### FOR IMMEDIATE RELEASE

A exhibition by the Studio for Narrative Spaces explores the human perception of machines using machine learning artistic interventions, currently showing at JCCAC and the Floating Projects Collective until 30 June 2021.





### Supported by:

City University of Hong Kong School of Creative Media The Hong Kong University of Science and Technology Middle East Technical University (Turkey) Floating Projects Jockey Club Creative Arts Centre (JCCAC)





School of Creative Media





ORTA DOĞU TEKNİK ÜNİVERSİTESİ MIDDLE EAST TECHNICAL UNIVERSITY





For more information about STUDIO FOR NARRATIVE SPACES, please contact SONG Zijing: lilliansong1997@

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### I Was of Three Minds 三個自我

### 2021年05月22日 - 2021年06月30日 / Floating Project

"I was of three minds when one bracket tells a thousand items all changes level and composition."

"I Was of Three Minds" is a series of new machine learning artworks and works in progress by RAY LC and STU-DIO FOR NARRATIVE SPACES. The works combine diverse media like projection, sculpture, print, and video, weaving together the perspective of the machine as perceived by the human actor. Indeed the "three minds" phrase was generated by a machine-learning natural language model, inventing words in its own, yet reflecting the human concerns put into the model. The works also narrate the way machines see us, and in turn the way we perceive such machine perceptions in the current technological context. Taking the perspectives of humanmachine interaction, new media, and narrative design, this exhibition explores the way humans and machines interpret each other in narrative environments. It depicts the way we perceive machine creativity and interaction, as well as the pitfalls we fall into when we succumb to the metaphor of the mind of the machine.

#### "我有三思,從千件物品級別組成變化於籃子所告。"

《三個自我》展示了一系列由RAY LC和STUDIO FOR NARRATIVE SPACES於近期創作的機器學習藝術作品或 正在創作的作品。這些作品結合了不同的媒體,如投影、雕塑、印刷品和視頻,將人類行為者所感知的機器 的視角編織在一起。事實上,"三個自我"這句話是由機器學習的自然語言模型產生的,它自己發明了一些 詞語,同時也反映了人類對模型的關註。這些作品還反映了機器看待我們的方式,以及我們在當前的技術 背景下對這種機器感知的不同視角。。從人機互動、新媒體和敘事設計的角度出發,本展覽探討了人類和機 器在敘事環境中互相詮釋的方式。它描繪了我們感知機器創造力和互動的方式,以及當我們屈服於機器 思維時所陷入的陷阱。

<u>Artist / 參展藝術家:</u> RAY LC STUDIO FOR NARRATIVE SPACES

<u>Exhibition Information/展覽信息:</u> Date 展期: MAY 22 - JUN 30, 2021 Venue 地點: Floating Projects, L3-06D, Jockey Club Creative Arts Centre (JCCAC), 30 Pak Tin St, Shek Kip Mei, Kowloon 據點, 九龍石硤尾白田街30號, 賽馬會創意藝術中心(JCCAC), L3-06D Cooperating Organization 協作機構: Floating Project 據點

Website 網站: recfro.github.io/threeminds/

### <u>Artwork Statement /</u> 作品簡介:



#### CATCH AND RELEASE

2021 Video, dimension variable; physical TVs.

The way we imagine machines see us is imbued with our own biased perceptions and expectations, and nothing like the way machines actually see us. In this work, I use the medium of dance to show how machines can digest the dynamic forms of human bodies in different genres of musicdriven movement. As we marvel at the patterns detected by computer vision, free of the human way of looking, we begin to understand how to see the world the way machines do. It isn't until the end of the dance when we can reunite with our comfortable human visions, but by then the dance is finished, and we wondered what the dancing experience really was like, if we didn't have to limit ourselves to the lens of the machine. Machine vision can only catch the fleeting forms of the human, and release them when they are no longer detected. They can see the dynamic patterns, but they can't see the reality behind the abstractions. Perhaps mere abstractions are enough?

Catch and Release uses the Yolo algorithm to computationally detect human movements in four dance performances shown on four CRTTV's: Cuban Rueda, Swing, Bollywood, and Salsa. For more info, see our exhibition info: <u>LC (2021)</u>.

#### HOME ALONE

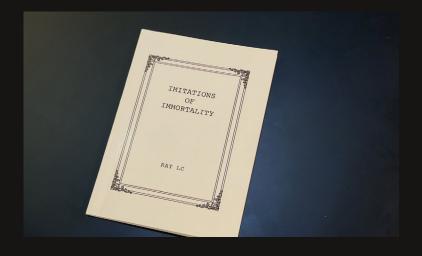


2021 Projection, mapped to wooden frame 1.5x1.5m.

For communities of folks of Hong Kong, home serves as a different space full of their individual stories. It can be a luxurious interior for social connection, or a crammed space for a quarantine, or a work place for both caretakers and work-from-homers. The diverse spectra of lives in Hong Kong can be experienced as their narratives in the place they spend the most time of their lives in, their homes. Home Alone is a narrative landscape of the interior spaces of Hong Kong, from crammed spaces of domestic workers to high rise mansions of urban yuppies. It evolves from the serene bedroom scene to the stuffy bathroom to the window-filled high rise to the compact guestroom for its domestic worker populace to eventually the abandoned houses of Yim Tin Tsai, where we find ourselves finally left alone only with their previous narratives in the form of broken bottles, ragged dolls, and ancestral photos. Finally, we are home alone in Hong Kong.

Home Alone is a StyleGANS machine-learning-based traversal of latent spaces of the interiors of Hong Kong homes, with the objects and features of the room serving as narrative devices. For more info, see our exhibition info: <u>LC, Zhang (2021)</u>.

#### **IMITATIONS OF IMMORTALITY**



2020 Book, A6 size.

Imitations of Immortality are two sets of variations in deep structure of classic poems of diverse forms and themes, written by RAY LC and by GPT-2, a machine-learning text generation model. The human-written works draws inspiration from events in the author's own life, but written as variations on not only the meter and rhyme scheme and diction of each classic work, but deep variation on its semantics and purpose. What is the extent of machine capabilities in writing deep emotional and purposive variations as humans do? I trained GTP-2 on each of the 8 works, and fine-tuned each poem with my own variation to teach it to create variations by learning to variate.

Imitations of Immortality is a book and also lives on the web. For more info, see our online exhibition: <u>LC (2020)</u>, and the accompanying paper: <u>LC (2021)</u>.

#### **ARTISTIC INTELLIGENCE - ANALYST**



2018 Sculpture; plaster, silicone, LED controller; 35x25x25cm.

Currently, Machine Learning (ML) is employed to extend human capabilities to realms where extensive data access provide opportunities for associations previously unexploited by human artists. These examples take the human point of view first and merely expand their abilities, include generating novel musical combinations based on a palette of tones and analyzing image content to pick out image transformations styles. While these applications rely on ML as a data mining agent over unexplored domains, they fail to exceed the limit of human expectations of what they do. A different approach is to make ML agents part of a human ecosystem of creative works, exploiting our assumptions about what machines that have humanoid behaviors can or should do. Here, we use Artificial Intelligence (AI) in unexpected ways in everything we interact with, building objects that don't follow rules we expect. Applying ML to unexpected forms of interactions subverts what we think machines are capable of, creating situations where AI goes beyond human expectation of what machine intelligence should mean to us, making them oddly, Artistically Intelligent.

For more info, see the paper published at Art Machines: International Symposium on Computational Media Art, "Artistic Intelligence": <u>LC (2018)</u>.

#### FLORA



2018 Installation, dimension variable; video projection, physical TVs, interactive analog controller, decoration.

We are here to watch. We are going to. We live in a world inundated by technology, but even the newest technology comes about by evolution from previous forms. Just as the rain forest covered our world, providing a canopy for the development of species connected to each other in an environment, the television and screen-based interfaces today is the canopy for a network that connect humans together in a social network. Can the forest and the internet of things be part of the same evolutionary track? Where we are before is part of where we are now, which is the how we can begin to understand our future.

FLORA is a video projection connected to physical TVs using an analog controller that narrates the evolution of digital technology as a process of mapping ourselves onto devices. For more info, see our exhibition info: <u>Crouse, LC (2018)</u>.

#### <u>DRIZZLE</u>



2021 Manga, 2 pieces (newspaper, A4 size, 12 pages; print, dimension variable).

Misinformation and rhetoric in current public discourse make climate change denial a difficult viewpoint to argue against by policy and scientific arguments alone. The public is more persuaded by personal stories of influence rather than sound logic. Instead of traditional arguments, we created covert visual narratives that communicate the values espoused by climate action without framing it as an argument for climate action. Such implicit influences are designed for particular goals of climate action, such as individual responsibility, long-term vision, and collective conservation strategies, utilizing design fiction to narratively engage even antagonistic viewpoints like climate change denial. The comic tabloid Drizzle seeks to engage audiences visually with personal virtues that align with climate action without policy-based, overt arguments.

For more info, see our paper "Designing for Narrative Influence: Speculative Storytelling for Social Good in Times of Public Health and Climate Crises" published in CHI'21: <u>LC, Mizuno (2021)</u>, and "DRIZZLE: a comic for covert climate action influence" at IASDR: <u>Song, Sun & LC (2021)</u>.

#### SOUND OF(F)



2021 VR interactive work, dimension variable.

Complex datasets like sound collections and musical performances are difficult to experience intuitively. Machine Learning provides a way to computationally cluster large audio collections, but context-dependent forms of interaction are required to allow audiences to grasp the dimensions of the complexity. We applied the t-SNE algorithm to collections of subway street music in New York, as well as to a live performance of Gershwin's Rhapsody in Blue, to explore the way interactions in immersive space can be used to explore complex and large audio collections. We found that 2D and 3D interactions, as well as headspace vs. controller interactions can differentially affect the experience of different sound spaces by prototyping these interactions in VR using data processed through t-SNE. This provides a method for experiencing the sounds of a city or environment via intuitive navigation, and nonlinear exploration of a work of music using joystick manipulations in VR.

For more info, see the paper submitted to Audiomostly Sound Interaction Conference, "SOUND OF(F): Exploring contextual representations of sound and music data sets using machine learning": <u>Erol, Ozgunay & LC (2021)</u>.

### Description of artist and studio @ cityu / 藝術家信息:

RAY LC: is a human working to build bonds between communities and among machines. His practice creates interactions and environments from perspectives of human-machine interaction, new media, and collaborative narratives. He holds a PHD in neuroscience from UCLA and an MFA in design and technology from Parsons School of Design. He is currently creating artistic interventions that illustrate the implicit influences that spatial design has on our perception and behavior. RAY's notable residencies include BankArt, New York Hall of Science, Saari Residence, Elektron Tallinn. RAY's notable exhibitions include Kiyoshi Saito Museum, Elektra Montreal, ArtLab Lahore, Ars Electronica Linz, NeON Digital Arts Festival, New Museum, CICA Museum, NY Short Documentary Film Festival, NeurIPS.

#### Website: raylc.org/

STUDIO FOR NARRATIVE SPACES: is a collective of creative practitioners at City University of Hong Kong School of Creative Media who work with neuroscientists, roboticists, performers, designers, architects to tell immersive stories and grasp how human behaviors are shaped by environmental storytelling. Members included in this exhibition: RAY LC, Eray Ozgunay, Zeynep Erol, ZHANG Jingwei, SUN Yating, SONG Zijing. Other members: XU Hongshen, LIN Luoying, ZHOU Suifang.

#### Website: recfro.github.io/

Ins: www.instagram.com/studiofornarrativespaces/

Т Н R A E E M N S

# RAY LC STUDIO FOR NARRATIVE SPACES

MAY 22 - JUN 30, 2021, 2 PM - 8 PM

L3-06D, JOCKEY CLUB CREATIVE ARTS CENTRE (JCCAC), 30 PAK TIN ST, SHEK KIP MEI, KOWLOON 九龍石硤尾白田街30號 賽馬會創意藝術中心(JCCAC), L3-06D Floating Projects