Rebecca Allen
Sync(Emerge (Consciousness))
In the recent BBC Radio 4 documentary, aired in September 2018, titled The Art of Immersion the American artist Rebecca Allen was introduced as a “pioneer of digital art”. Her work spans over three decades – and beyond that even into the 1970s, beginning with an experimental animation work in 1974 featuring a woman seductively lifting her skirt (more about this in Helen’s Starr’s beautifully crafted and insightful essay that follows this introduction).

QUAD’s exhibition programme encompasses much in contemporary art making – particularly photographic and moving-image work – with one of our main focuses is to showcase and champion the very best in digital art (or, more precisely perhaps, art being made today by artists using digital techniques and technology). With this in mind, we are thrilled that an artist of such renown, ability and stature in the field as Rebecca Allen has shared work from her astonishing career with our audiences, as well as producing a brand-new VR commission for QUAD titled Life Without Matter (2018). Rebecca is also QUAD’s International Digital Fellow for 2018 - 2019, joining our roster of other recent high-profile fellows Gibson/Martelli from the UK; teamLab from Japan and the UK/ South Korean partnership Kimchi and Chips (Elliot Wood and Mimi Son).

I would like to extend my grateful thanks to Helen Starr – co-curator with me of Rebecca Allen’s exhibition at QUAD – for her support, insights and the exceptional essay that is featured in this publication. Thanks also to my colleagues Laura O’Leary and Bethany Kane for their editing and design of this publication, and to TECH:SQUAD at QUAD for their work installing Rebecca’s exhibition, Sync(Emerge(Consciousness)). My final thanks are reserved for Rebecca Allen; she is indeed a pioneer, and one who continues to pave the way.

Peter Bonnell, Senior Curator at QUAD
Now I do not know whether I was then a man dreaming I was a butterfly, or whether I am now a butterfly, dreaming I am a man.

莊子 Zhūangzǐ (c. 369 BC – c. 286 BC)

We are living in the most exciting of times! The future, if such a thing even exists, will decide if these are the best of times or the worst of times. And the future/past as we know it will be written by the victorious. These are wondrous times for technology, with massive advances in the last few years in artificial intelligence and virtual reality. Both of these technologies raise very deep philosophical issues, such as what is artificial intelligence? Is it an artificial mind? What is virtual reality? Is it an artificial world?

This is the time of the questing thinker, because philosophy is the study of the mind and the natural world, and how the two come to co-exist.

To be able to build artificial minds and artificial worlds will open new vistas for us because they will make new connections between mind and world. And if we can connect these two we can build new bridges to each other. For all other minds and all other bubble worlds – of artists, of programmers, of farmers and airport workers – are inhabited by the ‘Other’. And the ‘Other’ is always intrinsically different from and alien to oneself.

Ordinary physical reality meets three conditions: it is immersive, it is interactive and it is driven by real world Physics. Film and Music are...
immersive, driven by real and/or digital physics but not interactive; meeting two of these conditions. Gaming is interactive, driven by digital physics but not immersive; it too, meets two conditions. Full-scale virtual reality, of all communication technologies meets three conditions, it is an immersive, interactive and computer-generated environment. Virtual reality takes the immersive and interactive quality of everyday reality and brings in the computer to generate the digital physics.

Virtual reality is the ladder over the fourth wall. The fourth wall is the conceptual barrier between any fictional work and its viewers or readers. Breaches into this wall can be found as early as Miguel de Cervantes’ Don Quixote (1605/1615) and ‘breaking the fourth wall’ was popularised in the early 20th century by authors such as Virginia Woolf and C.S. Lewis. It occurs when a character in a fictional world engages directly with his/ her/ their audience; reader, viewer or visitor. The breaking of the fourth wall is often used as a technique to increase or decrease immersive aspects of a cultural work. Increased immersion can trigger mass moral panics and emotional turbulence. Powerful examples include Myrick and Sanchez’s film, The Blair Witch Project (1993) and Team Salvato’s multiplatform single player visual novel Doki Doki Literature Club (2017). With flirty, responsive, Lolita-like avatars who can be wooed by poetry, Doki Doki Literature Club’s branching narratives and dark content has elicited warnings from watch-dogs such as The Sun and the BBC.

We can think of virtual reality as an artificial, digital world. When we digitise ourselves as avatars, when our ephemeral minds inhabit our ephemeral bodies, our real bodies react as if we are physically present. When we are scared in an artificial world, adrenaline (fear) rises in our real bodies, when we feel adoration in an artificial world, our body produces oxytocin (love). The veil, this skin, between what is real and what is virtual is thus compromised and we, in a transitory state of flux, exist simultaneously in a dreamt-up world and the natural world.

Let us consider for a moment that Descartes’ mind-body dualism is an outdated concept designed to privilege intellect over feeling. ‘Substance’ dualism, as it is commonly known is an old philosophical view in which non-physical consciousness has no matter, or that our minds, divorced from our bodies are distinct and separable. This 17th century thought experiment states that the mental can exist outside of the body, and the body cannot think. We have mostly left this behind as most teenage fans of Kubo’s manga, Bleach (2001) and Kirkman and Moore’s comics, The Walking Dead (2003) would agree; that a mind without a body is a ghost and a body without a mind is a zombie.

We can apply a more measured approach and embrace instead a term which was introduced in 1972 by Chilean biologists, Humberto Maturana and Francisco Varela. Autopoiesis (from Greek (auto-), self, and (poiesis), creation) refers to a system capable of reproducing and maintaining itself.

Autopoiesis is an astonishing bio-chemical lens which gives us an insightful way to look at pioneering artists such as Rebecca Allen, Suzanne Treister and Hans Haacke who have been thinking about how complex systems work in artificial technical environments, in sociological environments and in natural, ecological environments. These avant-garde, systems-literate artists laid the fertile ground for younger, but no less brilliant artists such Pierre Huyghe, Jon Rafman, Ian Cheng and Anicka Yi.

First among this visionary tribe is Rebecca Allen.

In 1989 Allen wrote “... not only will people build highly detailed artificial worlds in the computer, but they will also create complex characters with ‘human-like’ behaviour that will ‘live’ in these artificial environments. These new worlds will be experienced by the viewer through high resolution displays and the viewer will be able to interact with these synthetic characters.”
Like Renaissance artists of old, Allen has always moved fluently between technology, art and philosophy of mind exploring notions of feminism, gender fluidity, the body in motion and mind.

**Mind (n): the element of a person that enables them to be aware of the world and their experiences, to think, and to feel; the faculty of consciousness and thought.**

Rebecca Allen’s very first computer animation in 1974 was of a woman seductively lifting her skirts. Today we can appreciate this as an insightful critique on patriarchy and the secretiveness of Silicon Valley Technology. Made despite the then unamused computer scientists, if only this work had left that sterile computer lab and passed into the wider world. But things were different then and a woman’s voice in technology was not allowed above a whisper.

Ten years later in 1984, Kraftwerk (1970-), pioneers of electronic music also turned to Allen to create their digital image for the single *Musique Non Stop* and to design the cover art for their 1986 album *Techno Pop* (aka *Electric Cafe*). Allen’s *Musique Non Stop* video went on to become one of the most lauded MTV videos in pop history. Furthermore, although Kraftwerk is known for not collaborating with female artists, Allen’s voice threads through the single, “*Musique nonstop, techno pop, musique nonstop techno pop...*” A lenitive mantra, now above a whisper; like the rhythmic chant of a 9th century Gregorian monk.

Allen has collaborated with other world-famous artists such as Korean American Nam June Paik (1932-2006). In addition to her collaborations with Paik, she was commissioned by Paik to create the animations for works such as *Office Workers* (1992) and *Twisted Turtle* (1993) among others. Nam June Paik has been ascribed accolades such as “founder of video art” and is credited with the earliest usage of the term “Electronic Superhighway”. His work has influenced contemporary artists such as Christian Marclay, Cory Arcangel, Ryan Trecartin and Haroon Mirza.
Much of the software, now used by these younger generations of artists was sourced from Allen’s published research. Often the only creative person guiding development of these technologies, many, now ubiquitous software tools were shaped by Allen’s humane, artistic vision.

Systems; that animate in three dimensions not two. Systems; that capture how our bodies move in space; like Brancusi’s genre-bending birds. Systems that augment and expand our reality with symbols. Feedback systems that interface using breath, muscles and touch; like a futuristic understanding of Brancusi’s *Sculpture for the Blind, Golden Bird* (1919). The dazzling, golden bird of Romanian folklore, whose magical song restored sight to the blind and youth to the aged.

Allen has always brought her active perceptual thinking to ever current problems such as what does it mean to be a networked, sentient being? How do we navigate our place in this differently ordered modern universe? What are the invisible electrical bonds which tie us not just to our living world and tribal families, but to animals, plants and even artificial beings?

All autopoietic creatures; be they human, AI, a swarm of insects or bots or the scented pine forests of the North American landscapes are unified organisations of networked cells. These tangled structures interact and transform continuously in an elemental dance to regenerate the very processes which reproduce and maintain themselves.

Let us next get rid of the idea of duality in consciousness. It is not true that there are two sides to consciousness; that you are self-aware, or you are not. On/ Off. Fundamental aspects of our conscious mind consist of loosely woven skeins of electrical states existing in a linguistic and cultural framework.

Notions such as art and time exist only in an internationally agreed political, cultural and geographical frame. 10.00 am in London is not...
the same as 10.00 am in Tokyo and Brancusi’s *Bird in Space* (1926) was not a kitchen utensil, but an artwork. Most new and innovative ideas which seem glaringly obvious now, have been fought for and hard won. *Brancusi v. United States* (1928).

So too, do certain woven threads of our consciousness shape the different parts of our thinking selves.

Brightly lit skeins of our consciousness rise like a wave depending on the task at hand. We use differently woven fragments for different situations; for automatic tasks, for quiet wakefulness, for breathing, for sleeping, for solving hard problems. Neuroscience keeps finding new skeins and fragments of consciousness and has only very recently begun to knot them together so as to apprehend the three-dimensional web of thought.

An understanding of this can be found in two of Allen’s major works created two decades apart: *Life Without Matter* (2018) and *Bush Soul* (#3) (1999). In *Life Without Matter* we find ourselves in a mythic space, a lush forest and the interior of a stone structure that is at once ancient and futuristic. Built in the innocent, graphical language of the pre-Alpha Go era, the viewer confronts their digital reflection. And since a virtual world is immaterial (not built with ‘real’ physics), a virtual mirror need not reflect one’s physical appearance, but rather the female, male and animal in all of us. The groundbreaking *Bush Soul* series (1997-1999) based on West African Orisha practice allows one to visit the lands of “Oshun, Goddess of Water and Beauty” and of “Oya, Mistress of Speed and Tempest”; but, and this is important: as a rider not the ridden. Both allow you to step into virtual worlds where you can play with forms of communication that rely on gestures, movements and artificially intellectualised behaviours.

We, who are transported by these imagined worlds startle as we lose track of time. When talk turns to losing ourselves in the beat of a drum or in the high of a hallucinogenic, we now, thanks to Allen’s oeuvre, have a richer language to describe what we mean. For while our bodies...
do not differentiate between the virtual and the real world, our consciousness leaves a little fragment to stand guardian of our still breathing bodies while allowing other silken strands to extend into this dream imagined world, like the long, silken threads that spiders use to fly.

Neuroscience continues to develop tools that track this plurality of consciousness. When thinking occurs in our brain, it looks like a constantly erupting lightning storm that can travel through and across our brain's folded surface, travelling tingling to our fingertips and then back again. These constant explosions of electrical activity are our brain's cells processing the incessant stream of information coming in through our senses.

When we are awake, even when we daydream these bacchanalian rhythms exhaust us. So, we seek restoration in sleep. Here our brains begin a careful re-ordering so that in REM, sleep becomes more of a summer shower and non-REM sleep settles over us like solitary drizzle.

Most electric bursts in certain parts of your brain never switch off or vary when you are awake, daydreaming and dreaming. If they do, you are either under an aesthetic or in a coma leaving only the skeins in charge of our automatic systems lit. These are systems which monitor the outside and inside worlds through our senses. They keep you breathing, and your heart beating and they startle you to alertness if a loud sound occurs. When, however, you are not unconscious but asleep or deep in a daydream parts of your brain become active in a different way and new fragments of consciousness emerge.

Allen investigates this thinking through works such as INSIDE (2016) and The Tangle of Mind and Matter (2017). These works, especially INSIDE (2016) emphasise Allen's early fascination with the bodily and the mechanisms that lie within. Allen's exploration of our most powerful sense, the visual is clearly expressed in the painterly(ness) of INSIDE (2016) and how our mind is embodied in the meat, muscles and sinews of our tactile self. Both works connect us with our corporeality of being, that physical container, our flesh-based mortality. And, in fact, both works utilise digital images of an actual brain generated using MRI imaging.

For Allen the role of the body is to act as a vessel for the brain, mind and conscious self. The brain itself is a vessel for the self-aware mind to understand the makeup of the body through which it feels: love, in the racing of heart and fear, in the butterflies of the stomach.

Though the brain and conscious mind are related, they are not synonyms. They must not be used interchangeably as the brain is the complex networked structure within which the mind functions. Without the brain there is no mind.

Why do we build virtual models of our mind's eye in our day and night dreams? Current thinking suggests that what we dream influences what we do and not the other way around. We know that the ability to remember the past is linked to the ability of imagining the future. In our dreamscapes, memory and imagination come to the fore.

When the brain is not attending fully to the outside world, when you are daydreaming or have recently drifted into sleep, it replays fragments of broken skeins which are parts of old memories in real time. Each fragment of memory can connect to another in three dimensions, if there is some commonality between the two. These connectors are specific to a common location, common emotion or a common cue. And this is how we create a speculative model of the world. Moving through these memory models during REM sleep is the way that consciousness involved in memory and learning attempts to figure out how the past can connect in the future. When we dream, we build future models of the world.

And as these broken skeins compile and recompile they create the virtual reality of our mind's eye.
We create these simulations to prepare us for the future. This is what it means to learn and to adapt our behaviour to new contexts. This is another trait commonly found in autopoetic creatures; the ability to dream.

Sentient beings, unlike analogue machines made up of clearly separate parts cannot be taken apart to be understood fully. Just as artificially intelligent, digital machines cannot be understood just from their graphics cards or electrical plugs. Allen's body of work showcases the tangle of tethers, which link the complex parts of ourselves. We, who are sentient, emerge from our connected selves and from these nodes of webbed silk, conscious that we are. Cogito, ergo sum!

When we travel as visitors to Allen's worlds, we are tethered to the VR devices, we are tethered to our avatars, we are tethered to our bodies and to our conscious minds.

Rebecca Allen is an artist who began to generate this type of thinking in 1974. The more science lifts the skirts and the skins of the hidden, the more it becomes clear that our brains can only attend to a small fraction of the surrounding reality. We each inhabit a sensorium, our own little bubble, which is big enough to get by. This is at the heart of the struggle to approximate the larger picture.

We can expand our little bubbles, our sensoria by networking ourselves into the virtual worlds of Rebecca Allen. The fraction of reality we can understand, can be increased by experiencing virtual reality, it is expanded by the imagined, virtual world of another. Allen's thoughtful dreamscapes allow visitors to explore a virtual space free from any privilege or lack thereof marked on their bodies as stigma in the real world. Here, within the imagined space of her mind all who journey can begin anew. We are no longer as suffocated by ideas of limited knowledge, of unobtainable information, and of unimagined possibilities.

Beginning with her early anatomical drawings, each subsequent art work has grown in scope and understanding. As Allen's creative allegories, her four-dimensional visual poems leapfrog the cascades of other media which mark our current times, we may finally hope to understand the Other.

Like the raised skirt of the early animation, Rebecca Allen's corpus exposes a philosophical frame that is complex and multi-dimensional and as yet undetermined.
The Great Khan’s atlas contains also the maps of the promised lands visited in thought but not yet discovered or founded: New Atlantis, Utopia, the City of the Sun, Oceana, Tamoe, New Harmony, New Lanark, Icaria.

Invisible Cities, (1972) Italo Calvino

Despite its minor importance in Plato’s work, the story of Atlantis has had a considerable cultural impact through the ages. From Thomas More’s Utopia (1516) to Francis Bacon’s New Atlantis (1627), to James Wan’s Aquaman (2018), the myth of Atlantis has always portrayed a futuristic and technologically advanced people.

And so it was over a hundred years ago when German explorer Leo Frobenius visited West Africa and came across some sculpted bronze heads and terracotta figures. He was certain, he had discovered remains of the mythical lost city of Atlantis.

Building on tales long told by Portuguese slavers, Frobenius surmised that a white civilisation must have existed in Africa and that it was this “white residue” that enabled native Africans to exhibit traits of “military power, political leadership and... monumental architecture”.

Frobenius was referring to a West African kingdom of Ife believed to have flourished from the 12th to the 15th centuries in the lush forests of the lower Niger, now known as Nigeria. It was in fact, the Yoruba artists of this kingdom who created the sculptures over the course of some four centuries. These wondrous artworks are among the most
aesthetically striking and technically sophisticated in the world, certainly predating anything the British were capable of at that time. Thirty years later, these ancient artefacts forced European historians to revise previously held assumptions of an ancient ‘white’ race of Atlanteans. Eighteen brass and copper sculptures were brought to London and subjected to a more rigorous science-based inquiry using newly discovered techniques; such as carbon dating. The results proved compelling.

A 1948 article in the Illustrated London News was headlined: “African art worthy to rank with the finest works of Italy and Greece” and “Donatellos of medieval Africa.”

As critic Michael Glover noted in the UK’s Independent newspaper, “At the same historical moment that Andrea del Verrocchio was doing his wonderfully painstaking, high-Renaissance drawing of a female head, anonymous artisans in Ife were working with brass, bronze, copper and terracotta to produce a series of exquisite heads that are not only the equal of Donatello in technical brilliance, but also just as naturalistic in their refinement. So much for African primitivism.”

Rebecca Allen’s series of works Bush Soul (#1, #2 and #3) (1997-1999) is a beautifully researched and exquisitely wrought early virtual reality work which acknowledges the power and importance of the West African practice of Orisha. Òrìṣà are the human form of the spirits (Irunmọlẹ) in Yoruba traditional identity. The Irunmọlẹ are meant to guide creation and particularly humanity on how to live and succeed on Earth (Ayé).

Bush Soul (#3), part of the exhibition at QUAD, and its accompanying VR-like technology invites one to wonder if here, too, in the practice of this ancient African race, other invisible, advanced technologies may be masquerading incognito.

Bush Soul (#3) flawlessly illustrates neuroscientist Antonio Damasio’s three layered theory of consciousness. In Damasio’s thinking, the final layer, could not exist without the underlying two. The third layer emerges as an Extended form of Consciousness. Unlike the first two layers, the third and final layer requires a vast use of conventional memory and as this powerful fragment of consciousness emerges, our sense of self moves beyond the here and now.

Wrapped now in VR cables and tethers Allen’s work extends the viewers’ consciousness into the richly coloured dreamscape of the Bush Soul series of works. Here, participants are transported to a mythical, equatorial Earth (Ayé) where they are bound to the native avatars; as visiting souls. Like the storm borne riders of the Woden’s folkloric Wild Hunt, viewers can guide their digital steeds to interact with the fantastical creatures of this world; some with visitor riders and some without. All who play here are constrained by the programmed, scripted behaviours of this digital dreamscape.

So too, in Òlùrè, “The Land of the Hummingbird”, known today as the Republic of Trinidad and Tobago, storm borne riders (Irunmọlẹ) have visited the Orisha shrines which dot the island in scores. When the drums and chanting of West African descendents reach a crescendo, women in white clear the way for any devotee who has been chosen to be ‘ridden’ by a visiting Spirit (Irunmọlẹ) of the Bush. Trinidad Orisha deities, equated with Christian saints, are messengers between humankind and the divine Kingdom of the Supreme God Olodumare. Oya, Shango’s wife, Mistress of Speed and Tempestuous Wind, is paired with St Catherine; Oshun, Goddess of Water and Beauty, with St Philomena; Osain, Yoruba God of Herbal Medicine, Healing and Prophecy, with St Francis; Ogun, the Warrior God of Iron and Steel, with St Michael.

In Cuban Santeria, Haitian Voodoo and Trinidad Obeah, Orisha devotees used the paraphernalia of the Catholic church as camouflage to hide their African beliefs and practices. Thus, a non-Christian aural, rhythmic and gestural praxis, continued to be practiced (and is still practiced today) right under the very noses of our colonial masters.
It also happens that, if you move along Marozoia’s compact walls, when you least expect it, you see a crack open and a different city appear. Then, an instant later, it has already vanished. Perhaps everything lies in knowing what words to speak, what actions to perform, and in what order and rhythm; 

*Invisible Cities*, (1972) Italo Calvino

The Yoruba people have always turned to Orisha practice in times of social upheaval and sickness. Without hallucinogenic drugs, cables, software, silicon chips and plastic, the Yoruba people could enact the most powerful, transportive form of Damasio’s extended consciousness.

Trinidad Orisha, is in fact a wave based communication tool of the technologically advanced, ‘Atlantean’ people of West Africa.

More commonly known in the West as Shamanic trance, Shamanic State of Consciousness (SSC) is a voluntary, self-induced and temporary state of consciousness that is historically understood to serve social cohesion and healing interventions in diverse tribal settings. Brain imaging indicates that shamanic state of consciousness (SSC) involves a shift from the normally dominant left analytical to the right experiential mode of self-experience.

As brain imaging technologies become more sophisticated, Western science is now beginning to understanding the purpose of this powerful practice which changes the very nature of human awareness.

In 2010, psychologists Dacher Keltner at University of California, Berkeley and Jonathan Haidt, now at New York University, published a paper defining a moral, spiritual and aesthetic emotion; awe. “A subjective feeling rooted in the body,” according to Keltner, where it erupts through our bristling skin, as goosebumps.

Awe is an emotional response to perceptually vast stimuli that transcend current frames of reference. Studies show that awe
encourages people to endorse more ethical decisions, lower their sense of entitlement and report values; in which they pay more attention to the needs of others.

At the annual meeting of the Organization for Human Brain Mapping in Vancouver, Canada, in June 2017, neuroscientist Michiel van Elk presented functional MRI scans showing that awe produces a vanishing self. The egotistical, insecure voice in your head about self-interest and self-consciousness, disappears. As a result, we feel more connected to collectives and groups.

Keltner’s team has also found that weeks later, feeling awe makes people happier and less stressed and that it assists the immune system by cutting the production of cytokines, which promote inflammation. Researchers at Stanford University, California, discovered that experiencing awe made people feel as if they had more time and thus were more willing to give up their time to help others. In addition, boundaries between normally segregated parts of the brain temporarily break down, boosting creativity and creative problem solving.

Psychedelic drugs such as Psilocybin and LSD also hijack the natural system of our mind-body and fast-track people to these experiences of awe. Virtual reality experiences have been proven to also elicit awe, so too have the paintings of Caspar David Friedrich, and the soundtrack Virtual Mima from Satoshi Kon’s Perfect Blue (1997).

There is a growing Western realisation that awe, which is triggered by being in the presence of a powerful Other has all sorts of benefits for individuals and society.

So much for African primitivism.

Like aural, rhythmic and gestural citadels, the invisible structures of West Africa Yoruba covered the landscapes of the New World bringing solace, strength and healing to the enslaved community for whom they were visible. For in the danced drumming of the steel pans (the only acoustic instrument invented in the 20th century), in Bele, Kaiso, Soca, Rapso, the chutney of our Carnival and in our Gospel, steady state castles are woven into our skin. Thus, did we, who are called “The Lost Tribe of the Yoruba” spread our invisible technology throughout the New World.

Helen Starr is the founder of the not-for-profit organisation The Mechatronic Library and co-curator of Rebecca Allen’s Sync(Emerge(Consciousness)).

With special thanks to Helen Starr’s Mathematical and Computer Programming Generation Z team: To Harold (Trip) Starr for his meta insights into online gaming communities and digital physics. To Chris McGarry on the mechanics of AI modelling. To Jin lei Chen for her astute observations on complex digital systems.

www.themechatroniclibrary.com/
Helen Starr is an Afro-Carib Trinbagonian cultural activist and founder of The Mechatronic Library est. 2010. She has been programming artists such as Susan Hillier, Marlene Dumas and Jan Fabre and historical shows such as The Portable Museum of Marcel Duchamp: de ou par MARCEL DUCHAMP ou RROSE SELAVY since 1995.

A move away from the commercial sector, saw Starr funding environmental and artistic digital research projects. In 2008 she partnered with the Bartlett School of Architecture, to produce early, artist designed 3D printed objects in ceramic, silver and bronze. Over 97% of 3D printing uses plastics.

A long time patron of South London Gallery, 2013 saw a collaboration with SLG's Artists-In-Residence Crabtree and Evans. The result was Critters (2015) which incorporated game engines and 3D printing; a world first. John Eng Kiet Bloomfield's Worlds Among Us, (2017) saw partnerships with Wysing Arts Centre, FACT, Liverpool and QUAD, Derby leading to feminist VR works such as Warm Worlds and Otherwise (2018) by Anna Bunting Branch and Life Without Matter (2018) by Rebecca Allen.

Helen Starr’s deep hope is to foster an understanding of the digital realm. That museums, curators and artists continue to make beautiful, thoughtful and critical works with these powerful, emerging technologies. So, that they do not belong solely to corporate and political entities.

Biography

Rebecca Allen is an internationally recognized artist inspired by the aesthetics of motion, the study of perception and behaviour and the potential of advanced technology. Her artwork, which takes the form of virtual and augmented reality art installations, experimental video and large-scale performances, spans nearly four decades and embraces the worlds of fine art, performing arts, pop culture and technology research.

With degrees from Rhode Island School of Design and Massachusetts Institute of Technology, Rebecca moves fluidly between artist studio and research lab, using her research to inform her art. Her early interest in utilizing the computer as an artistic tool led to her pioneering art involving human motion simulation, artificial life algorithms and other generative techniques for art creation. She was founding Chair of the UCLA Department of Design Media Arts and is currently a professor there.

Allen’s work is exhibited internationally and is part of the permanent collection of the Centre Georges Pompidou in Paris and the Whitney Museum and Museum of Modern Art in New York. Previous collaborators include artists such as Kraftwerk, Mark Mothersbaugh (Devo), John Paul Jones (Led Zeppelin), Peter Gabriel, Carter Burwell, Twyla Tharp, Joffrey Ballet, La Fura dels Baus and Nam June Paik.

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