A Matter of Orientation: Interactive Artwork Recasting Historical Artifacts in Latent Reality

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Abstract

With the rapid proliferation of artificial intelligence (AI) systems in multiple aspects of our lives, AI biases have emerged as a pressing and multifaceted challenge. What can these biases teach us about narratives existing in our cultural memories and storytelling? A Matter of Orientation is an interactive Virtual Reality (VR) installation that speculates on the complexity of this question forged by the Western mode of thinking. Our interactive 3D world, a multimedia assemblage of AI-generated content, tests the limits and affordances of generative AI and room-scale VR that shape the resulting artwork. A Matter of Orientation translates Edward Said's critique of Orientalism into a new digital reality configured by large language models and gamification of storytelling. Players are immersed in an interactive VR temple that recontextualizes Oriental objects from San Francisco's Asian Art Museum (AAM) into deepfake videos, image-to-3D models, text-to-image stories and architecture, and generative script writing. In their algorithmic recreation, these historical artifacts amplify the cultural distance already traveled away from their geographic home.

Keywords

Interactive Art, Interactive Storytelling, Non-Linear Narratives, Artificial Intelligence Art, Generative AI, Virtual Reality, Orientalism, Edward Said, Expanded Cinema, Machine Learning

Introduction

As science fiction writer Ken Liu has mentioned, our narratives are the threads that bind us to a locale, breathing life into nebulous notions such as a homeland [14]. According to Liu, in a profound way, we live, die, and are forever transformed by these tales. Now, AI has enlisted itself into this influential assembly, albeit presenting a congenial façade and asserting its intent to aid mankind. This technology is set out to shape our cultural myths and interpret complex historical events that previously have, as Liu describes, served as mirrors reflecting our existence [14].

When discussing AI, we imply a broad field of study that includes categories such as machine learning, natural language processing, and neural networks among others. In scrutinizing AI technologies, it is crucial to acknowledge the intrinsic prejudices of AI that will, in the end, mold our narratives. The insights of prominent AI scholars, such as Craw-

Figure 1: This sculpture is composed of a head we made with image-to-3D mesh output and hand-sculpted the body based on a Midjourney image reference.

ford, Buolamwini, Gebru, and Solaiman, emphasize the impact of biases in AI while urging a necessary open discourse. It is vital that more and more AI researchers advance similar methodologies for detecting and mitigating AI biases while also addressing ethical considerations [2, 6, 30]. Without increasing diversity in stakeholders, this deficiency sabotages improvements with our inherent biases.

By questioning the origins of our stories, we explore how generative AI models embody the translated discrepancies between different databases of knowledge – in migrant identities originating in Western art museums, contemporary art thinking, and sciences. In this light, A Matter of Orientation aspires to accomplish more than just recontextualizing culturally adrift objects; it seeks to establish a homeland for them, a space in which these artifacts are imbued with newfound narratives and cultural significance as they wander toward a placelessness. Put another way, can generative AI systems create unexpected emergent stories and intervene in our constructed reality? The project we have developed resides in the unseen space between these two inquiries. A Matter of Orientation has been successfully shown in a juried international art residency Salzburg Internationale Sommerakademie and a top-tier electronic arts exhibition Ars Electronica Festival.

Figure 2: Open world level with generated 3D figures arranged in a formation informed by old cemeteries of Hong Kong. Behind the central animated statue, virtual portals display interactive deepfake videos.

Where do our stories come from? Such a question requires contextualizing one's temporal and geographical boundaries. A Matter of Orientation addresses this query by exploring generative AI uses for populating an interactive VR world (Figures 1, 2, and 4). In this pursuit, our VR installation (Figure 3b) provides a new context for viewing Oriental objects from San Francisco's Asian Art Museum (AAM). Building upon the critique of Orientalism [23, 24, 25], our work examines how this problematic notion exists in the cultural memory collected within the training data of AI speech, text, and image generators.

In question is the inherent black-box characteristic of AI systems. The opacity of these AI systems obfuscates their decision-making process expressed in the output. Our collaboration with these algorithms probes such biases that facilitate this multimedia production. Whether conscious or unintentional, this non-transparency acts as a veil that undermines the algorithms themselves. In this inquiry, our production recasts the Western narratives exaggerated with generative AI systems. Furthermore, A Matter of Orientation juxtaposes the outputs of multiple generative AI systems within the VR gaming medium to redefine interactive multimedia storytelling [31] by using the language of video art and sculpture.

Background and Intentions

Departing from passive storytelling experiences to pursue interactive non-linear narratives, our story originates from Edward Said's book, *Orientalism* [23]. In Said's writing, the West asserts a purportedly clearer understanding of the East than the East possesses of itself [23, 24, 25]. Said highlights the complexity of the Oriental region's vague borders, spanning over sixty distinct nations from East Asia to the Middle East, reaching across North Africa, and ending around Morocco [23]. Each location's intricate history predates much of Western historical memory. Nevertheless, these diverse entities are homogenized by the Western gaze into a singular, reductive category labeled "Eastern," "Asian," or "Oriental"

[23].

Contemplating this homogenized Oriental concept, our VR world consists of reinterpreted video footage from the AAM, which houses artifacts from both the Near and Far East. Through Said's critical lens, A Matter of Orientation re-examines the AAM's current acquisitions while reflecting on the collection's controversial origins [1].

The central query emerges in the museum experiences: can the addition of more information to an exhibition placard truly augment our comprehension of these objects? These statues and artifacts now inhabit an entirely different sociopolitical and geographical landscape; they are alienated from their historical roots and placed within a new cultural environment. In a metaphorical sense, can these objects, once separated from their *cultural context*, retain their *intangible cultural heritage* (Figure 3a)?

In response to these untethered objects is our determination to explore the transformative role of AI in reshaping our understanding of history and memory. Artists like Sasha Stiles [34] and Ivona Tau [29] have articulated the integration of AI into their creative processes as a means to uncover latent meanings. Both are discovering new ways to collaborate with AI. Specifically, Stiles attributes characteristics of a virtual identity named Technelegy to her AI co-writing process to generate new meanings in unexpected language combinations [34]. At the same time, Tau creates otherworldly locales in her photography by training a generative adversarial network (GAN) on her photographic images [4, 17]. We draw upon Stiles' and Tau's methodologies in crafting inclusive forms of storytelling that challenge the prevailing landscape of fractured global narratives.

Biased Storytelling A notable concern surrounding AI pertains to the opaque nature of current AI tools. Scholars like Crawford and Paglen have highlighted the political, cultural, and ethical dimensions that underlie the development of AI systems [6]. Crawford and Paglen emphasize how the in-

(a) Object from the AAM with a video projection of a mountain. Photo by the author.

(b) View of an audience member interacting within the VR installation.

(c) Screenshot of participant's view in the VR environment.

Figure 3: The participant is immersed in an unreal museum space surrounded by generated sculptures. As the participant navigates the VR hallways and landscapes, these objects speak their stories in an AI-generated voice.

tricate processes of collecting, curating, and labeling images for AI training can inadvertently perpetuate biases, reinforce stereotypes, and reflect the values of the dataset creators [6]. Other researchers, such as Dennison and Solaiman, identify the need for cultural context within large language models to address AI racial biases [30]. Similarly, Buolamwini and Timnit scrutinize the limitations of commercial facial recognition systems, particularly concerning gender and race [2]. Each of these scholars identifies the necessary moral reflections in AI systems for detecting and mitigating bias. Still, with the concerted effort of artists and technologists, the pressing need to address ethical concerns is brought to light as an increasingly prominent imperative.

Situated within this discourse, our project probes the affordances, constraints, and inherent inclinations within the multimodal generative outputs of manifold AI systems. For example, Midjourney [16] and other AI technologies face challenges when rendering hands, generating unexpected shapes as they grapple with the intricacies of hand anatomy. These limitations lead to unconventional and sometimes surreal depictions that we leverage in our sculptures as in Figure 1. Utilizing AI, marked by its inherent black box opacity, raises concerns about the technology's application in the creative processes with three key points:

1. Unearthing Hidden Narratives: The integration of text-based AI promises discoveries of latent meanings within fragmented global narratives. Our inquiry explores the potential of AI in creating inclusive storytelling.

2. Post-Human Perspective: It is the prism of neural network algorithms that shapes the reinterpretation of cultural narratives developed under Western influences. Our project employs AI to generate and transmit these narratives, shifting from human storytelling to AI-driven storytelling. Such a perspective expands Said's examination of the East as viewed by the West.

3. Transformative Storytelling: We challenge traditional allegorical structures while underscoring the creative potential and ethical implications of AI in art and philosophy. The use of AI-driven VR and 3D printing transforms generated content, raising complex questions about provenance, ethics, aesthetics, and colonial histories.

In this pursuit, A Matter of Orientation departs from the passive time-based linear storytelling to investigate the edges of Orientalism through a narrative-expansive VR installation (Figure 2). The combination of Oriental objects within a digital world invites an aesthetic seeped in magical-realism of narrative video games, such as *Firewatch* [3], *What Remains Of Edith Finch* [9], or *Dear Esther* [35]. VR participants inhabit the immersive digital world to which these artifacts have been transported, reflecting an Oriental historical presence within the collective memory of neural networks.

Project Realization

Our approach to the generative AI medium builds upon the artistic language of narrative moving images, sculpture, creative coding, and immersive installations, bringing together a collaboration of two artists. We merge new generative workflows between multiple AI systems within an interactive virtual world built using Unreal Engine 5 (UE5) [8]. Facilitated through the VR headset, Meta Quest 2, our standalone room-scale experience collides and amalgamates multiple methodologies spanning visual art, creative writing, and sound (Figures 4, 5, and 6). Our VR world offers an interactive way to holistically experience AI-generated content integrated with a separate digital space, isolating the viewer from their physical reality (Figures 3b and 3c).

Moreover, this VR game provides participants six degrees of freedom to experience and investigate all facets of digital spaces and storylines. This engagement involves walking, dragging, and teleporting through the immersive environment (Figure 3b). The virtual layout of the three completed levels, illustrated in Figure 4, and their interaction design, operate on the principles articulated by Brian Schrank in his writings on game design as an avant-garde medium [26, 27]. In this approach, the game mechanics remain straightforward. For example, participants step in distinct trigger zones to activate environment objects that orient towards the player's location within the game level. These interactions focus on the contextual significance of the AI content within VR.

Informed by the game development methodology, our initial-stage experiments have focused on generating concept art using various text-to-image algorithms, such as Midjourney [16]. Our 3D world consists of game assets constructed

(a) Orientation hallway with a monumental animated talking king bust.

(b) Interior temple-like space with rows of talking sculptures surrounding a pond.

(c) Open-world level with stylized lighting and a video texture wrapped onto the sky.

Figure 4: Three different levels provide the audience with three different contexts to consider the objects and their environment. The first level places audience members in a long narrow blue sandy hallway; the second is in a large stone atrium back-lit by a night sky; and the third final level is set in a multi-colored cosmic sky.

from AI text-to-image visuals where we employ keywords associated with Orientalism to define our scenes, textures, and digital objects. Our experiments employ Hito Steyerl's conceptual framework where AI generates a collective average based on trained human data, embodying a meanspirited ideal [32]. Specifically, we investigate how each AI-generated game asset enhances the features of a "mean image" while amplifying the flaws of the "poor image" [32, 33]. Steyerl's play on words refers to unrealistic human representations while identifying the influential power of these images in the media [33].

Within generative AI, these perfect average "poor images" become mean – or cruel – outputs. Our generated assets lack visual clarity and fidelity, with grotesque figures, as in Figure 1, against backgrounds that confuse cultural references (Figure 8a). When subjected to AI-assisted tools, which rely on algorithms and machine learning, the flaws of such "poor images" are amplified in multiple media, including concept art, sound design, interaction design, 3D modeling, and environment art. To magnify and reveal biases across these media, our experiments probe AI representations of the Oriental in an interactive 3D environment.

Conceptualizing with AI To create the VR environment art and interactive 3D animation elements, we utilize Midjourney for aesthetic and compositional direction. Midjourney has provided concept art for architectural focal points (Figure 7a), lighting design, and texture maps for virtual materials (Figure 8a). VR's expansive and interactive nature allows participants to interact with a vast world using head movement and position tracking. In this way, the features and limitations of VR inform our decisions on translating these images into the 3D world, requiring adaptations to lighting, spacing, scale, and level of detail. These adjustments become apparent when comparing the outputs generated from initial renderings to the final ones (Figures 7a and 7b). For world-building in UE5, we have selected eight of 120 concept images coherent in style and composition (for an example see Figure 7a). Additional visuals are used to inform the spaces lying outside the viewfield of the main generated renderings.

Image Generation To outline the preliminary vision of an Oriental VR realm, we employ text-to-image AI tools. Our first experiments with Stable Diffusion (SD) [22] defy the idea of finding biases within the AI system due to the nuanced prompting style. Moreover, SD's 1.5 model version does not produce images readily convertible into 3D environments or textures. In contrast, the lighting and composition of Midjourney's outputs translate to the VR game development workflow without restrictive prompting. Still, iterative image remixes are necessary to generate new variants with different random seeds to create distinct game levels.

We designate the "Oriental" keyword to define the architecture and aesthetic direction. For example, the prompt "oriental stone old wall covered in old paint and carvings –tile –v 5.1" results in intricate, stone-carved textures adorned with what appears to be East Asian-inspired writing. (Figures 8a and 8b). Unprompted by a specific geographic region, Midjourney has provided a blend of Chinese, Korean, or Japanese characters. Other representations of the Orient, such as the Middle East or mid and Southeast Asia, do not appear as prominently. This suggests specific connections to a particular geographical setting with specific "Oriental" prompts and these outputs play a role in shaping the ultimate aesthetic direction.

Narrative Design To populate an inanimate world of Midjourney-inspired architecture and museum relics, the key sculptures engage the participant with responsive 3D animations while narrating their stories. These monumental figures and statues require a voice, each with a unique personified text, demonstrating their tangible existence in VR. To adhere to the AI "mean image" aesthetic, the narrative voice within the VR environment employs Resemble AI's voice-to-voice technology [20], vocalizing the generated text through our custom voice model. Given that a majority of our AI-generated statues appear male, as in Figures 3c or 4a, we used our male team member to build a "mean" of their voice using Resemble AI.

To generate the text, we allow the AI system to hallucinate on a mixture of our previous writings and Said's *Orientalism*

	C	
	golden column	Cemetary
ism begin?	Orient yourself properly when eating oriental-flavored ramen.	We live in an occ
ds the exotic, eminal.	Chili Peppers	Let us not be blin and only correct
tion is to be in the	Occidental flavor is trapped in a wounded history that is poorly understood.	May my presenc enlightenment i
cidental flavored	Soy Sauce	I am the past, the
	Garlic	
rmative realm, en East and West	The Orient's silence suggests a gaze that is one-sided, like gods without a position in heaven.	Who needs to lis there are Orient

Figure 5: This story card table illustrates the interactive generated text narrated by the sculptures in the level.

Figure 6: Deepfake video of an AAM sculpture as a lip-syncing hologram within the game environment.

book. The text serves as input into Inferkit, an AI-based text generator [12]. This AI tool interprets the input and generates hallucinated text accordingly. We are intrigued to observe the latent meanings that emerge from this approach. Inferkit enables us to remove portions of the text and insert new content at any location. Essentially, Inferkit bridges the latent gaps in our text, injecting it with unexpected ideas. The AI becomes more of a collaborator compared to other AI tools. Afterward, we fine-tune the resulting text to establish the final narrative framework and rhythm suitable for an interactive video game (Figure 5).

Deepfaking It   Pushing the idea of responsive characters narrating our generative story, we use Creative Reality Studio by D-ID [7] to generate deepfake videos. Participants trigger these videos throughout the levels on interactive 2D screens and video textures wrapped on 3D sculptures (Figures 4, 6 and 7b). Derived from AAM artifact photos, these deepfake videos lip-sync the text in response to viewer interactions. Specifically, these videos of inanimate statue characters effectively synchronize with our AI-generated voice.

However, the advanced facial recognition system of Creative Reality Studio struggled to identify more than half of the still images captured of Oriental figures and faces. Out of the available 120 snapshots, only ten have translated into deepfakes. These deepfake animations serve as the narrative backbone of A Matter of Orientation. The non-linear narrative mirrors the tangled histories of the museum objects and, in doing so, expands upon Said's examination of the East reinterpreted through the eyes of AI.

3D Models and Environment   After finalizing the concept art, we utilize Kaedim's proprietary machine learning system to convert the static AAM video stills into dynamic 3D models. These meshes are then integrated into UE5 with other hand-modeled environment assets. We have manually selected and edited 120 stills from our 2017 filming of the AAM collection. However, the system has rejected more than half of the images for being unrecognizable or too complex to be processed. As a result, we have successfully received 50 poor-quality 3D meshes. The non-figure sculptures and full-body statues have been the least successful in processing, resulting in Oriental heads for the majority of meshes.
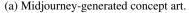
The resulting meshes have been discrepant in their polygon count, consisting of an assemblage of basic geometric shapes, such as spheres, instead of being modeled. To integrate these models and animate them (as in Figure 4a), several technical alterations are required while preserving their shapes (Figure 4c), including severe optimization, new texture mapping, and graphics optimization. The fact that our museum dataset comprises a limited number of female-appearing sculptures underscores the challenges associated with gender classification. Kaedim only successfully generated three female figures and two inanimate objects, highlighting the importance of an unbiased dataset. In the end, we have treated the generated meshes as raw material to sculpt and mold with the guidance of Midjourney compositions (Figures 2 and 4b).

Interaction Design   To engage the participants in our storytelling, we encourage exploration with multiple navigation modes, interactive characters, responsive 3D animations, videos, and speech. This approach responds to a conspicuous constraint of self-imposed limitation on interactivity in numerous VR productions [11, 28]. Specifically, cinematic and narrative experiences unfold as passive journeys propelling the viewers between pre-determined plot points. Unlike traditional cinema and hyper-interactive video games, A Matter of Orientation strikes the middle between these paradigms through a custom navigation system, a wireless VR experience, and multimedia storytelling. Participants activate substories directly in the immersive 3D environment. Our interaction design in VR accommodates the wide field of view, latency limitations, optical flow, graphical realism, and controllability. Due to the newness of standalone VR interaction design, we have iterated three prototypes of level design, scripting, and optimization. For prompt iteration and exchange of artistic solutions to the technical questions, we have collected oral feedback as notes from fellow artists during art residency exchanges and private exhibitions open to ten viewers or less.

Presentation

The artwork experience has culminated in a public exhibition at Ars Electronica. The exhibition consists of a delineated

(a) Midjourney-generated concept art.

(b) Virtual reality scene with a monumental interactive portal.

(c) The 3D printed headset reflects its digital double.

Figure 7: The three realities of Portal Buddha wearing a virtual VR headset orients towards the player wherever they go in this level. The sculptural form was generated using an image-to-3D tool and later retopologized, optimized, and textured for VR use. The 3D-printed sculpture houses the VR headset for charging in between audiences' interactions.

open play area (Figure 8c) and a golden 3D-printed Buddha bust sitting on a pedestal (Figure 7c). The statue wears a decorated Meta Quest 2 headset, inviting users to enter the Buddha's concurrent digital existence. The 3D printed model references the monumental portal statue in one of our VR levels (Figures 7b and 7c). The Buddha figure prominently elevates over a pillared portal, adorned with our image-to-3D generated Oriental sculptures referencing a Midjouney composition (Figure 7).

Importantly, the VR headset operates wirelessly, fully untethered from any computer. This freedom allows participants to physically walk through the expansive 3D world without the constraints of restrictive wires, fusing the participant's experience of tangible and digital realities. Upon entry into the first VR room, viewers encounter a short interactive tutorial that demonstrates all of the navigation modes. After finishing the tutorial, participants take approximately 10-15 minutes to complete the experience.

Discussion

Exploring AI within the framework of Said's Orientalism is not merely a humorous exercise but one with significant real-world implications. As our artistic explorations of multiple generative systems show, the historical forms of colonial violence analyzed by Said still manifest through the capitalist application of AI [10, 21]. Such ethical concerns are not confined to artistic practices but permeate our everyday lives where the consequences of bad and lazy data points have concrete effects.

When the AI-powered exam proctoring tool, Proctorio, fails to recognize non-white faces [18], it reveals the continuing tangible menace of AI operating without protective measures. Despite the warnings about racial biases in AI video recognition systems by researchers [2, 6, 30], companies continue to pursue rapid advancements in AI and ignore such concerns.

The use of AI in A Matter of Orientation depicting these issues shows how multiple generative systems share the same shortcomings. While participants experience the outcomes of our creative experiments with Oriental representations in AI outputs, as creators we have arrived at follow-up questions:

- Is it possible to eliminate the biases existing in AI technology?
- Are these biases inherent to the technology we produce as long as they exist in our human societies?

The ease of incorporating AI tools to generate Oriental imagery and textures, deepfakes, and voice cloning is both remarkable and unsettling. The danger is that anyone who can create attractive media can misuse it. At the same time, these post-human tools expose new ways of collaborating with machines and algorithms in multiple media, such as in narration, dialogue, voice acting, images, and animations. In our role as human creators, we explore both the positive and malicious sides of these tools to construct a societal critique while discovering new expressions of the Orientalism discourse. For instance, when co-writing with Inferkit, the system has unexpectedly introduced the concept of food into our Orientalism discussion. While cuisines do not prominently feature in Said's postcolonial work, it is undeniable that each culture's culinary history is an integral part of its identity. So when ingredients common in Eastern Asia - sesame, green onions, fermented soybean paste - appear in the generated text (Figure 5), a serendipitous yet significant dimension emerges in our narrative.

In contemplating our human-machine collaboration, it is essential to heed Melvin Kranzberg's observation that technology itself is neither inherently good nor bad; it is also not neutral and carries the potential for both beneficial and detrimental consequences [13]. These considerations underscore the importance of ethical and critical engagement with AI and its impact on society.

AI As A Mirrored Blackbox Our collaboration with AI technology also has faced ethical challenges. An unexpected

(a) Midjourney prompt: "oriental stone old wall covered in old paint and carvings –tile –v 5.1"

(b) Screen capture of architecture decorated with Midjourney reliefs repeating throughout the VR environment.

(c) Layout of the exhibition space.

Figure 8: Midjourney-generated textures later translated into a relief using Adobe Substance Painter for making game texture maps. Game texture maps from Midjourney appear throughout the architecture of the VR world. The participant can explore the virtual space by walking through the physical environment.

revelation regarding one of the AI services has surfaced just before the public reveal of our artwork. Unexpectedly, the technology used to translate photos of AAM relics into 3D models, Kaedim, has been lying about their image-to-3D capabilities and, instead, had outsourced the creation of AI-generated 3D models to low-cost human labor [5]. In fact, company employees assert that Kaedim's AI models have been unable to achieve Kaedim's main business service; the company requires a person to create their 3D models.

Using an outsourced inexpensive workforce to cover the shortcomings of AI technology mirrors a previous incident involving OpenAI and Kenyan workers employed for less than $2 an hour [19]. Remarkably, Kaedim's founder, Konstantina Psoma, was recognized in Forbes' "30 under 30" list in the Technology category as late as 2023, raising questions about the criteria for such accolades and the transparency of AI companies [15]. It is imperative for artists, including ourselves, to exercise heightened vigilance when employing these AI tools. These occurrences serve as a compelling reminder that the creative utilization of AI must be accompanied by a steadfast commitment to ethical principles to guarantee the responsible advancement and utilization of AI technologies.

Conclusion

Although A Matter of Orientation has taken strides in employing AI to inspire and develop a VR game, there remains considerable terrain to explore. The relatively recent emergence of many AI technologies, some being only a year or less old, underscores the dynamic nature of this field. Moreover, the continual release of new AI tools, including those introduced during and after the production of A Matter of Orientation, further highlights an evolving digital landscape. Our project serves as a point of departure into the interplay between human creativity and AI, the ethical considerations surrounding AI-generated art, and the implications for the broader artistic community.

During our interactive production, we have created a VR world where generative AI algorithms guide aesthetics and populate the world with multimedia content. There are valuable lessons to be learned and room for improvement. On the one hand, the introduction of the Buddha figure and stories of regional ingredients by AI unexpectedly steered our examination of Orientalism representations in a new direction. On the other hand, services such as Midjourney, Stable Diffusion, and Kaedim failed our intentions. Take Midjourney, for instance—it could not produce 360-degree fully rendered scenes, a limitation that turned out to be beneficial. The unrendered sections necessitated our subjective viewpoints. Still, the post-human collaboration with machine output requires a judicious blend of human mediation to overcome the inherent limitations of AI tools. Another significant challenge is the dependence on proprietary AI platforms when hidden code exploits the inherent opacity of AI to conceal its shortcomings.

In the end, our artwork amalgamates the issues of ethics existing within both technology and society. Our VR experience, A Matter of Orientation, invites the participants to reflect on the critique of Orientalism in the digital age and question whether the inherent biases originate in the AI technology or the societal framework itself.

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Acknowledgments

Authors Biographies

Zhiwan Cheung first performed for the camera as a book reviewer for the 1990s TV show Reading Rainbow. Since then, he has continued to probe the intersection of national identity and the personal psyche through his art. Currently, Zhiwan is pursuing a PhD at the Hong Kong University of Science and Technology (Guangzhou).

Oksana Kryzhanivska is a practicing artist working between Zhuhai, China, and Milwaukee, USA. The artist teaches Creative Technologies at UW-Milwaukee with a scholarly background in the intersection of technology and art. The artist's interactive sculptural works have been exhibited in Canada, the USA, Australia, Germany, Italy, and China.

Pan Hui is a Chair Professor of Computational Media and Arts and Director of the Center for Metaverse and Computational Creativity at the Hong Kong University of Science and Technology (Guangzhou) and a Chair Professor of Emerging Interdisciplinary Areas at the Hong Kong University of Science and Technology.