

A Journal for Contemporary Art
Issue No. 5.0

THE ELECTRONIC HYDRA
GUEST EDITED BY DANIEL BIRNBAUM

CATALOGUE



Precious Okoyomon, *Ultra Light Beams of Love*,
2021, augmented reality.
Courtesy of the artist and Acute Art

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QR codes and AR Artworks

STEP 1

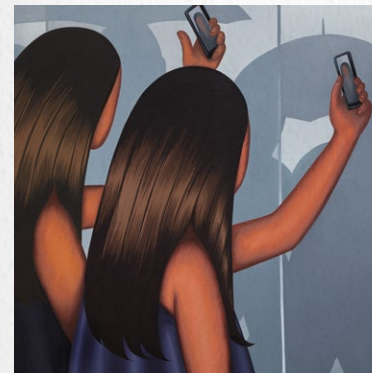
SCAN THE QR CODE WITH YOUR CAMERA
TO DOWNLOAD THE ACUTE ART APP

STEP 2

ONCE DOWNLOADED, POINT YOUR
CAMERA AT THE QR CODE AGAIN TO
VIEW THE ARTWORK



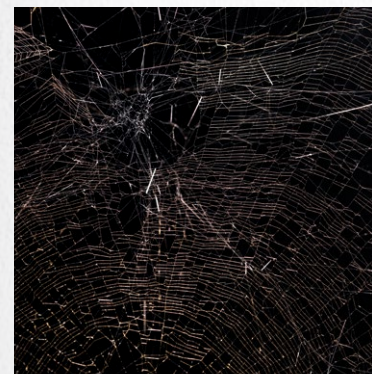
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CATALOGUE

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Marcel Duchamp was artistic advisor to Guggenheim Jeune,
Peggy Guggenheim's gallery at 30 Cork Street (2nd floor), 1938-39



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THE ELECTRONIC HYDRA: AN INTRODUCTION BY DANIEL BIRNBAUM

SINCE 2019, DANIEL BIRNBAUM, ARTISTIC DIRECTOR
OF ACUTE ART, HAS BEEN WORKING WITH
RENOWNED INTERNATIONAL ARTISTS TO PRODUCE
AND EXHIBIT COMPELLING, CUTTING-EDGE VISUAL
ARTWORKS IN VIRTUAL REALITY (VR), AUGMENTED
REALITY (AR) AND MIXED REALITY (MR).

As guest editor of this special edition of CATALOGUE,
Birnbaum describes the Electronic Hydra, while considering
by Marcel Duchamp the anticipation of virtual space.

We live inside a creature that Hans Ulrich Obrist and I have named the Electronic Hydra, a many-headed monster that spreads its seemingly interminable extremities across the globe. I want to thank Hans Ulrich for his drawings of the electronic monster published here for the very first time.

Today's artists can celebrate the possibilities of new immersive technologies or possibly create friction in the aspiration to produce pockets of resistance. They can hardly pretend that the monster's arms aren't getting an increasingly tighter grip on all aspects of our lives. New technologies are taking over the planet. Art institutions will be transformed and collectors of art have discovered the world of unique digital objects, so-called NFTs.

Exactly how will today's visual media — AR, VR and Mixed Reality — expand the ways we experience art? Will the virtual turn change art itself, just like photographic techniques and mass distribution once altered our understanding of what an artwork can be? Walter Benjamin's influential 1935 essay on mechanical reproduction opens with a quote from French poet Paul Valéry: "We must expect great innovations to transform entire techniques of the arts, thereby affecting artistic innovation itself and perhaps even bringing about amazing change in our very notion of art."

A little more than two years ago, I left my job as head of Moderna Museet in Stockholm, an institution with a strong art and technology

legacy, to join Acute Art, a London initiative exploring new immersive media in collaboration with some of today's key artists. It started with VR works by Marina Abramović, Anish Kapoor and Jeff Koons and Ai Weiwei. Soon we moved on to augmented reality works that have been displayed across the world, from Beijing to Buenos Aires. Our most recent AR projects are launched in London with this issue of CATALOGUE: Koo Jeong A's *OLO*, Precious Okoyomon's *Ultra Light Beams of Love*, and *Lune* by Julie Curtiss. These works are triggered by QR codes in this magazine. They are also installed on Cork Street this October and are available to those who have downloaded the Acute Art app.

Jaron Lanier, who coined the concept of virtual reality many decades ago, is still convinced of the medium's capacity of redefining perceptual space. In his most recent book, *Dawn of the New Everything*, he describes VR as a scientific, philosophical, and technological frontier: "It is a means for creating comprehensive illusions that you're in a different place, perhaps a fantastical, alien environment, perhaps with a body that is far from human. And yet it's also the farthest-reaching apparatus for researching what a human being is in terms of cognition and perception."

When I first encountered the virtual worlds a few years ago I was drawn to these philosophical queries regarding the boundaries of human perception. But soon enough the new immersive media's potential role in an art world in transformation trying to adjust and respond to

the climate crisis became apparent. Many of our collaborations with artists have an ecological focus. With Olafur Eliasson we are developing a series of works that explore how technology reconfigures our zones of intimacy and creates new ways for us to be 'alone together.' With Tomás Saraceno we have developed AR spiders that are unlocked by viewers willing to engage with real spiders, a project the artist understands as an example of what the philosopher Yuk Hui refers to as an exploration of the relationship between biodiversity and techno-diversity: I am thankful to Yuk Hui for his beautiful essay in this issue. And we have installed a secret spider by Saraceno at a central place in London. Anyone willing to take a photo of a real spider and submit it on the Acute Art app will be informed of its exact location.

If John Cage was right, art is an early warning system, the function of which is to prepare us for the world of tomorrow. And Walter Benjamin observed the prophetic capacity of certain works of art to allude to technologies that have not yet been developed: "The history of every art form shows critical epochs in which a certain art form aspires to effects which could be fully obtained only with a changed technical standard, that is to say, in a new art form." It has been claimed, for instance, that certain 19th century novels, such as Emily Brontë's *Wuthering Heights*, anticipate cinema.

Can art be prophetic in the sense that it predicts scientific and technological revolutions that have not yet taken place? Another case in point: Marcel Duchamp's *The Large Glass* with its complex geometries crystallised in a work of art that we are still struggling to fully grasp. It is not a painting in the traditional sense but an entirely new kind of artwork characterised by the artist as a 'delay in glass' that — according to numerous critics — seems to anticipate virtual space. In recent years, no one has looked closer at Duchamp than Cerith Wyn Evans, who has explored the secret geometries of the glass in the most innovative ways, turning key components into luminous installations. I am grateful to Cerith for giving us a glimpse of his Duchampian writings, a selection of which are published here for the first time.

The original version of Duchamp's *The Large Glass* is permanently installed at the Philadelphia Museum of Art. However, the second version — produced by Swedish art critic Ulf Linde in dialogue with Duchamp (and signed by the artist in 1961) — has been at the centre of all major Duchamp exhibitions after World War II, from the 1963 retrospective in Pasadena to the major surveys in London, Stockholm and the Centre Pompidou in Paris. Linde became obsessed with figuring out the secret geometries that he believed to be an important aspect of the work. He found fragments and hints in Duchamp's writings and conversations: "Most people who know anything at all about Marcel Duchamp, know that he was interested in geometry and mathematics. It is therefore puzzling that so little

has been written about how this can be traced in his art, even though he himself has clearly pointed out where the first traces are to be found." In one of his interviews, Pierre Cabanne asked him to explain how he developed the complicated system of measurements in *The Large Glass*, and Duchamp replied: 'The explanation is in Moulin à café.'

Linde was convinced that the mathematical speculations on a fourth dimension, developed by the cubist group Section d'Ore around 1912, remained a significant key to all of Duchamp's most ambitious works. He believed they were secretly linked by geometrical patterns. Philosophical issues, including Einstein's Theory of Relativity and the philosophical speculation of Henry Bergson, were at the centre of the Section d'Ore group's interests. They were developed in intense dialogue with the mathematician Maurice Princet.

If Duchamp anticipated virtual space, then an artist like Saraceno seems to be anticipating some sort of technology not yet invented, a radical rethinking of what 'technology' means. With the climate apocalypse in full swing, we need to start thinking in less extractive and destructive terms. And we seem to need a new system and ethos for institutions in general. Elizabeth Diller's thoughts about institutional models might spur us to think about how to reanimate possible futures imagined by innovators of the past: for instance, by Buckminster Fuller or by British avant-garde theatre director Joan Littlewood and architect Cedric Price, who collaborated on the Fun

Palace, a community space designed to awaken the passive subjects of mass culture to a new consciousness. Their interactive machine for entertainment and education, conceived half a century ago, involved virtual-reality experiences *avant la lettre*, from Captain Nemo's underwater restaurant to a lunar journey in a space-capsule simulator. Although never realised, the Fun Palace remains an influence on architectural imagination and curatorial experiments alike. But do we actually need yet another large building? Perhaps not, according to Diller — the architect behind MoMA's recent expansion, The Shed in New York's Hudson Yards, and innumerable other museum structures. What we perhaps need is a network of humble sheds scattered through forests across the globe and connected virtually.

But why material sheds at all? Perhaps the forests themselves should be the institutions, networked via some sort of truly immaterial cloud — no server farms, no fossil fuels — that has yet to be devised? Many domes in the air, connected through winds and birds? That, I think, is what an artist like Saraceno would prefer.

I truly believe that we should search for alternatives to our planetary race to the edge of disaster. We need a new curatorial toolbox and I'm imagining that new technologies will help us navigate the changing landscape. Grassroots provincialism and downscaling is one answer. Perhaps they are not the only alternatives. For art institutions, climate emergency cannot only mean doing less. Could it also mean developing entirely new forms of art?

‘The Electronic Hydra [is] a many-headed
monster that spreads its seemingly
interminable extremities across the globe.’

DANIEL BIRNBAUM

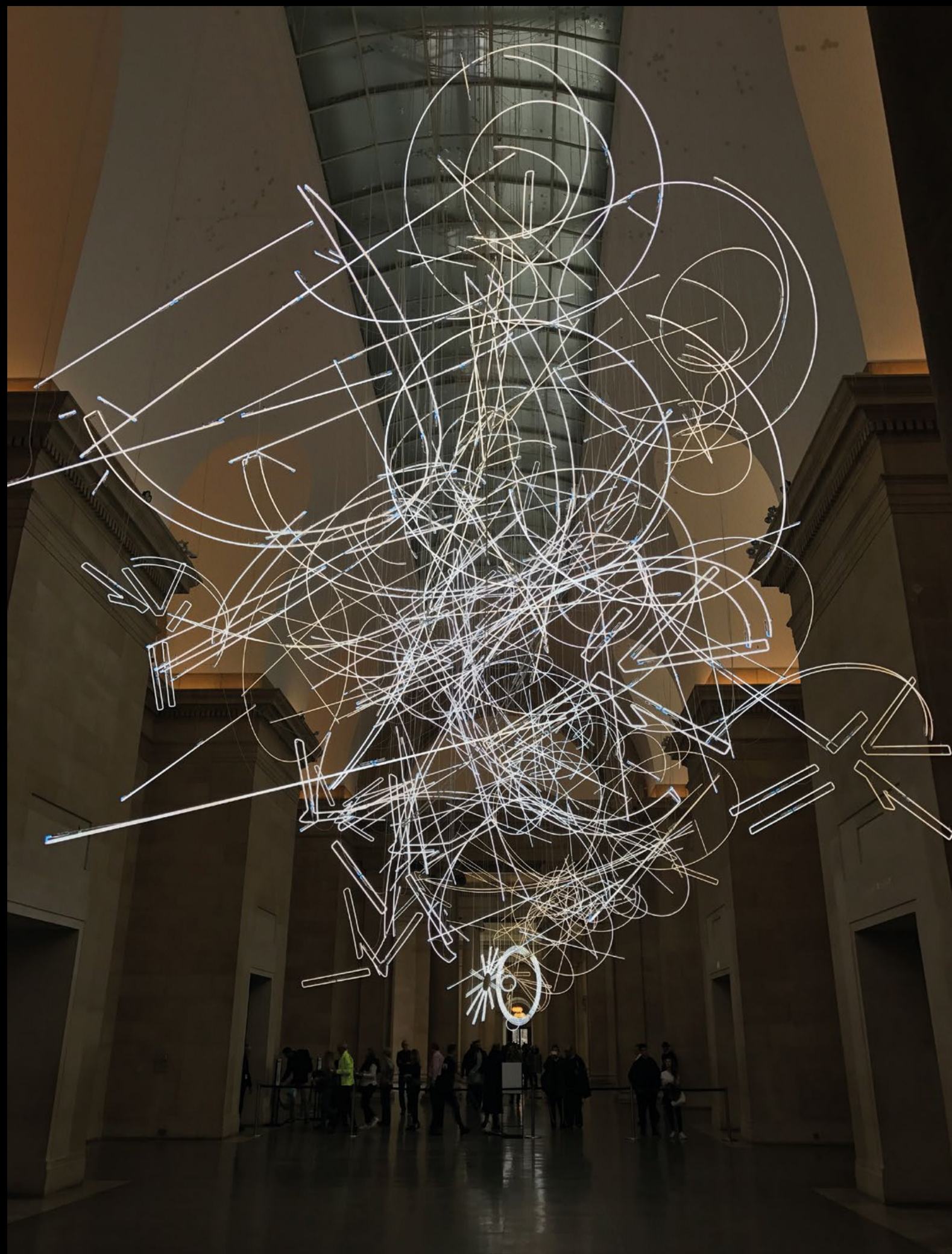


Photo: Cerith Wyn Evans, 2017.
Courtesy of the artist

T H E

**CERITH WYN EVANS ON
MARCEL DUCHAMP**

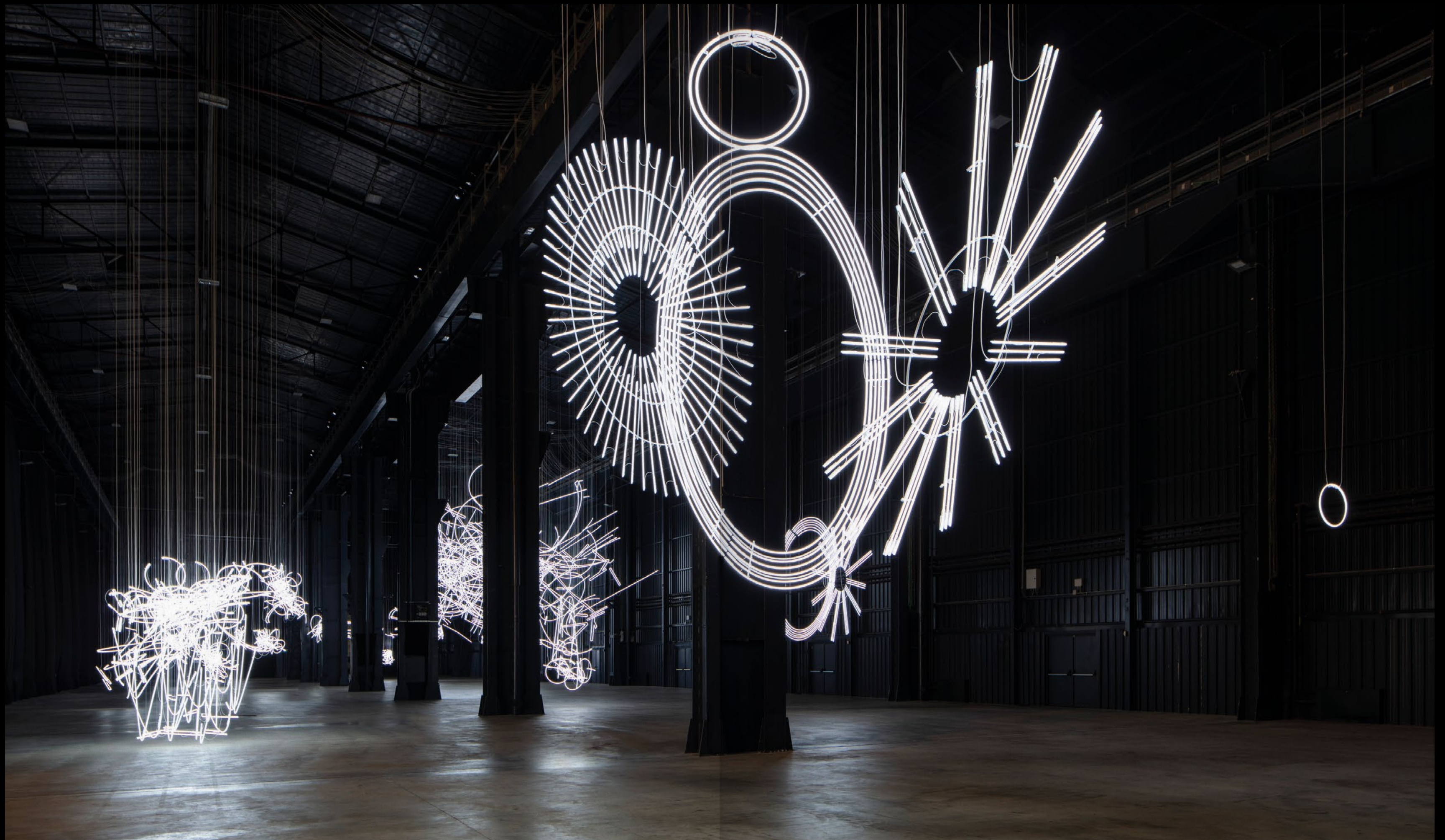
ILLUM/NATING

**THE ARTIST IN
CONVERSATION WITH
DANIEL BIRNBAUM**

G

A

S:*



Installation view, Cerith Wyn Evans,
...the Illuminating Gas, Pirelli HangarBicocca,
 Milan, 2019. Photo: Francesco Margaroli.
 Courtesy of the artist

Daniel Birnbaum: Cerith, I was hoping our conversation would be about your works that in various ways reference Marcel Duchamp. There are two or three relatively recent big installations, *Forms in Space... by Light (in Time)* and *Radiant fold (...the Illuminating Gas)*. My first question would simply be: How did this come about?

Cerith Wyn Evans: Well, given the context, conversation is perhaps more appropriate than an interview because I'm not sure how confident or well-placed I am in order to answer questions about my work, which I suppose I align with the allure that Duchamp has for me. In a way I've been thinking, treating and applying Duchamp as a kind of methodology, or Duchamp as a process. Duchamp is a genre. He's also a brand, a magnet, both lens and screen.

His lightness is something which holds great store for me. This radiant ambivalence finds expression in Cage and Warhol too.

Many things lead to decisions that you make or accidents that happen along the way which draw conclusions to be made without you really having to engage your will or your desire behind them... witness the paraphrase.

Sight Sight Cite
This triumvirate of co-ordinates, this, in a sense a kind hologram inaugurated by the homonyms of these sights, sites, cites, act like a kind of smoke screen, which, by occluding reveals the view onto the "Oculist Witnesses" - a trinity of planes in suspense.

DB: I was wondering why you singled out the *Oculist Witnesses*. I know there are other artists, many decades ago who were obsessed with Marcel Duchamp's works. They also singled out *Oculist Witnesses*. What is it with this element?

CWE: It's an enunciation, a fold; a transversal form of thinking.

It's alleged that the sigil - these rays, these waves and concentric circles that are all represented in an axonometric perspective as they are laid out in the glass originally came from the diagrams used by opticians - ophthalmologists - to test people's eyes. So to a certain extent they constitute a character, a form, a perfectly adequate summation of Duchamp's critique of the retinal. The tyranny of perception. The 'human' is the trap from which the retinal forms the chains to attach the human to representation, the figurative or the narrative contortions of the 'Real'.

To that extent they hold a special position symbolically and a-symbolically.

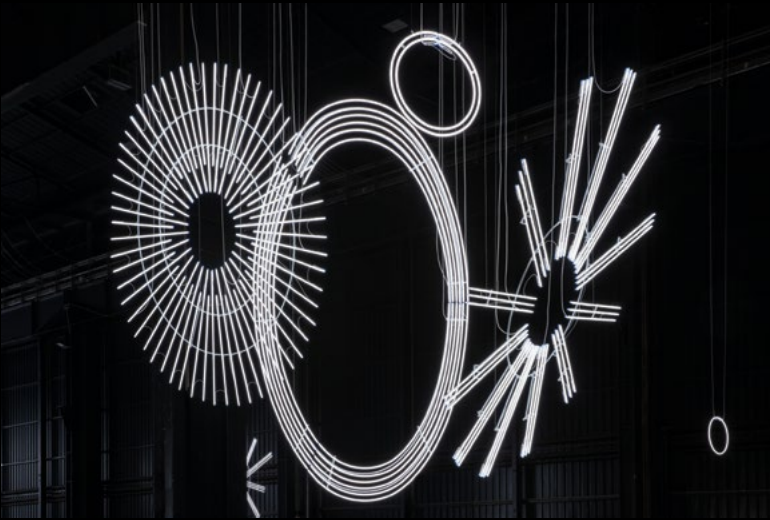
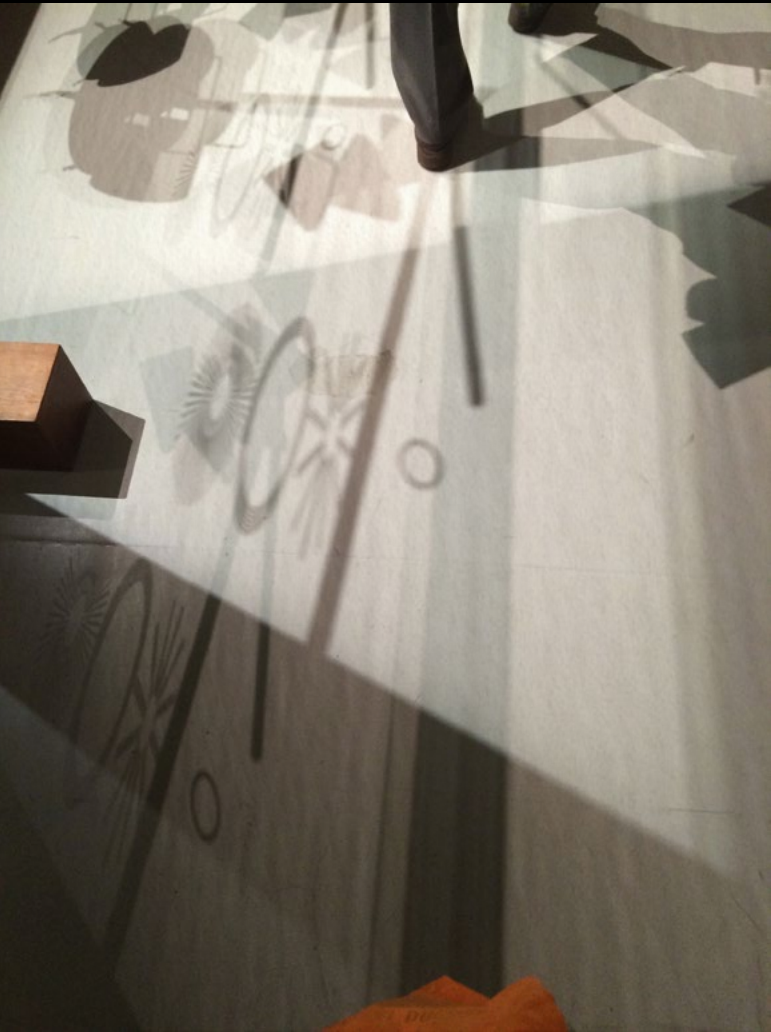
I'm fortunate enough and old enough to have known and spoken with Richard Hamilton about his working with Duchamp on *The Large Glass*. There are anecdotes around the difficulty of applying this mirror surface, this foil to the glass itself in a large block, tracing out the shapes that he wanted to convey and then very, very painstakingly with a razorblade removing the foil backing. There was a physical removing of the mirror's surface in order to allow both reflection

and seeing through and that led me to be stimulated by this iteration of a Void. I felt that it allowed an opportunity to use it as what I.A. Richards would call a 'pseudo structure'. It acts as a frame in order to evoke nothingness, it draws the parallels to negativity and perhaps silence. This opportunity was also riddled through with a sensibility of indifference, which I regard as a kind of political act.

DB: For a decade I lived with versions of Duchamp's work because I worked for a museum, [Moderna Museet] that was very involved with these things in the 1960s. Every morning I used to see Ulf Linde's, the Swedish scholar's version of *The Bride Stripped Bare by her Bachelors, Even*.

CWE: Also contingent, because he worked with Duchamp on these things.

DB: Exactly. You mentioned Richard Hamilton - it's maybe of interest to elaborate that there are there are three versions of *The Glass*. As well as Linde and Hamilton, a Japanese poet/artist called [Shuzo] Takiguchi later made a version.



Installation view, Cerith Wyn Evans, *...the Illuminating Gas*, Pirelli HangarBicocca, Milan, 2019. Photo: Francesco Margaroli. Courtesy of the artist

Photo: Cerith Wyn Evans, year unknown. Courtesy of the artist



Installation view, Cerith Wyn Evans, *...the Illuminating Gas*, Pirelli HangarBicocca, Milan, 2019. Photo: Francesco Margaroli. Courtesy of the artist

CWE: There are three versions, four, counting the original but as far as I can understand Duchamp saw the original as a kind of version even though it's an original. So there is this sort of splitting in Duchamp where much is allowed to travel and occupy time, while evacuating space. It's very generous,

DB: I feel that what you have done is very different because Takiguchi, Linde, Hamilton created one-to-one replicas or versions...

CWE: There's a transubstantiation, a paradigm shift because I felt it would be worth taking a step back into or away from or sideways, certainly, at least, somewhere else with trans-forming... actually making it somehow a-literal in space. Now, we can think the original eye charts would have been 'flat'. Duchamp is to a certain extent using axonometric perspective in order to spatialise in terms of representation, applying a form of perspective to suggest that these forms would be receding into a space, a kind of virtual space, the space of Euclidean geometry.. the 'as if' of representation.

DB: Recently I was asked to write something about an individual work of yours and I picked a piece which I think is an extraordinary, beautiful installation called *Forms in Space... by Light (in Time)*. It's one of the pieces that has the Duchamp theme but also rather surprisingly there's the juxtaposition of Japanese Noh theatre. What makes that dialogue of a 20th century avant-garde piece with a centuries old tradition of Asian theatre possible?

CWE: If we consider the notion of there being extra dimensions we can improvise with the world.

The piece was made as a site specific commission for the Duveen Galleries at Tate Britain in which the intuition of space is overdetermined by its character.

.... One thing that I do have here, a kind of epigram (if you like, an 'assisted ready-made') I was drawn to: Michel Foucault wrote a wonderful book on Raymond Roussel and I messed around with it a little bit. I applied it to the piece that you're talking about. If I could read it, it's very short:

"The Illuminating Gas systematically imposes a formless anxiety, diverging yet centrifugal, directed not toward the most withheld secrets but towards the imitation and

the transmutation of the most visible forms: each word at the same time energised and drained, filled and emptied by the possibility of there being yet another meaning, this one or that one, or neither one nor the other, but a third or none at all."

DB: It's unbelievable that through all of our lives, yours and mine, Duchamp has always recurred and people have seen it as anticipating new possibilities; assemblage, conceptual art and today you mentioned the words 'virtual space'. In my essay I quoted [Walter] Benjamin's observation that some art forms seem to be prophetic in the sense that they anticipate things not yet fully there and art forms not fully possible. It's as if *The Large Glass* and other works by Duchamp somehow talk to us trying to understand the world we're in now with all the digital and virtual possibilities. In relationship to one of your recent pieces, you talk about the fact that it's difficult to find a conventional description of what it means to live through a revolution of information technology. I wonder if Duchamp's Glass again is something that can be helpful for us to understand the kinds of art forms that haven't really taken shape yet - you know that I'm trying to work on virtual and augmented reality.

‘Duchamp is to a certain extent using axonometric perspective in order to spatialise in terms of representation, applying a form of perspective to suggest that these forms would be receding into a space, a kind of virtual space, the space of Euclidean geometry... the ‘as if’ of representation.’

CERITH WYN EVANS



Photo: Cerith Wyn Evans, 2020.
Courtesy of the artist

Cerith Wyn Evans, Philadelphia Museum of Art,
1995. Photo: David Bussell.
Courtesy of the artist



Photo: Cerith Wyn Evans, 2015.
Courtesy of the artist



CWE: Yes. It takes time and agility to navigate because it's easy to fall into a kind of banal trajectory of thinking, well, what kind of key is *The Large Glass*? So to a certain extent it's taken on this sort of talismanic quality, and I think the joy and the beauty in Duchamp is that there is this sense of there being a kind of enunciatory property to the way in which it alludes to not really 'solving' anything, but there are far-reaching things about it that lead us to think and inhabit zones in our imagination which are ripe for the discovery of things, which may be other forms to articulate the reality which is the mind-numbing opacity of our relationship to this digital realm. The opacity is so staggering that it's very hard to do anything but somehow yearn for the possibility of some kind of sense of reflection or transparency or some way of dissolving that opacity and... just stop it being brick wall wallpaper.

DB: The Benjamin quote I mention is: "The history of every art form shows critical epochs in which a certain art form aspires to effects which could be fully obtained only with a changed technical standard, that is to say, in a new art form."

CWE: I think once you start investing in this notion of taking a prophetic stance, then you're in some very distorting loop in relation to your economy of time. 'New' equals 'old'... best to think laterally.

DB: It's a very silly and absurd fact that our telephones look a little bit like *The Large Glass*, especially when they're broken. Sooner or later your iPhone will break and crack. This of course is a very dumb version [laughs] of this prophetic nature.

CWE: Let's remember that glass came about through electricity. Glass is lightning hitting sand.

DB: Exactly. You have also sent us some examples of a new kind of writing which we are thrilled to publish. Which is your writing but it's clearly appropriating themes and concepts and a vocabulary that we know from Duchamp. Maybe you can just say a few words about these works?

CWE: Yes. The text comes from notebooks that have been worked on over the years. In a sense Duchamp is one of characters in the scenario but there are many other star-signs that play a part. It's a sort of scrapbook I glued together from things that have had some kind of resonance for me.

Elaine Sturtevant was friend of mine, we were once talking about him and she said, "What Duchamp did not do, not what he did -which is what he did, locates the dynamics of his work." That's true.

Yet, here (hic et nunc), - Issued with a different frequency

OR issued with the same frequency...

Here as manifest gas glass electricity illumination and shadow. That which has provided the means to produce an absence.

Limbo incarnate. *transphoton*

This space.....defined by linear perspective is calculable, navigable and predictable.

It allows the calculation of future risk, which can be anticipated and therefore managed. As a consequence, linear perspective not only

transforms space,

but also introduces

the idea of linear time... ..

which allows mathematical prediction and, with it, linear progress. This is the second, temporal meaning of perspective: a view on to a calculable future.

~~("I sometimes play in the future.")~~

So, time, you say, just as homogenous and empty as space...

Empty how?

The horizons here are apt to congregate together, together ...Contre jour'

Something like - A picture, liminal, sequestered, and in suspense... The diagram allows a glimpse of the state that comes before the 'formation of an object' and what goes into its becoming.

for all these calculations to operate, we must *necessarily* assume an observer standing on stable ground looking out toward a vanishing point on a flat and artificial horizon.

However, linear perspective further performs an ambivalent operation concerning the viewer.

As the whole paradigm converges in one of the viewer's eyes, the viewer becomes central to the worldview established by it.

Sensing *OCTAGON*

merging *SEPTAGON*

Seemingly...the viewer is mirrored in the vanishing point, and thus constructed by it...yet here, something unlike a picture, more a frequency in the shade...

calling *Supernatural Shift*

and a change of mind... that which exceeds the actual "nured nature" ...equipped with the prosthesis of an abstract machine -

an inhuman

eye

subtracted, at any cost, from the 'visual atlas' of common perception.

The perceiving subject is stripped of its flesh to reveal a

hallucinating

automaton which

promptly takes leave of the space of representation and its

perspectival - subjective - mimetic "point of view" meaning that the conditions of the pictorial as such,

MIGHT

be rethought in the light

of the visual.....

infra-mince

Spectre of Janus, across the threshold of fundament/firmament... distant relations,

radiant fields figment/ground

Ruin play after Standard stoppages

MONAD

throwing shade,

Fold through Fold listen Plü selon Plü

press :- PLAY

Folds through forms (ascending).

The illuminating gas (in suspension) enunciates a transubstance through the transversal word play of homonyms

...squinting palimpsest)

skewed and

stuttering

to be revealed in some time to come, which proximity to this arrangement occludes?

Tremors on the threshold... hold your breath to light the fuse. Hold your breath to take the picture. Strike a match to tell the time or hold your breath to tell the time...

A 'Scene'

framed in fewer senses than one. Hostage to insufficient terms.

...*Oculist*
Witnesses

trial by photons...

Alight on a Dark Shadow and an inkling (*chink*) as to what this insistence on 'clarity', this persistence on vision occludes.

Witness Occluded

...and what stands (once seen, ~~now~~ unseen

Ongoing manuscript, courtesy of Cerith Wyn Evans

From the artist: 'These notes are indebted variously as a result of reading 'In Free Fall: A Thought Experiment on Vertical Perspective' by Hito Steyerl e-flux journal # 24... among other sources... and transversal threads leading to, from and through 'The Brain-Eye' by Eric Alliez

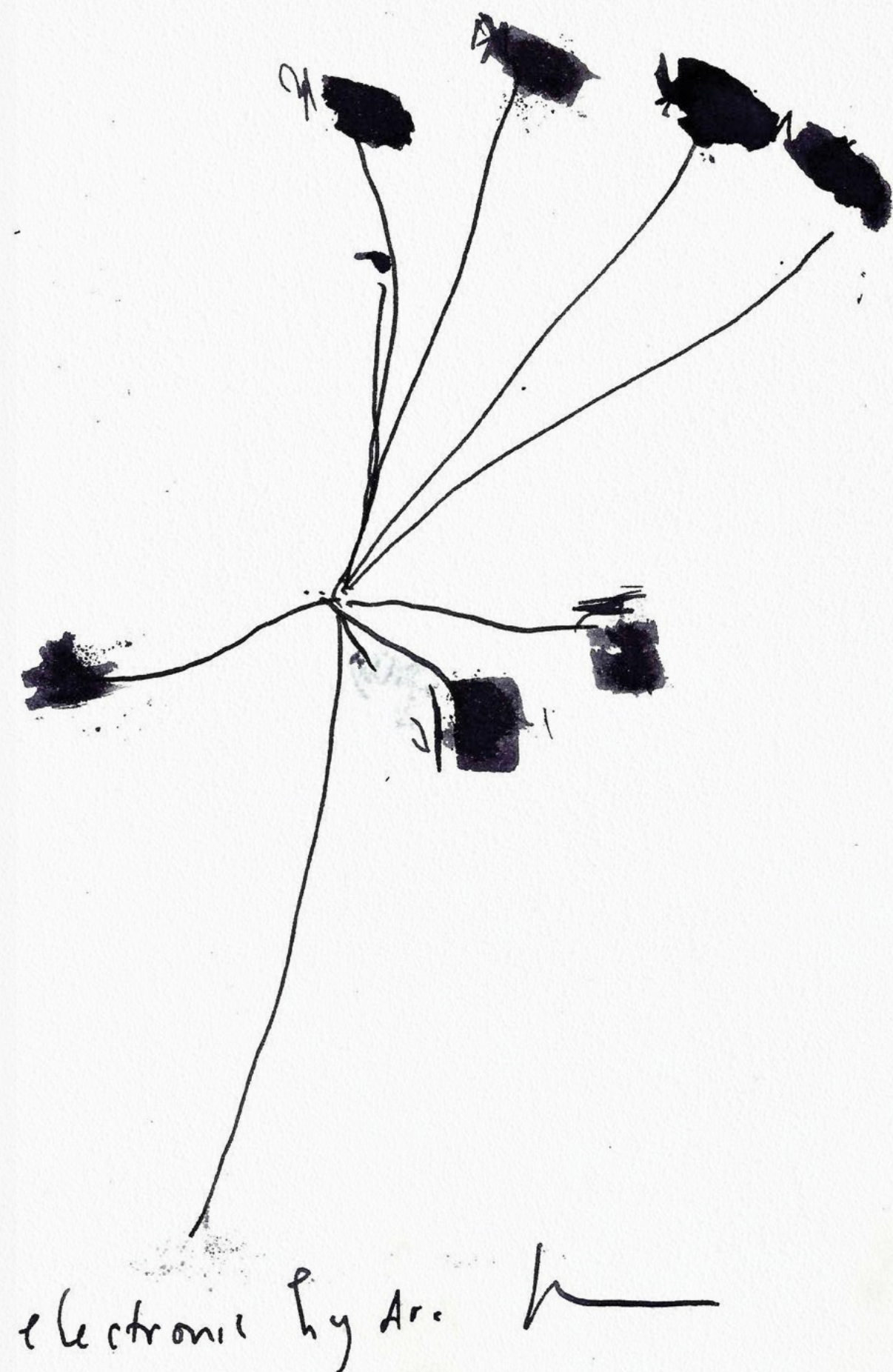
ELECT

SKETCHES FOR
AN EXHIBITION

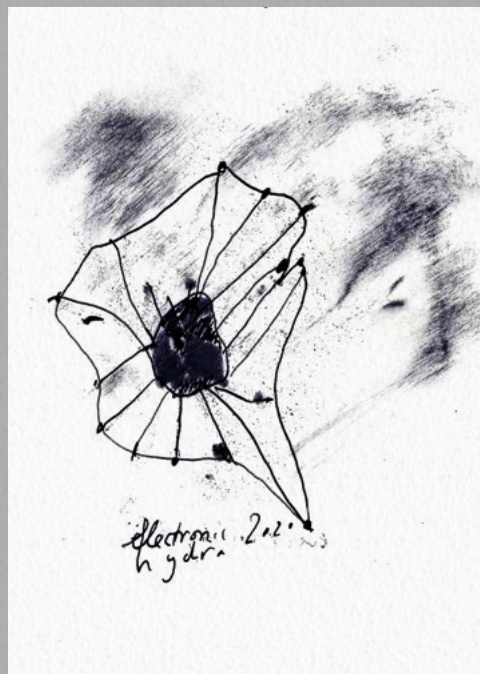
HYDRA

HANS ULRICH OBRIST

RONIC



Electronic Hydra, Hans Ulrich Obrist, 2020



DIRECTING

JULIE CURTISS

THE

THE ARTIST IN CONVERSATION
WITH DEAN MAYO DAVIES

GAZETTE



Julie Curtiss, *Selfie 2*, 2020,
acrylic, vinyl and oil on canvas,
30 x 30 in, courtesy of the artist

Born and raised in Paris, New York-based artist Julie Curtiss turns cinema still, painting scenes that are powerfully fixed and cropped with absolute intention.

With a surrealist sense of the uncanny, Curtiss directs the gaze with imagination, over high-heels, strange food and, to lift a phrase about Duchamp from his first wife Lydie Fischer Sarazin-Levassor, ‘an almost morbid horror of hair.’

The first AR work by Curtiss, *Lunc*, is alive in the impossible – a rotating being designed to be forever distant.

Dean Mayo Davies: What catalysed the tech paintings: the selfies and *States of Mind*? Were they a product of your quarantine experience?

Julie Curtiss: They were already scenes in my head [before COVID]. I was sitting down at MoMA in a waiting area when I saw these two girls who almost looked like clones doing selfies. They were wearing the same outfit and it was a striking scene, a bit like synchronised swimming. I made a mental note of painting it later.

The work with the VR sets I had already been thinking about, though it was painted during quarantine. I guess everything had been exacerbated during that time. I liked the idea of something that looked set in a 1960s-era in terms of clothes and stereotypical housewives, but placed in a more contemporary set-up or activity. How would I translate, in painting, the idea of being together but not being together? Because there are so many limitations in painting. It’s a very frustrating thing. It’s not like a movie where you have additional elements at play. With the still frame how can you express ideas of time and space? It’s a little more tricky.

DMD: There’s a heightened feeling of surveillance in these works. Would you agree?

JC: Oh yes. And actually the way we use technology without quite understanding what it means, the implications of remodelling our psychic.

DMD: *Lunc*, with Acute Art, is your first AR work. It was also some time in production – naturally a different experience from the repose of painting in your studio. What appealed to you about the medium?

JC: Yes, the work was a year in the making. I was familiar already with the technology, but had never thought about myself in that context. The thing I wanted and was really keen on was having a person manifesting in the room but whenever you tried to engage with this being, they dodged or hid.

Eventually the idea evolved to where I tried to draw this being – a woman – and I got to try on all kinds of outfits. But I was getting frustrated having to think about dresses and skirts and pants, some kind of make-up. I was like, ‘What’s the point? Why am I doing that? She’s just gonna be naked.’



Julie Curtiss, *States of Mind*, 2020, acrylic, vinyl and oil on canvas, 40 x 60 in, courtesy of the artist

Julie Curtiss, *Selfie 1*, 2020, acrylic, vinyl and oil on canvas, 30 x 40 in, courtesy of the artist



‘There are so many limitations in painting. It’s a very frustrating thing. It’s not like a movie where you have additional elements at play. With the still frame how can you express ideas of time and space? It’s a little more tricky.’

JULIE CURTISS

Being naked was more unsettling, however: a mix of intimacy and voyeurism with an added nature element. I didn't know if I was comfortable because I didn't want the work to become kinky or sexy. I realised that it would be in the design of the character that we make it sexual or not.

I worked really hard to find a name for *Lune*. The cycles of the moon were really interesting to me and my work is often around the act of seeing; hiding certain things while trying to reveal others, really directing the gaze. There's the rotative aspect, she becomes that centre and, you know,

we are the moon in a way. It's an interesting articulation of the piece. Eventually, I like the idea that of being able to manifest her anywhere: in the bedroom or your garden. Wherever.

DMD: Does your work allow you to surprise yourself?

JC: I mean that's the best part of being an artist. I'm not going to lie, it's hard to surprise yourself. You wish to constantly. That's why I like to go in territories that I'm less comfortable with. I'm [currently] doing a print so I'm learning printing

techniques and working on objects. Projects really help me not get too pulled into one thing and keep exploring new ideas. I think it's not necessarily obvious for other people, but ideas are driving the work more than the aesthetics or the process itself. I'm driven by ideas.

‘[There’s] the way we use technology without quite understanding what it means, the implications of remodelling our psychic.’

JULIE CURTISS



Julie Curtiss, *sketch of Lune*, 2020, ink on paper, 7 x 5 in, courtesy of the artist



Julie Curtiss, *Lune*, 2021, augmented reality. Courtesy of the artist and Acute Art

K O O

J E O N G

A



Koo Jeong A, *OLO*, 2021, augmented reality.
Courtesy of the artist and Acute Art

P

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PRECIOUS OKOYOMON

S

:



Sky Song

Somewhere I read you long to dispossess yourself of yourself
Slowly adjust to the suffering
In this shit again

The other day watching the sky drowning in blue as
I laid in the grass
I shouted a Dumas poem to the sun

Take up the blood from the grass, sun.
Take it up.
These people do not thirst for it.
Take up the insect children that play in
the grass, sun.
Take them away.
These people are sick of them.
Take down the long slender reeds, sun.
Cut them down.
These people cannot make flutes any longer.
Now sun, come closer to the earth!
Even closer than that.
Closer. Now, sun.
Take away the shape from the metal, sun.
They are like stone, these people.
Now make them lava.
I'd like there to be space between us and then also a crushing, a pounding.
This fullness of articulation. I mean no but yes
but
Motherfuckers always asking too many questions?
dispossession of that individuality / held in that all but already given to the unconscious,
the giving having given itself away / never was

What if it's not about putting shit together but about how shit falls apart?
Shittttttt
open that
void wide up

Eating ass for breakfast
Keep getting off

Open up
get in lick it up
Shit slinger
Master cleanse

Tehhehehhehhehhehhehhe

Silly boi
Faggot

fuck
the
Sun
fucker

the relationality of decolonization
brutalizing interplay of centrality and
constrained motion
Reform fade up a dark empty room lit by only evening light
a window set high in a back wall
No colour
No percussion
Footsteps the only sound
Don't cry bby
Dry your pretty eyes smile at me
at space time itself

Ever since I woke up this morning, i've had so many horrible thoughts i thought about people
with who I agree on 99% of what they say and with whom I share 99% of their desires? I lost
count. That's bad, and I really want to work on that, i want to work on being a better person but i
can't do it by myself or in my head or in the interpersonal diorama Maybe u can't separate

It's inside and outside and not externalizable

a war of our own device

Correlative images wash into view

We comically fall off a cliff

Come into everyday life
Now double that out into open space
the performative enactment of our
always already
Being
singing hosanna in the ear of anarchist bliss furiously falling into
love
waterfalls mysterious mischievous end ‘
Always love
The other day laying in the green
Watching the everyday sky go from pitch to dim violet to pink it settles

Black Girl Magic

when was the assertion of blackness anything other than an interrogation
theory on self-abolition
they gave me a muzzle
I asked to be abstracted

loving to disappear
I fell in love with everyone peeking over temples

Shoo shoo i want to be free

She moves freely through the black velvet curtain loving everything lovingly
Black will make u
 Black will unmake you

She seems to know her actions are rational

She walks with grace and assertion

Blackness doesn't move it stays still holding steadfast

she is abstracting comfort to reinforce the idea that
she is not a magical negro
she can break

she breaks angel eyes delicate weight
suffering is not existence
the blackness of blackness the fucked up invisibility of whiteness
find the self then kill it
new sainthood nappy headed nigger child
patron saint of the ashy black barbie
nubian princess nigress
zoomorphic angelic beings singing in midnight sugar storms
shoo shoo i want to be free

Abeg O

My mother got married for a greencard
I mean we're living through some shit
my mouth is full of regret
I am my mother's daughter
do i ever get tired of punishing myself
nah son
all these bitches is my sons
defied Oppression
clenched teeth
I'm leaking everywhere
ain't this shit sexy
dreams of waking up / eating ur own tongue
this is what my mother immigrated for
I mean wading thru this memory is going to require some bullshit
under the glare of this dimly lit bathroom
snorting K with this white boi
off this flooded toilet
my flesh in purgatory
I mean my ancestors seem confused
I mean this is the caucasian dream
I am big and round and ready
I mean my lil dark body is twitching
I am unliving my mother
becoming the body
fed up with my making
I address my prayer to myself
a body on its knees
unearthing light
begin erasure
nothing to write home about



Precious Okoyomon, *Ultra Light Beams of Love*,
2021, augmented reality.
Courtesy of the artist and Acute Art

ELIZABETH

DILLER

JOHAN

BETTUM

DANIEL

BIRNBAUM

ELIZABETH DILLER IN CONVERSATION WITH JOHAN BETTUM AND DANIEL BIRNBAUM

Johan Bettum: Your office was founded in 1981 and quite soon, in '87, you had an exhibition at Storefront in New York, *Bodybuildings*, where you were engaged with visual media. Another example would be *Parasite*, the installation in the Museum of Modern Art in New York in '89; you presented it as an interrogation of vision. How come you were so interested in technology pertaining to vision early on in your professional career?

Elizabeth Diller: Well, vision is our master sense, but my interest goes beyond perception. I've always been interested in the culture of visibility and how vision is used to control people through surveillance, voyeurism, exhibitionism, or tourism. From the very start of our practice to today, Ric [Ricardo Scofidio] and I had an interest in optical engineering. It never ended but finds different channels in different projects.

As far back as our first solo exhibition in New York, *Bodybuildings*, we were interested in the physicality of mediated vision and television. For that exhibition at Storefront for Art and Architecture, we had a conceptual problem of making an exhibition of projects that were not possible to bring into the gallery. So we had to somehow bring in mediated materials that weren't the authentic spaces or things. We were already starting to think about the role of mediation and mediated vision. In this case we were using slides, reproductions, and magnifying lenses to make them more immersive. When we came to MoMA, *Para-site* was a reflection of an architect coming into a building to do an installation. MoMA had imagined that we would just put models on bases and drawings on a wall but we actually thought, 'No, we have to interrogate this place that we're in – the museum.' The way to do that was looking very closely at looking itself. What happens at the threshold between the institution and the city,

that very edge, that moment? What happens in these spaces of transition between galleries where work is valued to places of circulation and so forth? So it was about looking closely at looking and who's looking at who and for what reason. We were obsessed with this, and there was a time here when we were all looking at institutions, questioning and critiquing them, and this was part of that critique.

JB: You also brought it into the heart of architecture – I'm thinking about the Slow House, a weekend house that you designed for a client on Long Island in 1981. If I may quote you, Slow House was conceived as a passage "from physical entry to optical departure." There was a live video camera directed at the water view and feeding the monitor in front of what you referred to as a picture window, a window out to the landscape. This electronic view was operable; the camera could pan and zoom by remote control. When recorded, the view could be deferred – day played back at night, fair weather played back in foul, and you state that the composite view formed by the screen in front of the picture window is always out of register, collapsing the opposition between the authentic and the mediated. It seems to me, if there ever was an augmented reality project, Slow House is it.

ED: It's more about layering the digital view on the actual view. This is intended to question how we value or even distinguish the real versus the artificial. The starting point of the project was a critical one. When we were asked to design a beautiful weekend house on a cliff overlooking the ocean, we began by initially looking at the way real estate is advertised with a view. It's always a water view, bay view, lake view, partial lake view, or a partial sea view. What you see of the outside from the inside is always the most important thing. But before there is a building, there is a

landscape context. The thing that makes a view a view is when it's framed. Whether it's a photograph or an actual window frame, you're creating a view where there was context before.

So our argument was that the picture window was already a mediation of the natural. It's the thing that can be sold and has immediate value because of the framing. We asked the question: 'Is that any different from the digital image which is also looking at the very exact same view and bringing it to you through another lens, except in a digital form?' The objective is layering the two on each other. They're both created, constructed views. By disrupting the horizon, we wanted to call attention to the discrepancy and production of a view in general. So there's an interruption by the monitor which is completing itself with a digital view.

The project actually broke ground, but construction had to stop after the foundations were already poured. Unfortunately, the client lost money in the art market in the sale of a Cy Twombly painting. So there you go. A Cy Twombly is the market equivalent to a house by us. [Laughs]

JB: Is it far-fetched to think that these things feed later projects such as the Institute of Contemporary Art in Boston (2006) with its theatrical view onto the river from the Mediatheque? Or the picture window on The High Line (2019) overlooking 10th Avenue? Of course, not technology per se but a continued interest in that framing and the artificiality of constructing a view.



Pass Family Mediatheque, interior view,
Photography by Iwan Baan,
Courtesy of Diller Scofidio + Renfro

‘I think that if I were to imagine the next thing, it would have some of those components to it, which were heavily inspired by Cedric Price. His Fun Palace is an unrealised project that is the germ of the idea of The Shed.’

ELIZABETH DILLER

ED: Yes. In fact, when we designed the Boston ICA, it was conceived as a set of cinematic experiences as you go through the building. You have different ways of relating to the Boston Harbour: sometimes you have no view, sometimes it's squeezed, sometimes it's mobile in the elevator, sometimes it's concealed and sometimes just part of it is framed. Everything is edited except for one thing, and in the case of Boston it was just the water and its texture. The space is actually called the Mediatheque because that's a part of the museum where the visitors can have access to media content, but it's suspended from the underside of the cantilever of the building. The whole glass window is optically engineered so that you can see only see the texture of the water and the temperature of the light, without the horizon line for context. It is an abstraction of the context for this very refined view.

When we opened the building, an elderly gentleman in the space said, "This is the largest screensaver I've ever seen," [laughs] and he meant it. He thought it was actually a big screensaver. It's very hypnotic. In a way that framing is an editor; it edits out everything irrelevant and frames what's essential. It is very similar to what we did on The High Line. In an area that existed as part of the historic structure, we took away the underside and created a grandstand theatrical space that looked down only at the traffic on 10th Avenue.

We replaced the steel edge with glass, which

allowed people to just sit and watch the tail lights of cars. To me it was very important in designing this place because the park was in a sense an escape from everything. The High Line is really about doing nothing. There's not much you can do there except walk or sit, and to highlight this notion of doing nothing we wanted to capture a view that was really monotonous and beautifully boring to really, really experience the nothingness of the experience on The High Line. It's kind of like a very thick nothingness.

Daniel Birnbaum: Listening to you talk about devices and optical instruments, visual technologies and also describing the Slow House almost as an augmented reality makes me wonder what you think about the following questions: Do you think that artistic creativity and architecture reacts to new technologies, or do you think that somehow art and architecture can anticipate – in some kind of prophetic way – technologies that aren't really fully developed yet?

ED: When I think back, I was never consciously thinking augmented reality but our studio's interest absolutely aligns with augmented reality. The theory behind a lot of these projects and also three dimensions collapsing into two or two or three and a half dimensions, was also manifest in our theatre projects, like *Moving Target* (1996; a multimedia dance work in collaboration with Charleroi Danes) or *Jet Lag* (1999; a multimedia

theatre work in collaboration with The Builders Association and D-Box). I think particularly *Moving Target* is a case where we are staging a performance that the audience is seeing in a perspectival way but also in a mirror reflection above. That reflection allows for a simultaneous view in perspective and a plan view which is an unusual, almost a surveillance view. At the same time, we were projecting content on the mirror, which was also semitransparent. We were able to have a character on stage and a projected character dancing a duet together. One was produced virtually through the mirror and the video, while the other was physically on stage. This ability to have one of the performers be virtual meant that we were able to exploit the potential of the body through virtual means.

We've done this through multiple projects in dance. I'm thinking also of *E/JM1*, *E/JM2* (1998; multimedia dance work in collaboration with Charleroi Danes and the Ballet Opera of Lyon). These are projects where there's the virtual presence of dancers and actual dancers, always working together, and it has always been an argument about why is natural vision, that is unaided vision, seen as more valuable than vision brought to you by other means? It is the issue of the authentic versus the artificial, which we never considered a useful dualism. We think, learn and see in multiple ways through multiple devices, and vision is always constructed. So we think of mediation as some kind of lesser form than

natural vision but it's equivalent, and all these projects are not only meant to didactically say that but meant to make magic happen in space, to enhance the potential of physical space and likewise the other way around, to enhance so-called mediated vision with actual events.

JB: You used virtual reality in one exhibition project, *Pierre Chareau: Modern Architecture and Design* at The Jewish Museum in 2017, and you also had a wonderful use of technology in the exhibition project *Charles James: Beyond Fashion* which was at the Metropolitan in 2014. It seems to me in these two projects there would be an example of your engaging with technology to reveal things that otherwise would be unseen or to make possible views that otherwise are inaccessible to us. It also represents a nice tension in terms of how you engage with technology, sometimes in a critical fashion, sometimes with a cultural interest. For the Charles James project, you used robots that had cameras that would sweep around the models and perform a fantastic digital dismantling of the dresses. Can you speak a little bit about that?

ED: Charles James was a fantastic designer, and the reason why the Met asked us to do this show is that he had an architectural approach to the design and production of his garments. They had more stiffness through the way he embedded structure in some of his great gowns. So we took

this opportunity in designing the exhibition to show more than the eye could naturally see, by analysing the large, beautiful garments through different methods. We used X-rays, MRIs and all sorts of medical devices like spectrographs to look at some of these things that were not visible. We built digital models so we could visualise cutaways of the garments. We were able to deconstruct these dresses and show how they were made, and zoom beyond the ability of the eye to see the structure of the fabric in detail.

These techniques are usually used in science and medicine, and we thought why not bring them into the museum to tell more of the story? Yet, we were very aware of how sometimes digital technologies are brought into museums to enliven didactic content for the viewer to control sort of like a game. We're critical of that approach because it's so common, overused, and under-theorised. We wanted to make not so much a didactic show but more of an immersive exhibition, to look at this garment in front of you and see through it at the same time. We also had the camera do naughty things, like go under the skirt and look underneath at what was hidden. [Laughs] So that was fun. We had analytical content on a monitor where these technical stories were told through the digital model and through these technical means. We were told by the Metropolitan Museum that of all the fashion shows that they've ever staged, this was the one with the highest demographic of men. Why?

Because of the technology. It's the first time that the museum actually accepted the use of monitors and screens to bring in digital content.

In the Pierre Chareau exhibit at the Jewish Museum in New York, we faced a very different problem. Chareau's work was largely interior and was mostly gone. There were pieces of furniture that were scattered around in collections and there was the Maison de Verre (1932) in Paris. But there was very little actual content in the show except for ephemerals like letters, postcards and photographs, and so the question was how do we bring this really beautiful work of Chareau to life? Again, we called on technology and it's just one of the tools that we have to produce space where there is none. We found archival photos of some of the apartments that Chareau made installations in, and we built the digital models of these and produced a VR environment that you can interact with through a headset. You can put on the headset and see a chair in real scale in the spot it once existed in and as you move around you see the background and the rest of the room.

What was interesting was that the VR wasn't operating on its own. It used a physical piece as a starting point to connect the real to virtual space. We also integrated something in the image that implied the space was occupied, like a burning cigarette with just a little bit of smoke. It brought the space to life in a way that can't be captured from the photograph.

It took a lot of construction time to rebuild these spaces based on plans and the photographs, but it felt like a very well received media and VR experience which is usually frowned upon and very often frowned upon in museums for its artificiality. However, in this case it's the combination of the real and the produced reality that makes for the experience.

DB: It's really interesting when you talk about this VR experimentation. It seems that once or twice, three times maximum, in every century there's a new visual technology that arrives from photography through film and television... the video camera, digital experimentation. In this century we have a cluster of new possibilities and I'm curious about what you think, what kind of a paradigm shift is this? Are these new immersive possibilities comparable to the introduction of television? I had a conversation with Douglas Copeland, the writer, who's a virtual reality fanatic, and he thinks it's going to change everything. Do you think it's a major shift?

ED: It's too early to tell. One of the current issues is the hardware: headsets are heavy and inconvenient and we're separated from space. It feels like it's too much of a burden.

DB: Well, there are obstacles. They're clumsy, no?

ED: I remember Magic Leap (a VR headset released in 2018). There's this promise that somehow without the great burden of all this equipment, we would be able to have an AR experience in space. I don't know where that technology is heading, but there's an opportunity to combine these realities in an effortless and lightweight way. When that happens, I think it can be transformational. The promise of VR has been around for a while, and I have not closed the door on it at all. In fact, we already use a form of VR, mostly very simple 360s in a lot of our work. We're using it in designing spaces and in producing models that can be inhabited in real time. We're using it for the recording of our performance work as well. We did a 360 degree robot project on The High Line where we produced *The Mile-Long Opera*. But these are all parts of this phenomenon that I think has so many different layers to it and the question is how much will it consume our lives? Right now it feels less radical, and more just like one of the tools that we use unconsciously. It's similar to the way TV became habitualised and Zoom became our everyday communication medium. Slowly these technologies are becoming part of our everyday lives. So maybe when Magic Leap finally comes up with a solution, it won't be so radical. [Laughs]

JB: Your Blur Building is a wonderful counterpoint to the discussion here. This was a building installation that you did for the Swiss Expo in 2002. One of the chief qualities of virtual reality is that it's fully immersive and you have attested to that in terms of how you told us you use the technology or media in the office in order to explore spaces and models. Blur Building was all about immersion, wasn't it? It was about intensifying the experience of being a subject immersed in... I think you called it a 'low-definition immersive environment.'

ED: Yes, that project was a response to the preceding Expo which was filled with high definition screens everywhere. Ric and I thought counteracting high definition would be interesting. This is the same issue of authenticity as our earlier work, only in this case, it values pixels per inch. The more pixels per inch the better the resolution, the better the image, and as the contrarians that we are, we thought, well, why not really push for a low-definition – not only image – but experience in space? The idea was to take the water in this lake and to produce an immersive fog-cloud that you could enter and get lost in, and there would be nothing to see and nothing to do in this space except contemplate our dependence on vision as the master sense. But it was a white out.



*Blur Building, Exposition Pavilion:
Swiss Expo, Yverdon-Les-Bains, 2002.
Courtesy of Diller Scofidio + Renfro*

‘Why is natural vision, that is unaided vision, seen as more valuable than vision brought to you by other means? It is the issue of the authentic versus the artificial, which we never considered a useful dualism. We think, learn and see in multiple ways through multiple devices, and vision is always constructed.’

ELIZABETH DILLER

All you could just see was a little bit of the contours or people when they came in and out of focus. We called it “Blur,” and blur is usually used around photography and lenses and softening the focus on something. So you think about a blur as a problem in vision, like you can't quite get the focus right or your eyes are blurry; you can't quite see. We thought of this as an advantage to really bring this immersive medium together with humans and the weather and truly make an environmental project on an environmental scale. This obsession with vision is pretty much everywhere in our work.

DB: It's interesting to hear all your examples from choreography and fashion shows and theatres and museums and the visual arts in general. We spoke about the dialogue with technology, but how did this incredibly intense dialogue with the other arts actually come about?

ED: It was never any different. I was an art student before I became an architecture student, and I actually wanted to make movies [laughs]... and I grew up, you know. When Ric and I got together, it was the second half of the seventies in New York and the scene was quite great; everyone was working in alternative media and sort of fighting the institution. Wooster Group (a New York City-based experimental theatre company), for example, was doing really interesting work that I remember being very affected by, and they

continue to do it, they work a lot with video and physical presence on stage. We were looking at anyone from artists like Nam June Paik to choreographers like Trisha Brown. We were looking at installation and also land art, Gordon Matta-Clark and Robert Smithson. These are all sources of inspiration of the early work, and when I graduated with an architectural degree I always wanted to bring in space into the work. I didn't know how. I didn't know whether it was to be as buildings or public space, but it was meant to be experienced, always.

I learnt this third dimension and popped out of film into three dimensional work but was always very interested in the space of the street, in the space of the stage, in the space of the museum. Those spaces are not neutral. They're meant to be rethought. There are conventions that need to be learned and then questioned, and I think that's why the opportunities came up. We sought the opportunities. We went after grants. Ric and I taught to be able to pay the rent so that we can do these independent projects before we had a single client.

DB: So right now I'm actually developing an exhibition that will be hosted by your structures.

ED: I want to know about this!

DB: Emma Enderby, Chief Curator at The Shed, and I are producing an augmented reality show

called *The Looking Glass*, a title that I think maybe you may like [laughs]. It is happening around The Shed and on The High Line, and I'm of course curious. Since you are, at least in my world, the architect who has been most closely associated with very, very important art initiatives in recent years, from the beautiful ICA in Boston to the extension of MoMA to totally new kind of institutions like The Shed and The High Line, which is not really an art institution but it's become one through the ambitious exhibition programme: What could be next? Do you have a utopian vision of a new art institution that would demand other architectural solutions? You've already done all these things, but since they keep coming, is there an unrealised project?

ED: Not just yet but there's always stuff cooking. So the initiative of The Shed had to do with a future unknown. New York is a real estate-driven city and you have to grab space for people to convene when you have the opportunity. But if artists were to convene there with the public, what would they show, what would they do, what would the performances be like? These questions couldn't be answered because the future is unknown. So maybe the space is just infrastructure. It's just space that could be big and small. It will have enough power to power anything you want.

It will have the structural capacity to lift everything, really heavy things. It will be indoors and outdoors and so forth. So The Shed is predicated on a kind of hypothesis of a cultural facility of the future, not necessarily a museum, as it has no collection but rather a continuously changing set of needs and actors and publics. It's about accommodation through this infrastructure. And we realised this project which is unbelievable. Alex Poots – the brilliant Artistic Director – and Hans Ulrich Obrist both worked to make this institution fabulous and commissioned all new work for the inaugural years.

I think that if I were to imagine the next thing, it would have some of those components to it, which were heavily inspired by Cedric Price, who did it in the 60s. His Fun Palace is an unrealised project that is the germ of the idea of The Shed. Thinking about this in the future, it would be ideal to not just be geo-fixed. The problem and the benefit with architecture is that it makes a place. It's fixed and not everybody can be there, and it would be great to be able to share events in real-time in a better way than we do now. It would be fabulous to have a network of sheds all around the globe that could do similar programming with great affinity for one another

to build more of a global initiative, where there's fantastic exchanges and connectivity in different ways that could liberate the institution from its one fixed spot, as well as time zones.

DB: So it's actually a kind of Fun Palace/Shed but in many places at the same time and distributing the exhibitions across geographies. I think that sounds like the next thing.

ED: Okay. Let's get the funding and do it! But I think that it really has to do with how we're closer to thinking in a similar way, where mayors are starting to become more powerful than presidents [laughs], and institutions are thinking more collectively. That is potentially a future that we and the next generations could start to enable, to transcend geo-political borders.

DB: Sounds like a realm for virtual reality as well.

ED: Yes, absolutely.

DB: But do you think it could also happen on a smaller scale? In terms of The Shed, have you thought that this could also take place on a smaller scale?

ED: Yes. The Shed took advantage of the site that we were given. The given plot wasn't actually big enough and we wanted to expand its footprint. So it's the product of certain variables. But the essence of The Shed is flexibility, space with the infrastructure for artists to be able to do a lot of different things and have cross-disciplinary possibilities. Who knows? The thing that we knew we would always need is electrical power. Whether it's done through some kind of remote way or it's done through wires, we will always need power. And we knew we would need space, though maybe not much at times, or maybe we wouldn't need a certain height. But we felt this architecture of infrastructure could marry those things: space, power, structural capacity. And there would be just the infrastructure that you need to make anything, whether it's water and power or communication lines. That is the basis of spaces that could be distributed all over a city and does not need one hub with one giant space.

DB: With the pandemic, some people have said that it's a kind of anticipation or a dress rehearsal for a bigger issue, having to do with the climate crisis, if we're not going to keep the art world, or the culture world, as it was. You're talking about

something that interests me a lot; these different places in different geographies that are linked will need the technologies we're talking about. If you're going to link the Fun Palace in Shanghai to The Shed in New York and to a few other such places, maybe forests in Scandinavia, they can be linked through virtual tools.

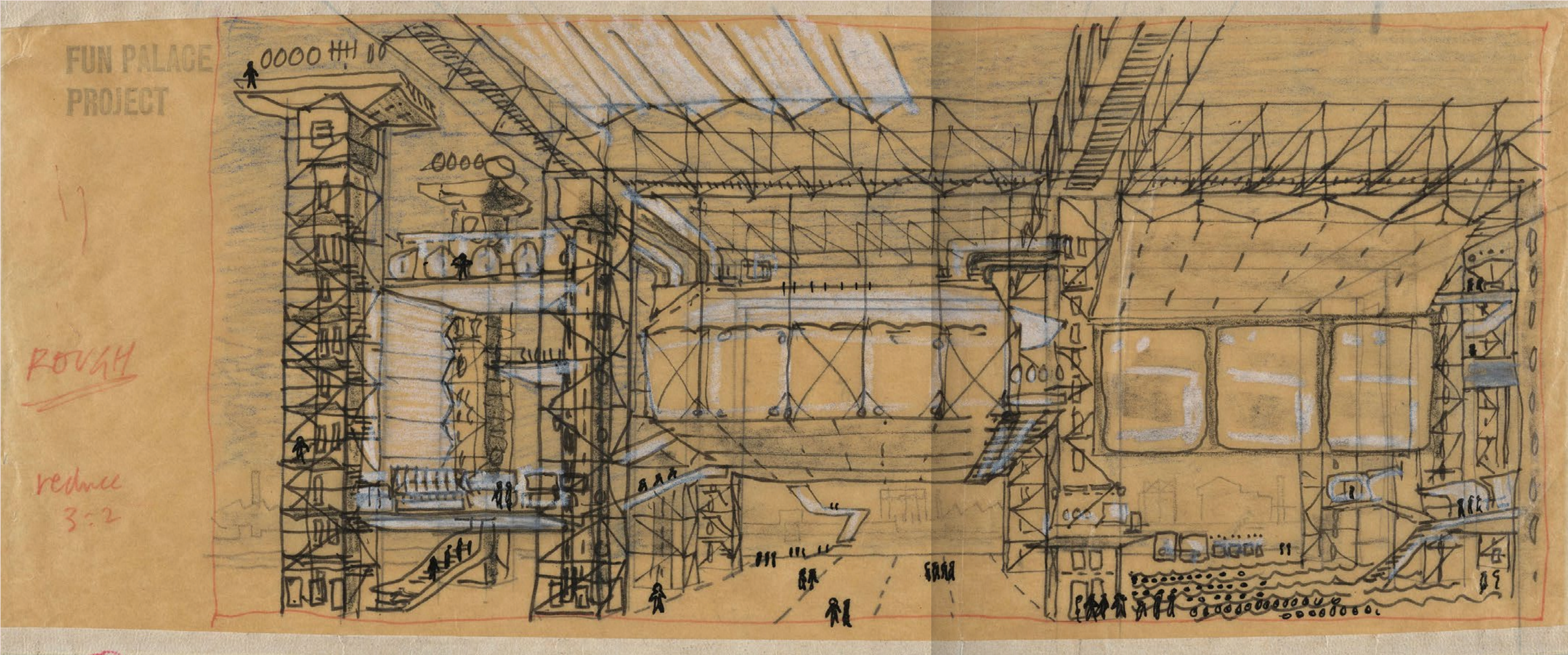
ED: I think that is very much a possibility. But we'll need to ask how we can correlate real space with those virtual spaces. If it's not seamless, how can we eliminate the prophylactics of the seams from the experience? I think that is the challenge.

I've found that for all of the reductions in real experience that we complain about, there are gains that we haven't been able to have. It's always been arduous to work virtually with collaborators from different parts of the globe. Now it's easy because the technologies allow us to sketch in real time and see each other. I've also been teaching my classes on Zoom. My students worry because they can't make a physical model and space, they don't have access to a shop. But now you can trap your captive audience for ten minutes, and make a film to use the potential of Zoom.

I think that the more sophisticated the technology, the easier the use, distribution, and

democratisation of these instruments really make all the difference. There's a kind of beautiful vision of connecting the globe in real-time and in real experience. Not packaged, not pre-recorded. This is something that I do believe in, and it has always been there in our work: liveness matters. When you see a pre-recorded recorded, it feels very different. That's why we still love the live stage. You see a performance with flaws that can't be corrected if there's a mistake; you feel there's an auratic experience of the performer and sound and immersion that is not being duplicated in our work by a mediated presence. It's not trying to simulate the real. It's existing in parallel with the real. Why can't the real and unreal be together in space in a happy, alternative medium?

This conversation took place on 29/05/2021 as part of Breaking Glass III – Virtual Space, a Städelshule Architecture Class symposium on virtual and augmented reality in art and architecture, 28–30/05/2021.



© Photo SCALA, Florence
Cedric Price (1934–2003): *Fun Palace for Joan Littlewood project*. Perspective. Stratford East, London, England, 1961. New York, Museum of Modern Art (MoMA). Gift of The Howard Gilman Foundation. Acc. n.: 1231.2000. © 2021. Digital image, The Museum of Modern Art, New York/Scala, Florence

TOMÁS SARACENO'S
WORLD WIDE (SPIDER) WEB



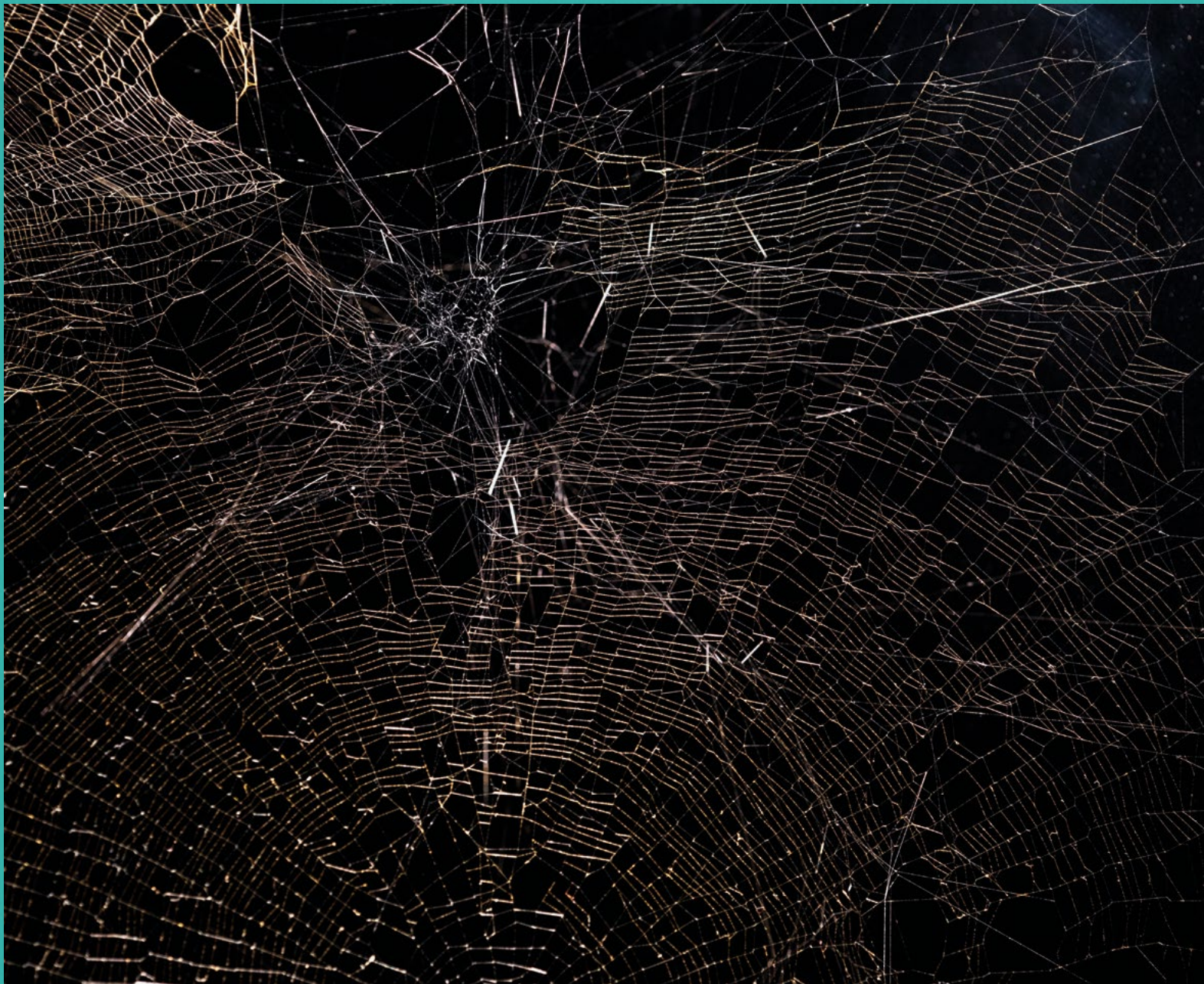
DANIEL BIRNBAUM,
EMMA ENDERBY AND
HANS ULRICH OBRIST

C A N T
E C H N
O L O G
Y S A V
E U S ?



Tomás Saraceno
Hybrid solitary semi-social solitary solitary Instrument
 42 Comae Berenices built by: a duct of *Nephila inaurata* - seven weeks, an ensemble of *Cyrtophora citricola* - eight weeks, a triplet of *Holocnemus pluchei* - six weeks, a solo *Araneus diadematus* - two weeks (detail), 2020
 Courtesy the artist and Arachnophilia
 Photography by Studio Tomás Saraceno
 ©Tomás Saraceno

Tomás Saraceno
Hybrid solitary solitary Instrument WDS J12266-6306
 built by: a solo *Nephila senegalensis* - six weeks, a solo *Parasteatoda repidariorum* - three weeks, rotated 180° (detail), 2019
 Courtesy the artist and Arachnophilia
 Photography by Studio Tomás Saraceno
 ©Tomás Saraceno



A spider creates an image of the world through the vibrations it receives and sends through the web. The web is thus an extension of the spider's senses and – one could argue – of its mind. The analysis of these seismic signals traveling through the web falls under the scientific discipline of biotremology: the study of vibrational communication.

No other artist has explored non-human perspectives of the world with the zeal of Tomás Saraceno, the tireless Argentinian explorer of the life of spiders.

In our era of climate emergency – when entire ecosystems are at risk – Saraceno's art gives us a glimpse of alternative universes co-inhabited by animals and humans. His vision of a world free of carbon and fossil fuels is built around a series of unorthodox collaborations that involve webs, air, balloons, and indigenous communities. And the life of spiders.

The focus on bio-diversity is something Saraceno shares with Olafur Eliasson, in whose studio in Berlin he once worked. Eliasson has also often communicated his efforts to consider life not from a human-centric point of view but from a broad, biocentric perspective. Both artists want to explore perspectives that go beyond what we humans can properly imagine.

How it is to be a spider, for instance, we will never fully fathom.

For Saraceno it is clear that the way we inhabit our planet needs to change, and the pandemic represents a dress rehearsal preparing us for a much more radical challenge: a climate crisis that threatens life on Earth.

What could the focus on bio-diversity mean for art and its institutions?

Clearly, the models that have dominated the international art world for decades are ecologically unacceptable. Thousands of people

flying to another continent for a weekend to look at art that also has been transported to a biennale or art fair by air certainly seems obsolete.

That form of irresponsible globalism will have to end. But what will take its place? An emphasis on grassroots initiatives? Probably. But if some of us want to maintain the planetary conversations we need to find new ways. Could today's immersive technologies expand the ways we experience art?

The recent craze for trading blockchain-based digital imagery (so-called NFTs) and the environmental impact of these technologies have shed unflattering light on all initiatives involving virtual spheres. Until there is an ecologically sound blockchain, Saraceno will have nothing to do with the crypto world.

Tomás Saraceno
Spider web photographed in the context of Spider/Web Pavilion 7: Oracle Readings, Weaving Arachnomania, Synanthropic Futures: At-ten(t)ion to invertebrate rights!, 2019
 At the 58th International Art Exhibition - La Biennale di Venezia, titled May You Live In Interesting Times, curated by Ralph Rugoff.
 Photography by Studio Tomás Saraceno.
 Courtesy Spider/Webs, the artist and Arachnophilia
 ©Tomás Saraceno



‘Saraceno wants to question the idea of a detached sphere of virtuality.’

DANIEL BIRNBAUM, EMMA ENDERBY
 AND HANS ULRICH OBRIST



Is technology the problem or could it be part of the solution?

Saraceno wants to question the idea of a detached sphere of virtuality. The so-called cloud, for instance, is a hardwired network of, servers, routers, and fibre-optic cables that consumes enormous amounts of energy. The concealment of the true realities behind the phantasmagoria of virtuality is a form of mystification typical of Big Tech persuading customers that in the digital sphere all transactions have become shimmeringly frictionless.

Saraceno's foray into the virtual sphere instead stresses the essential links between the environment we all inhabit and the visual effects that can emerge when augmented reality works are viewed on tablets and phone. The two are connected.

In collaboration with *acuteart.com*, Saraceno has produced gigantic colourful AR spiders that the viewer can place wherever they want them. The app necessary to make these extravagant creatures appear is linked to another app that is part of Saraceno's interdisciplinary Arachnophilia project – *arachnophilia.net* – that since many years explores all aspects of the life of spiders: the vibrations they produce, the architectures they build, the ways they travel and communicate.

To get access to the spectacular AR spider that you can place in your home or garden, the viewer has to find a real spider (or web) and document it with the camera on their phone. The picture then needs to be submitted. The moment it is recognised as representing an authentic spider the interactive AR creature is unlocked and can be placed where the viewer wants them. In that way the audience contributes to Saraceno's unique global mapping of spiders and webs.

Saraceno's *Mapping Against Extinction* is a project that links the augmented reality artworks with our planet's threatened biodiversity. The spectacular possibilities of new immersive art is thus used as a way to create attention to what ultimately is infinitely more significant: the future of life on our planet. Scientists argue that we are bearing witness to the dawn of what is called the 'sixth mass extinction'. Such an insect Armageddon would be catastrophic for all forms of life, also that of humans.

With AR new forms of public art emerges. Geo-located virtual sculptures can interact seamlessly with the world that surrounds them. In a surprising way they can appear embedded in the landscape. New forms of viewer participation will turn spectators into active co-producers.

Saraceno's *Webs of Life*, launched with the

Serpentine Galleries in London and The Shed in New York last summer, is local and global at once. You have to explore your immediate surroundings to find real spiders or webs. You have to search your basement, garden or street corner to get access to sensational immersive experiences.

In exchange for a sample of biological life you will get a virtual artwork that you can place where you want it. If other institutions join, the project could create a world-wide spider web, virtual and real.

It's an exploration of what Chinese philosopher Yuk Hui calls biodiversity and techno-diversity. Could these connections between biological life and virtual experiences be a first glimpse of an entirely new maze-like exhibition format for a future on a planet on which life can survive?

Join us in supporting Tomás Saraceno in his spider research and in his creation of a global web! Go out and look for real spiders!

'Saraceno's *Mapping Against Extinction* is a project that links the augmented reality artworks with our planet's threatened biodiversity. The spectacular possibilities of new immersive art is thus used as a way to create attention to what ultimately is infinitely more significant: the future of life on our planet.'

DANIEL BIRNBAUM, EMMA ENDERBY
AND HANS ULRICH OBRIST



Tomás Saraceno, *Bagheera Kiplingi*, 2021,
augmented reality.
Courtesy Tomás Saraceno and Acute Art

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YUK HUI

REMARKS ON A DIGITAL CHRONO-TOPOLOGY

I would like to start with a recent work of the Japanese artist Masaki Fujihata titled *BeHere*, which invites the audience to reflect on what kind of intervention with urbanism and what kind of engagement with *locality* can new interface technologies such as augmented reality (AR) offer for artistic creations. Here designates the locality which is Hong Kong.¹ The artist uses AR to recount a history which is no longer, but yet still possible to be experienced through traces constituted by new media technologies. It is through this work that we can participate – in the very literal sense of this term – in the life of the phantoms. It is an attempt to reconstitute time by constructing a space which contains both objects that are obsolete and objects that are present; the topology of space is modulated by new technologies which disrupt the temporal dimension of the presence and creates a chrono-topology in the form of a social sculpture in the sense of Joseph Beuys. What is the significance of this possibility of modulating the topology of space, or the making of new sculptures through digital interactive technologies?

1. Digital Baroque

We know that virtual reality (VR) and AR technologies are proliferating in different domains and have entered our daily life as a form of digital writing and reading. We encounter these digital objects everywhere in shopping

malls, in supermarkets as well as in pornography websites; they seem at the first glance predicates of space like what red and round is to an apple. Consumerism has invaded beyond the physical space which Guy Debord once called the society of spectacles, it has also constructed spectacles which are no longer limited by chronological time and continuous space: every spectacle is possible, a whale swimming in front of us right now or a Louis Vuitton bag waiting for your grasp. Space is opened not as a mere three-dimensional container characterised by its capacity to hold but is also infinitely folded like the baroque art. Folding, inscribing the infinite in the finite, like the sound of the ocean wave, in the less than one second duration, there are infinitesimal *petites perceptions*.

The fold in the baroque time was an aesthetic expression rooted in a new ontology, described by Leibniz's monadology and his calculus. In Leibniz's extraordinary monadology, monads are deprived of window but endowed with a mirror which reflects what is reflected in the mirrors of other monads from specific points of view. This reflection of reflection of reflection creates an algorithmic infinite and therefore the plenitude of each monad: "each portion of matter may be conceived as a garden full of plants, and as a pond full of fish. But each branch of a plant, each limb of an animal, each drop of its humours, is also such a garden or such a pond."² It is only at our time that Leibniz's imaginary universe and

his mathematical ideal converged into a single reality. It means that the fold is no longer only an aesthetic expression, but it is realisable through interactive technologies. The distinction between virtual and real made in the last century therefore becomes useless, if not misleading. With AR and VR, we are open to virtually infinite interfaces and surfaces in space, we can walk into each monad which presents us the universe from a totally different point of view, and it is the reason for which we can speak about a perspectivism as a radical opening of perspectives, which suspend our viewpoint and surprise us – like *epoché* in the phenomenological sense.

We will have to do so by first inquiring into the nature of space. AR and VR concern primarily space. But what is the space in AR and VR? In VR, the space is nothing other than vectors indicated by numerical values: objects appear in front of us are synthesis of multiple images taken from different angles, and it is through the optics that they appear to us as 3D objects; in AR, there is space, however, paradoxically it is also devoid of space, since the same space, could appear differently to million different people according to schemes of personalisation. There seems to be a multiplication of space but in fact there is no space, meaning it is *atopos*, *a-topological*. Furthermore, when we speak about VR and AR in a place like Hong Kong known for its lack of space, it becomes somewhat ironic to be excited

¹ An earlier version of this essay was presented in a symposium organised around the work of Masaki Fujihata, and later published in *Art in the 21st Century: Reflections & Provocations*, ed. Siegfried Zielinski (Hong Kong: Osage Foundation, April 2020), 44–51

² Gottlieb Leibniz, *Monadology*, 67, see Lloyd Strickland, *Leibniz's Monadology, A New Translation and Guide* (Edinburgh: Edinburgh University Press, 2014), 28

by the increase of virtual space that doesn't really exist and never will serve the need of the people. It is ironic because now with augmented reality, we will have virtually infinite space, and everyone can have his or her own personalised space anywhere in the city through an apparatus should it be a tablet or a pair of glasses: the city is finally owned by the people, though only digitally. However, we also shouldn't underestimate this statement since it is also an invitation to imagine a decomposition and recomposition of urban spaces, which didn't yet happen.

2. Space and Spatiality

There is no space but spatiality in the digital world. These technologies don't augment space, but only modulate the spatiality of space. Modulate here doesn't mean giving form, but rather to affect the totality through partial input. What is spatiality? When someone returns home after work, there is electricity cut, and the house is completely dark, however this person can still orient himself or herself to find a candle in the second drawer of the desk in the second room on the left of the corridor without having seen anything clearly in the dark. Left and right, as Kant says in "What does it mean to orient oneself in thinking" that they are not distinguishable in intuition, but rather belong to a feeling [*Gefühl*], which originates from a "subjective ground of determination." There is spatiality that defines the *Umgang* or the *Umwelt* of the space but it is not the space itself.

Likewise, when you come into a lecture room, and find a place to sit down, why did you choose this seat but not the other? What draws your attention to this part of the room? There is a spatiality of this space that is singular to you because it is derived from your personal experience. It is not space but rather spatiality which is the object of interrogation in the digital baroque. With VR and AR technology, we are able to disrupt the spatiality of space by introducing the spectators to different points of view. Or in other words, we are able to complexify the question of spatiality beyond a phenomenological discourse, and to modulate these spaces with digital tools.

The digital is a new way to think and manipulate interobjective relations. Interobjectivity is a concept that I developed in *On the Existence of Digital Objects* as a critique of the overemphasis of intersubjectivity in phenomenology⁴. According to the latter, veritable descriptions of an object are based on intersubjectivity; but in fact the intersubjectivity is only possible with interobjectivity, meaning that what is called *sensus communis* or common sense is established by interobjective relations, for example in all forms of writing should it be literal, analog and digital. Sound artists are probably among those who are most sensitive to the interobjective relations, since sound art is possible only when one is able to manipulate the interobjective relations of sound grains. Or maybe we can generalise that technology to some extents is a science of interobjectivity, because what was considered to be meditative and imaginary relations, could be materialised in the technological evolution, for example, the interobjective relations based on the physical contacts between the gear and the pulley in the mechanical time is replaced by relations constituted by data. In other words, the world of AR and VR is the world of interobjective relations established by data, so interactivity should be considered from the perspective of interobjectivity and spatiality.

The convergence between the sensible and the computational in the digital form of interobjectivity is a new possibility made possible by cybernetic manipulation which reconfigures the question of spatiality: everyone has his or her own world overlapping with each other in space and time. The simultaneity of time and space is fundamentally a phenomenon of spatiality but not space. A shark is swimming towards me, but there is no shark in space, and there is no space within the shark, there is only spatiality coordinated by both sensible and computational data. To where is this power of manipulation of spatiality leading us? Today the younger generations are taught to use these new technologies at school and to create different applications; museums are eager to use these technologies to enhance the experience of art works, for example equipped with VR goggles

zooming into the ancient paintings such as those in the Chauvet Cave of Ardèche to see the details in three dimensions; shopping malls want to use these technologies to improve their costumes experience, allowing them to buy from distance or to produce their needs by displaying objects relevant to their profiles. What distinguishes these from artistic creations? It is not our priority to define what art is here, but it is necessary to confront this question in order to deepen our understanding of this radical opening of digital technologies.

The dramatic emergence and encounter of digital objects in the world of AR releases the spectator from his or her habitudes and exposes her or him to extraordinary events: the chrono-topological order of existence is subverted, like what was already made possible by the montage technique in cinema but with the great difference that the objects are no longer only on a two-dimensional screen, nor the audience remains passive spectators. For example, excitement of being able to see a shark swimming towards me in this room and being able to touch it and feel it albeit its inexistence. These digital objects produce surprises much more than a painting or a sculpture. The surprise is calculated and determined by location sensitive algorithms.

3. Location and Locality

What is a location? A parameter composed of a longitudinal and latitudinal value provided by the GPS device? Does location mean place? Or location sensitive means again that these spaces are without place? It is space without place because it belongs to nowhere but the curiosity of newness and the vulnerability to marketing. Space without place is homogeneous. This is the real poverty of AR and VR since they seem to augment our space but in fact it increases nothing but only oblivion of place. It is in this sense that "Be Here" is primarily an invitation to reflect on such a question. Will artistic appropriation of AR and VR be able to return these spaces to their places or even bring back a *locality*? However, what does it mean by place here?

Place is that which gives space. I would like to mention here the work of the Japanese philosopher Kitaro Nishida. The founder of the Kyoto school has developed a logic of place, in Japanese, *Basho* (場所).⁵ Nishida suggests that instead of seeing a predicate as an accident of the subject, it could be understood as a place which contains the subject. Nishida's innovative appropriation of the Neo-Kantian Emil Lask's logic, Fichte's philosophy of subjectivity as well as Zen Buddhism allows him to obliterate the Aristotelian subject-predicate logic and the subject-object opposition brought about by early modern philosophy. For example, when we say, "red is a colour," "red" is placed within the broader universal "colour"; and in "the rose is red," it is the particular redness of the rose that is placed within the universal of redness. The copulative is thus signifies a belonging to place (*basho*). The extension of the logic of place will end up at the absolute nothingness, since it is the nothingness that gives birth to all. The nothingness is not a lack or a negation of being, rather it is that which gives birth to being. Are we not regressing into metaphysics? Not really. Because the absolute nothingness is the origin of all places only because it is historical, historical in the sense that it is only so and considered to be so in the context of East Asia, especially when we consider what Nishida says about Eastern philosophy and Western philosophy that the

‘We know that VR and AR technologies are proliferating in different domains and have entered our daily life as a form of digital writing and reading.’

YUK HUI

former concerns the question of nothingness and the latter the question of Being.⁶

Now the logic of place leads us to a logic of history and presents a challenge to the digital chrono-topology; we therefore also moved from an undetermined universal concept of space to a "universal" of place which is paradoxically historically determinable but yet remained open. Therefore, we see a rather different logic from what we presented at the beginning of this article. We pointed out that the artist reconstitutes time by predicating space with the help of digital technology; now we reversed the order by suggesting that the question of space, leads to the question of place, and finally to the question of historicity and locality. The question of historicity is not about historiography which lists the historical events in chronicle orders – which we see in many artworks employing symbols to refer to specific historical events, for example the colonial past or any nostalgic objects; the question of historicity concerns less about semiotics, but rather it questions *what kind of opening can be made possible in view of the present and the past*.

What consists of the difference between an AR system used for shopping and a work of work is this *opening* that the latter attempts to present. A work of art in this sense an artistic intervention is no longer one that *uses* and *expresses* through these technologies, but rather one that *raises*

questions to and with these technologies, and in such a singular gesture, it *transforms* the use of technology and creates a chrono-topology which opens both the question of space and place. Pretending to be a good materialist, one suffers, by constantly asking how technology will transformer art; but the truth is that it also turns one into a bad materialist, falling to think how art can transform technology.

We may conclude by saying that the question is, with these new technologies, and without reducing to mere simulacrum, will it be possible to modulate the spatiality in order to make such an *extraordinary* event to take place? By extraordinary, we mean that which suspends the logic of space and produces a real surprise – in the sense that it is not only being merely newness but rather it reveals the uncanny place which is there but not yet pronounced. And this extraordinary event invites us to give these new media technologies *locality*; at the same time, the work of art becomes a social sculpture that returns a physical space to a place that is *yet to be made sensible*. This seems to be a fundamental question for virtual space related art and the challenge to artists who want to transform technology beyond their industrial uses.

¹Immanuel Kant, "What does it mean to orient oneself in thinking?" (1786). In I. Kant (Author) & A. Wood & G. Di Giovanni (Eds.), *Religion and Rational Theology* (The Cambridge Edition of the Works of Immanuel Kant, pp. 1-18). Cambridge: Cambridge University Press, 8:135

⁴Yuk Hui, *On the Existence of Digital Objects* (Minneapolis: University of Minnesota Press, 2016), Chapter 4

⁵See Kitaro Nishida, *Basho*, in *Place and Dialectic Two Essays by Nishida Kitarō*, trans. John W.M. Krummel and Shigenori Nagatomo (Oxford: Oxford University Press, 2012), 49-102

⁶I elaborated on Nishida's interpretation of the difference between Western and Eastern philosophy as well as his logic of *basho* in my recent book, *Art and Cosmotechnics* (Minneapolis: University of Minnesota Press, 2021)



Bryan Ferry, *The Bride Stripped Bare*, 1978,
12", vinyl, Polydor/EG
Bryan Ferry, *The Bride Stripped Bare*, 2021,
12", remastered vinyl, Virgin

JOHAN BETTUM
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