SCM | ACIM RESEARCH

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School of Creative Media
香港城市大學
City University of Hong Kong

Centre for Applied Computing and Interactive Media
香港城市大學
City University of Hong Kong

Raven
Stainless steel, brass, aluminum, mechanical parts
By Joseph Chan

Reconfiguring The Cave / Da Vinci (1997/2001/2019)
Interactive Computer Graphic Virtual Reality Installation, two-channel Stereoscopic Projection
By Jeffrey Shaw

Melted Proportions
3D printed Polymer (SLA)
By Tobias Klein

03

Sustainable Cinema No. 3: Praxinoscope Windmill
Kinetic Sculpture (steel, plexiglass, electric motor)

Sustainable Cinema No. 6:
Lenticular Waterwheels (Right)
Kinetic Sculpture
(steel, plexiglass, electric motor, electric LED)

Both by Scott Hessels

DEAN'S NOTES: LEONARDO AT CITYU

The School of Creative Media was delighted to participate in *Leonardo Da Vinci: Art & Science, Then & Now* which took place at the Indra and Harry Banga Gallery at CityU from September to December 2019. The show, curated by Dr. Isabelle Frank with Alberto Rocca from the Ambrosiana, Milan, was an opportunity to view the remarkable scientific and technological drawings of the Renaissance master which were shown for the very first time in Hong Kong.

Leonardo's work was staged in an atmospheric mise-en-scene that was conceived by exhibition designer Frederic Beauclair, in collaboration with Associate Curator, Nicolas Patrzynski, who supplied imaginative digital visualizations and audio accompaniment. The designers succeeded in cultivating the sense of mystery and discovery which the works themselves evoke in the engaged visitor. As Frank says, "These drawings reveal the breadth of Leonardo's insatiable curiosity, ranging from the anatomy of an eye, Euclidean geometry, to the flying machines, and military machines." Interactive wall panels written by Frank supplied detailed background for the individual works on display and the exhibition was accompanied by her comprehensive and carefully annotated catalogue published by CityU Press and lavishly designed by Nicolas Patrzynski.

In collaboration with Frank, SCM's Jeffrey Shaw extended the exhibition with new creative works by SCM faculty, revitalizing Leonardo's vision in the present through the medium of new technologies, including augmented reality, virtual reality, 3D printing, robotics and machine learning. For Shaw, the Leonardo exhibition was "an opportunity to demonstrate how the School of Creative Media is fulfilling Leonardo's brilliant legacy of amalgamating art, science and technology."

Tobias Klein is a digital craftsman who reconceives the history of craftsmanship in decorative arts through 3D printing technologies. In *Melted Proportions*, he drew inspiration from Leonardo's collaborator, Luca Pacioli, to create a work that progressively deformed a complex geometric shape into the irrational geometry of unstructured forms. 3D printing also partly inspired Lam Miu Ling's *Impression Machine*. Lam Miu Ling, a computer scientist, carefully synchronized the movements of a robotic camera to a display consisting of the contour shapes of solid geometric objects drawn from Leonardo's canon. The robotic camera, on open exposure, photographed the slowly changing contour shapes or slices of the objects and created a 3D representation of Leonardo's objects in light.

In *Codex Folio 307*, Hector Rodriguez, a software artist, and Felipe Cucker, a mathematician, created structured transformations of geometric forms by training a machine learning algorithm upon Leonardo's mathematical pattern to create an image series of remarkable beauty and complexity. Chris Sandor also used machine learning techniques in *Leonardo da Vinci's Dreams*. Here a generative adversarial network was trained on the 1119 images of Leonardo's Codex Altanticus in order to imagine what kind of notebook illustrations a machine learning algorithm might create.

Older technologies were also on display. Joseph Chan, an SCM alumnus, invites us to appreciate anew the intricate choreography and beauty of engineered moving parts. For this show he created *Raven*, a wonderfully intricate clockwork mechanism of a bird in flight. Engineering is also central to Scott Hessel's *Sustainable Cinema* series which recreates moving image devices using the power of nature alone. Two works were exhibited, the water-powered *Lenticular Waterwheel* consisting of rotating cylinders whose movement generates a 5-frame lenticular animation, and *Praxinoscope Windmill*, originally driven by wind energy. The simplest of old technologies was supplied by Alavro Cassinelli, a polymath inventor. Like Leonardo, Cassinelli is an expert draftsman and obsessive ideas man. The visitor to this exhibition was privileged to see his creative mind at work in hundreds of his own notebook pages.

Shaw himself contributed two works. The first, *reconfiguring the CAVE: da Vinci*, consisted of a virtual cave, whose wall and floor is projected with different 3D environments or virtual worlds. At the center of the cave, Leonardo's *Vitruvean Man* was realized as a virtual puppet whose movements, manipulated by the visitor, served to reconfigure the 3D worlds. Leonardo thought that the human body was modelled on the workings of the cosmos; here, Shaw re-imaged the *Vitruvean Man*, and by extension, the participant, as interactively aligned with the cosmos. The second, *LDV.VOTR.AR*, designed with Sarah Kenderdine, was a digital recreation of the interior of the cave located behind the figurative group that forms the centre of Leonardo's painting *The Virgin and the Rocks*. In this fitting conclusion to the show, Shaw invited spectators to forget about Leonardo, the artistic genius, and playfully re-discover themselves inside one of his paintings. There they were free to wander within a microcosm of tactile rock surfaces, luxurious imaginary plants and extraordinary vistas of the blue beyond.

Those who would like to see more of Shaw's artwork have an opportunity to do so at the Osage Gallery, Hong Kong where his retrospective exhibition is on display until February 2020.

ON THE COVER:
Impression Machine
Digital Camera, Robotic Manipulator, Flat Panel Display, Projector, Computer
By Lam Miu Ling

Dr. Alvaro Cassinelli (Left) and Dr. Christian Sandor (Right)

EXTENDED REALITY LAB

The XRL (eXtended Reality Lab) is a new research lab at SCM co-directed by Alvaro Cassinelli and Christian Sandor. Launched in June 2019, it is a maker-space for media artists, scientists, designers and inventors interested in producing original work in the fields of Augmented Reality (including its fundamental technologies: computer vision, optics, computer graphics, and human-computer interaction) and Augmented Materiality (physical computing, smart materials, digital fabrication, swarming robotics, and the internet of things).

Alvaro says, "I like to mix Science and Art and create new things. We were both living and working in Japan before though never met there. We met in 2012 in Germany at an event to which we were both invited. We have common interests but we do different research and this collaboration has been very interesting. We are looking for PhD students to join our team."

The research objectives of the lab are to create an interdisciplinary group at SCM bringing together media-art practitioners, scientists and technologists (primary in the fields of AR, VR, HCI); to produce new technology and interfaces for enhancing human expression, communication and learning, all relying on scientific results gathered from the fields of HCI, Cognitive Sciences, Ergonomics, Interaction design as well as Physics first principles; to identify the potential and place of these new technologies and tools in the range of emerging new media technologies; to generate academic output but also real-world products, demos and media-art installations; and to organize conferences on these topics and invite researchers, designers and artists for short- and long-term residences in the centre.

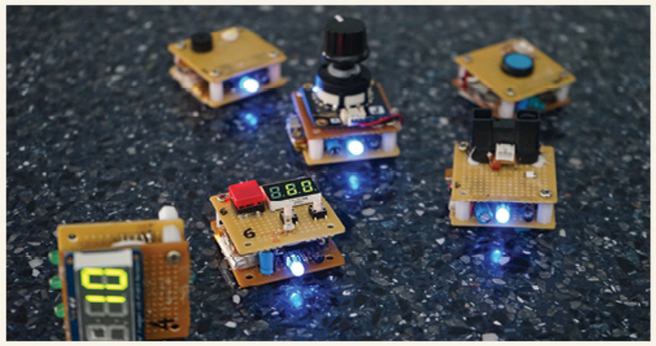
Christian says, "I was doing research on engineering and art as a hobby. I have done some interactive visuals at music events using computer graphics. Now, since coming here, I am exploring art even more. Some people focus on art and they don't want to do research and the others focus on research and don't want to do art. It is a few who are hybrid. We are here to strengthen this direction."

Alvaro Cassinelli is a researcher, inventor and media artist. From 2001 to 2015 he worked at the Ishikawa-Watanabe Laboratory at the University of Tokyo, where he co-founded and lead the Meta-Perception group. He is also a co-founder and organizer of the "Devices that Alter Perception" international workshop (from 2008-2011), and the first "Taller de Arte y Computación Física" in Uruguay (2008). He has served as a Research Fellow at the University of Tokyo, and in Uruguay he is a certified SNI Researcher and Director of R&D at SinergiaTech, the first FABLAB and private Physical Computing Academy. He has been a Visiting Professor at KAIST (Korean Advanced Institute of Science and Technology), NAIST (Nara Advanced Institute of Technology, Japan), ESPCI and Langevin Institute (Paris), and CEIBAL (OLPC Uruguay & IT R&D center). He maintains ties with the corporate world as a consultant and collaborator, as well as with start-ups including EXVISION (a spin-off company from his former laboratory).

Alvaro's research interests span physics, fundamental aspects of computing, high-speed/slow-speed robotics/nanorobotics, augmented and virtual reality, cognitive sciences, artificial intelligence, wearables, augmented perception, prosthetics/rehabilitation, and, in general, human-machine interfaces using novel principles and custom technology – areas in which he holds five patents and one trademark. Independently experimenting in the field of Media Arts, he has won numerous prizes, including the Panasonic Prize (2005), an Honorary Mention at Ars Electronica (2006), the Grand Prize [Art Division] at the 9th Japan Media Art Festival (2006), the Excellence Prize (Entertainment Division) at the 13th Japan Media Art Festival (2009), the NISSAN Innovative Concept Award (2010), the Jury Grand Prize at Laval Virtual (2011), and the Digital Content EXPO Prize at SIGGRAPH Emerging Technologies (2016).

Christian Sandor has served as an Associate Professor at Nara Institute of Science and Technology (NAIST), where he co-directed the Interactive Media Design Lab. Before joining NAIST, he directed the Magic Vision Lab. He has worked with leading research groups at Columbia University (New York, USA), Canon's Leading-Edge Technology Research Headquarters (Tokyo, Japan), Graz University of Technology (Austria), University of Stuttgart (Germany), and Tohoku University (Japan). Since 2000, his foremost research interest is Augmented Reality, and together with his students, he won awards at the premier Augmented Reality conference, The International Symposium on Mixed and Augmented Reality (IEEE ISMAR): best demo (2011, 2016) and best poster honourable mention (2012, 2013). In 2012, Magic Vision Lab was the first, and still the only Australian lab to be awarded in Samsung's Global Research Outreach Program. In 2014, he received a Google Faculty Award for creating an Augmented Reality X-Ray system for Google Glass. He serves as an editorial board member for *Computers & Graphics (Elsevier)* and *IEEE Computer Graphics & Applications*, and as a steering committee member for *ACM Symposium on Spatial User Interaction* and *IEEE ISMAR*. He has been program chair for numerous conferences, including *IEEE ISMAR* and *SIGGRAPH Asia Symposium On Mobile Graphics And Interactive Applications*.

Augmented Reality enables Users to experience Computer Graphics interacting with their Bodies



A. Cassinelli and D. Saakes Data Flow, Spatial Physical Computing, TEI'17, International Conference on Tangible, Embedded, and Embodied Interaction (2017)

A Situated Augmented Reality Ghost Story

LEUNG CHI WO: FROM PHOTOGRAPHY TO INSTALLATION ART

Leung Chi Wo, who is commonly known among colleagues and friends as Warren, is a mixed media visual artist and co-founder of Para/Site Art Space who identifies as a Hong Kong artist. "I was born in Hong Kong," he says, "so it is a very common subject in my work." Warren exhibited in the Hong Kong pavilion at the Venice Biennale in 2001 and since then his work has been shown widely at prestigious venues such as Queens Museum of Art in New York, Museu da Imagem e do Som in São Paulo, the Tate Modern in London, the Museum of Contemporary Art in Shanghai, and at biennales in Venice, Shanghai, Busan and Gwangju.

He has staged over 30 solo exhibitions since 1998 and in 2015, he had his first survey exhibition at OCT Contemporary Art Terminal in Shenzhen. He often takes part in group exhibitions and in 2019 alone he has participated in exhibitions at Para/Site and Oi!, Hong Kong, and the Aichi Triennale, Nagoya. Among his many collaborative projects include seminal works with Sara Wong such as *City Cookie* (1999-) and *Museum of the Lost* (2013-). His recent awards include being finalist for the APB Signature Art Prize, Singapore Art Museum, 2018; finalist for The WYNG Masters Award, 2016; and a Jury Selection, 19th Japan Media Arts Festival, 2015.

Warren's art responds to the social environment and context in which it is embedded. Ranging from photography and video to text, performance and installation, his work explores the relationship between our perception of space and our ideas of place within the context of our lived social experience. His approach to creativity always involves research into different contexts and situations. He is interested in the hidden relationships that emerge between various subjects when the works are staged and seen. Warren says, "My artistic agenda is to see how the audience approaches or reacts to my work. I'm very concerned with the context in which my work will be viewed."

Given the importance of context for Leung's work, his practice has developed through stints as a visiting artist at the Institut Kunst of Hochschule Luzern and Ecole Cantonale d'Art du Valais in Switzerland; Monash University, Melbourne and Australian National University, and by artist-in-residence programmes in New York, Sierre, Vienna, Alberta, Sapporo and several venues in Australia.

He began teaching at SCM in 2010 and he is currently director of the MFA program. He teaches courses in photography and installation such as "Sight and Space Installation Workshop," "MFA Studio," and "Image and Object." Of his teaching Leung says, "it is very closely related to my practice. I have always been working with photography but in my work I try to go beyond the surface of the image both in the way that I think about photography and the way I stage it. This is what I teach to my students."

In 2019 he published a book entitled *Stories of Hong Kong Artists—Interview Manuscripts from 1998*. This consists of 26 Artist's interviews and is a prequel to Leung's video installation, *Untitled, which is* about fragments of local art history. He said, "It's not only about the featured artists, but also my own reflection back then as a young artist who was searching for the meaning of being an artist. It's only published 20 years later because I am interested to see how people's fading memory could respond." *Tsunan Museum of the Lost*, co-authored with Sara Wong, was also published in 2019. This artist's book is an exhibition on paper that explores alternative approaches to reading photographs.

Frater
Sewing machine, black & white negative film,
1967 Hong Kong fifty-cent coins, low speed-motor and steel frame
55 x 65 x 146.5 cm (2015)

Warren's latest project "Scratching on the Surface," an artistic response to French scientist Jacques Benveniste's controversial theory of water's ability to remember, is an installation with 2-channel video projection, mechanical parts, a wooden structure and water. Scenes of water, captured in various locations in Hong Kong and Thailand, are projected on a large screen is in front of which is a pool of water. A fragmentary narrative interweaves the stories of three totally unrelated individuals—the artist, a young boy who perished in the sea and a Canadian blogger who narrowly escaped from a natural disaster. A branch hanging from the ceiling gently disturbs the surface of the water in the gallery. Ripples of water suggest the fluidity of memory and the passing of time creating a contemplative, meditative aesthetic experience.

Warren is currently researching on violence in Hong Kong. "This consists of a lot of archival digging. I look for violent incidents such as riots, murder and sexual assault and then I go to the exact location 50 years later on the same day and photograph the sky. I'm working with memory and representation and the sky is a metaphor. I also look for any celebrations that have happened on that day to bring out the paradoxical nature of life" he explains. His aim is to finish this project in 2020.

Dancing Man Wearing Wooden Clogs
From the "He was lost yesterday and we found him today" series, in collaboration with Sara Wong
Chromogenic print
100 x 150cm (2014)

Scratching On The Surface
2-channel video projection, mechanical parts, wooden structure and water
Dimensions variable (2019)

RICHARD ALLEN: THINKING ABOUT FILM

Richard joined SCM as Dean four years ago, having previously served as Chair of the Department of Cinema Studies in the Tisch School of Art, New York University, where he had also been a Professor for many years. He has long been fascinated with the medium of cinema as a popular art form: "I ran the film society when I was an undergraduate at Oxford University," he says, "and when I graduated I decided to pursue the formal, academic study of cinema, which was then a very young field, by travelling to the United states and pursuing my PhD at UCLA."

In his early career, Allen focussed mainly upon the intersection between philosophy and film and was the first to introduce the philosophy of Wittgenstein to film studies. His first book, *Projecting Illusion*, tried to explain the compelling power of movies through an illusion theory of representation. Soon after he edited two anthologies of essays on the philosophy of film and art: *Film Theory and Philosophy* (with Murray Smith) was the first published anthology on analytic philosophy and film; and *Wittgenstein, Theory and the Arts* (with Malcolm Turvey) defended the irreducibility of humanistic understanding to scientific explanation. This is a topic which his current position as Dean of the School of Creative Media has caused him to return to with a new appreciation of its importance.

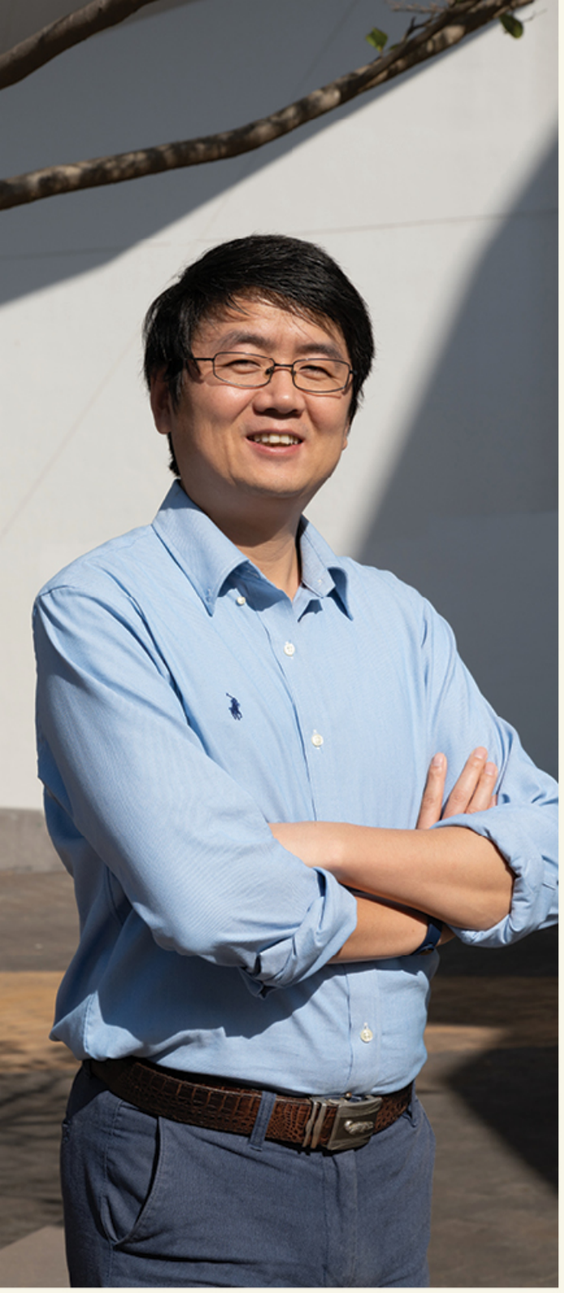
Subsequently, Allen developed his life-long interest in the films of Alfred Hitchcock by organizing and hosting a conference entitled "Hitchcock Centennial Celebration" at NYU in 1999, which featured both Hitchcock scholars and collaborators. He then embarked on a series of essays on Hitchcock that evolved into a major book, *Hitchcock's Romantic Irony*, and three anthologies, partly drawn from the *Hitchcock Annual* that he co-edited with Sid Gottlieb for 15 years. *Hitchcock's Romantic Irony* is a book that has been widely cited. It "seeks to explain why it is that critics have seen Hitchcock's work in so many contradictory ways, such artist vs. entertainer or conformist vs. social critic, and why it is that his work continues to exert such a compelling fascination and influence," he says.

15 years ago Allen was invited to a conference in Delhi, where he spoke about Hitchcock. He returned with a stack of Bollywood films and these changed the way he thought about cinema. He co-organized a conference in New York called the "Social and Material Life of Indian Cinema" in 2006, and he has since written extensively on the topic including a co-authored book (with Ira Bhaskar) called *Islamicate Cultures of Bombay Cinema*. "Before the great divide between Hindi and Urdu languages, Hindu and Muslim cultures in India were syncretic. We felt it especially important in the current climate of intolerance to demonstrate the profound and continuing significance of the Islamicate tradition in Indian cinema," he says. Next year he will publish with Bhaskar a follow-up anthology: *Bollywood's Islamicate Forms*.

Allen is currently finishing a book called *Bollywood Poetics*. "It has taken me far too long to write," he confesses, "but fortunately, this year, CityU kindly granted me a sabbatical to work on it." "Bollywood films," he says "demonstrate some of the basic devices of story-telling, such as the trope of mistaken identity, and obviously song and dance plays a central role." In the relative absence of clearly defined genres in Bollywood, each chapter delineates distinctive story-telling idioms and tropes: the reincarnation romance, stories of the double, comedies of error, the mistaken suitor or husband, stories of *parda* (or veiling) which create mistaken identity, and sexual masquerades where genders or sexes are confused.

Allen's newest research, funded by a GRF, is an interdisciplinarity project that he is undertaking with his wife, art historian and director of CityU Exhibition Gallery, Isabelle Frank. This project seeks to understand and re-evaluate the origins and history of melodrama. "For too long," he says "literature and film scholars have assumed that melodrama is a secular idiom that begins after the French Revolution." On the contrary, he asserts, "melodrama begins with the extraordinary transformation that occurred in medieval Christianity. It is the Christianity of Pathos, which centred upon Christ, a suffering human being, and was expressed through the regime of medieval painting and drama, which constituted the idiom of melodrama in its consequent form."

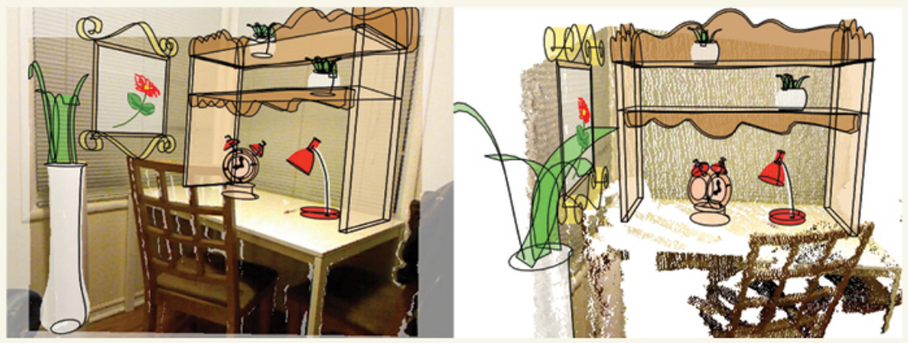
When asked whether he still writes on Hitchcock, Allen says that just as the narrator of Hitchcock's *Rebecca* must always return to Manderley, he will always be compelled to return to Hitchcock. He has written on Hitchcock and Hindi cinema, because Hitchcock's influence always crops up there, and his most recent essay is on "Hitchcock, Melodrama, and the Christian Imagination." "Hitchcock," he points out, "was a Catholic director and his films, like *Under Capricorn* (1949), show a profound understanding of the relationship between the Christian imagination and melodrama."



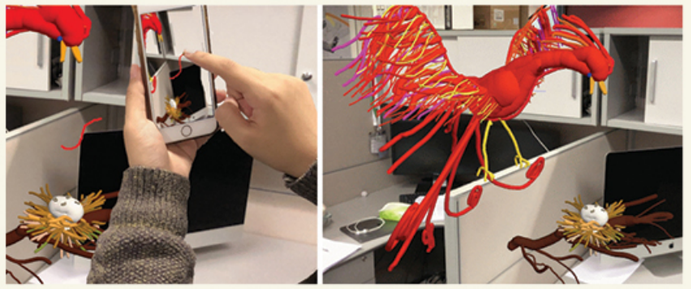
HONGBO FU: 2D/3D CONTENT TOOLS FOR NON-PROFESSIONAL USERS

We must first congratulate Dr. Hongbo Fu for his promotion to full Professor in July 2019. Hongbo also currently serves as an Associate Dean of Research, Postgraduate programmes and Administration. With a Ph.D. in Computer Science from *Hong Kong Univ. of Science & Technology* he has excelled in his research field which lies at the intersection of computer graphics and human computer interaction (HCI), and he is one of the very few researchers who have been actively working in both fields. Hongbo's father was an active artist who made large-scale wooden and stone Buddhas for temples. So it is not such a stretch to see why his scientist son would seek to perfect the creation of 3D forms in computer graphics and design, and develop methods and systems to make 2D/3D content creation tools more intelligent and easier to use.

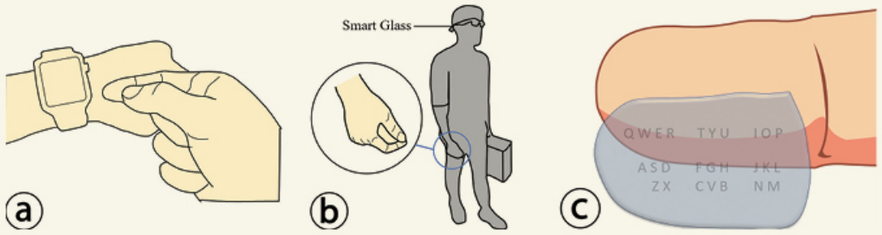
"I have been interested in designing and developing creativity support tools for novice users. I am the first to study the problem of automatically recovering a plausible drawing order for a given static line drawing, and to demonstrate its application to video scribing and whiteboard animation," he says. He is also part of a team that presented and patented a new image-guided drawing interface called *EZ-Sketching*, which uses a tracing paradigm and automatically corrects sketch lines roughly traced over an image by analyzing and utilizing the image features being traced. Observing many videos with rich motion information, they have presented *Live Sketch*, a new video-driven interface to assist non-professional users in animating a single sketch through the expressive dynamic deformation of one or multiple video examples.



SweepCanvas presented at UIST 2017 is a sketch-based interactive tool for rapid exploratory 3D modeling on top of an RGBD image of a real world scene



Mobi3DSketch presented at CHI 2019 is the first system allowing the creation of complicated 3D sketches using a single AR-enabled mobile device



TipText, which is a new text entry technique using micro thumb-tip gestures, won the Best Paper Award at UIST 2019

Another active research topic is sketch understanding, with the financial support of a General Research Fund (GRF) project "*Data-driven 3D Interpretation of Freehand Drawings.*" His team has presented, for the first time, a data-driven approach for the semantic segmentation and labelling of freehand sketches at SIGGRAPH Asia 2014, which shows its application to sketch-based assembly of 3D parts. "We are interested in applying deep learning technologies to semantic understanding of freehand sketches" he says. "We have revisited semantic sketch segmentation and labelling using a deep learning approach, and devised a novel deep learning-based approach for turning freehand sketches to corresponding high-quality normal maps, which are important intermediates for representing complex 3D shapes," he adds.

Hongbo's recent interest is in making novel 3D authoring tools for mobile Augmented Reality. With his collaborators, he has developed *SweepCanvas*, a sketch-based interactive tool for rapid exploratory 3D modelling on top of an RGBD image of a real world scene. His latest work, *Mobi3DSketch*, enables the creation of complicated 3D sketches using a single AR-enabled mobile device and he has applied for a patent. With the support of another GRF grant: "*A Part Assembly Framework for Recovering 3D Geometry and Structure of Everyday Objects,*" Hongbo has developed a part assembly approach for automatically recovering high-quality structures from low-quality data acquired by consumer-level scanning devices, a new support-induced part-level structural representation, a new tool for structure-adaptive editing of man-made objects, and a novel pose-inspired shape synthesis approach.

Hongbo's current research is supported by two ongoing GRF grants: "*Data-driven Structure-adaptive Editing of Man-made Objects*" and "*Towards Bridging the Gap Between Freehand Sketches and 3D Models,*" as well as an ongoing SRG project entitled, "*Human-Centric 3D Shape Design and Synthesis*." The research findings from these projects have been presented as a keynote at *Computer Graphics Workshop 2016*, Taiwan, and at several universities including The University of Hong Kong, National Tsing Hua University in Taiwan, and University of Science and Technology of China.

Hongbo said, "I have also started to put more of my research efforts on pure HCI topics. This has been driven by not only my own interests but also the interests of the undergraduate and postgraduate students at our school under my supervision." They have developed the *BezelCursor,* a novel one-handed thumb interaction technique for target acquisition on mobile touch screens of various sizes, and *FingerT9*, which enables text entry by using one-handed thumb-to-finger gestures.

Hongbo has received many awards, including the Best Paper award at UIST 2019, New Orleans, USA; the Best Demo Honorable Mention, Symposium on Mobile Graphics and Interactive Applications, SIGGRAPH Asia 2016, Macao, China; the President's Award in 2016 at CityU; and Best Paper, CAD/Graphics 2015, Xi'an, China. With his research team he has earned a patent for "Group-Aware Command-Based Arrangement of Graphic Elements" as well as for "Facilitation of Error Tolerant Image Tracing Optimization."

Hongbo plans on exploring the combination of language-based and sketch-based interfaces for various applications. He is also interested in continuing to develop novel 3D authoring tools on mobile AR platforms. He is on sabbatical leave this semester and is visiting Tsinghua University as a Visiting Professor.

NEW FACULTY AT SCM
YUK HUI

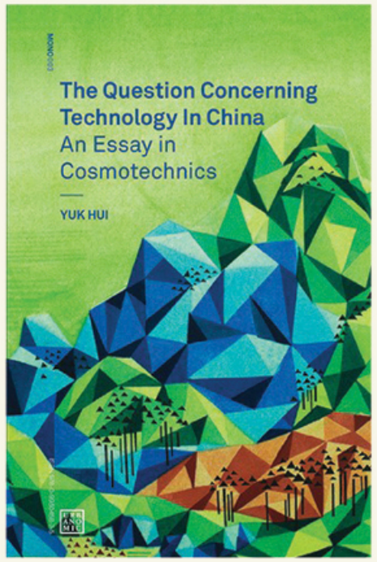
Yuk joins SCM this semester from Bauhaus University Weimar. He is no stranger to the School. He was a Visiting Associate Professor in early 2019 and taught two courses. One was on Art and Technology, and the other was a course on the French Philosopher Gilbert Simondon. Yuk says, "I am teaching similar courses at SCM this semester as well but I have changed the syllabus."

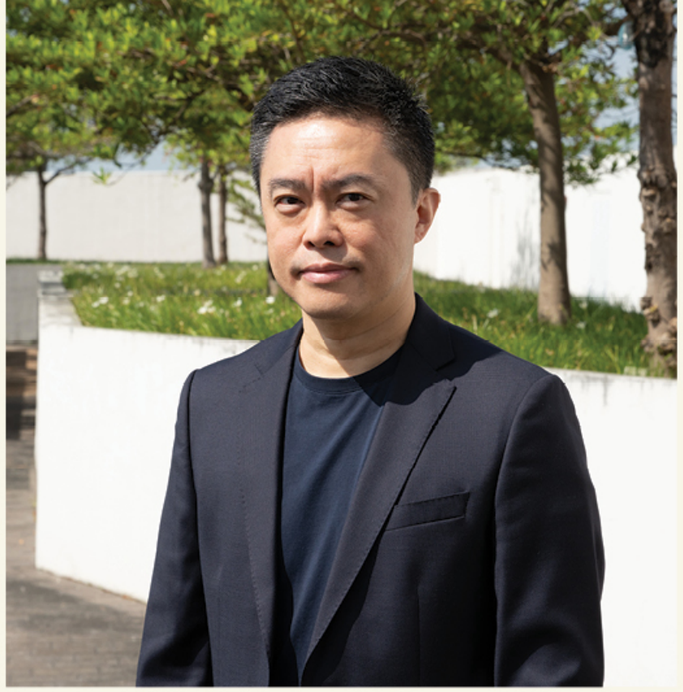
He studied Computer Engineering and Philosophy at the University of Hong Kong and Goldsmiths College in London, with a focus on the philosophy of technology. Between 2012 and 2018 he taught at the Institute of Philosophy and Art (IPK) and the Institute of Culture and Aesthetics of Digital Media of the Leuphana University Lüneburg where he wrote his habilitation thesis. Previous to that, he was a research associate at the Institute for Culture and Aesthetics of Media (ICAM), postdoctoral researcher at the Institute for Research and Innovation of the Centre Pompidou in Paris and a visiting scientist at the Deutsche Telekom Laboratories in Berlin. He is the initiator of the "Research Network for Philosophy and Technology," an international network which facilitates research and collaborations on philosophy and technology.

Yuk has published on philosophy of technology and media in periodicals such as *Research in Phenomenology, Metaphilosophy, Parrhesia, Angelaki, Theory Culture and Society, Cahiers Simondon, Deleuze Studies, Intellectica, Krisis, Implications Philosophiques, Jahrbuch Technikphilosophie, Techné, Zeitschrift für Medienwissenschaft, Appareil, New Formations, Parallax*, etc. He is an editor (with Andreas Broeckmann) of *30 Years after Les Immatériaux Art: Science and Theory* (2015), and author of *On the Existence of*

digital Objects (University of Minnesota Press, March 2016, with a preface by Bernard Stiegler), *The Question Concerning Technology in China: An Essay in Cosmotechnics* (Urbanomic, December 2016); and *Recursivity and Contingency* (Rowman & Littlefield International, February 2019, with a preface by Howard Caygill).

Yuk is Visiting Professor at the China Academy of Art where he teaches a master class with Bernard Stiegler every spring and supervises PhDs; he is also an affiliated researcher at the Centre international des études simondoniennes (MSH, Paris Nord). His key research areas are Philosophy of Technology, Philosophy of Nature, Simondon, Heidegger, Lyotard, Mou Zongsan, Phenomenology, Idealism, Neo/New Confucianism, Artificial Intelligence, Cybernetics, and Media Theory. "I look forward to this year at SCM and my new project on alternative forms of Artificial Intelligence. I'm really excited to come back to my home which is Hong Kong. It represents an opportunity to strengthen my ties in East Asia," he says.





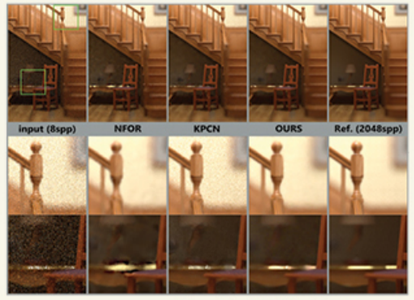
MIKE WONG

Mike is a computer generated imagery technology consultant and a computational artist. For over 20 years Mike worked as an independent technical consultant for VFX production creating digital infrastructure for digital entertainment content creation. In 2011, he founded Artixels, a Visual Effects R&D Consultancy based in Hong Kong which caters to clients all around the world. Mike co-founded Skytools Digital Studio Co. Ltd., which is a subsidiary financed by Next Media Group (Apple Daily). This company has focused on applying 3D CGI as a means to serve various content creation needs. He is also co-founder and Technical Director of Pointer Digital Grafix which offers computer animation production as a service.

Mike has a strong background in the movie and television industries in Hong Kong. He served as a visual effects supervisor for 4 years on Hong Kong's first mega VFX movie *The Storm Riders* (1998), and, his VFX work on the film won a Golden Horse Best VFX award. He has also worked as a Visual Effects supervisor and technical director on MV / TVC and other motion pictures projects. Mike won the silver award at the Hong Kong IT awards (1998) and was one of the finalists at the ITS International Monitor Award for best Electronic Visual Effects (1997).

Mike's arrival at SCM, after completing his PhD on Machine Learning at the Chinese University of Hong Kong, is really a return home. For he served as an Assistant Professor teaching computer animation from 1999-2008. "At that time it was a very small faculty and this school was newly built in CityU's basement car park," he recalls. In order to maintain high quality teaching and learning for both staff and students, he proposed and established the school's IT support team. Now he has rejoined as an Associate Professor and teaches programming. "It is quite challenging because the students have had no exposure to this subject but I enjoy the challenge. It's great to join back and see how much SCM has grown," he says.

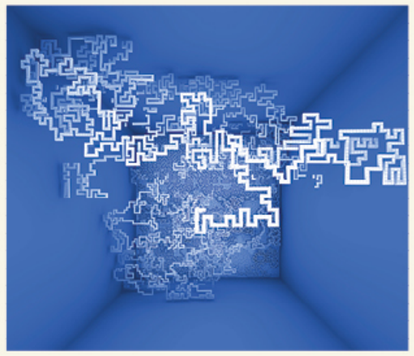
Mike's new research project, "View-dependent Asymmetric Detail Enhancement for 360-degree Stereoscopic VR Content" is a year-long investigation which Mike started in October 2019. This project aims to improve the viewing experience in Virtual Reality using both the human perception characteristics, and a computational image detail enhancement process. "The Center for Applied Computing and Interactive Media at SCM is very resourceful and I would like to develop this research into a group project," he says. He also hopes to make more artworks as well as to explore new avenues of research at SCM.



'Deep Residual Denoising' research presented in SIGGRAPH Asia 2018, Tokyo, JAPAN

A work produced using 2.5D Computational Stippling method, presented in ISCMA 2019

Mike's VFX software 'Escher' was used extensively in this independent short 'Mishimasaiko'



'Portrait of Decisions' exhibited at the GRAPHITE conference 2007 held in Perth, Australia

NEW FACULTY: ELENA SHERSTOBOEVA

SCM welcomed Dr. Elena Sherstoboeva in July 2019. Elena is a media & entertainment law researcher and legal practitioner jointly appointed between the School of Creative Media, and the School of Law. Her areas of expertise are freedom of expression and information; media law and policies; copyright; law and the internet; transparency laws; online surveillance; and privacy and data protection. She is currently teaching courses on Law and Creativity, Entertainment Law, and Business and Law in Hong Kong.

Elena holds a PhD degree in Journalism from Moscow State University, and in Communication from Ramon Llull University, Spain. She also has two Master's degrees in Law and Journalism. She studied copyright law ('CopyrightX') at Harvard Law School and attended several summer schools, including the leading one in her field at the University of Oxford.

Elena started her academic career in 2009 at Moscow State University's School of Journalism. Subsequently, in 2012, she became an Associate Professor in the School of Media at the National Research University Higher School of Economics, one of the leading universities in Russia. Elena has been a visiting lecturer at the University of Copenhagen as well as a visiting fellow at the University of Pennsylvania and the University of Leeds.

Since 2011, Elena has collaborated as an independent legal expert with international human rights organisations, such as UNESCO, OSCE, and the Council of Europe, by providing reports and comments on Internet, media and broadcasting regulations as well as on transparency laws. She also cooperated as a legal expert with the BBC World Trust Service and the Russian Parliament's Committee on Information Policy.

Elena has served as the top counsel and CEO of her own legal agency specializing in media and entertainment law. She has wide experience in negotiating and revising contracts with global entertainment companies, such as Warner Bros. Entertainment Inc., Universal Music Group, and Sony Music, as well as in helping creative individuals and enterprises launch their innovative media start-ups. She was also a singer and music producer. She says, "I'm so excited to be here in Hong Kong. I had so many offers, but I am sure I have made the best choice. I love my students and my colleagues here. I appreciate talented and creative people who are passionate about what they do, like me. I am genuinely grateful to people who believed in me and gave me the chance to work here."

Eric Lo (BScCM graduate, second from the left) and Hung Kai Chun (BScCM graduate, second from the right), were awarded the Student Innovation (Post-secondary and Undergraduate) Silver Award, Hong Kong ICT Awards 2019

Cave Automatic Virtual Environment (CAVE) display test. CAVE is an immersive technology that uses three or more projections or displays to build a virtual environment surrounding the user to enhance the immersion while interacting with the 3D environment

"Prosroid: The Wheelchair Training Simulator" – a participant is trying a scenario task which can help improving wheelchair user's driving skills on a ramp. The work was exhibited at the Gerontech and Innovation *Exhibition* 2018

OUTSTANDING ALUMNI: ERIC LO AND KENNEDY HUNG

Congratulations to Lo Chi Wing Eric and Hung Kai Chun Kennedy from the BScCM 2017 Cohort, who are the winners of the Student Innovation (Post-secondary and Undergraduate) Silver Award at Hong Kong ICT Awards 2019. Their award winning innovation is called the Prosroid, a wheelchair simulator, made in collaboration with the Community Rehabilitation Service Support Centre of the Hospital Authority (HA). This invention was developed through the TEDY (Technologies for the Elderly and Disabled people by Youths) programme run at SCM by Dr. Lam Miu Ling that aims to empower young people to solve social problems with innovative applications. The students spent a lot of time at the Kowloon hospital with the disabled in order to understand their needs and to develop, in collaboration with them, the right prototype. Many occupational therapists at HA also provided protocols and suggestions to the student team for the development of the training system. Prosroid users can practice in training scenarios by driving a simulated power wheelchair in a CAVE (Cave Automatic Virtual Environment) system or by using a virtual reality head mounted display. The simulated scenarios are based on real-life situations in Hong Kong. Users are trained to deal with slopes, narrow alleys, lifts and getting on and off public transport.

"The leader of this final year project went abroad so I took on the project and I asked Ken to help me with the artwork" says Eric, reminiscing about how he became involved in the project. "Such simulators are not common in HK so we were hoping that we might get this award but we never expected it," he says. Kennedy adds, "The award is very important to me because it is the very first award that I have received. It makes me want to improve myself and it has helped my self-confidence so much. I am so honoured to receive this award."

The two inventors are very grateful to Dr. Lam Miu Ling and Dr. Yu Ka Ho at SCM for their support and advice. They believe that the environment at SCM helped them with this achievement as they were able to access the hardware they needed to innovate. After graduating they have started their own company called "Metal Wisdom." They say, "We hope to develop more software and training tools for the medical field in the future as our visits to the hospital have made us realise that the tools they use can be improved."

A LONDON SUMMER: CREATIVE COMPUTING AT GOLDSMITHS

Now, in its fourth year, the Creative Computing Summer School at Goldsmiths, University of London, is an intensive study programme for the students of the School of Creative Media. It is a bespoke programme created especially for SCM by Goldsmiths' Creative Computing faculty in close dialogue with Dr. Olli Tapio Leino, Director of International Programmes at SCM and other faculty leaders. It provides a model of how to combine technology training with creative skills in order to produce well rounded creative media students, which we hope to develop with other international institutions.

Leino says, "The Computing department at Goldsmiths has been SCM's close collaborator for a long time. They are known for their focus of combining a creative mindset with serious programming and technological skills - very much like the orientation here at SCM. SCM and Goldsmiths Computing faculty have many common research interests and the idea to collaborate with Goldsmiths on the summer school arose organically from these common interests. We have had faculty, post-docs, and PhD students visiting back and forth in the past, and now having the Computing department at Goldsmiths as a partner on this summer program gives a great opportunity for the undergraduate students at SCM to benefit from this London connection as well!"

In the programme, which consists of 60 hours of classroom sessions and 18 hours of tutorial study, students work on their own original creative assignments, developing their problem-solving, design and communication skills. The expert tutors give them all the skills they need to create generative drawings, graphics and animations in weeks one and two; and then to make projection mapped visualisations, and to build an interactive installations in weeks three and four. They participate in practical workshops to discover the possibilities of projection mapping and other new technologies. At the end of Week 2 and 4 they present their projects to the tutors and classmates and receive feedback on their work.

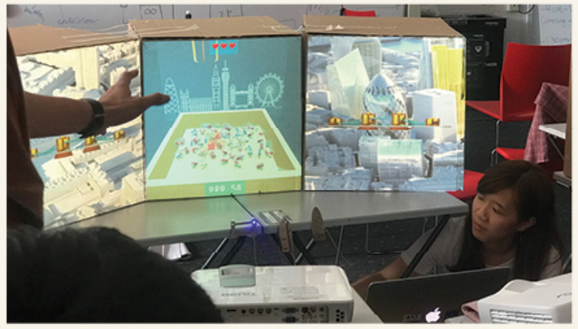
In addition to their core studies, an integral part of the programme is cultural exposure which helps to develop their language skills. The students participate in weekday evening trips and weekend tours as well as social events, which center upon trips to galleries, parks and museums in London. The tours include Tate Modern, the National Gallery, the British Museum and the Victoria & Albert Museum, as well as relaxing trips to London's wonderful parks and along the River Thames, and visits restaurants and theatres. In addition, students also organised their own tours to Brighton, Oxford, Stonehenge, Paris and Amsterdam.

Group photo of Graphics and Video Mapping Class

The fact that Goldsmiths is in New Cross which is an exciting multicultural neighbourhood with young artists and musicians and cutting-edge music and culture venues makes the experience a much more enriching one. It also has fast easy transport linked to Central and east London which makes it a convenient place for students. The fee that the students have to pay to join this programme is only 40% of the expenses. The rest is funded by City University of Hong Kong's Global Experience for ALL Funding Scheme. There are also scholarships available for which students have to apply.

There were 40 students who registered for the programme in 2019. Student feedback demonstrates the enthusiasm there is for the programme. One writes, "It was a great and new experience, opened my eye to a new level of media art." Another says, "It's great that we have a lot of creative freedom and we received a lot of help." And a third from Singapore who was one of the few non SCM students wrote of CityU participants, "Apart from three other Singaporean students, the rest of the class was made up of creative media students from Hong Kong. They specialised in different fields and their work inspired us to be more creative with our projects." SCM hopes this programme will form the basis of further in-depth collaborations with Goldsmiths in the future.

Students are creating e-textile works in class



Students' presentations of their group projects

SCM CREATIVE PARTNER: AN INTERVIEW WITH OSAGE GALLERY'S AGNES LIN

RA: Richard Allen | AL: Agnes Lin

In October 2019, prior to the opening of Jeffrey Shaw's one person show at the Osage Gallery, Hong Kong, I had the privilege to meet with founder and director, Agnes Lin, to discuss the role of Osage in the arts scene in Hong Kong and the special relationship that the gallery has forged with the School of Creative Media over the last few years. This is the edited transcript of our conversation.

"Interval in Space", curated by Harald Kraemer, Janine Stoll and Charles Merewether. Installation on view of works by Au Hoi Lam, Sarah Lai, illa Leutenegger, Beat Feller at Osage, 2017

Courtesy of the Artists Au Hoi Lam, Sarah Lai, Zilla Leutenegger and Beat Feller, Fundaziun Nairs and Osage Art Foundation

RA: Agnes, to kick things off can you tell me how you got into the gallery business in the first place.

AL: The idea for the Osage Art Foundation and the Osage Gallery came about together, back in 2004. What you call the gallery "business" had never been an end in itself. I wanted to build up a sustainable system for supporting art projects and fresh ideas. That is how the Foundation, the Gallery, the Consultancy, Design Expertise and art-related services came about.

RA: When did you move to your current gallery space in Kwun Tong and what it is you like about the space you are in?

AL: We have had several exhibition spaces in HK but we moved to our current location in Kwun Tong in 2014. Since the ceiling for this space is low, we had a designer Kevin Lim design a long gallery which we keep flexible so as to be able to serve the needs of different exhibitions or events. We also have a wonderful terrace which we use as a richly-layered space for performances and conversations.

RA: The current art scene in Hong Kong is very varied and very international. How do you decide which artists and what kind of art to focus upon in your exhibitions?

AL: Up to 2014, we have mainly created exhibitions based on Osage curators' research and selection. We also worked with guest curators such as Yuko Hasegawa, Patrick Flores, Charles Merewether, and Biljana Ciric. We have always been committed to presenting artists from an expanded geography in the region which includes Japan, Southeast Asia and China. Going forwards, we will focus on two programs: Regional Perspectives and HKACT!. The former would take us into exploring how to present artworks from Southeast Asia in ways beyond their geographical naming. The latter would investigate the experimental intersections of art, culture and technology today.

"BeHere" workshop with Masaki Fujihata, SCM and HKAPA students, 2017

Courtesy of the Artist Masaki Fujihata and Osage Art Foundation

RA: One of the things that marks your singular contribution to the art scene in Hong Kong is your commitment to education. Can you say something about why education is so important to you and what your gallery has done to foster education?

AL: I understand that one's relationship with art doesn't usually mushroom overnight. We have partnered with Hong Kong Christian Service from 2005 with 11 schools and 1300 children. We organize guided tours of exhibitions and sessions with the artists, and we conduct workshops for teachers and parents with the children which we empower teachers to develop and conduct themselves. We actively look for ways to create synergies which can benefit students and the community.

RA: As you mentioned, one of your key current projects is called HKACT! Can you tell me how HKACT! came about and what it stands for?

AL: *HKACT!* is an acronym for Hong Kong, Art, Culture, Technological Innovation. Even early on, Osage Art Foundation has been supporting and presenting new media and cross-disciplinary art, in projects like *Siren*, *Crosscurrents* and *Site:Seeing*. We do so even more consciously and energetically through *HKACT!*. Meeting Masaki Fujihata during 2016's ISEA at SCM was a turning point for me. With the help of 4 university institutions, including SCM, we produced "BeHere," an Augmented Reality public art project shown in 10 locations in Wanchai, which was well received by students, visitors and the community in Hong Kong in the 6-month duration.

RA: One of the reasons I am doing this interview is that in the last few years you have forged a special relationship with the School of Creative Media. Can you tell me how this relationship came about and what it means to you?

AL: When Jeffrey Shaw took up his academic position in HK, I began to develop a deeper interest in the crossing of art and technology. Over the years, through Jeffrey's introduction, I got to know the amazing faculty at SCM. The Foundation's relationship with the School developed through joint projects such as developing Miao Xiaochun's work *Microcosm* into an immersive experience at SCM's Gallery360 in 2012. We also jointly presented the exhibition *Market Forces – Erasure: From Conceptualism To Abstraction* in 2014. Half of the exhibition was held at Osage and the other half was a pilot project to inaugurate the 18/F, Lau Ming Wai Academic Building as an art space which is now known as the Indra and Harry Banga Gallery

RA: Tell me about some of the shows that you have done with creative media faculty and a little bit more about the forthcoming show with Jeffrey Shaw?

AL: Since 2014, I started to mull over creating *HKACT!* with Jeffrey Shaw, Maurice Benayoun and Tobias Klein. In the process, I also started to understand more about each of their practices. Later, we have supported Maurice Benayoun's solo exhibition *JUST DIG/IT!*, Tobias Klein's *Post-industrial Landscapes* workshop exhibitions, an artists' exchange program curated by Harald Kraemer called *Interval in Space*, and Tamas Waliczky's *Cameras* series in *Photo Macau*. We are excited to be staging *WYSIWYG*, a solo exhibition for Jeffrey Shaw – his first public solo exhibition in Hong Kong. We selected works together from the past 50 years of his art practice, plus one new work which is a collaboration with a HK artist.

RA: Agnes, given your commitment to Hong Kong artists, and in the context of the current social upheavals, how do you see the future of art in Hong Kong?

AL: We are living in precarious times. I believe more art will emerge in response. The issues regarding politics, culture and language, economics and society cannot be separated from art. I think there will be more complexity and semantic layers in the art. There may also be art made by people who are not identified as "artists," who may create in a broader field of the visual and other perceptive senses emerging in different media. I am interested to look at time-based art such as in the sonic world, sound, music, and noise with poetry and finally film which can juxtapose all of these.

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