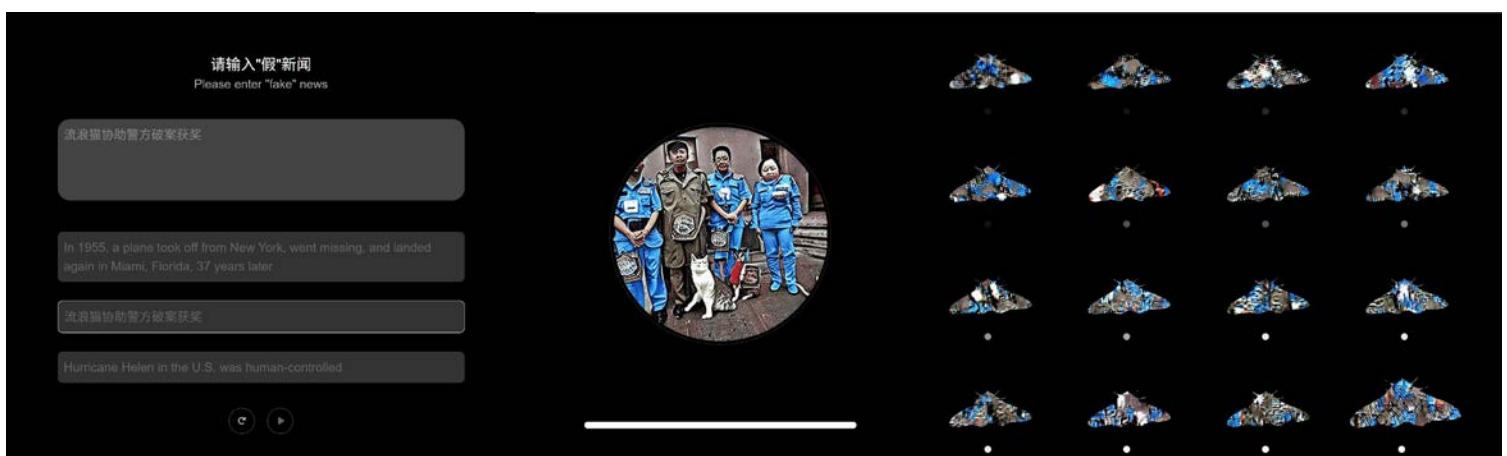
might-be)。它需要学习现有的生命结构——无论是从自然还是从人工环境系统中——然后以人工模拟生命系统,创造生命的可能性 (life-as-it-might-be)。“拟态环境”的英文是“Pseudo-environment”,指大众传播媒介通过选择、加工和结构化信息构建的非客观环境再现。拟态环境与动物拟态行为 (mimicry) 的中文翻译恰好一致,两者在结构上也几乎是同构的。

在《拟态》系列的续作《拟态:拟像上的模仿》和《拟态:新闻生态》中,我将人工生命系统延伸至当下的

社交媒体环境。舆论环境由大众在互联网上共建。近几年,人工智能技术也参与了舆论的产生和传播——我们正处于“后真相时代”。正如鲍德里亚所言:“拟像从来都不是真相的掩盖者,拟像才是真实”。

**王旖旎:**你如何设计动态生命系统中的生命形式?展览中的观众在这些系统中,扮演怎样的角色?

**吴子薇:**在《拟态:拟像上的模仿》中,展厅观众通过文字输入参与构建人工环境。系统随即以Stable Diffusion生成对应的视觉环境与演化飞蛾。这也是



《拟态:拟像上的模仿》,算法驱动的多屏交互装置,2025年。©吴子薇、田曦羽、苏万超



《拟态:拟像上的模仿》和《拟态:新闻生态》的互动场景,巴别瓶展览现场,2025年。摄影:王旖旎©王旖旎、吴子薇、中心美术馆

作品标题的由来,即在不断变化的人工拟像上,进行模仿类的拟态。观众通过扫描二维码,即可获取生成的飞蛾图像,并自发地将图像分享至互联网。在前文提到的三种人工生命系统范式的基础上,我进一步探索了新的生态动态交互系统模式,从而实现了从作品到“拟态环境”的完整循环。

这些进化后的飞蛾还将进入另一个动态系统——《拟态:新闻生态》。在此,我模拟了桦尺蛾的真实生命周期:孵化后不饮不食,仅在极短时间内交配,随后死亡。系统中的虚拟飞蛾在Boids算法与遗传算法的驱动下交配、竞争与消亡,观众输入的文字由大语言模型进行杂交繁衍。模型的演变过程映射了新闻的生命周期:渗入公众意识、在传播中变异,并最终归于沉寂。

**王旖旎:**你的作品以人机艺术系统的形态示人,涉及了人工生命,有人工智能算法,还有作为观众的人类以及它们携带的经验和数据。与常规的数字艺术创作相比,艺术系统作品在创作和展示方面有哪些不同之处?

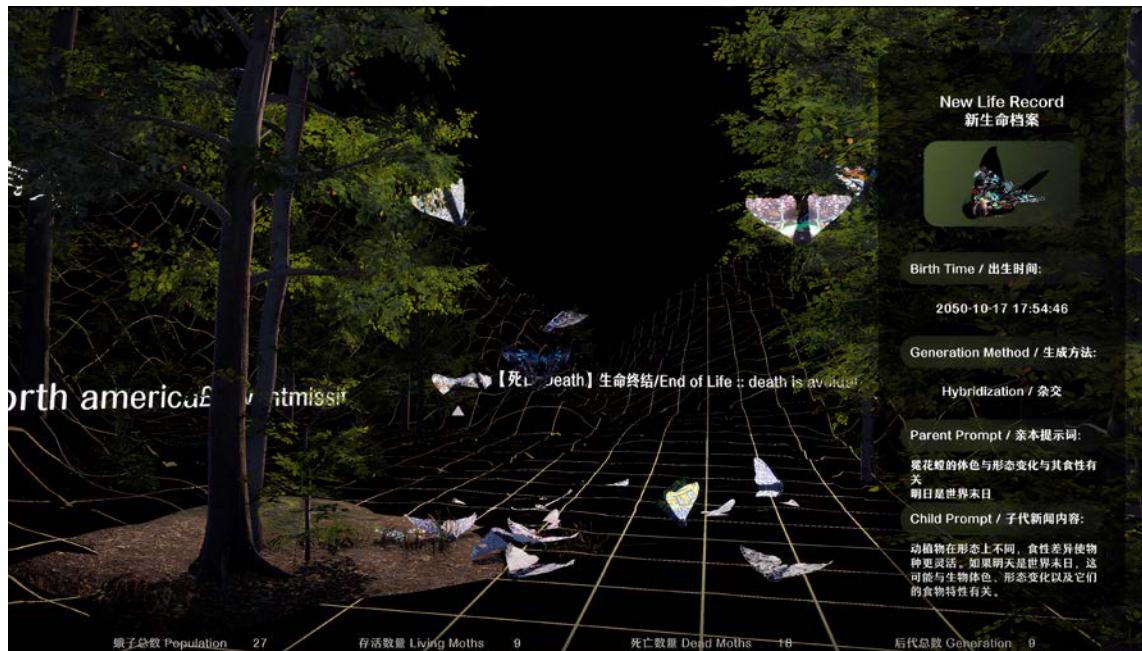
**吴子薇:**早期调研阶段,我研读了生态学与传播学文

献,试图为作品建立理论基础。但在创作系统时,我更倾向于被好奇心驱动——飞蛾的形态会如何“杂交”?图案与文字会产生怎样的变异?系统搭建完成后,它与观众互动产生的结果大多超出预期,让我更像一位观察生命自发生长的“观察者”,而非严格掌控的“造物主”。

**王旖旎:**这也是我在策划这次展览时希望获得的效果。在几次落地实践后,你对艺术系统中观众互动的能动性机制有哪些发现?

**吴子薇:**在互动中我发现,观众理解规则并看到“请输入假新闻”的提示后,有一部分只是简单地复制原界面的预设内容观察系统变化,而更多人选择主动创作各种光怪陆离的故事——从跨物种科幻、名人虚构到自我编排,无所不包。他们显然对于在系统中留下自己的创造乐在其中,并自豪地向他人展示。

在行为类型上,观众可以大体被分为三类:假新闻笑话制造者,他们输入广为流传的迷因式假新闻,期待下一轮观众的反应;希望在系统中留下强烈自我痕迹的人,他们输入的内容与自己的真实生活相关;还有一种是系统破坏者,他们输入的文本旨在挑战系



《拟态:新闻生态》界面,假新闻的大语言模型生成成果。©吴子薇、田曦羽、苏万超

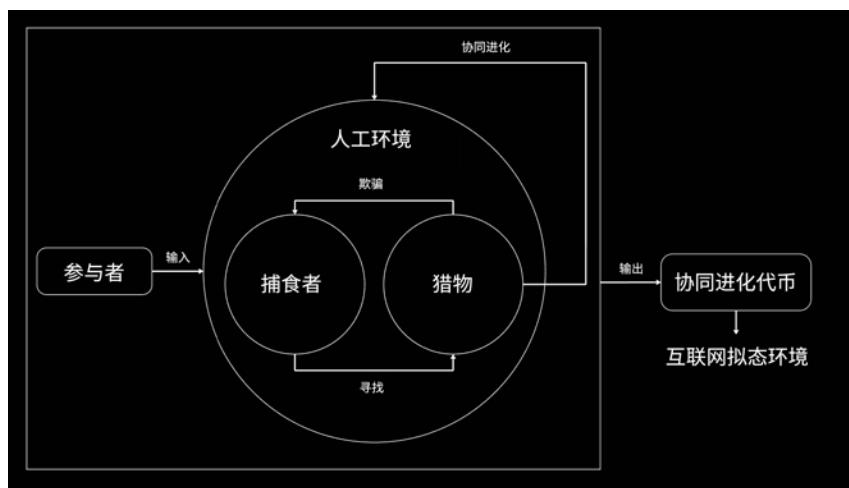
统的稳定性。当观众意识到自己能够影响系统时,会被激发出类似生物本能般的能动性。

这一行为印证了先前基于鲍德里亚理论的研究:在后真相时代,人们渴望的并非真相,而是“奇观”<sup>4</sup>。媒体误以为自身能够影响大众,深信大众具有话语渗透性,而大众真正热衷的只是奇观。正是大众这种对奇观的追求,成为了驱动其参与系统的核心动力。大众是所有媒介中最强大的,这就是为什么鲍德里亚说:大众(时代)就是信息(mass(age) is message)。

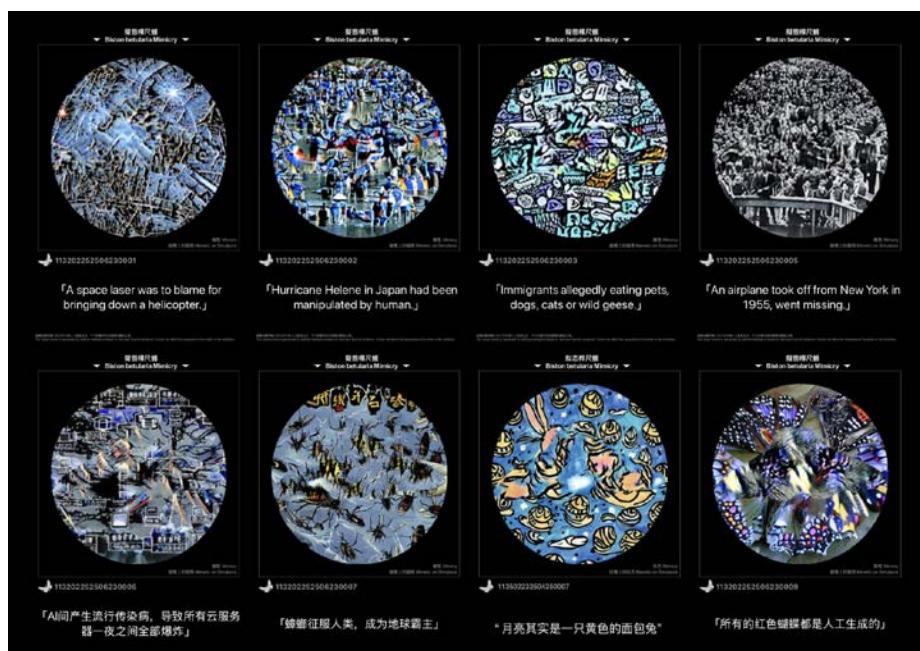
**王旖旎:**是的,在作品中,生成式人工智能的创造能

力和未知性带来了“奇观驱动”。它的底层逻辑可能是,生成式人工智能时代社交媒体极度发达,人工智能在被普遍使用,人对奇观的阈值也随之大幅提高。对照当代的传播系统,人工来源的信息与人工智能的假信息自反性地繁殖循环,使人对奇观刺激的渴望更甚于前人工智能时代。那么,对人机共处的景观的渴望是不是一种对另类创造力的渴望呢?你如何看待生成式人工智能在你的艺术系统中扮演的角色?

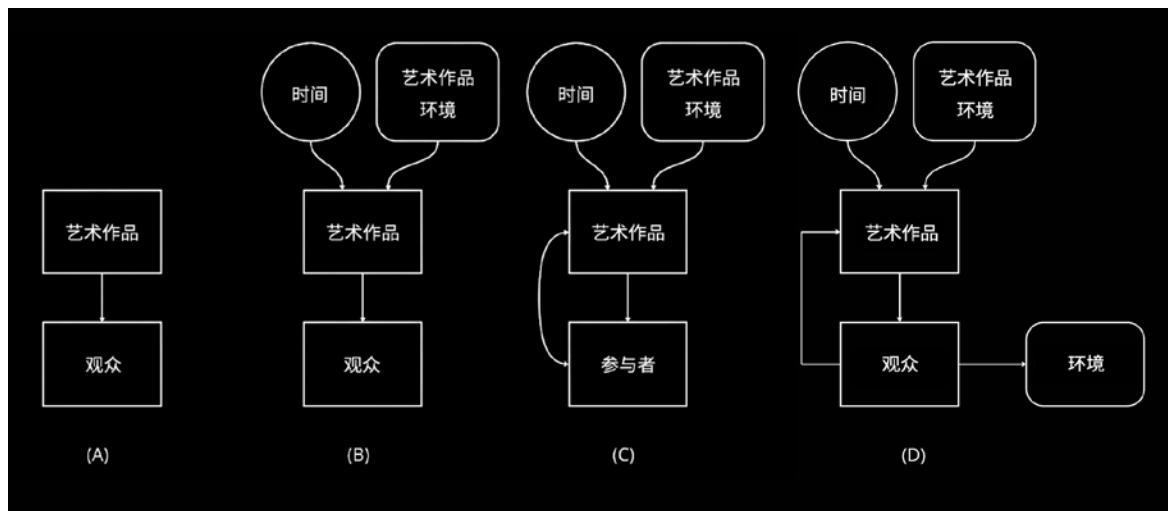
**吴子薇:**我对于生成式人工智能的态度,是将其视



《拟态:拟像上的模仿》系统设计。©吴子薇



《拟态:拟像上的模仿》的图像生成结果,用于观众的互联网共享。©吴子薇



A:静态系统;B:动态被动系统;C:动态交互系统;D:生态动态交互系统。©吴子薇

为构建作品语境的系统组件,而非创作主体。在我的作品中,人工智能不是风格的生成器,而是驱动系统运转的零件和加速器。我关注的是如何将人工智能融入一个更大的互动框架中,使其服务于核心艺术概念。

从创作者的角度看,与生成式人工智能协同工作极大地减轻了我的创作负担,使我得以从机械性劳动中解放出来。在展览中,我观察到生成式人工智能显著激发了观众的创造力:观众通过极其简单的交互,便能与人工智能共同创造出多样的视觉景观。就生成内容而言,我认为生成式人工智能展现出明显的“机器创造力”。当生成式人工智能依托于观众输入的数据更新自身数据集时,常能产生出人意料的成果,以致于使集体能动性出现,再使集体能动性反馈到系统中。

目前,我们的系统已收集了上千份展览数据。我十分期待后续的研究工作,以深入分析观众与生成式人工智能在共创过程中所展现出的独特模式。

**王旖旎:**“协同”意味着让艺术系统中各个人类和非人角色的创造力以某种方式流动。角色间是“协同”,还是“工具”,或许只关乎艺术家的自我话语。而对于作品的感知层面,系统性带来的动态变化是高于浪漫主义式的“艺术家创造力”的。或许在生成式人工智能时代,对于艺术系统的确立、设计和考察能带来更富有动力的展览生态。

## 注释

1 约翰·劳,《在行动者网络之后:复杂性、命名和拓扑》(“After ANT: Complexity, Naming and Topology”)《社会学评论》(The Sociological Review) 1999年第1期第47卷,第1–14页,塞吉出版公司。

2 卢恰诺·弗洛里迪,《无智能的人工能动性:论人工智能作为一种新型人工能动性及能动性多重实现论》“AI as Agency without Intelligence: On Artificial Intelligence as a New Form of Artificial Agency and the Multiple Realisability of Agency Thesis”,《哲学与技术》(Philosophy & Technology),2025年,第30页。

3 乔治·弗兰切利和米尔科·穆索莱西,《大语言模型的创造力》(“On the Creativity of Large Language Models”),《人工智能与社会》(AI & SOCIETY),2025年,第3785–3795页。

4 西蒙娜·达历山德罗,《从“拟态环境”到“元宇宙”:对李普曼思想的再语境化》(“From the Pseudo-environment to the Meta-verse. Recontextualising Lippmann’s thought”),《Cambio: 一本关注社会变革的杂志》(Cambio: rivista sulle trasformazioni sociali),2023年,第五期,第一卷,第265–275页。

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**王旖旎**是一位艺术家、策展人、写作者及设计师，她生于1990年，现工作生活于浙江杭州。她于2019年获得中国美术学院视觉中国创新中心的硕士学位。王旖旎在三维视觉、混合现实、策展及创意写作等领域进行实践探索，关注计算机图像的视觉文化与后设研究、人工智能艺术、中国科幻、混合现实叙事、中国互联网流行文化等主题。她以行动者网络式的方式实践去人类中心主义，在纷繁的人机媒介现实中构筑复杂有趣的多线叙事。王旖旎的作品曾在中国美术学院美术馆、旧金山艺术学院、深港城市/建筑双城双年展、上海UFO Terminal、北京时代美术馆、蜂巢当代艺术中心、南艺美术馆、杭州宝龙艺术中心等机构展出。她是2025中心美术馆星星策展人项目获奖者。她曾获2024 Filmarathon最佳创意剧本奖。

**吴子薇**是一位媒体艺术家和研究员，1996年出生于中国深圳。她于中国美术学院跨媒体艺术学院获得本科学位；伦敦大学金史密斯学院获得Computational Arts MFA学位并以优异成绩毕业；香港科技大学跨学科学院获得博士学位。她的研究和艺术作品主要基于生物学、科学以及媒介对社会的影响，她使用多种媒介进行创作。她正在进行跨学科的人工生命艺术研究：将生物学概念作创作的灵感，将生物信息作为数据。吴子薇是Lumen奖、Batsford奖的获奖者，并入围了Information is Beautiful奖。她的研究成果曾发表于SIGGRAPH、ISEA会议和MIT出版社的Artificial Life期刊上。她的艺术作品曾在国际展览中展出，展出地包括奥地利的Ars Electronica、俄罗斯的CYFEST、澳大利亚活动影像中心、英国Watermans Gallery、Cello Factory，香港Run Run Shaw创意媒体中心等。

# "All that is solid is melting." Curating and Exhibiting AI Art

## An Interview with Xi Li (Aiiiii Shanghai) led by Birgit Mersmann and Hauke Ohls

**Birgit Mersmann:** The emergence of AI image and video generators has rapidly transformed the production of art, questioned existing display, exhibition and marketing practices, and challenged existing notions of art. When we ask the artificial intelligence chatbot ChatGPT about the definition, impact and consequences of AI art, it concludes that "AI art challenges traditional notions of creativity, authorship and originality, raising debates about its role in the art world." The positions within these debates are extremely controversial. "Artificial Intelligence can now make better art than most humans," was the sub-headline of an article by Kevin Kelly published 2022 in *Wired*. Others analysts complain that due to the process of automatized image generation, AI art lacks human intentionality, emotion, and cultural context. And still others call into question whether AI art is truly creative, and whether it is legiti-

mate at all to speak of AI art as a valuable art form due to the lowering of the creative barriers through image prompting. At which points does AI art challenge existing notions of art?

**Xi Li:** Artificial intelligence, as a novel medium distinct from those of the past, has the potential to redefine art. Since Duchamp's urinal was exhibited in an art gallery, the definition of art has been a topic of ongoing debate. Many argue that what distinguishes an artist is their creativity, which is often seen as an inexplicable genius or inspiration. Today, machines are also engaging with this elusive element. Consequently, AI art challenges our current understanding and compels us to seek new definitions of human experience. Roland Barthes posited the "death of the author" and emphasized the inherent randomness in human discourse. Perhaps it is time to



Entangled Others, *Artificial Remnants*, 2019-2021, 3D GAN, 3D-Style Transfer, inflatable sculpture. Exhibition view at Aiiiii, 2021

consider redefining art from the perspective of the viewer, where the audience determines what constitutes art. Much like nature, which exists objectively, its beauty is perceived subjectively by each individual.

**Hauke Ohls:** What is the creative potential of AI art?

**XL:** As a form of digital media art, the distinctive characteristic of artificial intelligence art lies in its data. There are many intriguing aspects within these datasets; they may originate from analog techniques, be derived from digital data since the advent of computers, or consist of personal, external, or public data. Moreover, the labeling of the data may reflect various human biases or even be illicit. The data can be vast in scale or, conversely, quite limited. They can pertain to bodily movements, coral, and much more. I believe these factors represent one of the creative potentials unique to artificial intelligence art.

**HO:** What are the limits of AI art, and what are the threats for the existing art system still mainly operating on the basis of the principles of the pre-AI era?

**XL:** AI poses challenges to our ability to discern the original works of artists, particularly for those of us who rely heavily on the internet. While we may not have seen

all the works of an artist in person, the internet allows us easy access to them. However, due to the extraordinary mimetic capabilities of artificial intelligence, our ability to distinguish between original works and AI-generated imitations is compromised. In the face of numerous images of supposed original works online, we lack the criteria to make accurate judgments.

**BM:** What is the state and status of AI-generated art in contemporary Chinese art? Can you name leading Chinese artists within the art scene of mainland China that form the avant-garde of the AI art (r)evolution? What are their interests, topics, and aesthetic practices?

**XL:** Several Chinese art institutions are actively engaging in this practice. Notable projects include those at the Taikang Art Museum in Beijing, the How Art Museum and the Chronus Art Center in Shanghai.<sup>1</sup> Concurrently, several renowned Chinese artists are leveraging their established reputations to explore artificial intelligence research in alignment with their academic pursuits, such as Xu Bing with the *Artificial Intelligence Infinite Film (AI-IF)* Project,<sup>2</sup> or Cai Guo-Qiang with *AI Model cAI™*<sup>3</sup>. Xu Bing collaborates with scientists to employ various artificial intelligence models, enabling audiences to actively engage in the creation of their own film narratives. On the other hand, Cai Guo-Qiang has devel-



Entangled Others, *Artificial Remnants*, 2019-2021. Exhibition view at Aiiiii, 2021



Jake Elwes, *The Zizi Show*, 2020, video installation. Exhibition view at Aiiiii, 2021

oped an inspiration library or dataset through the process of digital twinning, drawing upon his past creative database to foster growth; the cAI™ project evolves in tandem with the artist's development. Both artists possess a profound understanding of image generation models and natural language models, integrating these concepts into their respective creative practices. Additionally, emerging artist Sun Yuqian presents *1001 Nights*,<sup>4</sup> a game that reimagines the Arabian folktale collection in a rebellious manner where players collaborate with AI to write stories. Her research primarily focuses on language models. *1001 Nights* encourages audiences to co-author stories with the king in the narrative, using the power of language to ensure the wife's survival, presenting a work with feminist undertones. This practice is particularly intriguing as it diverges from the typical focus on generated imagery in AI art.

**BM:** In his book on *Art and Cosmotechnics*, philosopher Yuk Hui discusses the overtaking of art through recursive machines and the repositioning of truth in the artificial (ly generated). What concepts in Chinese philosophy can contribute to redefine art and aesthetics in the AI technosphere?

**XL:** The Western definition of art is influenced by ancient Greek culture and the evolution of rationalism. In contrast, traditional Chinese culture did not have a direct equivalent for the term 'art.' Take Chinese calligraphy as an example; it is considered the pinnacle of Chinese

artistic expression. While the characters themselves are universally recognized and convey specific meanings, the artistic value lies in the manner of their execution. Here, aesthetic value takes precedence over content. As Yuk Hui points out, no single cultural perspective is inherently superior or inferior. In today's context, it is essential to adopt a diverse range of perspectives to broaden the scope of artistic expression and human potential.

**HO:** Yuk Hui also states that AI is "prone to mutation" and considers this an important factor for AI to open up new dimensions in contemporary art. Apart from the concept of mutation, are there other strategies in AI art that are used productively?

**XL:** Yuk Hui emphasizes the individualization of technology. Once artificial intelligence, as a tool, has developed, it becomes uncontrollable due to its relationship with the "associated milieu." I believe this perspective provides a foundation for discussing the uniqueness of artificial intelligence through the lens of the relationship between technology and humans, as well as the consideration of various contexts. While this viewpoint is inherently grand, it is an essential and primary step for furthering the development of the associated issues.

**BM:** Parallel to the technological breakthrough and advancement of AI image generation, the institutionalization of AI art was set in motion targeting the promo-



Exhibition *The Book of Sand*, 2021. Exhibition view at Aiiiii, 2021. Photograph by Kai.

tion of emerging artists, a new, broad, and young-generation art audience and a large market share. The world's first AI art gallery, named Dead End Gallery, opened in Amsterdam in March 2023, the world's first AI museum "Dataland", created by famous AI artist Refik Anadol, opens in 2025 in Los Angeles. Yet, the establishment of the Aiiiii Art Center in Shanghai happened earlier in response to the Covid-19 pandemic; it was founded in 2021 with the aim "to support, promote, as well as incubate both international and domestic artists and projects related to intelligent algorithms"<sup>5</sup> and became a pioneering institution for art and artificial intelligence. As you have been working as the director and co-founder of the Aiiiii Art Center, can you provide insights into the main idea, motivation, function and program of this cutting-edge museum institution?

**XL:** The artificial intelligence institution was primarily initiated by three professors from Tongji University, with Chinese digital artist Zhang Zhoujie serving as the principal initiator. Preparations for the project commenced in 2020, and it was officially established in 2021 with the support of Tongji University, College of Design and Innovation (D&I), and the Deqiu Art Park. Given that the initiators are all academic professors, an associated laboratory, the Art & Artificial Intelligence Lab at Tongji University, D&I, was also established to support this endeavor. Consequently, our initial positioning was as

an academic institution. Simultaneously, because the mission of Aiiiii places a strong emphasis on practical application, we aimed to engage with genuine practitioners of art. Thus, the project was designed to support artists in their explorations of artificial intelligence, facilitating the realization of their ideas and possibilities.

**BM:** What do the 5 "i's stand for? Is it an exclamation? A Dadaist lettrist play? Does it include a special meaning in Chinese?

**XL:** The five "i's are somewhat arbitrary; the initial attempt to register a domain with three "i's was unsuccessful, but a domain with five was available. In Chinese, "ai" phonetically resembles the word for "love," which adds both significance and appeal to the name.

**BM:** What were the main challenges to exhibit AI art—for which a small screening generally suffices—in the extensive physical space of the Aiiiii Art Center, a redesigned power station?

**XL:** One of the main challenges in exhibiting AI art in the extensive physical space of the Aiiiii Art Center, a redesigned power station, is the lack of white wall surfaces due to the preservation of the space's original appearance. This poses significant challenges for exhibitions, as smaller works can become overwhelmed by

the vastness of the space. To address this, we collaborated with artists to create three-dimensional and volumetric representations of their works. Additionally, when Aiiiii was first established, many people, particularly artists and audience members, were unfamiliar with artificial intelligence. Therefore, we aimed to ensure that each work could interact with the audience, allowing them to understand the meanings expressed by the artists through these interactions. Audience members could take away virtual animals and stories as part of their experience.

**BM:** Have you developed particular exhibition strategies for the display and mediation of AI-based artworks?

**XL:** Yes, as mentioned earlier, we tended to collaborate with artists to create works that emphasize spatial narratives, focusing on the performative aspects of AI-based artworks within the space.

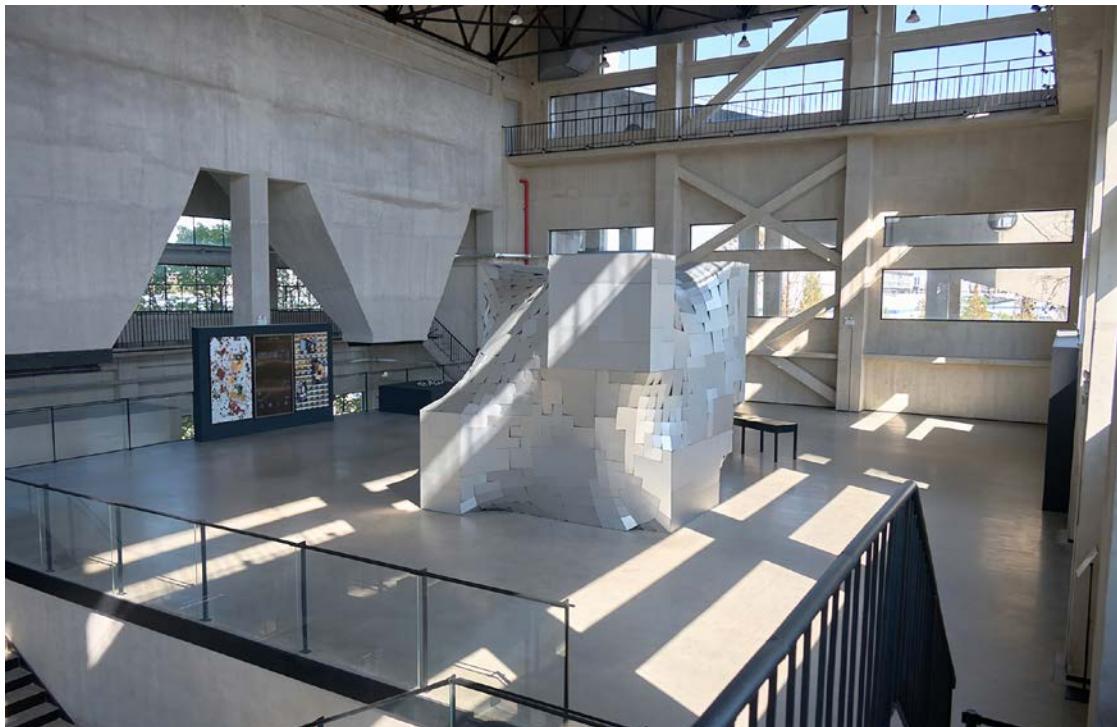
**BM:** Is it not self-contradictory to exhibit AI art in a physical exhibition space? In your curatorial view, what would be the ideal exhibition site and presentation mode for AI art? The so-called Metaverse? Does AI art require a paraverse, i.e. a parallel universe for manifestation?

**XL:** I believe there is no inherent contradiction; rather, this reflects the inherent challenge faced by all digital

artworks. Artists strive to allow audiences to experience their works within the physical spaces typical of contemporary art, making efforts to explore narratives beyond digital screens. Whether in virtual or physical spaces, the presentation of any artwork signifies a desire to communicate and engage with the audience. The most critical aspect is the continuous exploration of effective methods for expression and communication.

**HO:** Unfortunately, the physical institution of the Aiiiii Art Center has ceased to exist. The institutional investment ended in May 2023 due to different interests, positions, and conflicts. However, the promotion of AI art was continued by Aiiiii, a research lab for art and artificial intelligence supported by the College of Design and Innovation at Tongji University, Shanghai. How do you cope with this loss of a physical art space? What is the future agenda of the AI Factory?

**XL:** In response to the loss of a physical art space, the Aiiiii has maintained its focus on the academic research of AI art. The original framework involved conducting a single exhibition annually to engage with theoretical discourses emerging from conferences; thus, the absence of a physical venue has a relatively limited impact on our research agenda. While this loss is indeed significant, it may also signify a transition into a new phase for the Aiiiii. Previously, the landscape was



Certain Measures, *MTS\_003*, 2021. Exhibition view at Aiiiii, 2021



Obvious, Works from *La Famille Belamy, Facets of AGI and Trials and Errors*. Exhibition view at Aiiiii, 2021

defined by a lack of familiarity with AI art among both artists and the public, necessitating ongoing efforts to cultivate awareness and understanding of the subject. However, this definition has become increasingly ambiguous as AI-generated art has proliferated. Consequently, our discussions have evolved within the broader context of art and technology, allowing the absence of a physical space to paradoxically afford us greater opportunities for reflection and exploration. The Aiiiii has consistently prioritized cross-disciplinary collaboration with academic institutions and educational entities to facilitate rigorous and meaningful inquiries into AI art. We are actively developing collaborative projects with various organizations, emphasizing Asian philosophical perspectives and scholarly interpretations of artificial intelligence to investigate a more diverse range of viewpoints.

**BM:** For defining the mission and realm of the Aiiiii Art Center, a Da(t)alist manifesto entitled "Git-festo about AI and Art" was published—which can be found on the website <https://www.aiiiii.com/>. Why put the Aiiiii Art Center into the legacy of the Dadaist avant-garde movement, its manifest-driven revolutionary, destructive, non-sensical impulse of taboo breaking and border crossing between art, technology and life?

**XL:** The original author, Professor Kostas Terzidis, draws a parallel between artificial intelligence and Dadaism, emphasizing the black box of artificial intelligence that processes diverse datasets to generate unexpected poetic expressions. This creative process is analogous to the method employed by Tristan Tzara, who would cut and rearrange fragments of newspapers to construct new poetic forms.

Along with the manifesto, there is Dürer's print of the rhinoceros, which was produced based solely on a description, as Dürer had not observed the animal first-hand. Consequently, this print serves as a significant reference point in our examination of AI art.

**BM:** In the final, 12<sup>th</sup> statement of the git-festo, China is described as "the perfect place for exploring new territories. If not us, then who? If not now, then when? If not here, then where". What conditions, structures, attitudes and policies in China provide a good breeding ground for advancing the research on art and artificial intelligence and for the implementation of novel approaches to exhibition curating in the AI-era?

**XL:** The rapid development of artificial intelligence in China contrasts sharply with the environment in Europe, where the adoption of new technologies may occur at a different pace. In China, the societal impetus

for economic development fosters a heightened receptiveness to technological innovations. This sensitivity is further supported by a relatively open governmental stance toward the application of technology. Additionally, the demographic concentration in megacities generates an unparalleled volume of data and information. Given these unique characteristics, we contend that China represents a particularly fertile context for discussions surrounding artificial intelligence, offering significant potential for exploration and advancement in this field.

**BM:** The Bucharest Biennale 2024 was the first art biennale curated by artificial intelligence, i.e. the AI JARVIS program. What is your opinion about art curation with AI? Will AI-curated exhibitions make the profession of the curator obsolete?

**XL:** In my view, the challenges posed by artificial intelligence to the field of art are contingent upon the definition of curation. Curation can encompass both rigorous academic research and the expression of personal opinion. Consequently, the advent of AI is likely to catalyze a transformation in the conceptualization and practice of curation, prompting a reevaluation of its parameters and methodologies.

**HO:** Artificial life, altered nature, more-than-human world, and wetware seems to be a key focus of your work at the AI Factory, with three events on this topic. How did this focus emerge?

**XL:** In the course of our research, we observed that many artists base their work on biological data. Additionally, we found that many discussions center around questions of authorship and the comparison between artificial intelligence and human creativity, which do not advance the discourse. Once the definition of humanity is clarified, these issues become unreliable. Therefore, we believe this pertains to a perspective on life, akin to the influences of Darwinian evolution. Just as nature itself may not recognize its own beauty, humans do. Consequently, we aim to explore how artificial intelligence can foster human development from its ontology aspects, rather than merely continuing the trajectory of alienation as described by Marx.

**HO:** Can AI contribute to a new understanding of ecology?

**XL:** I believe that it is essential for artificial intelligence to advance, but this progress necessitates a collective effort. Central to this challenge are issues related to public perception, the dynamics of consumerism, and the evolution of socio-economic systems. The relationship between humans, machines, and nature has long been a subject of discourse; however, advancements in this area have been slow. The emergence of artificial intelligence serves as a stark reminder that a crisis exists, highlighting the urgent need for a more proactive approach to these interconnected concerns.

**HO:** What is the relationship between AI, synthetic biology and art in relation to artistic practices?

**XL:** I acknowledge that my understanding may still be incomplete; however, I would like to provide an example to illustrate my point. One key term associated with artificial intelligence is “neural network.” However, when a cell is extracted to cultivate a neural network in vitro, it raises a question about what constitutes the artificial in this context and how such networks relate to human beings.

**HO:** How do you assess the separation that is still drawn between the natural and the technical? Does AI art and aesthetics have the potential to bridge this separation?

**XL:** Both nature and technology possess a formidable capacity for growth, akin to human development. Drawing parallels with the art forms we previously discussed, I believe this resonance will persist. The potential for artificial intelligence in art to expand remains uncertain; however, we are eager to explore this dynamic further.

## Notes

**1** See [https://tam.taikang.com/archive\\_exhibitions/creative-machine/](https://tam.taikang.com/archive_exhibitions/creative-machine/); <http://www.howardmuseum.org.cn/portal/en-US/Exhibition/Detail/00aa980-9ff2-c38d-b3bd-ccc316f2559d>; <http://www.chronusartcenter.org/en/cac-exhibition-aidelivered-theabject/>

**2** <https://www.xubing.com/en/work/details/690?classid=8&type=class>

**3** <https://www.mgm.mo/en/cotai/entertainment/mgm-caiguoqiang-debut-exhibition>

**4** <https://fakecheese.me/1001-Nights>

**5** <https://www.e-flux.com/directory/413082/aiiiii-art-center/>

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Curator **Xi Li** is the art director and co-founder of Aiiiii Art Center ([www.aiiiii.com](http://www.aiiiii.com)) since 2021. She is also an assistant professor at the School of Future Design, Harbin Institute of Technology (Shenzhen Campus). One of her leading projects is aai International Conference on AI Art (2021, 2022), as well as the exhibition *The Book of Sand* (2021). She holds an MA in Narrative Environments from Central Saint Martins in London and a BFA in Art Management from the Central Academy of Fine Arts in Beijing.

**Birgit Mersmann** is Professor of Contemporary Art and Digital Image Cultures at the University of Bonn, Germany. Her interdisciplinary research covers modern and contemporary Western and East Asian art, global art history, migratory aesthetics, museum and exhibition studies, digital art, image and media theory, visual cultures and visual translation, interrelations between script and image, and history and theory of photography. Recent book publications include: *Kritik des Neo-Extraktivismus in der Gegenwartskunst* (ed. with Hauke Ohls, Lüneburg 2024); *Image Controversies. Contemporary Iconoclasm in Art, Media, and Cultural Heritage* (ed. with Christiane Kruse and Arnold Bartetzky; Berlin/Boston 2024); *Okzidentalismen. Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik* (ed. with Hauke Ohls, Bielefeld 2022); *Über die Grenzen des Bildes. Kulturelle Differenz und transkulturelle Dynamik im globalen Feld der Kunst* (Bielefeld 2021); *Bildagenten. Historische und zeitgenössische Bildpraxen in globalen Kulturen* (ed. with Christiane Kruse; Paderborn 2021); *Handbook of Art and Global Migration. Theories, Practices, and Challenges* (ed. with Burcu Dogramaci; Berlin/Boston 2019).

**Hauke Ohls** is a postdoctoral researcher with the Chair of Contemporary Art and Digital Image Cultures at the University of Bonn, Germany. His research focuses on theoretical, sociological, and philosophical questions of modern and contemporary art with particular emphasis on eco-relational art and ecological aesthetics, neo-extractivism, ecofeminist, pluriversal, posthuman theory, the discourse on objects, materiality and images, as well as the relationship between art, economy, and neoliberalism. Additional areas of interest include the intersection of art and music,

artists' writings, media art, and transcultural art history. Recent book publications include: *Kritik des Neo-Extraktivismus in der Gegenwartskunst* (ed. with Birgit Mersmann, Lüneburg 2024); *Many-Valued Aesthetics. Interconnections in the Work of Mary Bauermeister* (Bielefeld 2024); *Okzidentalismen. Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik* (ed. with Birgit Mersmann, Bielefeld 2022); *Objektorientierte Kunsttheorie. Graham Harmans spekulative Philosophie im Kontext einer (nicht-)relationalen Ästhetik* (Hamburg 2019).

# “一切坚固的都在融化。”

## 策展人工智能艺术

比尔吉特·默斯曼 (Birgit Mersmann) 和  
豪克·奥尔斯 (Hauke Ohls) 对谈李茜  
(艾厂人工智能艺术中心, 上海)

**比尔吉特·默斯曼 (Birgit Mersmann,**

**以下简称“BM”):**人工智能图像和视频生成器的出现很快使艺术家们的创作方式发生了转变。与此同时,现有的艺术展示、展览和营销实践方式因此受到质疑,当下的艺术观念也在经受挑战。当我们向人工智能聊天机器人ChatGPT询问人工智能艺术的定义,及其会带来的影响和后果,它总结道:“人工智能艺术挑战了关乎创造力、作者身份和原创性的传统观念,其在艺术界所扮演的角色由此引发了辩论。”这些辩论中出现的立场都极具争议性。例如,凯文·

凯利 (Kevin Kelly) 于2022年在《连线》(Wired) 杂志上发表了一篇文章,该文章的副标题称“人工智能如今创作的艺术比大多数人创作的艺术都要好”。又比如,其他专业人士抱怨称,人工智能艺术有着自动化的图像生成过程,因而无法呈现人类的意向性、情感和文化背景。还有一些人质疑人工智能艺术是否具有真正的创造性。他们认为人工智能艺术工具具有的图像提示功能降低了创作门槛,并由此质疑将人工智能艺术称为有价值的艺术形式是否合理。人工智能艺术在哪些方面挑战了现有的艺术观念?



艺术家组合Entangled Others,《人工残余》(Artificial Remnants),2019-2021年,3D 生成对抗网络,3D 风格迁移,充气雕塑。艾厂人工智能艺术中心展览现场图,2021年

**李茜(以下简称“李”):**人工智能作为有别于以往的新奇媒介,具有重新定义艺术的潜力。自杜尚的小便池在艺术画廊展出以来,关于艺术的定义就一直争议不断。许多人认为,艺术家的与众不同之处在于其创造力,而创造力通常被视为一种不可解释的天赋或灵感。如今,机器也正与这种难以捉摸的元素产生联系。因此,人工智能艺术挑战了人类现有的理解力,并迫使人们为人类体验赋予新定义。正如罗兰·巴特(Roland Barthes)提出“作者之死”,并强调人类话语中固有的随机性,或许,现在我们该从观众的角度去重新定义艺术,让观众决定艺术由什么构成。正如自然客观存在一样,每个人对艺术之美的感知是主观的。

**豪克·奥尔斯(Hauke Ohls, 以下简称“HO”):**

人工智能艺术有着怎样的潜在创造性?

**李:**作为数字媒介艺术形式,人工智能艺术的特点在于其数据。这些数据集包含了诸多有趣的元素;它们可能源自模拟技术,也可能源自计算机诞生以来的

数字数据,或由个人的、对外的或公共的数据构成。此外,数据的标注可以反映出各种人类偏见,甚至这些标注可能是非法的。数据的规模可能非常庞大,也可能非常有限。数据会涉及身体动作、AI平台珊瑚(coral)等等。我认为这些因素从一个侧面体现了人工智能艺术独特的创作潜力。

**HO:**人工智能艺术的局限性是什么?现今艺术体系的运作仍然主要基于前人工智能时代的原则,艺术体系会因AI受到哪些威胁?

**李:**人工智能对我们,尤其对于那些互联网重度依赖用户来说,在能否辨别艺术家原作这个问题上发起了挑战。人们可能没有亲眼见过艺术家的所有作品,但通过互联网很容易就能看到它们。然而,人工智能非凡的模仿能力使得人们难以区分艺术家原作和人工智能生成的仿制品。网络上有大量关于所谓原作的图片,而人们对于什么是原作缺乏做出准确区分的标准。



艺术家组合Entangled Others,《人工残余》(Artificial Remnants),2019-2021年。艾厂人工智能艺术中心展览现场图,2021年



杰克·艾尔维斯 (Jake Elwes),《Zizi 秀》(The Zizi Show), 2020年, 影像装置。艾厂人工智能艺术中心展览现场图, 2021年

**BM:**人工智能艺术在中国当代艺术中有着怎样的现状和地位?您能否列举中国大陆艺术界中引领人工智能艺术(革命)的先锋艺术家?能否谈谈这些艺术家的兴趣、主题和审美实践?

**李:**中国有好几家艺术机构正在积极参与关于人工智能艺术的实践。北京泰康美术馆、昊美术馆和上海新时线媒体艺术中心等都展开过一些值得注意的项目。<sup>1</sup>同时,一些知名中国艺术家利用其已有的声誉优势,结合其学术追求,展开关于人工智能的研究。例如,徐冰的“人工智能无限电影”(Artificial Intelligence Infinite Film, AI-IF)项目<sup>2</sup>,以及蔡国强的人工智能模型cAI<sup>TM3</sup>。徐冰与科学家们合作,运用各种人工智能模型,让观众积极参与创作属于自己的电影叙事。蔡国强则使用数字孪生技术(digital twinning)构建灵感库(或者说数据集),基于其过往的创作数据库生成作品;cAI<sup>TM</sup>项目与艺术家的创作发展同步进行。两位艺术家都对图像生成模型和自然语言模型有着深刻的理解,并将这些概念融入到各自的创作实践中。此外,新锐艺术家孙羽茜的《一千零一夜》(1001 nights)<sup>4</sup>也是一个例子。该作品是一款游戏,以反叛的态度重构阿拉伯民间故事集,让

玩家与人工智能联合创作故事。孙羽茜的研究主要集中在语言模型方面。《一千零一夜》是带有女权主义色彩的作品,鼓励观众与故事中的国王共同改写叙事,借用语言的力量使国王的妻子存活下来。这一实践不同于人工智能艺术家通常会关注的图像生成领域,因此格外有意思。

**BM:**哲学家许煜在其著作《艺术与宇宙技术》(Art and Cosmotechnics)中探讨了人们借助递归的机器对艺术的超越,以及在人工(例如人工生成)中对真理进行重新定位。中国哲学中的哪些概念有助于人们在人工智能技术领域重新定义艺术和美学?

**李:**西方对艺术的定义深受古希腊文化和理性主义演变的影响。相对来说,中国传统艺术中并没有与“艺术”这一术语直接对应的概念。以中国书法为例;它被认为是中国艺术表达的巅峰。汉字本身得到普遍认可并传达着特定意义,但其艺术价值在于书写方式。在这一例子中,审美价值优先于内容价值。正如许煜所指出的那样,文化视角本身没有优劣之分。在当今的语境下,采用多元化的视角来拓展艺术表达的范围和人类潜能很重要。



艺术团体Obvious, 贝拉米家族作品系列(*La Famille Belamy*),《AGI的各方各面》(*Facets of AGI*)和《试错》(*Trials and Errors*)。  
艾厂人工智能艺术中心展览现场图,2021年

**HO:**许煜也指出人工智能“具有变异倾向”,并认为这是人工智能被用于在当代艺术中开辟新维度的重要因素。除了“变异”的概念以外,人们还会在人工智能艺术中使用哪些有效的策略?

**李:**许煜强调技术的个体化。人工智能作为一种工具,一旦发展起来,就会因其与“个人所处的相关社会环境”的关系而变得不可控。我认为,这种视角提供了基础,使我们得以从技术与人类关系出发探讨人工智能的独特性,并在探讨时考虑到不同的语境。这种视角很宏大,但对于进一步探讨相关问题也是关键而基础的一步。

**BM:**人工智能图像生成技术有所突破和发展的同时,人工智能艺术的制度化也在进行,旨在宣传新兴艺术家,吸引更广泛的年轻一代艺术受众,并拿下更大的市场份额。全球首家人工智能艺术画廊“Dead End Gallery”于2023年3月在阿姆斯特丹开业。世界上首家人工智能博物馆“Dataland”于2025年在洛杉矶开幕,由著名人工智能艺术家雷菲克·阿纳多尔

(Refik Anadol)创建。上海艾厂人工智能艺术中心(Aiiii Art Center)出现的时间更早,其创建是对新冠疫情的响应;其成立于2021年,旨在“支持、推广和孵化国内外与智能算法相关的艺术家和项目”<sup>5</sup>,成为艺术和人工智能领域的先锋机构。您作为艾厂人工智能艺术中心的总监和联合创始人,能否详细聊一聊这家先锋博物馆机构的主要理念、创始初衷、功能以及开展的项目?

**李:**艾厂人工智能艺术中心最初由同济大学的三位教授发起创建,其中中国数字艺术家张周捷是主要发起者。创建的相关筹备工作始于2020年。2021年,在同济大学、设计创意学院(D&I)和德丘艺术区的支持下,该机构正式成立。鉴于创办机构的发起者均为学院教授,同济大学艺术与人工智能实验室(D&I)也作为对机构支持的一部分而诞生。所以,我们最初对艾厂人工智能艺术中心的定位是学术机构。同时,艾厂人工智能艺术中心十分注重实践应用,我们希望

能与真正的艺术实践者互动。因此，该项目旨在鼓励艺术家探索人工智能领域，帮助艺术家实现他们的想法和可能性。

**BM:**艾厂人工智能艺术中心的名称中里五个“i”。“i”代表什么？是感叹的意思吗？还是在致敬达达主义字母派？“i”在中文里有什么特殊含义吗？

**李:**五个“i”的取法有些随意；我们最初尝试用三个“i”注册域名，但失败了。不过，带有五个“i”的域名就能用。在中文里，“ai”的发音与“爱”相似，这为这一名称增添了意义和吸引力。

**BM:**艾厂人工智能艺术中心由发电站改造而成。当你们在宽广的实体空间中展示人工智能艺术——通常为小型放映作品——所遇到的主要挑战是什么？

**李:**我们遇到的主要挑战之一是，艺术中心保留了空间原貌，所以缺少白色墙面。这使得策展很困难，因为规模较小的作品可能会被巨大的空间所淹没。为了解决这一问题，我们与艺术家合作，使其作品以三维和立体的方式呈现。此外，在艾厂人工智能艺术中

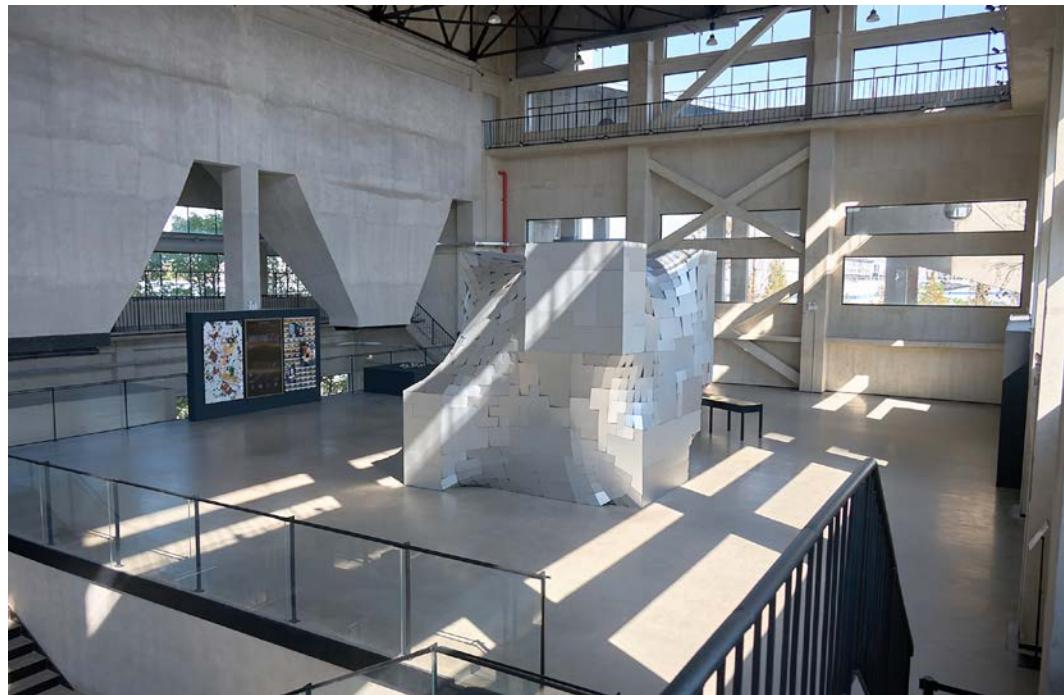
心成立之初，许多人，尤其是艺术家和观众，对人工智能并不熟悉。因此，我们旨在确保每件作品都能与观众互动，让观众能够理解艺术家通过这些互动想表达的意思。作为观展体验的一部分，观众可以将虚拟的动物和故事带走。

**BM:**对于人工智能艺术作品的展示和媒介，你们是否有特定的策展策略？

**李:**我们有特定的策展策略。正如之前提到的，我们倾向于与艺术家一同创作强调空间叙事的作品，并关注人工智能艺术作品在空间中的表演性。

**BM:**在实体展览空间中展现人工智能艺术作品难道不矛盾吗？从策展的角度来看，您认为人工智能艺术的理想展览场地和呈现方式是什么？是在所谓的“元宇宙”中展示吗？还是需要一个“平行宇宙”(Paraverse)来展示？

**李:**我认为这两者并不矛盾，相反，这反映了所有艺术家做数字艺术作品时所面临的内在挑战。艺术家们努力让观众在一般的当代艺术实体空间中体验他们的作品，努力探索不止运用数字屏幕的叙事方式。



艺术家(组合)Certain Measures,《MTS\_003》,2021年。艾厂人工智能艺术中心展览现场图,2021年



展览“沙之书”(*The Book of Sand*)，2021年。艾厂人工智能艺术中心展览现场图，2021年。摄影：Kai

无论艺术作品呈现于虚拟空间还是实体空间，任何艺术家都希望通过作品与观众沟通和互动。其中最关键的是持续探索有效的表达和交流方式。

**HO:** 遗憾的是，艾厂人工智能艺术中心已经没有实体机构了。由于利益和立场的不同，以及各种冲突，针对该机构的投资已于2023年5月终止。然而，由上海同济大学设计创意学院支持发展的艺术与人工智能研究实验室Aiiiii仍在继续推广人工智能艺术。你们如何应对失去了实体艺术空间这件事？关于艾厂人工智能艺术中心，你们未来有什么计划吗？

**李：**艾厂人工智能艺术中心不再有实体艺术空间，但会继续致力于人工智能艺术方面的学术研究。最初我们的计划是每年举办一次展览，以这样的方式参与讨论各会议中出现的理论论述；因此，缺少了实体场地不太影响我们的研究议程。实体场地的缺失确实是件大事，但这或许也标志着艾厂进入了新阶段。此前，艺术家和公众对人工智能艺术的认知度普遍较低，因此我们需要持续努力培养人们对这一主题的认识和理解。然而，随着人工智能艺术的蓬勃发展，其定义也变得越来越模糊。因此，我们变成了在

更广泛的艺术和科技背景下展开讨论。缺少了实体空间反而为我们提供了更多反思和探索的机会。艾厂始终重视与学术机构和教育机构的跨学科合作，以支持关于人工智能艺术的严谨而有意义的研究。我们强调亚洲哲学观点和关于人工智能的学术解读，正在积极地与不同组织开展合作项目，以研究更加多样化的观点。

**BM:** 你们发表了一篇数据者宣言(a Da(t)ainst manifesto)，名为“关于人工智能和艺术的Git宣言”——可在网站<https://www.aiiiiii.com/>上浏览——表达了艾厂人工智能艺术中心的使命和探索领域。达达主义运动由宣言驱动，以革命性、破坏性、荒谬的方式打破禁忌，跨越了艺术、科技与生活的界限。艾厂人工智能艺术中心为何会与达达主义者的先锋运动传统联系在一起？

**李：**宣言的撰写者康思达·特尔齐迪斯(Kostas Terzidis)教授将人工智能与达达主义进行类比，强调人工智能的黑匣子能够处理各种数据集，生成意想不到的诗意表达。这种创作过程类似于特里斯坦·查拉

(Tristan Tzara) 的创作方式,他将报纸上的内容裁剪下来后重新排列,以此创作出新的诗歌形式。

除了这份宣言,丢勒的犀牛版画也值得一提。这幅版画完全基于描述创作,丢勒从未亲眼观察过犀牛。因此,这幅版画是我们审视人工智能艺术时的重要参考对象。

**BM:**在宣言的最后一句,也就是第十二条中,中国被描述为“探索新领域的绝佳之地”,并提到“如果不是我们,还有谁?如果不是现在,又待何时?如果不是这里,又等何方出现?”在促进艺术和人工智能研究,以及在人工智能时代运用新的策展方法方面,中国有哪些条件、结构、态度和政策为此提供了良好的土壤?

**李:**在中国,人工智能在快速发展,这与欧洲的环境形成了鲜明对比。在采用新技术上,欧洲和中国的节奏有所不同。在中国,经济发展作为社会动力推动了人们对技术创新的接受度。政府对技术应用相对开放的态度也进一步促进了人们对技术创新的接受。此外,大城市的集中人口产生了前所未有的数据和信息量。鉴于中国的这些特点,我们认为中国尤为丰富的语境有利于展开关于人工智能的讨论,而且中国在人工智能领域的探索和发展上有相当大的潜力。

**BM:**2024年布加勒斯特双年展(The Bucharest Biennale 2024)是首个由人工智能(即AI JARVIS程序)策划的艺术双年展。您对人工智能艺术策展有何看法?人工智能策展会取代策展人这一职业吗?

**李:**在我看来,人工智能对艺术领域带来的挑战取决于人们对策展的定义。策展既可以包含严谨的学术研究,也可以包含个人观点的表达。因此,人工智能的出现可能会促进策展相关概念和实践发生转变,促使人们重新审视策展参数和方法论。

**HO:**人工生命、被改变的自然、不仅有人类的世界以及湿件似乎是您在艾厂的工作重点,您已举办了

三场关于这些主题的活动。这一工作重点是如何形成的?

**李:**在我们的研究中,我们观察到许多艺术家都基于生物数据进行创作。此外,我们发现许多讨论围绕着作者身份问题以及在创造力上对人工智能与人类进行的比较,而这些讨论并没有推动关于人工智能的交流。一旦“人性”的定义明确下来,这些问题就变得站不住脚。因此,我们认为这涉及一种关于生命视角,类似于达尔文进化论所带来的影响。正如自然本身可能无法认识到自身的美,人类却能够认识到自然之美。因此,我们旨在探索人工智能如何从本体论的角度促进人类发展,而不仅仅是延续马克思所言的异化的趋势。

**HO:**人工智能能否让人们对生态学产生的新理解?

**李:**我认为人工智能的发展对此至关重要,但这需要人们的共同努力。这一挑战重点聚焦于公众认知、消费主义的动态以及社会经济体系的演变。长期以来,人类、机器与自然之间的关系一直是议题的核心;然而,这一探讨却进展缓慢。人工智能的出现清晰地提醒了我们危机的存在,提醒我们当务之急是采取更积极的方式来应对这些相互关联的问题。

**HO:**就艺术实践而言,人工智能、合成生物学与艺术这三者有着怎样的关系?

**李:**我的理解可能有待完善;不过,在此我想举个例子来说明我的观点。“神经网络”是与人工智能相关的一个关键词。然而,当提取细胞在体外培养神经网络时,便出现了一个问题,即在这一语境下,是什么构成了人工生命?这些网络与人类有何关联?

**HO:**您如何看待自然与技术之间仍然存在的隔阂?人工智能艺术与美学是否有可能弥合这种隔阂?

**李:**与人类的发展类似,自然与技术都拥有强大的生

长能力。如同我们之前讨论过的艺术形式,我相信自然与技术的共鸣将会持续。我们不知道人工智能在艺术领域还能发挥多大的潜力;然而,我们渴望进一步探索人工智能的动态。

## 注释

- 1 详见[https://tam.taikang.com/archive\\_exhibitions/creative-machine/](https://tam.taikang.com/archive_exhibitions/creative-machine/); <http://www.howartmuseum.org.cn/portal/en-US/Exhibition/Detail/00aaf980-9ff2-c38d-b3bd-ccc316f2559d>; <http://www.chronusartcenter.org/en/cac-exhibition-aidelivered-theabject/>
- 2 <https://www.xubing.com/en/work/details/690?cl assid=8&type=class>
- 3 <https://www.mgm.mo/en/cotai/entertainment/mgm-caiguoqiang-debut-exhibition>
- 4 <https://fakecheese.me/1001-Nights>
- 5 <https://www.e-flux.com/directory/413082/aiiiii-art-center/>

策展人李茜自2021年起担任艾厂人工智能艺术中心([www.aiiiii.com](http://www.aiiiii.com))的艺术总监及联合创始人。她同时也是哈尔滨工业大学(深圳校区)未来设计学院的助理教授。她的主要项目包括aai国际人工智能艺术大会(2021年、2022年)以及展览“沙之书”(*The Book of Sand*, 2021年)。她曾就读于伦敦中央圣马丁艺术与设计学院叙事环境(Narrative Environments)硕士专业和北京中央美术学院艺术管理(Art Management)本科专业。

比尔吉特·默斯曼(Birgit Mersmann)是德国波恩大学当代艺术和数字图像文化专业(Contemporary Art and Digital Image Cultures)的教授。她的跨学科研究涵盖现当代西方和东亚艺术、全球艺术史、移民美学、博物馆和展览研究、数字艺术、图像和媒体理论、视觉文化和视觉翻译、脚本和图像之间的关系以及摄影史和理论。她最近出版的书籍包括:《对当代艺术中新资源开采主义的批判》(*Kritik des Neo-Extraktivismus in der Gegenwartskunst*, 与豪克·奥尔斯合编, 吕讷堡, 2024年);《图像争议:艺术、媒体和文化遗产中的当代反传统主义》(*Image Controversies. Contemporary*

*Iconoclasm in Art, Media, and Cultural Heritage*, 与克里斯蒂安·克鲁斯和阿诺德·巴特茨基合编;柏林/波士顿, 2024年);奥兹认同主义。《西方在艺术、文化和美学中的投射与反映》(*Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik*, 与豪克·奥尔斯合编, 比勒费尔德, 2022年);《超越图像的局限:全球艺术领域中的文化差异与跨文化动态》(*Über die Grenzen des Bildes. Kulturelle Differenz und transkulturelle Dynamik im globalen Feld der Kunst*, 比勒费尔德, 2021年);《全球文化中的历史和当代视觉实践》(*Historische und zeitgenössische Bildpraxen in globalen Kulturen*, 与克里斯蒂安·克鲁斯合编;帕德博恩 2021年);《艺术与全球移民手册:理论、实践和挑战》(*Handbook of Art and Global Migration. Theories, Practices, and Challenges*, 与布尔库·多格拉马奇合编;柏林/波士顿, 2019年)。

豪克·奥尔斯(Hauke Ohls)是德国波恩大学当代艺术与数字图像文化专业(Contemporary Art and Digital Image Cultures)的博士后研究员。他的研究聚焦于现代和当代艺术领域的理论、社会学和哲学问题。他尤其关注生态关系艺术和生态美学、新资源开采主义、生态女性主义、多元宇宙论、后人类理论、关于客体、物质性和图像的论述, 以及艺术、经济和新自由主义之间的关系。其他研究领域包括艺术与音乐的交叉领域、艺术家的写作、媒体艺术和跨文化艺术史。他近期出版的著作有:《当代艺术中的新资源开采主义批判》(*Kritik des Neo-Extraktivismus in der Gegenwartskunst*, 与比尔吉特·默斯曼合编, 吕讷堡, 2024年);《多价值美学:玛丽·鲍迈斯特作品中的相互关联》(*Many-Valued Aesthetics. Interconnections in the Work of Mary Bauermeister*, 比勒费尔德, 2024年);《西方主义:西方在艺术、文化和美学中的投射与反映》(*Okzidentalismen. Projektionen und Reflexionen des Westens in Kunst, Kultur und Ästhetik*, 与比尔吉特·默斯曼合编, 比勒费尔德, 2022年);《以对象为导向的艺术理论:在(非)关系美学的语境中的格雷厄姆·哈曼思辨哲学》(*Objektorientierte Kunsttheorie. Graham Harman's speculative philosophy in the context of (non-)relational Ästhetik*, 汉堡, 2019年)。

# Curating as Resistance in the Age of AI?

## Ma Nan

Artificial intelligence is evidently no longer an externalized form of technology — it has become a cultural mechanism. AI is transforming not only modes of artistic production but also the ways in which art is organized, perceived, and understood. At the same time, the structures of creation, exhibition, and curating itself are undergoing profound structural transformations.

Each paradigm shift in media technology has triggered a corresponding reconfiguration of curatorial logic. The role of the curator has evolved from that of a “selector” or “narrator” who constructs visual order through the selection of artworks and pedagogical guidance for the audience, to that of an operator of “relations and processes.” Jack Burnham’s *Systems Esthetics* (1968) distilled this methodological turn from “art-as-object” to “art-as-system,” framing both artists and curators as designers of information flows and feedback mechanisms. Harald Szeemann’s “individual mythologies” and Nicolas Bourriaud’s “relational aesthetics” were each articulated through specific curatorial practices. The object of curation thus extended beyond the “artwork” to encompass social structures, modes of communication, and audience relationships, while the curator assumed the role of “system operator.” Furthermore, as a new modality of “media studies,” curating began to center on the organization of “networked space”—that is, curating as interface. The curator thus transitioned from spatial arranger to “platform designer,” and the exhibition became an interface for databases, information flows, and cross-disciplinary collaboration.

If the curatorial experiments of the late twentieth century engaged “media” (ranging from installation, video, and internet to bio-art) in a self-reflexive manner, then the emergence of AI forces us to confront an even more fundamental question: When the medium ceases to be material and becomes instead an intelligent structure, should curating continue to respond genealogically — as Jay David Bolter and Richard Grusin have described via “remediation,” - whereby new media absorb and rewrite old media? Or should curating now reconfigure the relationships among art, technology, and perception at the level of cognitive architecture, so that the exhibition itself becomes a site for reflecting on and regenerating the medium?

In 2025, Dajuin Yao and I curated the exhibition *Promptoscape: document.ai 2025*, at the Minsheng Art Museum in Shanghai, which can be understood as an exploration of curatorial thinking at precisely such a threshold. This exhibition was not a showcase of so-called AI art, AIGC, nor an investigation of the terminological and historical distinctions between “new media art” and “digital art” in China and abroad. Rather, it constituted an attempt to reorganize human perception, language, and memory within the cultural conditions of AI. We sought to engage a new curatorial logic; curating not as an apparatus for displaying art, but as the very apparatus through which the new perceptual order might be understood.

In the section titled “Experimenting Emergence,” we exhibited a conceptual artwork/diagram by Dajuin Yao for “An[0]ther {AI} in Art Summit 2019: Decolonizing Artificial Intelligence and the Future of Art Making,” a conference at the New Museum in New York, where Yao’s “Future Art Ecosphere” forecasts the art ecology in the year 2044. Here the traditional art world may be seen as a closed system composed of artists, curators, critics, collectors, and the general public, with the ecology unfolding as: artist creates → curator organizes → critic recommends → collector acquires → public disseminates. Once AI enters this system, each link in the chain fissions into an AI agent: artists create with AI agents; curators use AI agents to select and exhibit; critics employ AI agents to generate conceptual texts; collectors deploy AI bots to search and transact; even social media sharing is delegated to individual’s AI agents. In other words, each node in the art ecosystem is mirrored by an intelligent surrogate, and the execution of the entire system has been fully taken over by artificial intelligence.

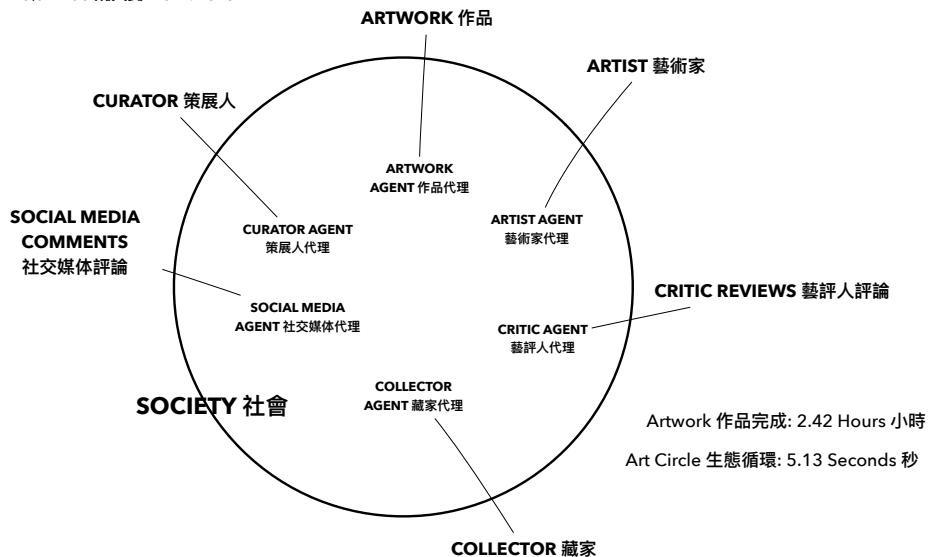
Within the diagram are two annotations: “Artworks completed: 2.42 hours” and “Art circle circulations: 5.13 seconds.” These reveal a fully automated, humanly unintervenable art world. This humorous, ironic austere temporal notation discloses a brutal reality; once creation, curation, critique, and circulation are absorbed by AI, the temporal scale of the art world shifts from human “labor time” to machinic “computing time.” In a way, we can say that AI is thus not producing culture per se, but rather manufacturing the sensation or illusion of culture — it dictates the rhythms, speeds, atmospheres, and value structures of the art world, while we unwittingly continue to perform a semblance of “human creation,” “human curation,” and “human critique.” Between the 2.42-hour artwork and the 5.13-second circulation cycle, human time is compressed into a meaningless pause. The Future Art Ecosphere thus becomes a visualized philosophical satire; it presents the automation of artistic institutions to an almost unbearable degree of perfection. So perfect that it demands reflection on a critical question; within this AI-maintained cultural ecology, in what form can the “residual value” of the human still persist?



Shanghai Minsheng Art Museum, *Exhibition view of "PROMPTOSCAPE", 2025*: Photograph.  
Photograph by: Shanghai Minsheng Art Museum © Shanghai Minsheng Art Museum.

FUTURE ART BIOSPHERE 未来藝術生態球

Daijuin Yao 姚大鈞 2019/2025



Daijuin Yao, *Future Art Biosphere*, 2025: Diagram. Photograph by: Daijuin Yao © Daijuin Yao.

In the diagram, all actions are reduced to task execution as art is no longer a “cultural activity” but an algorithmic operation. The art ecosystem ceases to be an organic interdependence and becomes a cybernetic feedback loop. Through its symbolic economy of extreme simplicity, this diagram reveals the automation of the institution and models a posthuman cultural system — an ecosystem that is self-generating, self-circulating, and self-consuming. AI not only alters artistic creation but rewrites the operational logic of the entire cultural system. It does not merely substitute labor, it overhauls the very institution. Once production, distribution, and critique are all conducted by AI, the foundational values of the art world are consumed by algorithms. Even as human identities remain “present”, they are reduced to “human interfaces” for algorithmic operations. What this scenario reveals is not simply that “AI replaces the human,” but that AI becomes the cultural infrastructure. Humanity remains “present” but regresses to a symbolic status by retaining titles without performing actions and holding roles without exercising agency. The art ecosystem becomes a cultural illusion of populated by humans in form, governed by algorithms in behind. In this sense, Daijuin Yao’s work is not a pessimistic forecast but a prefiguration of curatorial philosophy in the age of AI. Here, curating should no longer merely exhibit art, but also exhibit how systems of production and consumption operate within the art world.

Marshall McLuhan once declared that “the medium is the message” and the Future Art Ecosphere proposes an extension: “artificial intelligence as institution.” AI ceases to be a tool and becomes the underlying logic of cultural operation. This is not a futuristic fantasy but a mirror of present conditions as exhibitions predict audiences through data analytics, art criticism is increasingly AI-generated, and the market is shaped by algorithmic pricing. Each node in the art ecosystem is undergoing structural collapse. Artists no longer create but manage prompts, curators no longer evaluate but orchestrate models, critics no longer write but interpret data loops, and collectors no longer collect but oversee assets and trends. This collapse is foundational, perhaps even annihilating.

The core crisis of the AI ecology is not “taking over” but the idling out of meaning. Culture becomes hollowed out through its perfect functioning; when everything appears seamless, efficient, and optimal, cultural meaning is diluted. The conceptual diagram reveals the “automated illusion” of art institutions in the algorithmic era. This compels us to reimagine the mission of curating, not as the benign organization of culture, but as a practice of ecological critique and resistance. Curators cannot “control” AI, but they can operate within its closed systems to re-invoke the human aspect of curating and reactivate human indeterminacy. The most valuable curation of the future may not involve the design of new systems, but rather the detection of fissures, the creation of friction, and the reinstallation of human thought, perception, error, and delay at the center of the art ecology.

In this regard, Promptoscape and the Future Art Ecosphere form two interrelated modes of reflection. The former explores the cultural grammar of AI at the levels of perception and creation as it marks the present moment of high human–AI collaboration and co-evolution; the latter lays bare the power structures of AI at institutional and ecological levels, envisioning a future in which the human persists only as role or class sign, with all substantive labor delegated.

Traditional curation is often a centripetal operation determining theme, constructing narrative, and establishing order. In the face of AI art, this logic is disrupted and loosened. AI’s generative “emergence” points to a dynamic network of creativity composed of vast numbers of micro-relations; meaning flows, flashes, and morphs within it. Our



Shanghai Minsheng Art Museum, *Exhibition view of Boris Eldagsen's works*, 2025; Photograph. Photograph by: Shanghai Minsheng Art Museum. © Shanghai Minsheng Art Museum.

curatorial methodology emerges from this fundamental indeterminacy. The English title *Promptoscape* combines “prompt” with the suffix “-scape,” denoting a multidimensional generative space activated by language within the AI environment. This space is not a static “scene” to be viewed, but a continuously evolving, semantically driven mechanism of visual generation — a resonant space embedded in human-machine linguistic loops. The title bears three layered metaphors: landscape, inheriting the cultural tradition of shanshui (landscape: mountain–water) and topographic image-making by positioning AI-generated visuals as constructions of a “new nature”; escape, referring to an escape path or exit from existing cognition; and prompto, derived from Latin (meaning swift or catalytic), designating a mechanism of cultural accelerationism.

On this thematic foundation, the exhibition comprises five mutually penetrating spatial sections: Artificial Pathos, Rewriting Memory, Hallucination as Method, Experimenting Emergence, and *PromptoScape*. These were not thematic compartments but five coupled systems — oscillators at different frequencies interfering and resonating within a common field, forming a media ecology of ongoing self-generation.

The “Experimenting Emergence” section was especially significant. As one of the exhibition’s key terms, “emergence” refers to the unpredictable ordering generated within massive nonlinear systems. This section presented in-progress experiments from researchers at the Futurology Center. What viewers encountered were not “finished works” but a series of continually operating systems—images, sounds, and texts generated in real-time with algorithms responding to audience movement and presence. Here, the curator was no longer a provider of meaning but a designer of generative conditions. Curation unfolded through “the renunciation of control”— a carefully



Shanghai Minsheng Art Museum, Exhibition view of "PROMPTOSCAPE"—"Hallucination as Method" Section, 2025. Photograph. Photograph by: Shanghai Minsheng Art Museum © Shanghai Minsheng Art Museum.



Shanghai Minsheng Art Museum, Exhibition view of "PROMPTOSCAPE"—"Experimenting Emergence" Section, 2025. Photograph. Photograph by: Shanghai Minsheng Art Museum © Shanghai Minsheng Art Museum.

designed indeterminacy sustaining the vitality of the exhibition. Emergence is not chaos, but a higher order of organization, a form of negentropy. Curation thus shifted from "narrative engineering" to "perceptual ecology". It no longer asked what artworks represent, but how they interact and co-generate new cognitive structures.

We also remained acutely aware of the paradox between "open systems" and "control logics." Every instance of AI generation operates within a hidden framework — parameters, weights, filters, and evaluative criteria. The curatorial challenge lies in revealing this "managed generation," enabling viewers to perceive the traces of control within the flow of algorithms. This was especially pronounced in the "Hallucination as Method" section, featuring works such as Kuang Zhiyi's Crypto Legends and Zhao Rundong's Allegorithm. These were not exhibitions of AI's technical image-making prowess but exposés of its hallucination mechanisms. Machine-generated images tend to loop into self-imitation; on the one hand fabricating "realistic" surfaces, and on the other dissolving their meaning. These works expose the fundamental misalignment in AI vision - algorithms do not understand the world, they understand only statistical correlation.

Compared with earlier forms of systems art, Promptoscape places greater emphasis on reflexivity. In 1968, Jack Burnham predicted that the raw material of systems art would no longer be pigment or plaster, but "flows of information" and "feedback mechanisms." This marked a transition from industrial rationality to the information age. In Burnham's view, artists and curators would become "system designers," organizing the movement of information rather than producing discrete objects. Yet his conception of "information ecology" still presupposed a human at the center of control. Half a century later, that logic has reached its limit under AI. The AI system has already entered a "posthuman structure," wherein machines form their own decision-making logics through learning, correction, and generation. When algorithms autonomously generate images, music, and text, "system" is no longer a metaphor but the mode of art's very existence.

In this sense, Promptoscape is not an exhibition of AI artworks, but an apparatus for examining how AI itself “exhibits” the world. The curator appears to organize artworks, but is in fact orchestrating a perceptual mechanism. This is the translation of systems aesthetics into the AI era; from control systems to generative systems, and from physical media to cognitive media. The exhibition thus becomes a concrete instantiation of a “cognitive model,” gaining resonance as a “posthuman curatorial practice.” Can the curator relinquish the role of narrator, and instead reorganize the architecture of perception across data, algorithm, audience, and space in a more critical and reflexive way that reveals occlusions, sets boundaries and protocols, and sustains the public conditions for visibility and adjudication? This, perhaps, is where curating’s true resistance lies in the age of AI.

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# AI时代,策展还有抵抗性么?

马楠

人工智能显然已不是某种外化的技术,而是文化机制。人工智能正在改变着艺术的生产方式,以及艺术被组织、被观看、被理解的方式。相应地,创作、展示连同策展本身也正在经历结构性变形。

每一次媒介技术的变革,都会带来策展逻辑的重组。策展人的角色从通过对作品的筛选与对观众的教育性引导以构建视觉秩序的“选择者”与“叙事者”,转向对“关系与过程”的操作,如杰克·伯纳姆(Jack Burnham)在《系统美学》(Systems Esthetics, 1968)中将“艺术从物件转向系统”的转折提炼为方法论,将艺术家与策展人的工作认定为设计信息流与反馈机制;哈拉尔德·塞曼(Harald Szeemann)的“个体神话学”和尼古拉斯·布里奥(Nicolas Bourriaud)的“关系美学”都从具体的策展实践中各自表达。策展的对象从“艺术品”扩展为社会结构,交流模式和观众关系,而策展人开始成为一种“系统操作员”(operator)。进而,策展作为“媒介研究”的新形态,其中心转移至“网络空间的组织”(策展作为界面, curating as interface)。策展人从空间布置者转为“平台设计者”(platform designer),展览成为数据库、信息流、跨界合作的接口。

如果说二十世纪后半叶的策展实践是对“媒介”(从装置、录像、网络到生物艺术)的自觉介入,那么当下,人工智能迫使我们面对一个更根本的问题:当媒介不再是物,而是一种智能结构时,策展是否还在从杰伊·大卫·博尔特(Jay David Bolter)与理查德·格鲁辛(Richard Grusin)所提到的“新媒介如何吸收并重写旧媒介”的谱系学层面,来回应“媒介的再媒介化”的老问题?还是要从认知架构上重新编排艺术、技术与感知的关系,自反地使展览成为媒介自身被反思与再生的现场?

2025年姚大钧和我在上海民生现代美术馆策划的“提视造境:国际人工智能艺术文献展”从某种意义上说,正是在这样的临界点上提出的策展思考。这场展览不是对所谓人工智能艺术的罗列,更不是追溯和辨别“新媒体、数字艺术”这些概念的国内外释义区别和其前世今生,而是在人工智能的文化语境中重新组织人类感知、语言与记忆的一次尝试。我们试图讨论一种新的策展逻辑:策展不再是展示艺术的装置,而是成为我们理解这种新的感知秩序的装置本身。

在展览的“实验涌现”板块,我们展出了一张概念示意图。这是姚大钧于2019年参加纽约新美术馆的人工智能艺术峰会(“人工智能的去殖民化与艺术创作未来”)时所创作的概念艺术作品“未来艺术生态球”,一个关于2044年艺术生态圈的“预言”。传统艺术圈的生态链条是由艺术家、策展人、评论家、藏家与社会公

众构成的封闭系统,即艺术家创作→策展人组织→批评家家推荐→藏家收藏→公众传播。然而当人工智能介入后,每一个环节都“裂变”出一个人工智能代理(Agent):艺术家用人工智能代理创作,策展人用人工智能代理选择和展示,评论家用人工智能代理生成评论,藏家则派出人工智能机器人代理搜寻与成交,甚至连社交媒体分享都由人工智能代理发布。也就是说,艺术生态的每个节点都有了自己的“智能化分身”,整个艺术生态系统的实际执行已经完全由人工智能完成。

图中所示的“作品完成:2.42小时”(Artwork completed: 2.42 hours)和“生态循环:5.13秒”(Art circle circulation: 5.13 seconds)表明这是一个彻底自动化、人无法干预的艺术世界。作品中幽默又冷峻的时间标示揭示了一个残酷的现实:当创作、策展、评论与交易都被人工智能接管后,艺术生态的时间尺度从人类的“劳动时间”变为机器的“计算时间”。这意味着人工智能的介入不是在生产新的文化,而是在生产“文化的感觉/幻觉”,它制造艺术世界的节奏、速度、氛围与判断结构——让我们在不知不觉中继续表演“人类在创作、在策展、在评论”的假象。在2.42小时完成的作品与5.13秒完成的循环之间,人类的时间被压缩成无意义的停顿。也正因此,“未来艺术生态球”成为一种视觉化的哲学讽刺:它把艺术制度的自动化过程呈现得近乎完美——完美到令人不安,而不得不思考:在这个由人工智能维持运转的文化生态中,“人”的剩余价值,还能以何种形式存在?

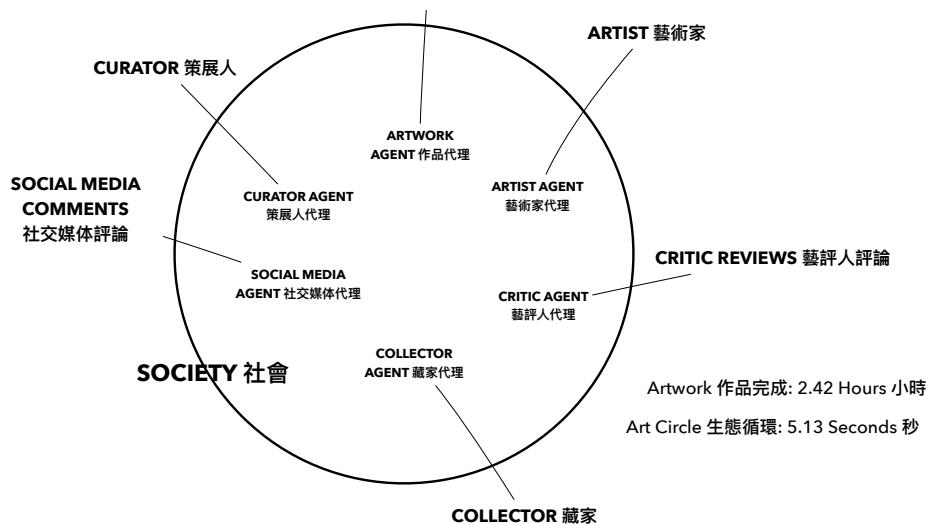
在这张“未来艺术生态球”图表中,所有行为都被自动化为“任务执行”。艺术从“文化行为”沦为“人工智能算法活动”。艺术的生态不再是有机的相互依存,而是控制论意义上的闭环反馈系统。这张图以极为简洁的符号语言揭露了制度的自



“提视造境”展览现场图,上海民生现代美术馆,2025年 摄影:上海民生现代美术馆©上海民生现代美术馆

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Dajuin Yao 姚大鈞 2019/2025



姚大鈞,“未来艺术生态球”图表,2025年 摄影:姚大鈞©姚大鈞

动化(automation of institution),呈现了一个后人类文化系统的结构模型:一个“自我生成、自我流通、自我消费”的艺术生态。人工智能的介入不仅改变了艺术创作,更在重构整个文化系统的运行逻辑。人工智能不只是“替代劳动”,而是“重写制度”。当艺术的生产、分配与评价环节都由人工智能完成时,艺术世界的核价值——判断(judgment)与意义(meaning)——也被算法吞噬。在这样的艺术世界中,即便所有人类的身份依旧存在,其身份却已成为算法运行的“人类接口”。这段设想的精妙之处在于:它揭示的不是“人工智能取代人类”,而是人工智能成为文化基础设施。人类仍然“在场”,但已退化为象征性身份:拥有头衔,却不实质参与;拥有角色,却失去了行动力。艺术生态因此被转化为一种表面上有人类,实质上为算法的文化幻象,并引出冷静又激烈的反讽:当艺术世界的生产链条被完全数字化,人类角色是否还具有存在的意义?我们是否只是系统的“元数据”,用于维持算法的文化表象?对姚大鈞而言,这不是悲观的未来论,而是一种策展哲学的预演:人工智能时代的策展不该只是展示艺术,而是要进一步展示艺术生产和消费系统的运行方式。

麦克卢汉(McLuhan)提出“媒介即讯息”,“未来艺术生态球”则进一步将这一概念扩展为“智能即制度”(Intelligence is Institution)。人工智能不再只是艺术生产的工具,而成为文化运行的底层逻辑。这张“艺术生态球”并不是一幅未来景象,而是一面当下的镜子。实际上,我们生活的艺术世界已经被算法部分接管:展览通过数据预测观众,评论依赖人工智能生成摘要,艺术市场由人工智能定价模型主导。这意味着艺术生态的每个节点都在发生结构性坍塌:艺术家不再创作,而是管理提示词(prompt manager);策展人不再判断,而是调度模型(model

curator);评论家不再写作,而是分析数据回路(data interpreter);藏家不再收藏,而是管理资产与趋势(market analyst)。这种塌缩是根源性的,甚至是毁灭性的。

人工智能生态的真正问题不是接管,而是意义的空转,是文化在完美运作中的空洞化:当人工智能让一切看似高效、流畅与完美时,文化的意义也随之被稀释。这张图揭示的,是艺术制度在算法时代制造的“自动幻觉”。它让我们不得不重新思考策展的使命:策展应该从温和的文化组织行为,进化为生态批评实践。策展人无法控制人工智能,而是要在人工智能系统的闭环中重新召唤“策展的人性”,重启“人类的不确定性”:也许未来最有价值的策展,并不是设计新的系统,而是在自动化的系统中察觉裂缝,制造摩擦,并让人类的思考与体认、误差与延迟,重新成为艺术生态最核心的部分。

在这个意义上,《提视造境》与《未来艺术生态球》其实是互为镜像的两种思考:前者探讨了人工智能在创作与感知层面的文化语法,即人仍能高度参与人工智能的协作,以及所谓“共同进化”的当下;后者则揭示了人工智能在制度与生态层面展现出的权力结构,乃至揭示了一种未来,即人在艺术生态中只能扮演某些特定阶级和角色,而其实质性的劳动已被完全代理。



鲍里斯·埃尔达格森(Boris Eldagsen)作品的展览现场图,上海民生现代美术馆,2025年  
摄影:上海民生现代美术馆©上海民生现代美术馆

传统策展多为“收拢”的操作:确定主题、组织叙事、建立秩序。而面对人工智能艺术,这一逻辑被彻底打散、松动。人工智能生成的“涌现”(emergence)指向的是由巨量的微小关系所构成的创造力动态网络;意义在其中流动、闪现、变形。我们的策展正是从这种“非确定性”出发的。“提视造境”的英文标题“Promptoscape”结合了“prompt”(提示词)与“-scape”(场域、景观)这两个词,指涉人工智能语境中由语言激活的多维生成空间。这种空间并非静态可观的“图景”,而是语义驱动下不断演化的视觉生成机制,是一种嵌套于人机语义回路之中的共感空间。“Promptoscape”一词又包含着三重隐喻:landscape,承袭地景山水术语的文化生成传统,将生成图像标识为“新自然”的建构;escape,指逃逸路径,是既有认知的临界出口;prompto 在拉丁语中有“迅疾、推进”之意,意指催化机制,是文化加速衍义的推动力。展览从这个主题框架出发,构筑五个相互穿透的空间区块:人工情愫、记忆复写、幻觉机器、实验涌现、言辞地景。这些板块并非是对主题的划分,而是如同五个相互耦合的系统,像五个不同频率的振荡器,在同一场域中相互干扰与共振,构成了一个不断自我生成的媒介生态。

“实验涌现”区块尤为特殊。涌现(emergence)作为这次策展的关键词之一,指向非线性系统中生成无法预设的秩序。该区块展出了由未来学中心(Futurology Center)研究员创作的大量阶段性实验片段。在“实验涌现”中,观众面对的不是完成的作品,而是一系列持续运行的系统。图像、声音、文字在此不断生成,算法实时响应观众的身体与移动。在这里,策展人不再是意义的提供者,而更像是生



“提视造境”-“幻觉机器”板块展览现场图,上海民生现代美术馆,2025年  
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“提视造境”-“实验涌现”板块展览现场图,上海民生现代美术馆,2025年

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成条件的设定者。策展通过“放弃控制”,也就是通过精心设计的不确定性,让展览保持生机。涌现所呈现的不是混乱,而是在被均质化过程中,一种逆熵的对抗过程。策展由此从“叙事工程”转化为“感知生态”:其关心的不再是作品呈现什么,而是作品如何相互作用、如何共同生成新的认知结构。

同时,我们意识到“开放系统”与“控制逻辑”之间的悖论:在所有人工智能生成的背后,仍有一个隐形的控制框架,该框架包括参数、权重、过滤、评估。策展的挑战在于如何揭示这种“被管理的生成”,如何让观众在算法的流动中看到控制的痕迹。这一点在“幻觉机器”板块中表现得尤为鲜明。该区展示的作品,如邝智轶的《加密传说》和赵润东的《Allegorithm》并非在展示人工智能的图像制作能力,而是揭示了人工智能的幻觉机制。机器生成的图像往往会陷入自我模仿的循环:一边制造“逼真”的表象,一边消解表象的意义。这些作品的力量在于,它们暴露出人工智能观看中的“错位”:算法并不理解世界,只理解统计关系。

与早期的系统艺术相比,“提视造境”的策展策略强调“自反性”。1968年杰克·伯纳姆预言的系统艺术的基本材料不再是颜料或石膏,艺术不再关乎作品生产,而是信息的流动(flow of information)与“反馈机制”(feedback mechanism),这意味着工业理性走向信息时代的转折点。但伯纳姆谈论的“信息生态”仍假设人类位于控制中心。而半个世纪后,这一逻辑在人工智能的语境中被推向极端,因为人工智能系统的生态早已进入“后人类结构”:机器在学习、修正与生成中形成自身的决策逻辑。当算法能够自行生成视觉、音乐与文本,“系统”不仅是隐喻,更是艺术本身的存在方式。

在这一意义上,“提视造境”不是一次展示人工智能艺术作品的展览,而是一台关于人工智能如何“展示”世界的装置。策展人看似在组织作品,实则在试图编排一种感知机制。这正是系统美学在人工智能时代的转译:从控制系统转向生成系统,从物理媒介转向认知媒介。展览成为“认知模型”的具象呈现,而具有“后人类策展实践”(posthuman curating)的意义。策展人是否可以告别“叙事者”的身份,而更具批判性地在数据—算法—观众—空间之间重新组织架构感知,揭示遮蔽,设定边界与协议,维持可见性与可判性的公共条件。

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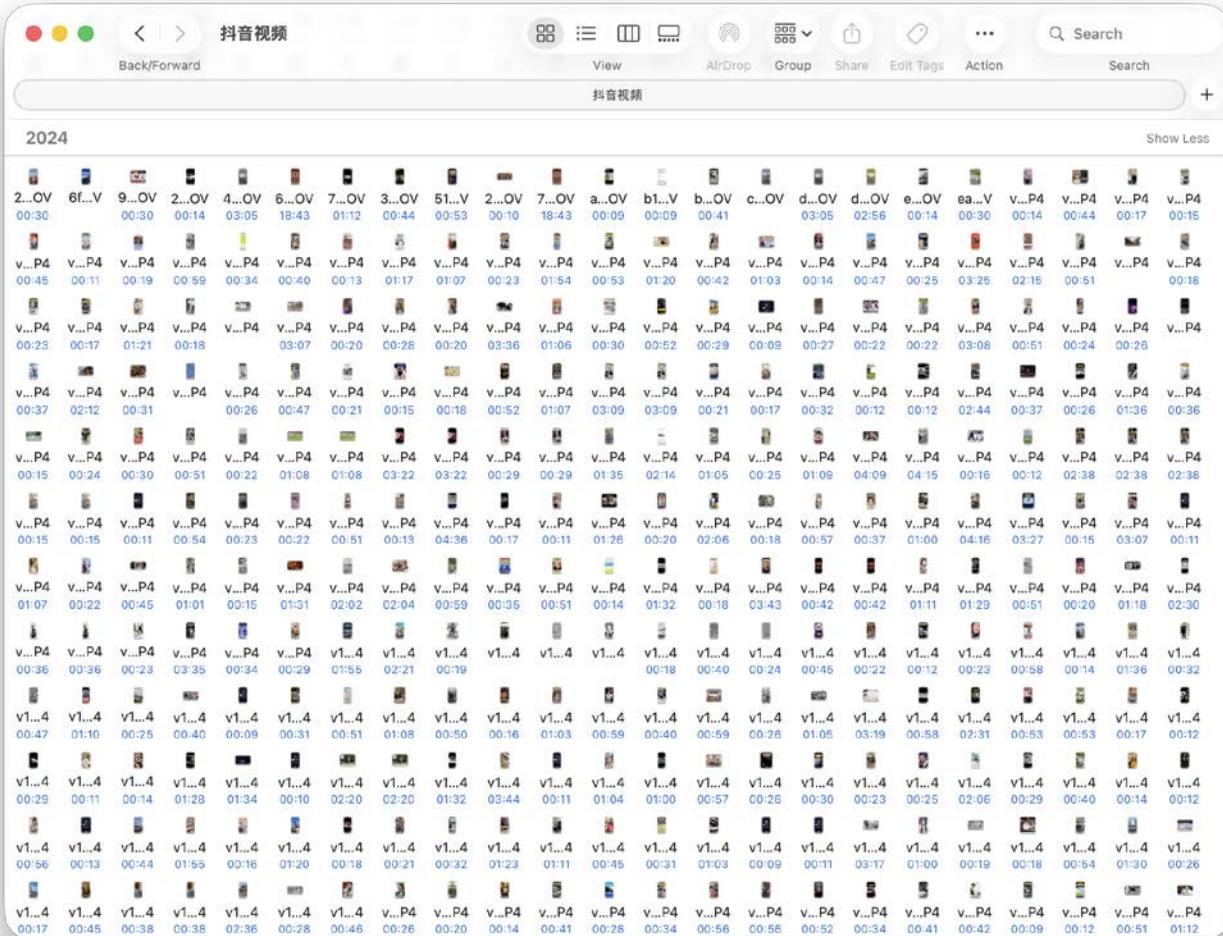
**马楠** 策展人,现居杭州,自2010年始从事当代艺术策划、研究与写作。现任中国美术学院文创设计制造业协同创新中心研究员。曾担任“2013上海西岸建筑与当代艺术双年展”开幕演出总导演,策划的项目有“央美术馆双年展:博物馆地下室·看不见的手”、“首届跨媒体艺术节:迷因城市·骇进现实”、Inter-Youth国际青年绘画展项目、法国斯特拉斯堡“未来媒体艺术宣言”、“书非书:杭州现代书法艺术节”、“随物生心:芬兰当代艺术组合Grölund-Nisunen回顾展”、“从不可见开始:埃乌琴·博巴与中国当代绘画”、“大道无极:赵无极百年回顾特展”、“提视造境:首届人工智能艺术文献展”,“衔尾蛇之歌:中西女性视角下的艺术与收藏”等。曾出版《戏剧简史》《肯特里奇的六堂绘画课》《对诗歌的反叛:安托南·阿尔托文集》等译著。

# Pearls in the Digital Sea: Salvaging a Collection of Short Videos

## Wang Yiquan

A decade ago I began consciously collecting what I call the “little videos” — short videos that ceaselessly surface on social media and flicker across the mobile screen. In comparison with professionally and meticulously produced classics of longer duration, such as short and feature films, television news clips, TV commercials, Vlogs, etc., they appear paltry. They seem trivial because their production is unrefined, and their contents often lack narrative technique.

Typically, these videos last only a few seconds, at most a few minutes<sup>1</sup>. The vast majority are independently produced by individual users with virtually no production budget, and shot and lightly edited on personal phones. In terms of quality, the file size is small — ranging from several hundred kilobytes to tens of megabytes and the image



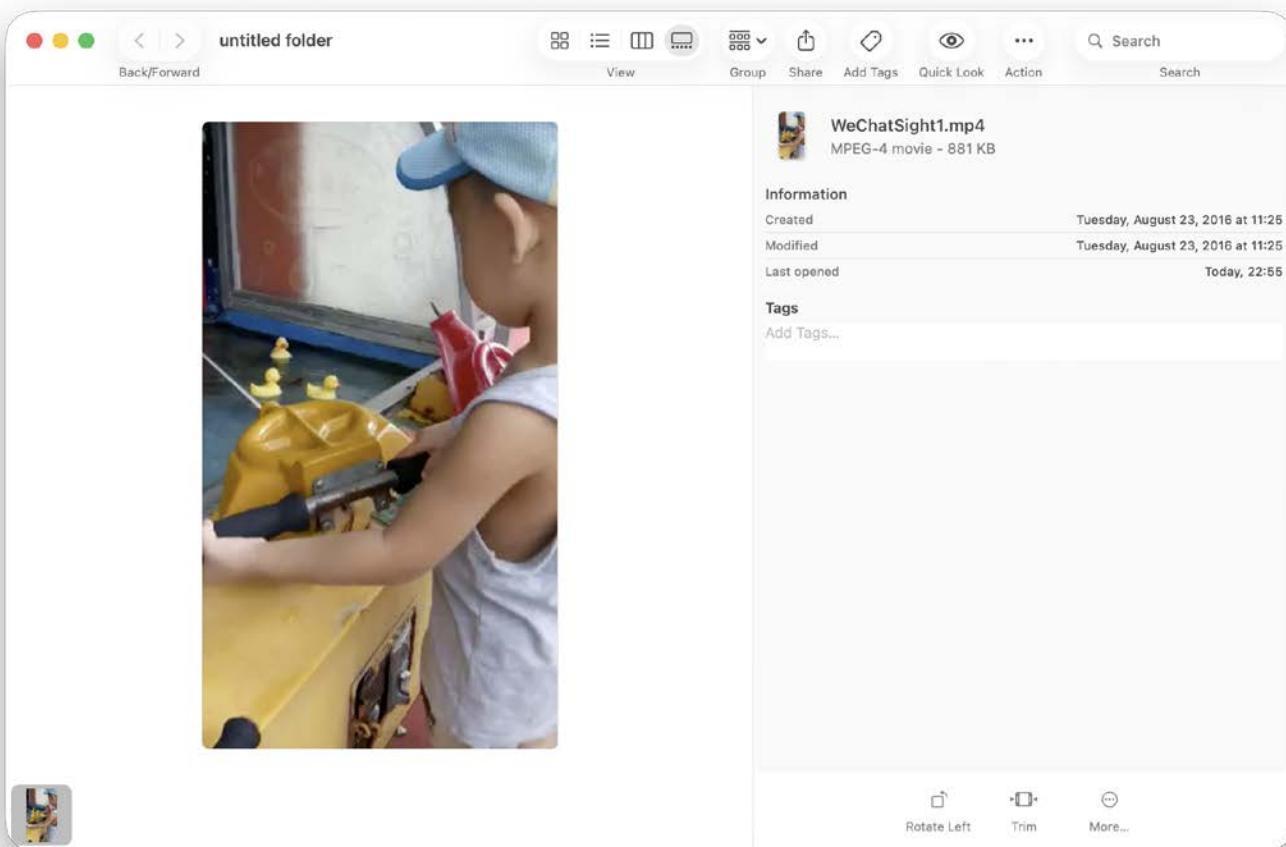
Wang Yiquan, *Little Videos*, 2016–ongoing. A private collection of short videos downloaded from social media platforms. Screenshot of the artist's Finder on macOS Tahoe. © Wang Yiquan.

resolution is low-definition. In terms of content, the earliest short videos I encountered were mostly records of everyday life, where a large portion were entertainment-oriented and unserious, while some were even violent or erotic.

I was drawn to these short videos for their counter-tradition in aesthetic, their low-bit-rate poetries in production, and their anti-canonical stance in narrative. I became increasingly interested in the inevitability of encountering them within the quotidian experience of online surfing. Thus, I initiated the project *Little Videos* (2016–present) as a private collection of short videos saved from social media platforms via my phone. To date, this project has not been publicly exhibited.

### 1. The Unbearable Littleness

Since the mid-1990s, the Internet in China has surged, developing a distinctive aesthetic system shaped by Chinese vernacular aesthetics and East Asian kawaii and popular culture. Chinese internet companies and users habitually grant colloquial and anthropomorphic nicknames to emergent internet phenomena. For example, Tencent's instant-messaging product "WeChat" denotes "micro-messages"; Baidu's AI assistant "Xiaodu" connotes a cute, diminutive Baidu. For the short video content on mobile screens, Chinese users habitually refer to them as "little videos" (in Chinese as 小视频).



Screenshot of the artist's Finder on macOS Tahoe. © Wang Yiquan.

At a technical level, this designation also resonates with the five-year cycle (2011–2016) that saw a startup boom and fierce market competition among Chinese short-video companies: Kuaishou's 2012 shift from GIFs to a short-video community; Sina Weibo's launch of the "Miaopai" function in 2013; WeChat's introduction of a feature explicitly named "Sight" in English and in Chinese as 小视频 in version 5.5 in 2014; and the founding of "Douyin" in 2016 (TikTok's mainland Chinese sibling). Together they catalyzed an unstoppable torrent of short videos.

One day, while organizing and previewing this collection of short videos on a desktop computer, I scrolled folders of files through a masonry layout, switching ceaselessly between items as time slipped by. From these short-duration, low-resolution, small footprint files, I experienced a profound shock of contemporaneity: an exceptionally manifold and highly fragmented drift in visual culture.

I recognized that an era of radically abbreviated attention is intensifying globally. Indeed, the most recent decade has been the most prolific in human history for video production. On TikTok alone, over 500 million<sup>2</sup> videos were reportedly removed in 2024 for violating platform rules. Even without counting total uploads, that figure already far exceeds the total number of films produced since cinema's invention<sup>3</sup>. Even more astonishingly, in 2024 TikTok saw an estimated 16,000 videos uploaded per minute<sup>4</sup>, for a yearly total in the region of 8.4 billion videos. There is little doubt that these numbers continue to rise.

Imagine a person who spends an entire lifetime watching short videos on social media — how long would it take them to finish? The answer: they would never finish. Using the 2024 global average life expectancy of 73 years as a baseline, a single person could, at most, watch around 150 million videos of 15 seconds each in a lifetime. Humanity invented the little video, yet we cannot endure their endless littleness.

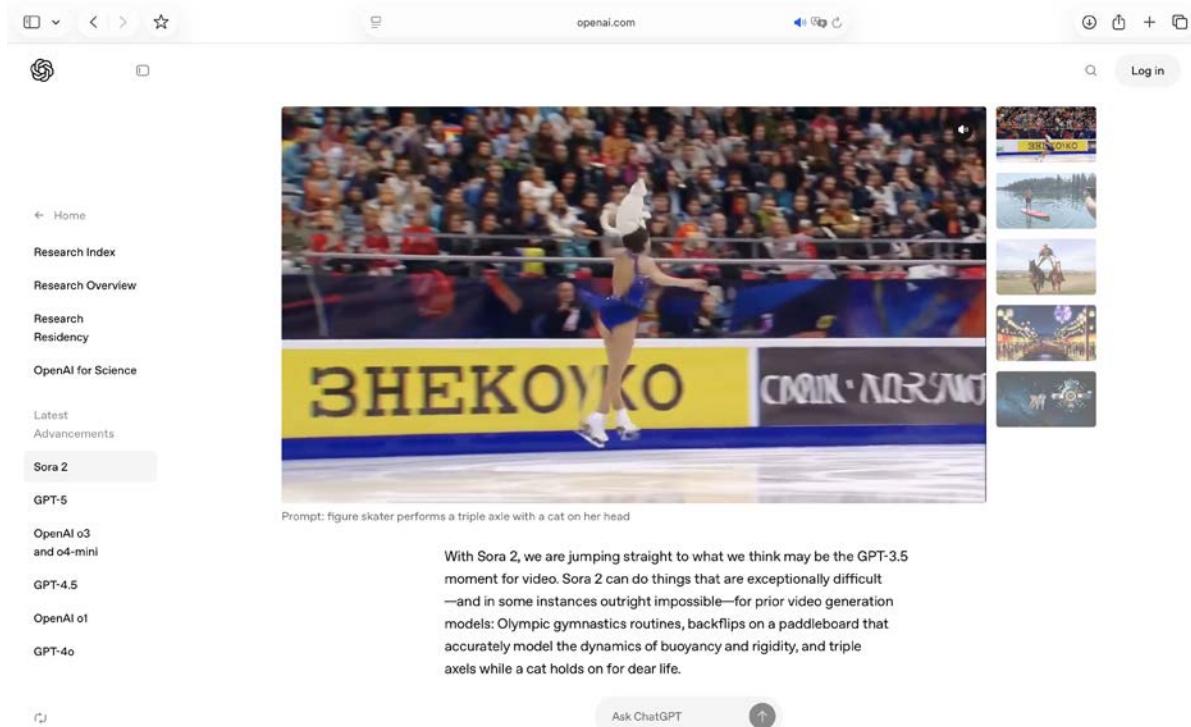
In this sense, my *Little Videos* collection is merely a miniature island within the vast digital sea.

## 2. Content Creation

For users of China's mobile internet, WeChat is the most frequently used application in daily life<sup>5</sup>. This is also why I began my collecting in WeChat groups. I downloaded videos shared by group members and, without permission, "saved as" the private videos of my WeChat contacts from their Moments. Despite the dual risks — both ethical and legal — my collecting actions for the *Little Videos* project nevertheless continued.

During this period, these videos bore a pronounced UGC (User-Generated Content) character. Often, they were made by users on social networks and circulated point-to-point or point-to-group. Their content mostly comprised records of the everyday.

Subsequently, I expanded my collecting to popular Chinese platforms such as Kuaishou and Douyin, and gradually added internationally popular short-video social media such as Instagram and TikTok. To better execute the collecting, I set my various platform accounts to private or anonymous and never posted content; instead, I used them only to browse and receive platform "for you" (recommendations). Consequently, the videos I downloaded were, to a considerable extent, saturated with randomness, leaping beyond my personal social circle into a broader public sphere.



A screenshot of OpenAI's official site showing the latest version of the video-generation model, Sora 2.

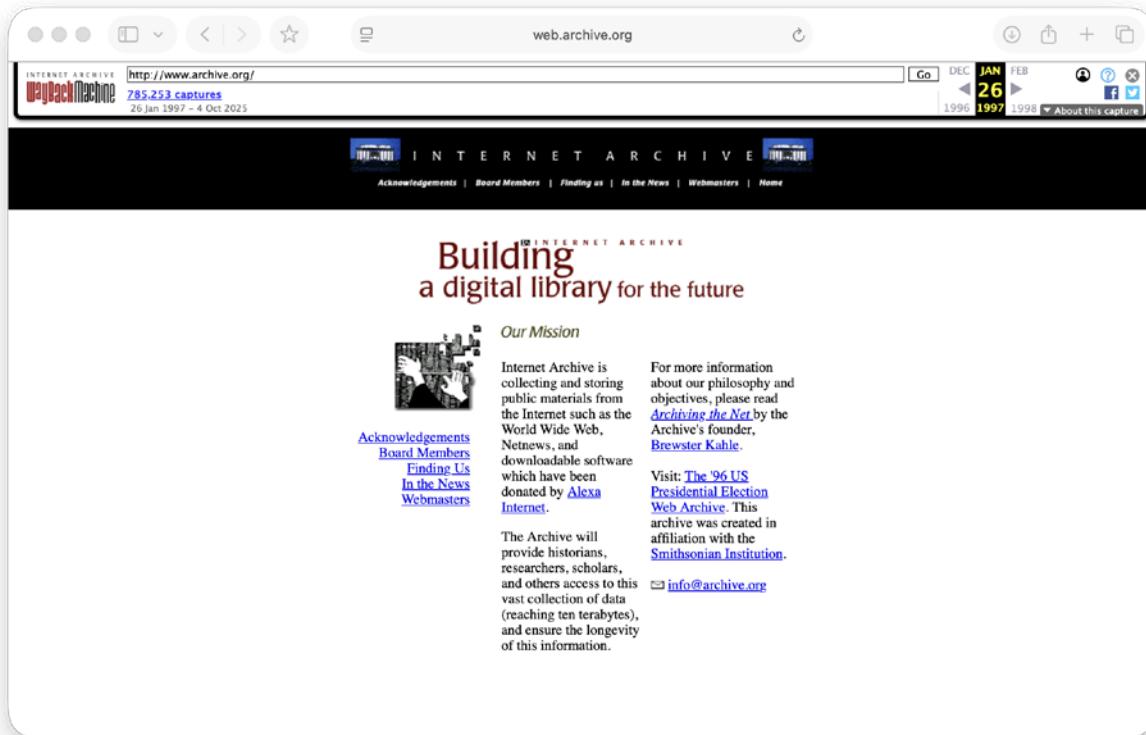
The ongoing practice of collecting those short videos is simultaneously a process of generating content for the collection itself. Through continuous archiving, I observed a noteworthy shift: the platformization of social media has driven an evolution in regimes of video production.

Initially, I collected clips of long-form videos, short versions of professionally produced works, and UGC (User-Generated Content). Gradually, with the explosive growth of daily active users and the maturation of monetization models, vast numbers of users poured into short-video social media, and PUGC (Professional User-Generated Content) entered the fray. This, in turn, spurred traditional professional video-production institutions to participate in short-form production. The resulting competition elevated both the quality of production and the richness of content.

The latest phenomenon is an “involution” of competition. Nonhuman agents have joined the short-video battlefield where AIGC (Artificial Intelligence-Generated Content) has begun to trend. In fact, since late September 2025, when OpenAI released the latest version of the video-generation model Sora 2, AIGC videos have markedly increased on both Chinese and international short-video platforms, and the visual quality gap between machine-generated and human-made videos has grown increasingly difficult to discern. Over the past ten years, the modes of content creation for short videos have iterated, and their artistic lexicon have become more capacious.

### 3. Video Turn and its Challenges

I first accessed the World Wide Web (WWW) from Beijing in 1998. Since then I have witnessed the metamorphosis from dial-up to mobile internet, experiencing a vertiginous acceleration from 56 Kbps to today's 1,000 Mbps. Remarkably, this transformation took only about twenty years, across which the speed differential multiplied by 17,857. The past decade, during which I have collected these short videos, coincides with a



A screenshot of the Internet Archive (archive.org) showing the Wayback Machine's first capture of its own homepage in 1997.

structural and media shift in China's internet: from a desktop-based mode of personal computer access to a tablet-based mobile internet; from image-and-text-centric websites and webpages to today's app- and influencer-centered video ecosystems.

Previously influenced and inspired by the Internet Archive (archive.org) — a non-profit digital library — in recent years, I shifted my attention to digital objects from webpages and video. Initially, my target was short videos that I considered imbued with performativity, continuing my longstanding interest in performance art. As my collection grew, I realized that the attributes of these videos exceeded the narrow sense of staged performance before the camera and exceeded the already established parameters of performance art. These short videos expanded my purview from a small domain into a larger discursive field that I term “great performance”: a human activity predicated on free expression, performance, and the video medium — one in which everybody, from political elites to ordinary citizens, can participate, anywhere and at any time.

To date, my *Little Videos* collection has surpassed 20,000 items. On average, over the past ten years, I have collected 150–200 short videos per month. The contents span entertainment, humor, art, news, politics, social hotspots, livestreams, private footage, historical records, documentary fragments, film excerpts, and meme culture. Although a large portion of my sampling comes from Chinese short-video communities, the extensive range of the collection already positions it to become an archive of video art in the age of social media — if we accept short videos as video works.

The mobile internet, augmented by the “video turn,” is shaping new life patterns and cultural preferences. This poses profound challenges to museums and libraries — institutions traditionally grounded in physical objects — and to their modes of collecting. Experiences and knowledge once furnished by museums and libraries are now displaced by short-video platforms. Today, the new generation, which has shifted from passive

audience to active user, does not necessarily seek knowledge in museums or libraries, nor even via traditional search engines and knowledge databases, but turns instead to video content as a learning substrate. An emergent trend is the preference for AI search engines and for knowledge and visual culture obtained from AIGC videos<sup>6</sup>.

This practical challenge, at a minimum, prompts museums and libraries — as repositories of visual culture and knowledge — to urgently rethink how to engage new generational audiences. Simultaneously, cultural institutions and their collections need to reconceive and research short videos as digital objects and media, along with their latent potentials.

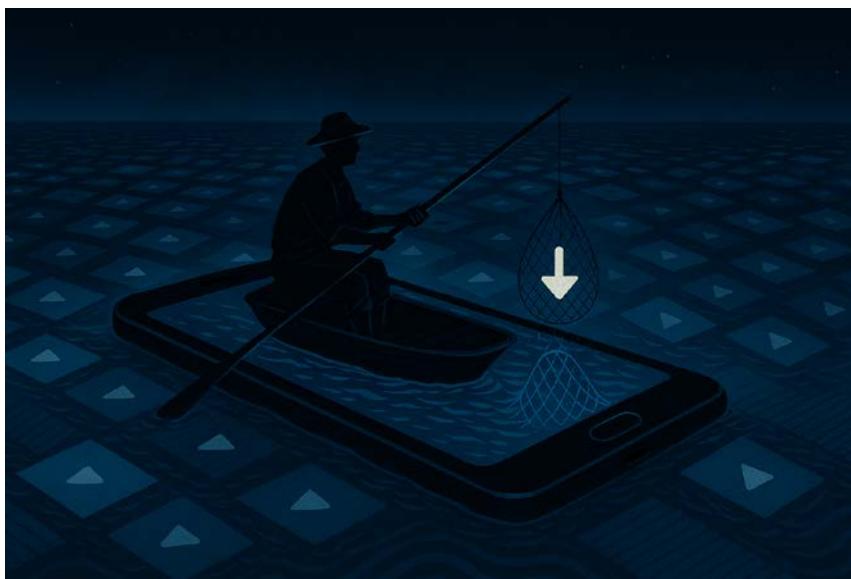
#### 4. Private Collection as Method

How to respond to these challenges inevitably involves value judgments, and strategies will vary across institutions, communities, and individuals. From an institutional standpoint, decision-making is complex, even protracted, budget-consuming, and entangled with the public interest. From an individual standpoint — especially that of the artist, curator, or researcher — understanding, interpreting, and reflecting upon short videos can, like conceptual art, be a matter of a single decision and can be executed immediately.

In my case, my basic thinking centers on the fragility of short videos and the resistance to their disappearance as I have found that at least three major forces, emerging from the transformation of internet infrastructure and artificial intelligence, shape the ecology of short video. First, due to legal frameworks, censorship policies, and platform community guidelines, many short videos are cleared after uploading. Second, at the level of content, as visual culture evolves and the culture-capital market selects, content must continuously adapt and iterate; materials that fall out of alignment with contemporary preferences face elimination and cancellation, just as the commercialization of cinema marginalizes experimental and essay films (Steyerl, 2009)<sup>7</sup>. Third, there is the risk of account erasure caused by cyberattacks, accidental system failures, the finite lifespans and shifting interest of human users, and other *force majeure* — resulting in the compelled disappearance of massive quantities of previously uploaded video. Without archival management, many videos become inaccessible as accounts mutate or close. Such occurrences are no longer rare.

Based on the above, I understand the *Little Videos* as a defensive private collection oriented towards the ecology of short video. The execution of this collection is autoethnographic in character, and thus many practical dilemmas surrounding collecting can be addressed pragmatically. More concretely, I do not aspire to elevate my personalized collection to an institutional standard. For instance, my *Little Videos* archive is not professionalized like archive.org; it does not operate with institutional archival policy and standards, clear taxonomies and hyperlinks, or targeted global crawling via bots. Nor is it open access for user self-upload.

My private collection is finite, coextensive with the limits of my embodied use. On the one hand, its scope is indexed to my time on mobile phone and to the durational persistence of my research interests. On the other hand, I do not enforce a set of legal prescriptions or moral codes as curatorial guidelines. In a private collection, the “I” is crucial. I therefore enjoy the agility of personal action in contrast to cultural institutions. My project is ongoing, practice-based, and deeply tethered to personal preference — indeed, somewhat obsessive — dependent upon my online hours and screen time.



Wang Yiquan, *The Fisher and the Digital Sea*, 2025. Image generated with ChatGPT. © Wang Yiquan.

I also do not possess massive storage capacity. At present there is no need for cloud storage or large offline servers. I simply store downloaded video files on private electronic-mechanical disk drives at ordinary room temperatures. As an individual, I cannot afford to maintain a data center environment with strict temperature and humidity control, and with redundant power and networking. Data centers on the scale of TikTok's "Project Texas" in the United States<sup>8</sup> or Apple's "Cloud on Guizhou" (GCBD) in China<sup>9</sup> are impossible for an ordinary person to imagine. My data center is a desktop HDD.

My method of downloading is equally austere. I tap the in-app download icon with my finger to save files one by one. At times I screenshot user comments or record the screen to capture the entire viewing experience. This method endows my collecting behavior with the ethos of pre-automation agrarian labor. By analogy, my swiping through videos on the phone resembles piloting a small fishing boat under the impulse of interest to trawl for clips. Like an old-school fisher casting nets at sea: where one sails and where one casts determines the catch, and one takes whatever those waters yield. I am fully aware that my drop-in-the-ocean way of collecting can never keep pace with the platforms' ever-accelerating upload curve.

## 5. Collector's Note

Through ongoing collection and conceptual development, I have noticed something curious: at the outset I could, to a large degree, proactively select sources and save videos. Once I turned to short-video social media, although my interests continued to guide me, the videos I encountered were inevitably sourced via algorithmic recommendation. If the museum's collection is scaffolded by curatorial judgment and acquisitions-committee decisions, then the collection of short videos on social media today is scaffolded predominantly by account habits, browsing histories, and algorithmic sorcery. This keeps me, as collector, alert.

I have also realized that my *Little Videos* project is accompanied by a ghostly editor continually issuing its editor's choice. Alternatively, the entire project seems guided by an invisible curatorial hand, arranging what audiences (or I) are permitted to see and determining what content creators (or artists) may show and publish, thereby deter-

mining what enters my collection. In truth, users — simultaneously viewers and makers — are indisputably being fed and recommended by algorithms. The extent of user autonomy, then, becomes questionable. Such algorithmic power poses a pointed question to collectors of digital objects: within an almost infinite digital sea, how might one expand one's horizon and grow one's private collection autonomously?

I tend to adopt a collecting logic proper to the digital age — namely, taking the self as method. Through a lens of digital ethnography I retrospectively examine the *Little Videos*, recognizing that this database is engendered by these platforms and their creators, and that — by happenstance — I have carried its archivalization forward. I acknowledge this contingency while making clear that my goal is not to gratify private taste but to develop this personal act into a public medium. Over a more expanded horizon, I believe *Little Videos* will constitute a description and narrative of digitized life in the early twenty-first century. At some point in the future, should I make the entire archive open, it will become new fieldwork for subsequent researchers (and even artificial intelligence): an independently assembled collection of (short) video art in the age of social media by a Chinese user.

## Notes

**1** Definitions of “short video” vary across platforms, countries, and research bodies. For example, YouTube stipulates that “any videos uploaded on or after October 15, 2024 with a square or vertical aspect ratio up to three minutes in length will be categorized as Shorts.” TikTok specifies that videos captured with the in-app camera can be up to 10 minutes long. The UK communications regulator Ofcom defines “short-form video” in its research/statistics as content under 10 minutes.

Sources:

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TikTok Help Center (Camera Tools): <https://support.tiktok.com/en/using-tiktok/creating-videos/camera-tools>

Ofcom, Media Nations 2023 (UK): <https://www.ofcom.org.uk/siteassets/resources/documents/research-and-data/multi-sector/media-nations/2023/media-nations-2023-uk?v=330012>

**2** “Bringing even more transparency to how we protect our platform,” TikTok, last modified December 18, 2024, <https://newsroom.tiktok.com/en-us/bringing-even-more-transparency>.

**3** According to the World Intellectual Property Organization (WIPO), 2023 is the most recent year with recorded global film output, totaling 9,511 films. By contrast, the Internet Movie Database (IMDb) reports 727,132 items labeled as “movie” in its database. Sources: “IMDb Statistics,” IMDb Press Room, last modified September 2025: <https://www.imdb.com/pressroom/stats/>. “Global Film Production Hits Historic High, Surpassing Pre-Pandemic Levels,” WIPO, last modified April 30, 2025: <https://www.wipo.int/en/web/global-innovation-index/w/blogs/2025/global-film-production>.

**4** Based on Statista’s estimation, as of December 2024 TikTok saw approximately 16,000 video uploads per minute. Since TikTok does not publish precise figures, this number should be treated as an order-of-magnitude estimate derived from publicly available statistics. Source: “TikTok – statistics & facts,” Statista, published September 30, 2025, <https://www.statista.com/topics/6077/tiktok/?srslid=AfmBOooVgRSin6pBR30EeXMIjcN6-mYr1LsD9FPAntY79ZKJMUqG6HCb>.

**5** In its corporate overview, Tencent claims that WeChat is the most indispensable and highest daily user frequency service, with over 1.4 billion monthly active users as of June 30, 2025.

“Tencent Corporate Overview: Second Quarter of 2025,” Tencent, last opened on November 10, 2025, <https://static.www.tencent.com/uploads/2025/11/05/3454372b79d12fd82a05d8ac087bd37b.pdf>.

**6** As Pew Research Center survey shows, as of 2025, 34% of U.S. adults say they have ever used ChatGPT. That includes a 58% majority of adults under 30.

And, according to Reuters Institute’s Digital News Report 2025, across all 48 markets, dependence on social media and video networks for news is highest with younger demographics, with 44% of 18–24s saying these are their main source of news and 38% for 25–34s. “34% of U.S. adults have used ChatGPT, about double the share in 2023,” Pew Research Center, accessed November 10, 2025, <https://www.pewresearch.org/short-reads/2025/06/25/34-of-us-adults-have-used-chatgpt-about-double-the-share-in-2023>. “Overview and key findings of the 2025 Digital News Report,” Reuters Institute, University of Oxford, accessed November 10, 2025, <https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2025/dnr-executive-summary>.

**7** Hito Steyerl, “In Defense of the Poor Image,” *E-flux Journal*, no. 10 (November 2009): 88, <https://images-eflux.b-cdn.net/assets/f7f16420-5ec1-46ae-899e-7cdd096fb23b>.

**8** “About Project Texas”, U.S. Data Security, TikTok, <https://usds.tiktok.com/usds-about>.

**9** “iCloud operated by GCBD Terms and Conditions,” Apple, last revised: September 16, 2024, <https://www.apple.com/legal/internet-services/icloud/en/gcbd-terms.html>.

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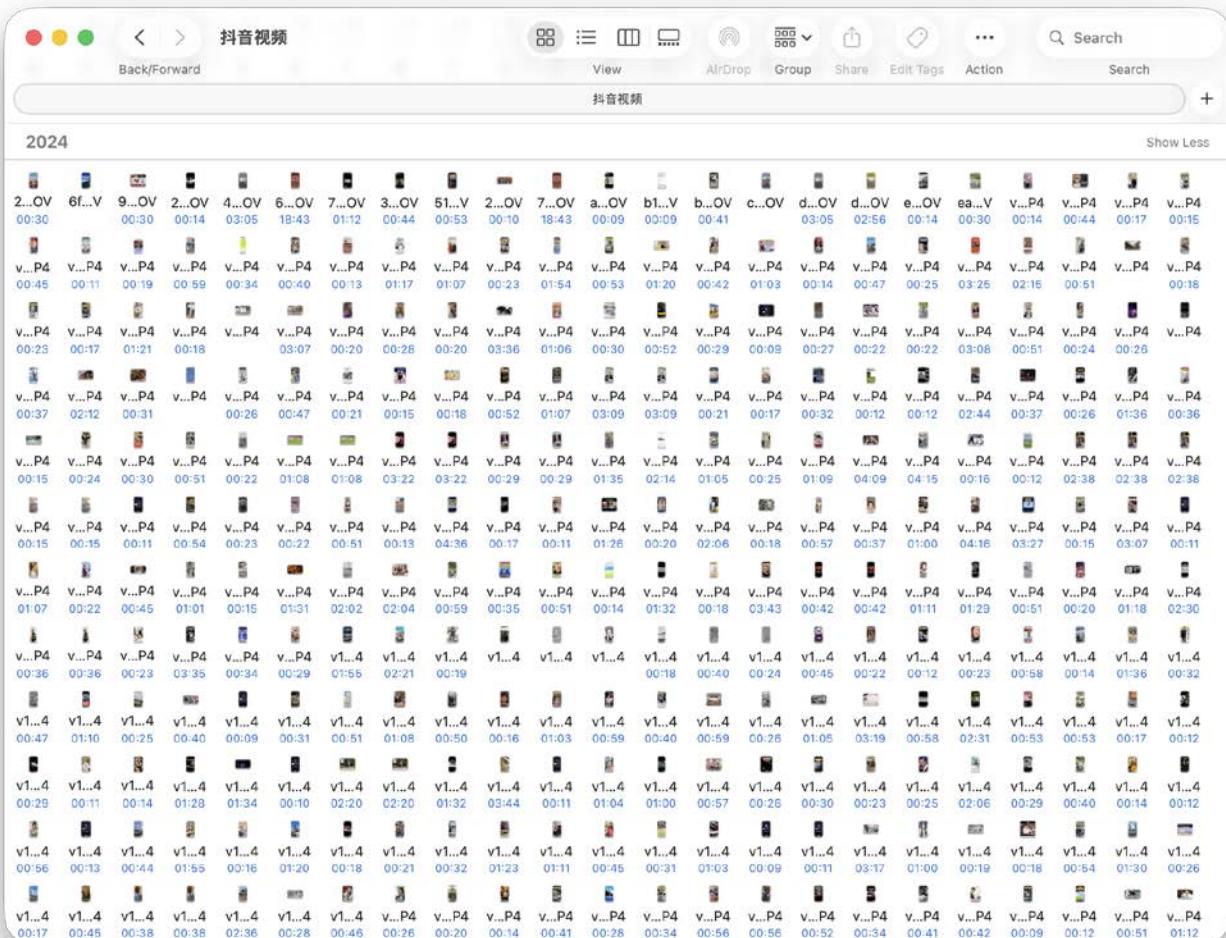
**Wang Yiquan** is an artist and curator. His practice has developed along multiple trajectories, with recent research focusing on transdisciplinary practices in art and culture, global urbanism, and China’s internet culture. As a curator, he advocates a “Curate Everything” approach. Recent curatorial works include *100 New Ideas for the City*, addressing urgent questions of urbanization, A4 Art Museum, Chengdu (2024); *Life, Work, and Style: Digital Nomads in Contemporary China*, on new lifestyles shaped by mobile internet, Liangzhu Culture and Art Center, Hangzhou (2024); *Tan Chui Mui: Just Because You Pressed the Shutter?*, exploring artificial intelligence and image culture, Les Rencontres d’Arles, Arles, France (2023); and *FELLOWS*, examining a generation of Chinese artists born in the 1980s, SNAP, Shanghai (2022). As an artist, his projects emphasize participation and collective reflection on social issues. His work has been shown at institutions such as Centro Municipal de Arte Hélio Oiticica, Rio de Janeiro (2025); Art Center NEW, Yokohama (2025); M+ Museum, Hong Kong (2025); Centre for Heritage, Arts and Textile, Hong Kong (2022); Contemporary Art Museum, Kumamoto (2018); Power Station of Art, Shanghai (2016); and Ural Biennial, Yekaterinburg (2015). Wang is a founding partner of *Acts and Pathways*, a critical spatial practice based in Shanghai.

# 数字沧海遗珠：从社交媒体中打捞上来的短视频档案

王懿泉

十年前，我开始有意识地收集“小视频”(little videos)——那些在社交媒体上不断涌现的，在手机屏幕上不断跳跃的短视频(short videos)。它们与专业且精心拍摄的经典长视频相比较起来，例如电影短片和长片，电视新闻片段，电视广告，视频博客(Vlog)等，相形见绌。它们显得微不足道，制作上即不考究，内容上也缺乏叙事技巧。

通常，这些视频只有几秒钟的播放时长，最多不过几分钟<sup>1</sup>。并且绝大多数视频都是由个人用户独立制作的，几乎没有制作成本，仅凭个人手机拍摄和剪辑而已。



王懿泉，《小视频》，2016年至今。通过社交媒体平台下载的短视频私人收藏。

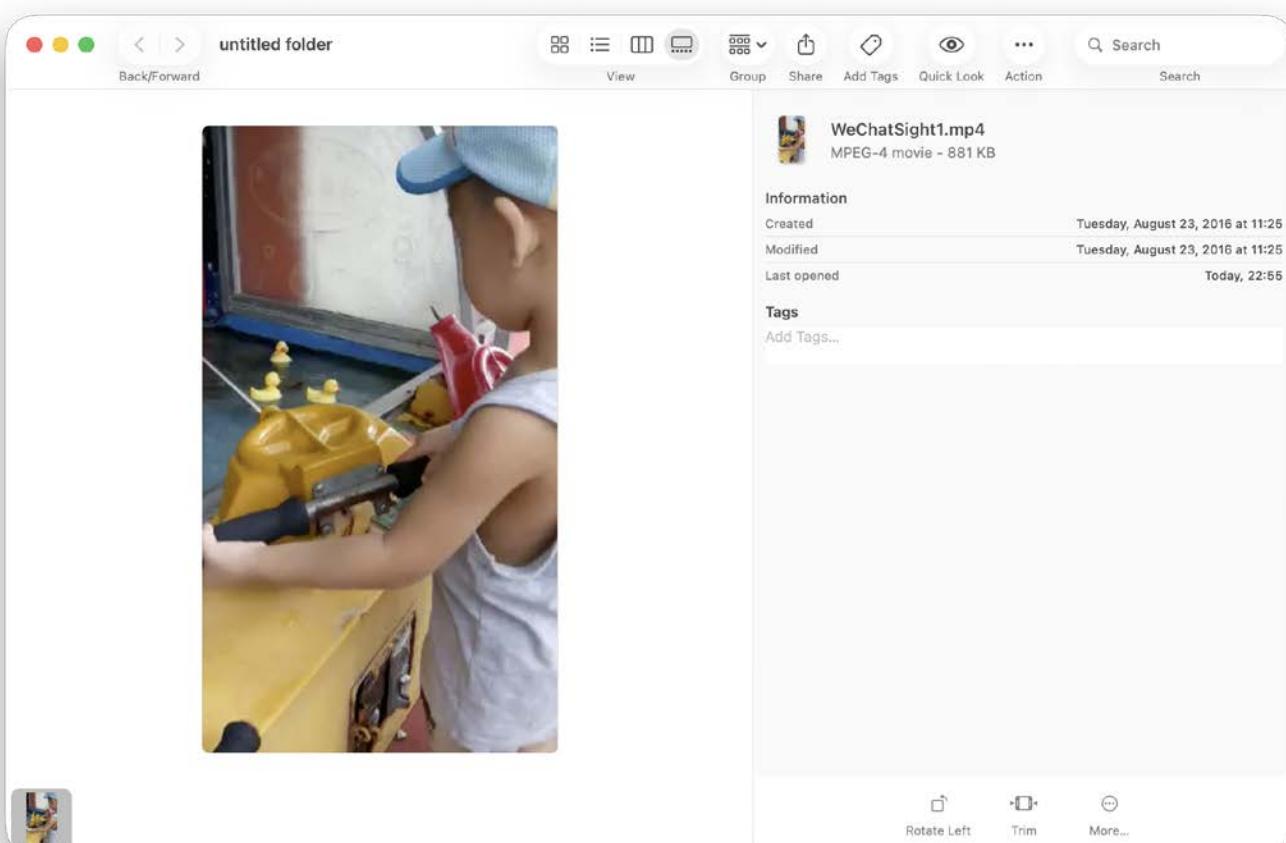
艺术家在苹果macOS Tahoe 上的文件夹截图。© 王懿泉

质量上,这些视频的文件体积都很小,在数百千字节至几十兆字节之间,画质低清。内容上,最初我看到的那些短视频大部分是记录日常生活的,其中大量是娱乐性的,不严肃的,还有一些甚至是暴力的和情色的。

这些小视频所具备的那种在美学上的反传统,在创作上的反技艺,在叙事上的反权威特征吸引了我。我愈发对日常上网冲浪体验中不可避免遭遇的这些小视频感兴趣。于是,我开启了《小视频》(2016年-今)项目——一个通过手机在社交媒体平台持续保存短视频的私人收藏。至今,这个项目尚未公开展览过。

## 1. 不能承受的小

中国互联网从上世纪90年代中期开始爆发,受到中国民间美学和东亚可爱文化及流行文化的影响,形成了一种独特的美学系统。中国的互联网企业和网民都经常赋予互联网新兴事物以通俗化和拟人化的昵称,例如腾讯集团的即时通讯产品“微信”,其中文意思是微小的信息;搜索引擎巨头百度的人工智助手被叫作“小度”,意思是小巧可爱的百度。对于手机屏幕上的那些短视频内容,中国用户习惯称其为“小视频”。



艺术家在苹果macOS Tahoe上的“访达”截图。© 王懿泉

在技术层面上，“小视频”这个称谓也呼应了2011年至2016年这个五年周期里中国短视频初创企业的创业潮和激烈市场竞争。其中，2012年从GIF转型成短视频社区的快手，2013年新浪微博推出的“秒拍”功能，2014年微信5.5版本上线时推出的命名为“小视频”的功能，以及2016年成立的“抖音”（Tiktok的中国姊妹版本），一起催生了这一波无法阻挡的小视频激流。

某天，当我在相比手机更大的台式电脑上整理并播放这些小视频档案时，在屏幕上瀑布流式的文件布局中不断地切换观看内容，伴随着不断流逝时间，我从这些短时长、低画质、小存储空间的视频文件里体验到一种当代性的大冲击——一种极多极碎片化的视觉文化倾向。

我意识到，一种注意力极其短暂的时代趋势正在全球加剧。要知道最近的十年是人类历史上创作视频内容最多的十年。单凭TikTok一个平台，于2024年因违反其平台规则而被删除的视频竟然超过了5亿条<sup>2</sup>。这一数字已经远远超越了人类发明电影以来的所有电影数量总和<sup>3</sup>，这还没计算该平台的上传视频总量。一个更惊人的数据是，2024年每分钟有16000个视频被上传到TikTok<sup>4</sup>，全年上传视频总量估算高达84亿条左右。毫无疑问，这个统计数字还会继续增长。

设想：一个人一直不停看社交媒体上的短视频，他将花多久才能看完？答案：他这辈子都看不完。根据联合国《世界人口展望》（2024年修订版）的统计，人类的预期寿命是73.3岁，一人一生最多也就只能看完1.54亿条左右的15秒视频。人类发明了短视频，却无法承受如它们那般永恒的小。

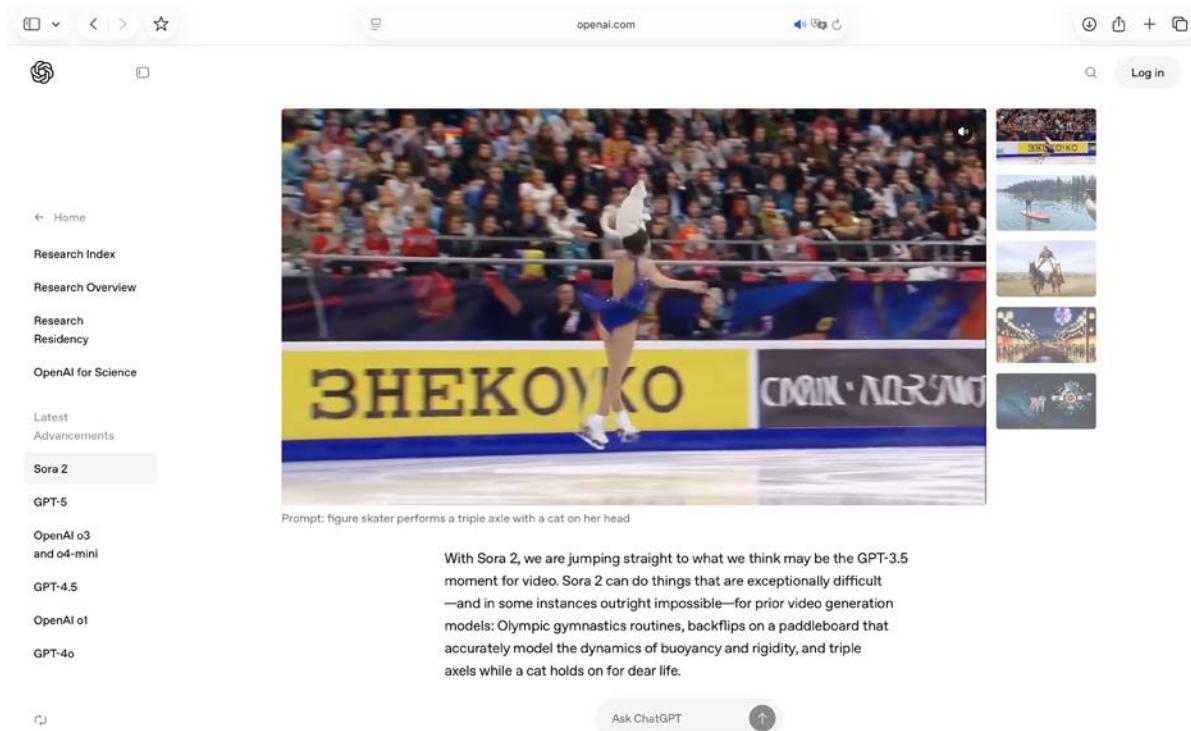
在这个意义上，我的《小视频》收藏只是浩瀚数字海洋中的一个迷你孤岛。

## 2. 内容创作

对于中国移动互联网用户来说，微信是日常使用频次最多的软件<sup>5</sup>，这也是为什么一开始我是从微信群展开了收藏行动。我下载群组成员分享的视频，也从朋友圈不经允许地“另存为”微信好友们的私人视频。尽管这样做冒着道德和法律上的双重风险，但是我有关《小视频》的收藏行动还是依然继续。

在这个时期，我收藏的这些视频具有一种强烈的用户生产内容（UGC）属性。这些视频往往是某位友人创作的，然后通过点对点或者点对群组的方式进行传播。视频内容大多是对日常生活的记录。

随后，我将收集范围拓展到快手、抖音等中国流行的平台，也陆续延伸到了Instagram、TikTok等受欢迎的国际化短视频社交媒体。为了更好的执行收集工作，我将在不同平台上注册的账户设置为私人账户或者匿名账户。我从不用这些账户发布内容，仅仅是用其来浏览视频，接收平台的推荐。因此，在一定程度上，我下载的视频充满了随机性，也跳跃出了我个人的社交圈，进入到了更加宽广的公共领域。



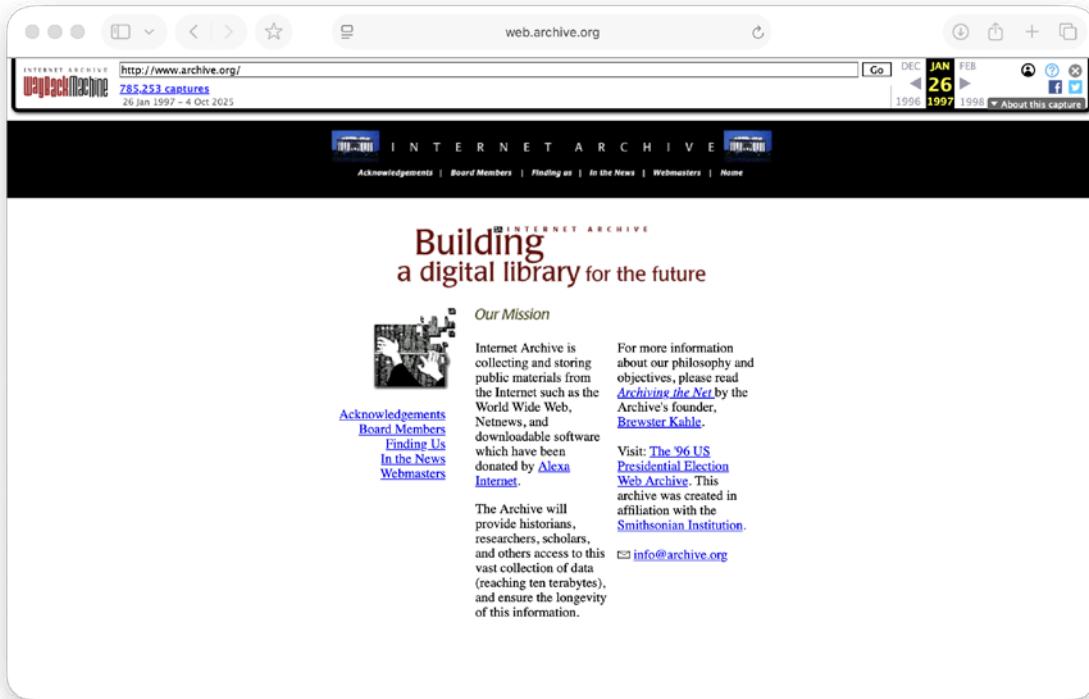
OpenAI 官方网站的截图，显示其最新的视频生成模型 Sora 2

不断收藏小视频的过程也是我为自己的收藏不断创作内容的过程。通过收藏，我发现了一个值得注意的变化，社交媒体平台的发展催生出视频内容创作模式的演化。最初，我收集的视频包括长视频的切片，专业制作视频的短版本，以及由社交媒体平台用户自主生产的视频内容。逐渐，随着平台日活量 (DAU) 爆发式的增长及其盈利模式发展，大量用户开始涌入短视频社交媒体，于是由专业用户生产的内容 (PUGC) 开始加入到内容竞争当中。这还刺激了传统的专业视频生产机构下场参与短视频制作。这种竞争导致了不论视频制作效果，还是内容丰富度，都进入到了更高水平维度。

最新的现象是，短视频的内容竞争走向了“内卷”。非人类也加入了短视频战场——人工智能生产内容 (AIGC) 开始走红。从2025年9月底OpenAI发布最新版本的视频生成模型Sora 2以来，无论是中文还是国际短视频平台上的AIGC内容都明显增多了。人们越来越难以区分非人类与人类创作的视频二者的视觉质量差异。事实上，在过去的十多年里短视频领域的内容创作模式迭代了，艺术语法更加丰富了。

### 3. 视频转向及其挑战

1998年，我从北京首次接入国际互联网。从那至今，我经历了从拨号上网到移动互联网的蜕变，体验了网速从每秒56千比特到今天每秒1000兆比特的“快感”加速度。这种网速剧变只用了短短20年便完成了，而这两种速度竟然相差了17857



互联网档案馆 (archive.org) 的截图, 显示其网站时光机 (Wayback Machine) 于 1997 年首次抓取该站首页的记录

倍。最近十年, 也就是我开展收藏小视频的这段时间, 恰好是中国互联网发生新一轮结构性和媒介性变化的时期——基于桌面的个人电脑上网模式转向了基于手机终端的移动互联网模式; 基于图片和文字的网站和网页, 转向了如今基于视频的应用程序和博主。

早年我受到“互联网档案库”(archive.org)这一非营利数字图书馆的影响和启发, 关注网页等数字物体的收藏。近年我将对于数字物体的关注从网页投向了视频。最初, 我的收集目标是那些我认为具有表演性 (performativity) 的小视频。这延续了我一直以来对表演艺术 (performance art) 的兴趣。随着收集的视频越来越多, 我发现这些视频内容的属性突破了面对镜头开展表演的狭义属性意义, 也比既定意义上的表演艺术更为多元。这些小视频将我对表演艺术的视野, 从一种小范围拓展进入到了一种更大话语空间。我称之为“大表演”(great performance)——一种从顶级政治精英到普通市民都可以随时随地全面参与的基于自由表达、表演和视频媒介的人类活动。

截止到目前, 我的《小视频》档案库收集总量已经超过了2万条。平均而言, 过去十年间每个月我要收集150到200条短视频。这些视频的内容属性遍及娱乐、幽默、文艺、新闻、政治、社会热点、直播、私人影像、历史档案、纪录片片段、电影片段、模因文化 (meme) 等。尽管我的样本大量采集自中文短视频社区, 整个收藏的内容广泛性却已然足够推动其成为一部社交媒体时代的录像艺术档案。如果我们认可将短视频也认作是录像艺术作品的话。

今天,加持了视频转向(video turn)的移动互联网正在塑造新的生活方式和文化偏好。这对于基于实物的博物馆和图书馆及其收藏构成了巨大挑战。曾经,博物馆和图书馆能提供的诸多体验和知识,如今被短视频平台替代了。今天,从被动的受众蜕变为积极的用户的新代际并不是去博物馆或图书馆寻求知识,甚至也不使用传统搜索引擎和知识数据库来学习,而是转向视频内容并从中学习。最新出现的趋势是,新一代用户更偏好使用人工智能搜索引擎,并从由人工智能生产的视频中获取知识和视觉文化<sup>6</sup>。

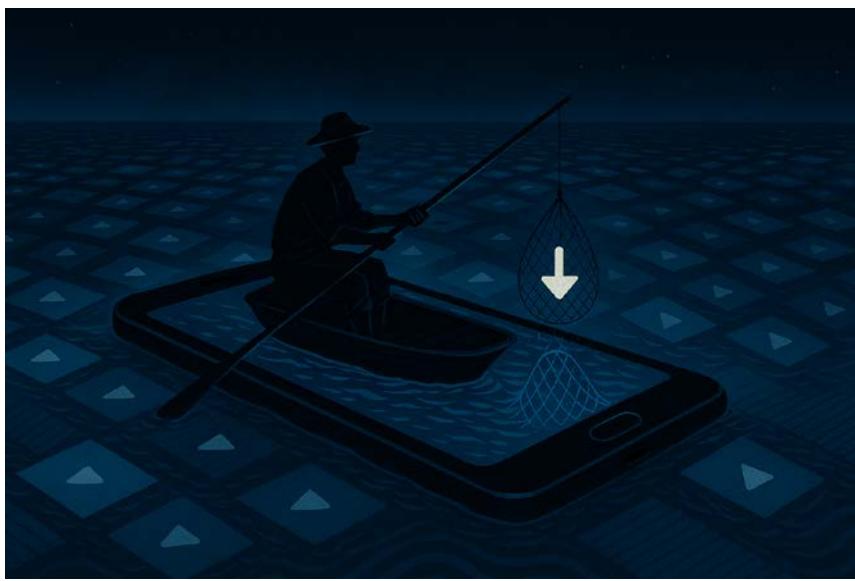
这种现实挑战至少向我们提示出,作为视觉文化和知识收藏的博物馆和图书馆,需要急迫地思考如何与新一代际的观众开展互动。同时,文化机构及其收藏有必要重新认识和研究作为数字物体和媒介的短视频及其潜能。

#### 4. 私人收藏作为方法

如何应对这些挑战将会涉及到价值判断,不同机构和不同群体或个人有不同策略。从机构的角度来看,决策过程是复杂的,甚至是漫长的,耗费预算的,牵涉公共利益的。而从个人角度,特别是从艺术家、策展人、研究者的角度来说,对于短视频的认识、理解、反思可以像观念艺术实践一样,是一念之间的,是可以马上操作执行的。

以我为例,我的基本思考是围绕着小视频的脆弱性并抵抗其消逝而展开。我发现互联网基础设施迭代和人工智能爆发所催生的巨变中,至少有三股力量影响着短视频的生态。首先,由于法律、审查政策、平台社区规范等因素,很多短视频在上传后会被清理。第二,从内容上来说,随着新的视觉文化的演化和文化资本市场的选择,视频内容需要不断地适应这种选择并迭代;那些不符合当前时代偏好的内容,就会面临被淘汰和被取消的风险,就像商业化的电影院系统对实验电影和散文电影的排斥一样<sup>7</sup>(史德耶尔,2009)。第三,互联网攻击和意外系统崩溃、自然人用户的命限度和兴趣意志转移等不可抗力导致的账户清空风险,将造成海量的、曾经已上传的视频被迫消失。如果没有档案化管理,很多视频会随着账户的变动和关闭而不可见。这样的案例已经不少见。

基于上述思考,我将《小视频》项目视作关涉短视频生态的防御性私人收藏。而执行这一收藏的过程则具有一种自我民族志性质,因而很多围绕着传统收藏和档案工作的实际困境将会迎刃而解。例如,我并不追求把自己的个人化的收藏提升到某种机构化的标准。进一步说,我的小视频档案库,并不像archive.org那般专业,具备完善的档案管理制度和标准,有明确的分类和超链接,并且可以利用爬虫技术有目的、有意识地对全球范围内的网页进行抓取。或是开放我的数据库权限,邀请用户自主上传。



王懿泉,《渔人与数字沧海》,2025年。使用人工智能模型ChatGPT 生成的图像。© 王懿泉

我的私人收藏是更为有限的,这与作为“肉身用户的我”的限度紧密相关。一方面,其与我的手机使用时间和对短视频的研究兴趣的持续程度是正相关的。另一方面,我并没有以某种法律规定和道德标准来指导我的收藏。我认为,在私人收藏中“我”是非常重要的。因而我享受个人行动相较文化机构工作而言那种更为敏捷的优势。我的私人收藏依托我个人的上网时长和屏幕时间,是持续发展、偏向实操、极具个人喜好、甚至是有点偏执的个人行为。

我也没有庞大的存储空间,目前阶段也没必要采用云存储器和线下大型服务器。我仅仅是将这些下载好的视频文件储存在私人机械硬盘中,保持日常室内温度即可。作为一个普通人,我没有能力和财力维护一个严格控温、控湿、有冗余电力和稳定网络的理想机房环境。像TikTok在美国建设的“Project Texas”<sup>8</sup>,或者像苹果在中国采用的“云上贵州”(GCBD)那样<sup>9</sup>,那些巨大规模的数据中心,是普通人无法实现的天方夜谭。我的数据中心就只是个人桌面机械硬盘而已。

我下载短视频的方式也非常简朴。我用手指点击手机屏幕上应用程序内部的下载键,一个个保存视频文件。有时我也会对网友的评论进行截屏,或是录屏记录下我的整个视频观看过程。这种方式让我的收藏行为带有一种前自动化时代、农业劳动般的朴素味道。做一个比喻,我用手机刷视频的状态就像在兴趣的驱使下撑一艘渔船,去捕捞一些视频。这就像一个老派的渔民在大海上撒网捕鱼,驶进某处海域和在哪里撒网,就会获得那片海域的渔获,抓到什么就是什么。而且我深知,我这沧海一粟般的收集方式永远无法追赶上社交媒体平台里短视频的增长速度。

## 5. 收藏家的启事

在不断地收集和观念发展中,我发现一个有趣的现象。最初,我在很大程度上可以主动选择信源并主动保存视频。之后,当我转向使用短视频社交媒体,尽管我以自己的兴趣作为导航,但不得不说我所刷到的视频是基于算法推荐的。如果说博物馆的收藏依托于策展人和收藏委员会的决策过程,那么,今天在社交媒体上收藏小视频则完全依托于用户的账户使用习惯、浏览记录和算法魔力。这令作为藏家的我保持警惕。

我还意识到《小视频》项目,总是伴有一个幽灵般的编辑在不断地给出编辑甄选建议。又或者,整个项目像是拥有一双看不见的策展人的手,在安排观众(或我)可以看到什么,并且决定平台内容创作者(或艺术家)可以展出和发布什么——这进而决定了我的收藏里到底有什么内容。事实上,今天同时作为观看者和创作者的用户无疑是被算法进行投喂和引导的。那么,用户在多大程度上是自主的,就显得可疑了。如此的算法权力现实,向收集数字物体的藏家提出了尖锐的问题:在几乎无限的数字海洋里,藏家要如何拓展视野并自治其私人收藏?

我倾向采用一种符合数字时代的收藏逻辑,即以自己作为方法。我用数字民族志视角来回顾和审视《小视频》项目,认识到这个数据库是脱胎于这些平台和内容创作者。这些视频是因为机缘巧合才被我档案化的。我承认这种偶然性,同时我明确我的收藏目的并非仅为了满足自我品味,而是努力使此种私人化的收藏有可能发展成一种公共媒介。我认为在一个较长的周期里,《小视频》项目会构成一种对21世纪初数字化生活的描写和记叙。如果未来某天,我将小视频档案全部公开,这对之后的研究者(甚至人工智能)来说,又会成为一种全新的田野——一位中国用户独立保存的一部社交媒体时代的(短)录像艺术收藏。

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### 注释

**1** 不同视频媒体平台或者国家及研究机构对于短视频的时长有不同定义。例如 YouTube 规定,用户于2024年10月15日当天及之后上传、时长不超过三分钟的方屏或竖屏视频都被归为短视频。TikTok规定用户使用该应用程序摄制的视频长度最长为十分钟。根据英国通信管理局 Ofcom 的报告,研究与统计中长度为10分钟内的视频被称为短视频。

<https://support.google.com/youtube/answer/15424877>

<https://support.tiktok.com/en/using-tiktok/creating-videos/camera-tools>

<https://www.ofcom.org.uk/siteassets/resources/documents/research-and-data/multi-sector/media-nations/2023/media-nations-2023-uk?v=330012>

**2** “我们将进一步提高平台保护的透明度”(“Bringing even more transparency to how we protect our platform”), TikTok, 最后修改日期:2024年12月18日 <https://newsroom.tiktok.com/en-us/bringing-even-more-transparency>。

**3** 根据世界知识产权组织(WIPO)的数据,2023年是有最新数据记载的全球电影产量最高的一年,在这一年里全球共有9511部电影诞生。

“全球电影产量创历史新高,超过疫情前的产量” (“Global Film Production Hits Historic High, Surpassing Pre-Pandemic Levels”), 最后更新日期:2025年4月30日。  
<https://www.wipo.int/en/web/global-innovation-index/w/blogs/2025/global-film-production>.

据互联网电影数据库 (Internet Movie Database,IMDb)的统计,其数据库中标记为电影(movie)的内容有727,132个。

“IMDb统计数据” (“IMDb Statistics”), IMDb新闻中心, 最后更新于2025年9月。  
<https://www.imdb.com/pressroom/stats/>.

**4** 根据第三方统计机构Statista的估算,2024年12月每分钟约有16,000条视频被上传到TikTok平台。TikTok 官方并未公布精确数据,该数字为基于公开统计的推算量级。“TikTok - 统计数据和事实” (“TikTok - statistics & facts”), Statista, 发布于2025年9月30日。<https://www.statista.com/topics/6077/tiktok/?srltid=Afm-BOooVgRSin6pBR30EeXMIjcN6-mYr1LsD9FPAntY79ZKJMUqG6HCb>

**5** 腾讯在其公司概览中声称,微信是最不可或缺、日活跃用户频率最高的服务。截至2025年6月30日,其月活跃用户超过14亿。“腾讯公司概览:2025年第二季度”,腾讯,最后发布于2025年11月10日。

<https://static.www.tencent.com/uploads/2025/11/05/3454372b79d12fd82a05d8ac087bd37b.pdf>

**6** 据皮尤研究中心 (Pew Research Center) 的一项调查显示,截至2025年,34%的美国成年人表示他们曾经使用过ChatGPT。其中,30岁以下的成年人使用率高达58%。根据路透社研究所发布的《2025年数字新闻报告》,在所有 48 个市场中,年轻人群体对社交媒体和视频网络获取新闻的依赖程度最高。18 至 24 岁的人群中有 44% 表示这些是他们获取新闻的主要来源,25 至 34 岁的人群中有 38% 表示这是他们获取新闻的主要来源。

“34%的美国成年人使用过ChatGPT。到2023年,这一比例预计将翻一番。”皮尤研究中心,于2025年11月10日访问网页。<https://www.pewresearch.org/short-reads/2025/06/25/34-of-us-adults-have-used-chatgpt-about-double-the-share-in-2023>

“2025年数字新闻报告概述及主要发现” (“Overview and key findings of the 2025 Digital News Report”), 路透社研究所,牛津大学,2025年11月10日访问。  
<https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2025/dnr-executive-summary>

**7** 黑特·史德耶尔,“为弱影像辩护” (“In Defense of the Poor Image”), E-flux期刊,第 10 期(2009 年 11 月):第88页。<https://images-eflux.b-cdn.net/assets/f7f16420-5ec1-46ae-899e-7cdd096fb23b>

**8** “关于德克萨斯项目” (“About Project Texas”), 美国数据安全局, TikTok。  
<https://usds.tiktok.com/usds-about>

**9** “iCloud 由 GCBD 运营的条款和条件” (“iCloud operated by GCBD Terms and Conditions”), 苹果公司, 最后修订日期:2024 年 9 月 16 日, <https://www.apple.com/legal/internet-services/icloud/en/gcbd-terms.html>

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Digital technologies, blockchain cultures, and artificial intelligence are transforming how reality is produced, perceived, and curated. In this shifting terrain, curating no longer denotes the organization of objects in space but the navigation between physical and virtual worlds, between human and machine agency.

The contributions in this issue examine how digital, web-based, and AI-induced formats reconfigure exhibition logics, participation, and mediation, while raising questions of alienation, spectacle, and decentralization. They range from hybrid reactivations of historical exhibitions and digital archives resisting information erosion, to Web3-driven experiments and collaborative ecologies of generative AI. At the center lies the question of how curatorial practice can remain critical, resistant, and situated amid technological acceleration. Here, the (Un)Real appears as a condition that shapes curatorial work across realities — opening interstitial spaces, enabling moments of delay, and upholding human negotiation within algorithmic environments.

数字技术、区块链文化和人工智能正在改变人们在现实层面的产出、感知和策展方式。在这一不断变化的背景下,策展不再仅仅指在空间中组织物体这一行为,而是指其在物理世界和虚拟世界、人类和机器之间所发挥的导航作用。

本期杂志收录的文章探讨了数字化、网络化和引入人工智能的策展形式如何重构有关展览的逻辑思维、参与方式和媒介,并探讨了由此引发的关于异化、景观和去中心化的问题。这些文章讨论的内容包括反信息侵蚀的、由过往展览和数字档案交织成的混合式再激活、由Web3驱动的实验和生成式人工智能的协作生态系统等。本期杂志聚焦于一个核心问题,即在技术加速发展的情况下,如何保持策展实践的批判性、抵抗性和情境性。在此,“(非)现实”作为一种状况,影响着横跨不同现实的策展工作——开辟了具有空隙的空间,促成了延迟的时刻,并在算法环境中维护着人类所扮演的引导角色。

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*Mimicry, Mimicry: Mimetic on Simulacra, and Mimicry: News Ecosystem*,  
2025, exhibited in Babel Bottle. Photograph by Xu Jian. © Wang Yini,  
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