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**Misinformation as Material: Towards the use of cognitive
psychology as a research tool for artists**

Hopwood, Alasdair

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Misinformation as Material

Towards the use of cognitive psychology
as a research tool for artists

Misinformation as Material

**Towards the use of cognitive psychology
as a research tool for artists**

A commentary submitted in partial fulfilment of the requirements of the University of Westminster for the degree of Doctor of Philosophy by Published Work.

Abstract

“There is an elementary school in Japan with a course in cognitive psychology. In this country you can find art school heads of department who don’t even know that such a subject exists.”

Artist and writer Simon Bill. Facebook post made on 7th July 2022

This written contribution towards a PhD by Publication outlines research projects that draw on a personal fascination in the effects of the fictive - both its cathartic potential and its tendency to slip into darker territories that can cause harm to others. By exploring what happens when a fiction is believed and how it impacts on the individuals and communities who harbour those beliefs, it considers how the ‘false’ can shift our behaviours.

This research is explored in relation to three major public projects with a focus on work undertaken in the last ten years (2012-22). They include *WITH* (withyou.co.uk), that forms the background to this research; *False Memory Archive* that extends key research areas and *Smoke and Mirrors: The Psychology of Magic*, a major exhibition that I initiated and co-curated at Wellcome Collection, London.

Aspects of human cognition contribute to the creation of our subjective experiences, whether that be our imaginations, our memories, our beliefs, or our sense of ‘self’. Working closely with world-renowned Cognitive Psychologists¹ on residencies and projects since 2012, I have developed an understanding of an area of research that I refer to as the Science of Subjectivity. This term could also be described as the science (or psychology) of perception or of conscious experience, and I’m situating my understanding of this territory as an artist who explores affinities between art and science. This thesis draws on research from cognitive psychology that identifies how certain fictions are believed and why our perceptual systems have evolved to tell stories that help us make sense of our experiences. These tendencies can be exploited and weaponised through suggestion and misinformation, particularly by those in positions of authority.

This commentary will explore how certain themes have become embedded within contemporary art practice and its institutions over the last twenty years. It proposes that the Science of Subjectivity is a useful contribution to furthering an understanding of art that is concerned with politics and activism, tactical media and the parafictional, the nature of identity, memory and autobiography and the psychic, mystical and spiritual. The transference of knowledge from cognitive psychology to these key issues in contemporary art, presented through research and artistic practices that move beyond current archetypes, combined with evidence from key public projects, constitutes a unique contribution to knowledge in this interdisciplinary field of art and science.

¹ Cognitive psychology is the scientific study of mental processes such as attention, language use, memory, perception, problem solving, creativity, and reasoning. (American Psychological Association dictionary of psychology)

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List of accompanying materials

Digital video files

False Memory Archive: All works authored by Alasdair Hopwood under the name A.R. Hopwood

FMAvideo1: *Professor Elizabeth Loftus and members of her research team recalling the same false memory, from memory, as if it were their own.* (2013).

FMAvideo2: *False Memory Archive: Two actors reciting submissions to the False Memory Archive from memory via FaceTime.* (2013).

FMAvideo3: *False Memories: Evelien van den Broek.* (2017)

FMAvideo4: *False Memory Archive: Erased Red Datsun.* (2013).

FMAvideo5: *False Memory Archive: Hot Air.* (2013).

FMAvideo6: *False Memory Archive: A Never Ending Lift (descent). Looped night vision footage of Freud's personal lift at the Freud Museum London.* (2014).

Smoke and Mirrors: The Psychology of Magic

SmokeVideo1: 'Pen and Hands' from the experiment *Explanations of a magic trick across the life span.* (2015). Jay Olson, Irina Demacheva and Amir Raz.

SmokeVideo2: *Eye-witness testimonies from the study 'The Possibilities of Mal-Observation and Lapse of Memory from a Practical Point of View' by Hodgson and Davey.* (1887) (recreated for an installation in *Smoke and Mirrors* 2019). Video produced in collaboration with Ben Gilbert, Thomas Farnetti, Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo3: *Interview with Professor Chris French.* (2019). Produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo4 (Reasoning): *Dr Gustav Kuhn explains misdirection of reasoning.* (2019). Video produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo5 (Perception): *Dr Gustav Kuhn explains misdirection of perception.* (2019). Video produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo6 (Memory): *Dr Gustav Kuhn explains misdirection of memory.* (2019). Video produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo7: *Video from the study Magic Performances - When Explained in Psychic Terms by University Students.* (2018). Lise Lesaffre, Gustav Kuhn, Ahmad Abu-Akel, Déborah Rochat and Christine Mohr.

SmokeVideo8: *Interview with Professor Christine Mohr.* (2019). Produced by Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo9: *Comedian and psychologist Rob Bailey explains cold reading.* (2019). Produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

SmokeVideo10: *Footage of the exposé of Peter Popoff.* (1985). Jason Alexander and Tyler Measom. (Edited by Alasdair Hopwood from original footage provided by Tyler Measom)

SmokeVideo11: *Interview with Jay Olson.* (2019). Produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

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Additional acknowledgements are included at the end of this thesis.

Author's Declaration

I declare that all the material contained in this thesis is my own work.

Alasdair Hopwood. December 2022.

Introduction

The Political

I make art that uses observations about contemporary politics as a point of departure. The politics in my art is not intended to convince, transform, or persuade people I disagree with to see the world in my image. I find art that attempts to directly engineer social change in this way problematic. I instead prefer to acknowledge that art will by necessity always be limited to its readers interpretation and that as a result, there is only so much it can do in a political realm.

This is not to say that I don't believe in the potential of art to change the way we think. It can be part of an incremental process that involves encounters with many different cultural forms that can transform how you think *you think*. I was drawn to making art because it feels to me to be inherently political. It's an expression of freedom and trust. Freedom to feel like you've chosen a creative life that rejects what we understand as the status quo, and trust because you accept that whatever you produce will shift in meaning depending on whose experiencing it. That mix of celebrating creative individualism, whilst relishing a fluid connection with a multitude of others is, in and of itself, a political statement of intent worth cherishing and defending.

Over a twenty-year career I've grown interested in the idea that my work can help to initiate useful self-reflection - to see my various contributions to the public realm as attempting to encourage metacognition². I have attempted to do this in ways that are generous, funny, idiosyncratic, and serious all at the same time. Whether I've achieved this ambition is hard to evidence, however I hope the reader of this thesis will be able to imagine ways in which it may have been fulfilled.

Throughout this PhD, I explore whether research from cognitive psychology provides useful guidance for artists who instrumentalise their work for political ends. I use my own journey through WITH (withyou.co.uk), *False Memory Archive* and *Smoke and Mirrors* to reflect on this question and to consider whether parafictional art is problematised by research from cognitive psychology that illustrates how susceptible memory is to misinformation. I also touch on the key underlying political origin points for my work, that are then woven into wider narratives that knit together the theoretical with the scientific and the personal.

The Autobiographical

In this commentary I explore how misinformation influences the narratives, fictions, and stories we tell ourselves. I use the word misinformation (not disinformation) because it includes information that is well-meaning but in error, as well as false information that has been deliberately designed to mislead³. Most of my understanding about the psychological impact of misinformation comes from my time working as an artist in residence in the *Anomalistic Psychology Research Unit (APRU)* at Goldsmiths, University of London. It was there that I worked closely with cognitive psychologists who study the effects of misinformation and suggestion on autobiographical memory. This

² An awareness of one's own cognitive processes, often involving a conscious attempt to control them. (American Psychological Association dictionary of psychology)

³ Lewandowsky, S., Cook, J., Ecker, U.K.H., Albarracín, D., Amazeen, M.A., Kendeou, P., Lombardi, D., Newman, E.J., Pennycook, G., Porter, E. Rand, D.G., Rapp, D.N., Reifler, J., Roozenbeek, J., Schmid, P., Seifert, C.M., Sinatra, G.M., Swire-Thompson, B., van der Linden, S., Vraga, E.K., Wood, T.J., Zaragoza, M.S. (2020). *The Debunking Handbook*. P.4

extraordinary research into ‘false memory’, should be of genuine interest to artists who are making work about their own lives, or which engages with questions of self and identity.

The research I describe in Chapters 2-4 will give some pause for thought - not only because it highlights the possible ways that misinformation can influence recall, but also because it challenges myths about the repression of traumatic memory. I assumed that many of these myths were true and that even if they weren't that it didn't really matter. As I made my way through key findings about the nature of memory from forty years of cognitive psychology, I realised that there were significant consequences to such complacency. This challenge to what *I thought I knew* about memory from learnings introduced to me at art college (that have capillaries of influence across critical theory, cultural studies, and popular culture) was a shock to the system. It led to a period of soul searching that forced me to challenge many of my own ways of thinking and making. I hope that the overview of this journey will be useful for artists and curators to consider.

If research from cognitive psychology (a science) seems to undermine certain theoretical positions that are rooted in foundational narratives from critical theory, then what should be done? Should the multitude of psychoanalytical discourses that emerged from Sigmund Freud be discarded after considering scientific evidence that problematises the ethics of such approaches? Should artists still use parafictions when scientific research suggests that such strategies could lead to error strewn acts of recall? Should artists and curators be fetishising magical thinking (and the mystical, spiritual and paranormal) at a time when pervasive, esoteric conspiracy theories are threatening to undermine democracy?

I ruminate on these concerns throughout an overview of my international touring exhibition *False Memory Archive* that grew from my residency at Goldsmiths, that also included spending time meeting and collaborating with a community of researchers in the US and Europe. I indicate that a metamodern approach could help in navigating a way through some of these thorny issues. Metamodernism, in proposing that all systems of knowledge should be doubted (with some more doubted than others), is perhaps a useful (but necessarily flawed) way to negotiate some of the tensions and problems outlined throughout this inquiry. The idea that one can oscillate between classical, modern *and* post-modern epistemological positions to create a collage of learnings that influence art practice, makes sense, as these cultural projects move between different disciplines.

The Magical

In the final section of this thesis, I reflect on my 2019 curatorial project *Smoke and Mirrors: The Psychology of Magic* at Wellcome Collection (London) that used magic and conjuring as analogues for a wider interrogation of the psychology of belief. This project grew from my Wellcome Trust Engagement Fellowship – a prestigious award that I received in 2013⁴. I used observations from the world of politics as a springboard for the project: in particular, the way in which misinformation was weaponised in the 2016 UK Brexit referendum and the 2016 USA presidential election. I responded to such a febrile political atmosphere by turning towards cognitive psychology to try to understand, with some urgency, why certain belief narratives can seem so intractable, regardless of clear and compelling evidence that resoundingly debunks or discredits that original belief. Using stage magic to frame these discussions felt useful because it avoided an overtly partisan politics - instead exploring how we can *all* be deceived given the right conditions.

⁴ I was the first visual artist to be awarded a Wellcome Trust Engagement Fellowship.



*Erased UFOs: A collection of found UFO images with all evidence of the UFOs removed, presented in 242 used frames. (2012-2014).
Top: Talbot Rice Gallery, Edinburgh | Bottom: The Exchange, Penzance | Part of the False Memory Archive national touring exhibition.*

The exhibition charted how magicians, scientists and spiritualists from the mid 19th Century to the mid 20th Century clashed over different interpretations of evidence emanating from the séance room. Extraordinary phenomena that seemed to prove the existence of an afterlife and the ability of mediums to contact the dead, was at the centre of a debate that was played out in darkened rooms, theatres and science labs across the US, UK and Europe. Claim and counter claim about the reliability of evidence became front page news with some siding with the spiritualist assertion that the phenomena was real, while others supported magicians who illustrated that mediums were performing simple tricks that only made it *look like* they were in contact with the dead. Scientists were split, with some just trusting their powers of observation and concluding that what they were witnessing was real (albeit seemingly impossible), while others were more sceptical - designing experiments to root out trickery or to evaluate the reliability of eyewitness statements that were central to claims of supernatural agency.

This push and pull between belief and disbelief was a fascinating and timely history to revisit considering how ‘evidence’ was being tossed around by key political players in the UK and US at the time of the exhibition (2019). So-called ‘Fake News’ was also employed by vested interests in the clash between magician debunkers and their mediumistic adversaries and whenever compelling, well-researched and convincing evidence was gathered, counter faith-based narratives were promoted as being as equal to it. These fascinating histories were illustrated in *Smoke and Mirrors* by a series of case studies and illuminated by psychology experiments that either used magical illusions in their methodology or examined how pre-existing belief can influence how we perceive anomalous experiences.

The psychology of magic is also useful for artists who are interested in understanding the difference between looking and seeing. In chapter 5 I touch on how psychological research exploring the art of misdirection is illuminating fundamental gaps in our perceptual systems. For example, eye-tracking technology has illustrated how audiences can be looking directly at the method of a particular trick without actually *seeing* it. Cognitive psychology has illustrated through a range of fascinating, creative and often quite amusing experiments that we have both an inattentional⁵ and attentional blindness⁶ that we simply don’t notice as we move through our day-to-day lives. These are the result of highly attuned evolutionary short-cuts used by the brain to help us function in a world full of distractions. Such research has an applied resonance to practical considerations like the importance of not driving while on the phone (it’s been shown that people talking on the phone while driving (even when hands free) simply don’t see a range of obstacles in front of them even when looking directly at them), whilst providing insight into how we perceive action and objects - helpful for the magician and crucial for visual artists. Psychological research into these limits of our perceptual systems also have wider ranging implications. The predictive, gap filling, instinctively inventive brain is also adept at creating what we understand as our sense of self and a feeling that we are free to choose what we want to do in our daily lives. Simple experiments using straightforward magic tricks ask whether those fundamental human attributes are themselves in some way illusory.

⁵ Inattentional Blindness is a failure to notice unexpected but perceptible stimuli in a visual scene while one’s attention is focused on something else in the scene. (American Psychological Association dictionary of psychology)

⁶ Attentional Blindness is a general term for any failure to notice visual stimuli that can be attributed to attentional factors rather than perceptual impairment. (American Psychological Association dictionary of psychology)

Smoke and Mirrors also presented a challenge to some complacent rhetoric that I've heard throughout my career as an artist. Over the last 20 years there has been a significant shift towards an interest in the occult, mysticism, and psychic practices in contemporary art, and more broadly in popular culture. This shift echoes previous Global North / Western histories where evangelical, spiritualist, new age and esoteric countercultures have sprung up in response to what are perceived as being difficult or uncertain times. Such narratives have also been framed as movements that are in some way kicking back against secularisation and the perceived dominance of western rationalism. In Chapter 5, I query some of these assumptions and present evidence from psychology experiments that highlights how storytelling, trickery and suggestion can be used by powerful actors to cruelly defraud the vulnerable and viciously exploit genuine faith. I ask whether the return to magical thinking seen within contemporary art practice is as radical as it purports to be given these histories, and question whether such a tendency is useful given that malign, esoteric conspiracy theories are starting to wield genuine political power. To move beyond this potentially fractious territory, I touch upon the freedom that a metamodern interpretation of the supernatural can give us. It allows us to still revel in the mystical and paranormal through *play*, whilst also being highly attuned to its absurdities and its manipulations.

I conclude this thesis by highlighting areas of research from cognitive psychology that illustrate how our susceptibility to suggestion and misinformation could be used for positive effect. Research from the psychology lab illustrates how fluid autobiographical memory can be, and how closely connected it is to our ability to imagine fictional scenarios. I highlight studies that are exploring how our perceptual glitches and our brains *love of a good story* can be mobilised to initiate the placebo effect in clinical settings. Experimental psychologists are using fake medical interventions and magic tricks to learn more about whether suggestion alone can enable different forms of self-healing. Fictions could at least in theory play a role in transforming aspects of our physical and mental health, however can it ever be an ethical enterprise to knowingly deceive a patient in the hope that it might make them feel better? I end by hinting at a return to the WITH project albeit with a shift of methodology that moves it outside of a parafictional space. I speculate on what positive impact knowingly fictionalising an experience from your past could have, by highlighting a series of recent works from a project I launched in 2021 called WITH TV.



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection, London. (2019).



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection, London. (2019).

Chapter 1: False Memory Archive - Building on WITH (withyou.co.uk)

“It is possible that much of what we take to be our personal autobiographical history is based upon false, or at least distorted memories”⁷

In July 2011 I was given an Arts Award by the Wellcome Trust to do a year-long residency at the Anomalistic Psychology Research Unit at Goldsmiths, University of London, to develop a series of art works in response to psychological research into *False Memory*. A ‘false memory’ is a *distorted or entirely invented recollection of an experience*. For formal definition it’s useful to turn to *The Science of False Memory* by Charles Brainerd and Valerie Reyna which states that:

“False memory refers to circumstances in which we are possessed of positive, definite memories of events - although the degree of definiteness may vary - that did not actually happen to us”⁸

Psychological research into false memory examines the malleability of human memory in two ways. First there is research into the misinformation effect which examines how memories for actual events can be distorted by false suggestions made by authority figures and other witnesses. Secondly, there is research into whether it’s possible to create false memories for entirely imagined, fictional events through misinformation and coercive suggestion. These interconnected areas of study have a rich and controversial experimental history, that has had a significant impact on how the legal profession understands the (un)reliability of eye-witness testimony and historic memory. The research has also presented a significant challenge to psychotherapeutic techniques that use suggestion to recover so-called ‘repressed memories’, by illustrating that false memories could result from such interventions. More broadly, false memory research also provides considerable insight into how our dreams, imagination and beliefs can merge with our believed recollections, whilst providing timely scientific evidence about how psychologically pervasive misinformation can be.

Why false memory?

The possibility that someone could have memories of fictional experiences that *feel real*, is an idea I’ve explored as an artist since 2003 under the playful guise of the fictional art collective ‘WITH’. As WITH, I have created a range of solutions at the website withyou.co.uk where it is claimed that a WITH ‘agent’ will create fake evidence of an experience for a ‘client’. Whether creating evidence of a happier (or more traumatic) past, playing out a future worst-case scenario or exercising on your behalf, WITH claim to offer their clients "time-saving solutions for personal growth and individual development". Examples include:

In *happynolucky* we create a happier past for you. You can commission evidence of a lovely childhood, great relationships, good health and a successful career. Soon you'll be able to highlight your positivity to potential employers, partners and friends who will find you a joy to be around. All evidence will be presented as an NFT and selected documents will be elegantly framed and mounted for your pleasure.⁹

⁷ French, Christopher C. (2003). *Fantastic Memories: The relevance of research into eyewitness testimony and false memories for reports of anomalous experiences*. Journal of Consciousness Studies, 10(6-7), pp. 153-174.

⁸ Brainerd, C. J., & Reyna, V. F. (2005). *The science of false memory*. Oxford University Press.

⁹ WITH Solution 01 as described at the project website www.withyou.co.uk

In *traumaformer* we create a more upsetting past for you. We can produce evidence of untimely deaths, awful relationships, former addictions and failed careers. Soon you'll be able to highlight your strength in the face of adversity to potential employers, partners and friends with this tragic solution. Selected evidence will be presented in an elegantly designed archive box and all documentation will be minted as an NFT.¹⁰

As art critic JJ Charlesworth explained in his 2010 essay *Memories, we're talking about memories*:

WITH's solutions take the intervention of the self-help book and life-coach to an absurd extreme, satirising contemporary culture's fascination with lifestyle choice and personal development. If you can have plastic surgery to change the bits of your body you don't like, WITH's solutions allow us to outsource the darker or less appealing aspects of our inner lives¹¹

I've spent the last 19 years creating objects and performances for private individuals and art organisations¹² that are fictional realisations of the WITH solutions. In them, I've made fictional client / agent exchanges where fake evidence is created by the agent to 'prove' that something entirely imagined has happened to a client. Imagined experiences include travelling the world for 30 years and receiving evidence of a more traumatic personal history. I have also claimed that WITH agents have had experiences *on behalf* of a variety of clients including thinking, looking, exercising, partying, doing nothing, missing meetings, waking up, and accidentally breaking a glass. Faked evidence of these delegated acts is then presented in art galleries and museums in performances and exhibitions.

It is implied through these fictional representations that clients end up believing that the delegated or imagined experiences *really* happened to them. The suggestion that it may have happened is seemingly enough for memories of the experiences to have developed. Beyond the project's branded veneer, there is however little attempt to convince the viewer that such a scenario is real. As author Anouchka Grose commented in her 2008 essay *WITH (withyou.co.uk)*:

They [WITH] aren't interested in tricking you, they seem far more interested in the logic of the representations they put forward, in how they work, or fail to, and what ontological value they can possibly have once the rug of authenticity has been pulled out from underneath them. Far from being disappointing, it's a relief. What could be more boring than someone trying to make you believe in some stupid made-up scenario, yet again?¹³

From within the satirical framework of WITH I have explored how concepts of self and identity could 'in theory' be susceptible to manipulation and distortion. I have also proposed a more nuanced position throughout the project that fictions and imagined scenarios could possibly be curative or

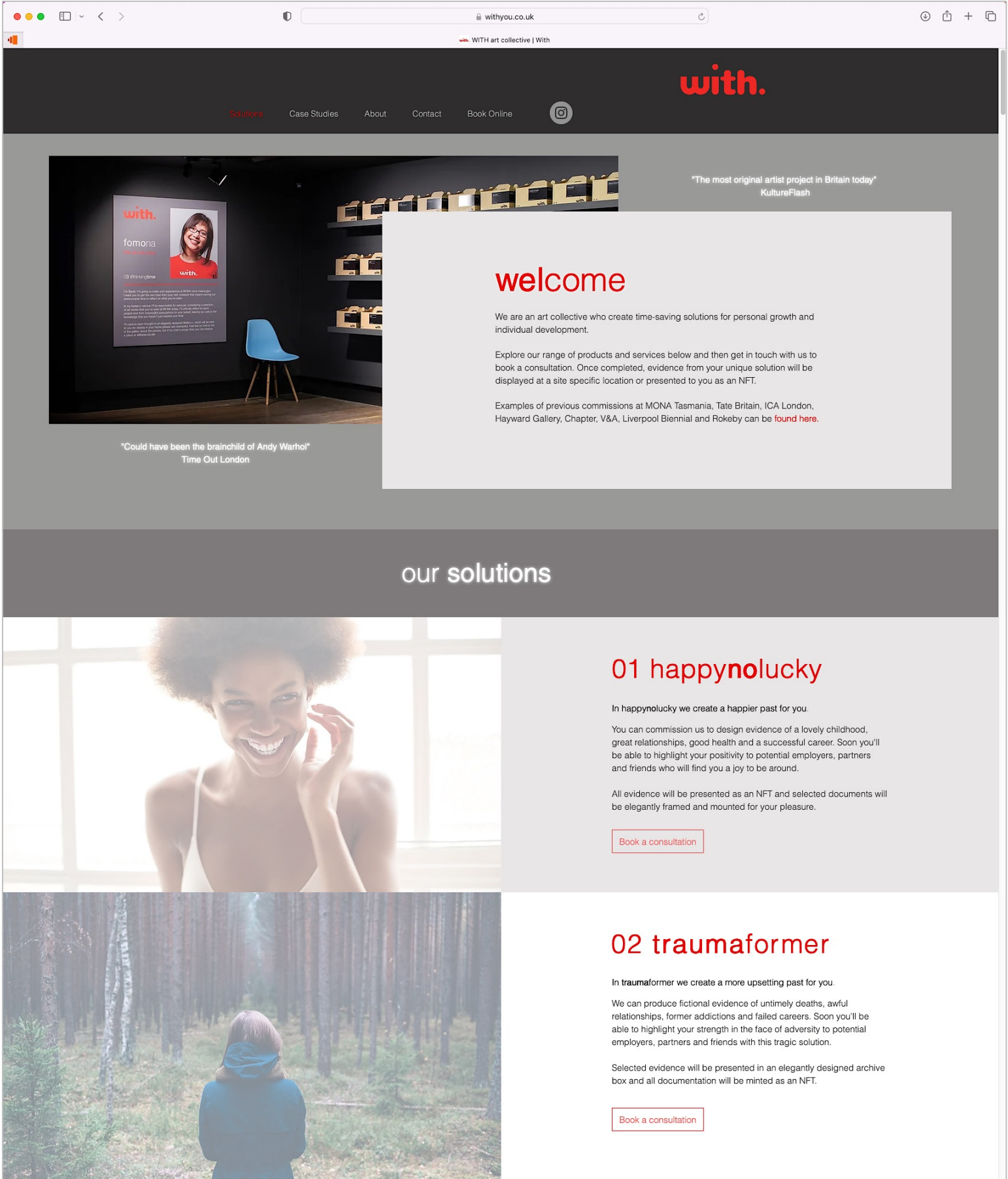
¹⁰ WITH Solution 02 as described at the project website www.withyou.co.uk

¹¹ Charlesworth, JJ (2010), *Memories, we're talking about memories*. Published for WITH solo exhibition *Resident* at Chapter Cardiff (2011)

¹² Including projects with Tate Britain, ICA London, Victoria and Albert Museum, Hayward Gallery, Mona Tasmania, Plymouth Arts Centre, Chapter Cardiff, Liverpool Biennial, Artprojx, Beaconsfield Gallery Vauxhall, Art Review Magazine and Rokeby London.

¹³ Grose, Anouchka. (2008). *WITH (withyou.co.uk)*. Essay commissioned by Rokeby London.

cathartic - that re-narrativizing your past could somehow make you *feel* better. It is these two areas of interest that led me to research into the science of false memory. What I initially thought of as the speculative notion proffered throughout the WITH project: that a demonstrably false experience can be 'believed in' as being 'real' - is something that the science of false memory has shown to be possible through several fascinating experiments. My residency at Goldsmiths was then a great opportunity to expand the ideas I was exploring in the WITH project, whilst developing my understanding of the psychology of belief, perception and memory.



WITH website (screenshot from homepage of withyou.co.uk). 2022.

A website for the WITH project has been running since 2005 at www.withyou.co.uk. There are currently 40 solutions described at the website.



03 miraclemaker

In **miraclemaker** we create evidence of a life-changing spiritual experience.

From weeping statues to floating apparitions our convincing renderings will help you to reconsider a rational mentality. Proof of your miraculous awakening will be presented in an elegant archive box or framed and mounted for your pleasure.

All digital documentation will also be minted as an NFT.

[Book a consultation](#)



04 comewithme

In **comewithme** we're your absent lover

We will provide a series of communications that prove you have a loving partner who can't be with you. You can choose from a variety of absent scenarios including soldier, artist, rig worker or prisoner.

We suggest a contemporary archive box as the perfect storage solution for all your intimate documents. All rendered proof will be minted as an NFT for safe keeping.

[Book a consultation](#)



05 vergingactive

In **vergingactive** we exercise on your behalf.

You can choose from a variety of options including competitive/non-competitive and intense/gentle. Evidence of (y)our activity will be presented to you as an NFT leaving you safe in the knowledge that you're investing in your health, despite a busy schedule.

[Book a consultation](#)



06 knowthing

In **knowthing** we do nothing on your behalf.

The experience will be fully assimilated through the ownership of the resulting documentation leaving you safe in the knowledge that your 'me' time is no longer being compromised.

All evidence will be displayed in your home and presented as an NFT.

[Book a consultation](#)



07 legasee

In **legasee** we give you a fictional child.

We'll create evidence that you're a parent, providing a short cut to fulfillment without compromise to your social/work life. You can select a range of part time options that cater for a variety of child solutions and all evidence of your selfless devotion will be presented as an NFT.

Selected documents will be framed and mounted for display around your home and office.

[Book a consultation](#)



WITH solutions #61 (Thinking Time), Fomona. 2019. Commissioned by Museum of Old and New Art (Mona), Tasmania.

This work offered a service to gallery visitors where a WITH agent could be booked to 'think' on your behalf about the exhibits on display throughout Mona. The thoughts were then captured in a 'thinkbox' and displayed in the gallery.



WITH solutions #61 (Ways of Seeing), Fomona. 2019. Commissioned by Museum of Old and New Art (Mona), Tasmania.

WITH offered a service to gallery visitors where an agent could be booked to carry on your visit to Mona on your behalf. The service was then captured on security cameras throughout the galleries. Everything was pre-recorded, however the empty chair created the impression that the service was in constant commission.

with.

fomona

(me as you now)



04 #socialmediator

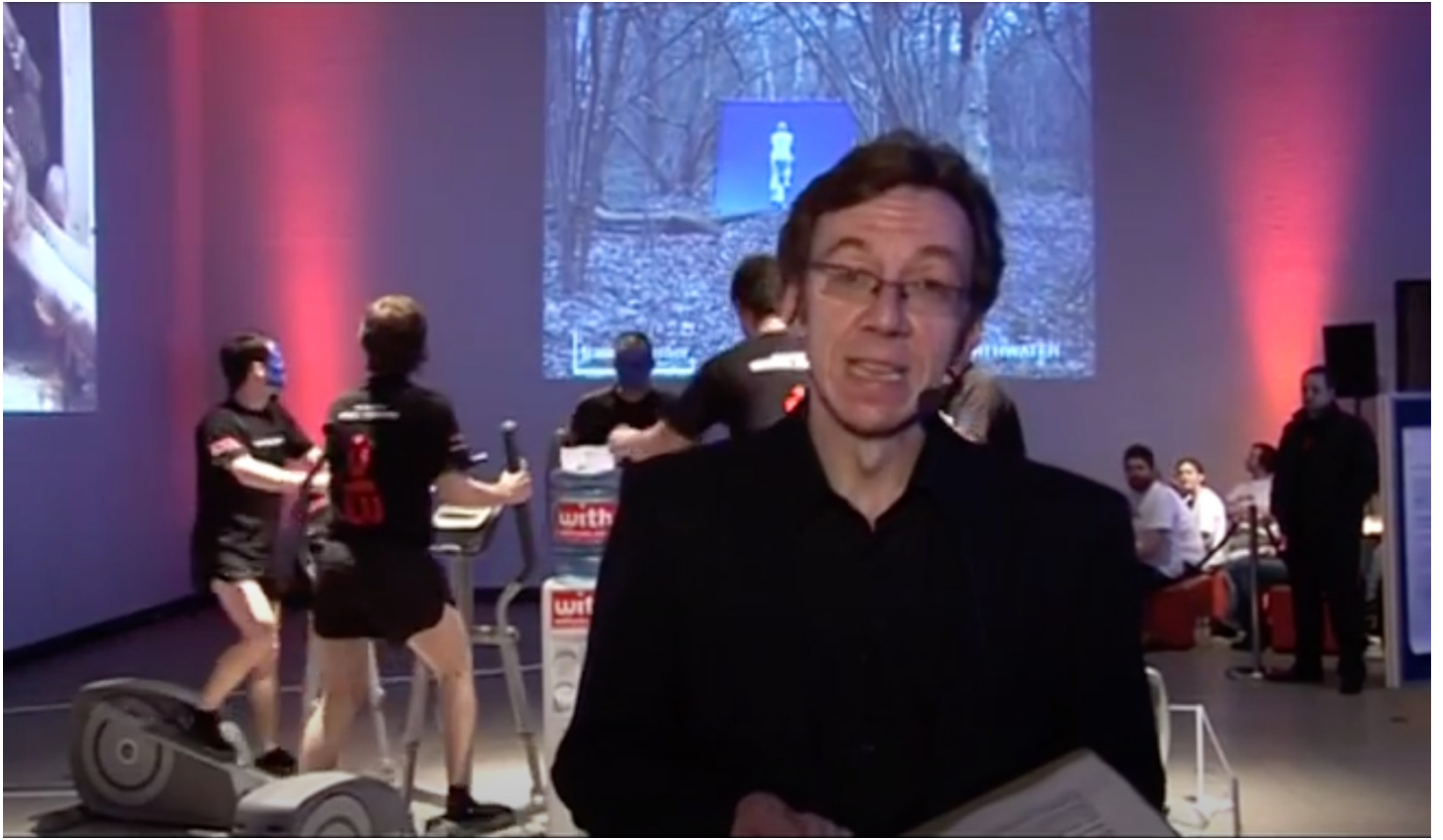
I'm Keziah. I think of myself as a people person and I'm never more alive than when I'm in a crowd. That's why I want to be you.

After your visit today, I will effectively describe all of your MONA experiences to new contacts at a number of social gatherings on your behalf. Your new friends will then invite me to future events of importance, where I'll continue to present an informed version of you to others. I'll take a number of keepsake photographs on your smartphone of me 'being you' at the various events, to remind you of your experiences.

I won't be available in the gallery to chat about the service as I'll be working hard through the night, however you can book me at withyou.co.uk.



*WITH solution #61: Fomona (Social Mediator) 2019 (detail)
Commissioned by Museum of Old and New Art, Tasmania*



WITH Recruit. (2007). Performance commissioned by Hayward Gallery London

WITH presented their unique range of solutions and attempted to recruit members of the audience to become WITH agents. The agents in the middle of the space were exercising on behalf of other artists performing at the same event.

WITH: Redesign Your Life (Down Under).
(2006). Commissioned by ICA London

Actor David Morley Hale played 'John McCarthy' who had received a 'traumaformer' as part of a WITH produced makeover TV show. He talked about how his life had been changed by the experience.



WITH TV (Client of the year). (2006).
Commissioned by ICA London

Actors David Morley Hale and Gary Abrahams played fake 'agents' as part of a fictional daytime TV show produced by WITH. During the performance WITH client of the year 'Jane York' (played by actor Margaret Cabourn-Smith) was interviewed about her experiences of receiving the 'miraclemaker', 'comewithme' and 'traumaformer' solutions.



WITH WATER. (2006).
Commissioned by ICA London

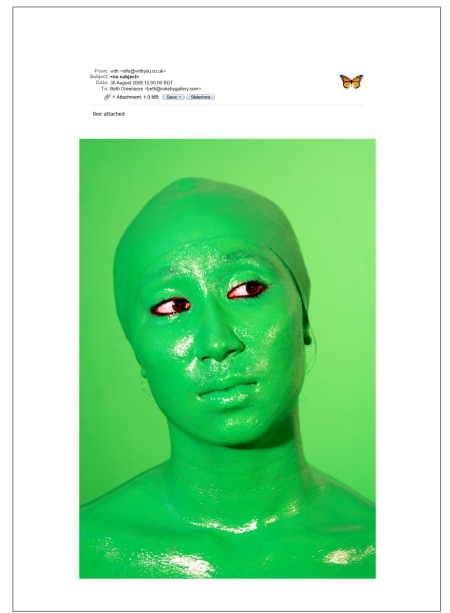
A cast of actors playing disgruntled ex WITH clients hijacked the launch of WITH WATER - an 'elixir catalyst' produced by the company that encouraged 'solution integration'.





WITH: Private Party. (2008). Commissioned by Beaconsfield Gallery Vauxhall for Terminal at Tate Britain.

WITH claimed that there were 50 WITH agents 'having fun' on behalf of a client in a locked gallery at Tate Britain. The work included a fake soundtrack of a party going on inside the space. Coloured lights could be seen flashing through the clouded windows of the locked gallery doors.



WITH: Knowthing (Beth Greenacre). (2008). Commissioned by Rokeby Gallery London.

WITH were commissioned to 'do nothing' on behalf of Rokeby director Beth Greenacre for the entire duration of their solo show at the gallery. An email was sent on the hour every hour of the four week exhibition, documenting the agent doing 'nothing'. Greenacre then had to print the email and place it on a pre-installed timetable grid.



WITH: *Gap(fear)*[™] (anon) 1957-1987. (2008). Part of solo exhibition at Rokeby Gallery.

WITH produced evidence of a lifetime of travel for of an anonymous client. In reality the slides were found at a house clearance sale at Deptford Market and repurposed for the sculpture.



WITH: Homespace (Ed Greenacre). (2008). Commissioned by Rokeby Gallery London.

WITH were commissioned to exercise on behalf of Rokeby director Ed Greenacre for the entire duration of their solo show at the gallery. A DVD was delivered everyday documenting the 'exercise' and was placed on a pre-installed timetable grid in the gallery.



WITH: Homespace (In the woods near your home). (2005). Private Commission.



WITH: Some Meetings We Missed On Your Behalf in London, Zurich and New York. (2010).

Exhibited as part of *WITHstore* at Rokeby Gallery London.



WITH: Untitled 004 (Wake Up). 2011. Commissioned by Chapter, Cardiff. Part of solo exhibition *Resident*.

Visitors had to pay £1 to access the installation through a paid turnstile (similar to the ones at train station toilets). They were then informed that they had purchased a WITH solution where an agent would be 'waking up' on their behalf at the gallery every morning at 6:57. The structure inside gallery 2 was completely shut off and could only be viewed through convex mirrors mounted in each corner. In the mirror a tidy bedroom could be seen ready for the agent to return that evening and continue their performance. Each paying visitor was given an unlimited edition poster to mark the event.



WITH: We will accidentally break a glass on your behalf. (2010). Exhibited as part of *WITHstore* at Rokeby Gallery London

At WITH's second solo exhibition *WITHstore* at Rokeby they presented a range of 'off-the-shelf' limited edition solutions. Works included a commissionable live performance where blindfolded by a blackened motorcycle helmet, I stumbled around a small space until I knocked a glass tumbler off a plinth. The commissioner signed the glass and then watched the performance from behind a safety screen. They were then presented with the broken glass cast in a wax brick, a certificate and photo documentation of the performance.



WITH: Solutions Unknown #1 & 2. (2008). Exhibited as part of solo show at Rokeby Gallery London

USB drives with evidence from WITH solutions made for private clients displayed in archive boxes. Full documentation of WITH exhibitions, performances and cabaret events from 2004-2019 can be viewed at <https://www.withyou.co.uk/exhibitions>

Misinformation and politics

As well as the science of false memory chiming with the speculative fictions offered throughout the WITH project there were other reasons why I wanted to learn more about this area of research. Post 9/11, as a young artist interested in politics, I was dismayed at what appeared to be an obvious attempt by the Bush administration in the USA to mislead the public about Iraq's role in the devastating terrorist attack on New York. In the aftermath of the tragedy we (and the UN) were told that Iraq was an imminent threat because they had developed secret relationships with al-Qaeda between 1992 - 2003 and that they had an 'operational relationship'. At the time this accusation seemed nonsensical given the history of animosity between al-Qaeda and Saddam Hussain (Bin Laden once told his biographer that "the land of the Arab world, the land is like a mother, and Saddam Hussein is fucking his mother."¹⁴) however the link was made repeatedly by the Bush administration and used as a primary justification for the invasion of Iraq on 19th March 2003. The link was clearly made in Bush's presidential letter dated March 13th 2003¹⁵ and in 125 separate appearances, Bush, Cheney, Powell, Rumsfeld and Rice made 61 misleading statements about Iraq's relationship with al-Qaeda¹⁶.

In an astonishing volte-face Bush then claimed in 2006 that "nobody has ever suggested that the attacks of 11th September were ordered by Iraq"¹⁷ despite clear evidence that Bush and his administration went to great lengths to make such a suggestion. The misinformation had been pervasive and was repeated consistently by the mainstream press in the US to the point where in February 2005 nearly two years after the start of the war, 64% of U.S. adults still believed that Saddam Hussain had strong links to al-Qaeda and 47% believed that he helped to plan 9/11.¹⁸

This was of course just one of the demonstrable falsehoods used to justify the invasion of Iraq. Analysis has shown that misleading statements were made about Iraq's nuclear and chemical weapons capability and the imminent threat they posed to the US and their allies. This misinformation was then used as the justification for the UK joining the US in the invasion - a catastrophic moment in modern British history.¹⁹

So, what was really going on here? Why were heads of state, governments, the media and large sections of the public ignoring what appeared to me to be a clear example of politically motivated misinformation? Was there a conspiracy? Was it just ineptitude? or more worryingly did key actors

¹⁴ Bergen, Peter. (2006). *The Osama bin Laden I Know: An Oral History of al Qaeda's Leader*. Published by Free Press, New York.

¹⁵ White House Archives of President George W. Bush
<https://georgewbush-whitehouse.archives.gov/news/releases/2003/03/print/20030321-5.html>

¹⁶ *Iraq on the Record: The Bush Administration's Public Statements on Iraq*. (2004), United States House of Representatives Committee on Government Reform — minority staff special investigations division March 16, 2004.

¹⁷ During a televised interview on Cox News in 2006, Bush responded to the question "What did Iraq have to do with [...] the attack on the World Trade Center," asked by reporter Ken Herman.

¹⁸ *Sizeable Minorities Still Believe Saddam Hussein Had Strong Links to Al Qaeda, Helped Plan 9/11 and had Weapons of Mass Destruction*. (2006). PR News Wire, Rochester New York. [Link](#)

¹⁹ *The Chilcot Inquiry*. (2016). House of Commons Library.
<https://commonslibrary.parliament.uk/research-briefings/sn06215/>



believe the misinformation they were spreading? Was Bush just lying when he claimed that links between terrorism and Saddam Hussain weren't made by his administration or is there a psychological explanation for what was going on? Were 'alternative facts' playing tricks on his memory? Did he have a false memory of what he originally said?

Parafictions in response to Misinformation

Trying to understand how and why bad information had become so effectively weaponised in the build-up to the Iraq war and the 'War on Terror' was then a huge influence on my development as an artist. It's key to understanding some of the concerns that underpinned the WITH project and my subsequent interest in false memory.

I wasn't alone. These seismic socio-political events had a major impact on many artists of my generation. Many politically motivated artists responded by blending activism with art making and creative play. This wasn't for me. Instead, I wanted to channel some of my anxieties and frustrations about the misuse of the imaginary through a creative endeavour that used the deceptive politics of the era as a point of departure. While others²⁰ were using art to make literal political statements on the war on terror, neo-liberalism and climate change, I instead set out to try and understand why we narrativize our experiences and how this tendency can slip into irrational belief and self-deception. Instead of just pointing an angry finger at *the others*, I wanted to creatively explore why we are all susceptible to misinformation and oft prone to magical thinking, self-deception and wishful thinking in our daily lives, and ask if it is always necessarily a *bad* thing. WITH was my first attempt to explore this territory creatively. I wanted the project to gesture towards the contemporary and be thought provoking and experimental. I also wanted the project to be inviting, generous, funny and cathartic, while understanding that I could never *really* know if it had any meaningful transformative impact on my audience. It was after all *just an art project*.

Creatively, it was essential that WITH's surrealism was framed by a website that appeared, at least on the surface, to be 'real', however I never intended for my audience to believe that the claims made by WITH were literally 'real'. Once you scratched the veneer of the illusion, the quasi-corporate framework would fracture to reveal that the speculative solutions were mere imaginings. And anecdotally my audiences seemed to understand that journey. They revelled in the way that they could acknowledge their own anxieties through reading the solutions and then laugh when they saw them speculatively realised in an art context. But I can't track every single person who engaged with the project, so I can't prove that no one believed that WITH was *actually* real, and I felt that that possibility was a risk I was willing to take.

The idea of presenting a fictional artwork in the 'real world' that initially looks convincing is an approach that the art historian Carrie Lambert-Beatty described in 2009 as parafictional, where "real and/or imaginary personages and stories intersect with the world as it is being lived. [...] Simply put, with various degrees of success, for various durations, and for various purposes, these fictions are experienced as fact"²¹.

²⁰ John Jordan's *Reclaim the Streets* and the art activist organisation *Platform* are two examples of UK based initiatives that were particularly active during the aftermath of the Iraq war. They continue to blend creative strategies with activism primarily in relation to climate change.

²¹ Lambert-Beatty, Carrie. (2009). *Make-Believe: Parafiction and Plausibility*. October, vol. 129, pp. 51–84.

Lambert-Beatty's definition captured a way of working that emerged during the late 1990s - early 2000s. The tendency coincided with the rapid growth of the internet, a platform that gave artists the perfect context to create projects that aped official and unofficial sources of information. Some parafictional artists actively sought to use such tactics as an activist strategy by appropriating (and thus undermining) the language of mainstream media and corporate culture. US tactical media²² artists *The Yes Men* were at the vanguard of this approach and across several landmark projects they successfully created fake news reports and duplicate websites that attempt to tell the 'truth' about politicians and corporations through fictional representations that exist in the 'real world'. Their finely honed strategy was to put false statements into the mouths of the powerful, who then said what *The Yes Men* thought they should be saying.

In their most famous hoax in 2004, they posed as representatives of the company Dow Chemical on BBC World News. While in character they issued what seemed to be a heartfelt apology and promise of compensation to those who were affected by the 1984 Bhopal tragedy, which was initially believed by the families of the victims to be real²³. The lie was supposed to reveal the truth (through a lie) about what Dow (which now owns Union Carbide, the company that ran the pesticide plant where the gas escape occurred) should be doing to compensate the victims. The ruse initially wiped \$2 billion from the share price of Dow and led to a humiliating apology from the BBC who had in good faith been duped by the prank. *The Yes Men* succeeded in raising the profile of an important issue of corporate maleficence, however they also gave the victims false hope that they were finally going to be properly compensated, on the very day that they were commemorating the 20th anniversary of the incident.

Other parafictional artists have used fictive strategies from within the relative safety of a conventional art context, the idea being that the critical space of the gallery, museum or art college can be effectively used as a site to interrogate notions of fact, fiction, truth and falsity. Contemporary artists who could be described as employing such an approach include Christoph Büchel, who set up a fully functioning community centre on the site of the former HSBC bank on Piccadilly (2011), Michael Blum, who created an entire museum for a fictional activist at the Ninth Istanbul Biennial (2005), and Aliza Shvarts, who supposedly performed a series of 'abortions' for her final year art project at Yale - a work that the university subsequently described as a 'creative fiction' (2008).

Such parafictional approaches have not just in the domain of visual art. The magician Derren Brown has created extraordinary television events where participants are immersed in

²² Tactical media artists use similar strategies to culture jammers who use guerrilla communications as a form of protest. Other tactical media / culture jamming groups include Adbusters, Billboard Liberation Front, Critical Art Ensemble, GWbush.com, RTMark and subRosa.

²³ Jon Snow interrogates Jacques Servin (whilst using the pseudonym Andy Bichlbaum) from *The Yes Men* on Channel 4 news. <https://www.youtube.com/watch?v=xXSpyZCRIjU>

horrifying fictions²⁴ that they think are real, and comedian Chris Morris used parafictive strategies in ‘Brass Eye’ to hoodwink minor celebrities into backing a fake anti-drugs campaign. As with the WITH project this blend of fact and fiction usually has an endgame: a critical point is being made about our contemporary moment. In her 2009 essay *WITH - Life Enhancement Solutions*, curator Emma Ridgway concluded:

“The implicit intention of WITH and other artists' strategies of cheerful antagonism is to jolt each individual from being a self-conscious visitor to being a self-aware, critical, thinking viewer.”²⁵

This epistemological ambition relies on the viewer / participant recognising at some point that what they are seeing is not real. In the WITH project this moment was triggered by satirical humour, which allowed the branded veneer of the project to be called into question. As Lambert-Beatty says such “experiences of deception and doubt [...] prepare us to be better, more critical information consumers, and therefore citizens.” Visual and Tactical media artists tend to be interested in questioning dominant historical, political and social narratives, while entertainers like Brown and Morris use television to reveal the power of the media and the pliable nature of human psychology.

Although I was drawn to the mischievous nature of a parafictional sensibility, I always had reservations about its darker tendencies. I could see how such a definition could be applied to WITH, however, I was never entirely comfortable with being associated with it. After all, WITH independently evolved as a creative project long before such a definition had been proposed and I didn't feel any need to frame it in one way or another. I did however go to great pains to not allow the work to be dragged into an activist arena, because I'm instinctively sceptical about the efficacy of such tactics. I also had genuine reservations about how tactical media artists were using politically motivated falsehoods to challenge what were in the first instance, politically motivated falsehoods. It seemed like a dangerous game to play and one that risked the kind of unintended consequences as seen in The Yes Men's clumsy Bhopal tragedy hoax. It also didn't allow for any nuance or have any interest in understanding the psychology of belief. It was always about trying to make ‘them think like us’ without asking why *we can all* believe things that aren't true.

By the time I entered my residency at Goldsmiths, I wanted to learn more about the psychological impact of false information not just because the world of contemporary politics seemed to be drowning in lies. It was also because so many artists were using deception as method and misinformation as their material (including me). It felt important to grapple with such an issue if I was to continue to make artworks that explored the ethical limits and cathartic potential of fiction. What could research into false memory tell me about the fluid, narrative nature of subjective experience, whilst also guiding me on what was ethically and epistemologically justifiable in a creative practice? How could these learnings shift my

²⁴ For example, in 2012 in the TV special *Derren Brown: Apocalypse* a member of the public was led to believe that a meteor had struck the earth and that he was one of only a few survivors. It is described on Brown's website as “the most ambitious hidden camera project ever filmed”.

²⁵ Ridgway, Emma. (2007). *WITH – Life Enhancement Solutions*. Between the Vanguard and the Peripheral. Edited by Paula Orrell. Published by Plymouth Arts Centre pp.12-20.

practice as an artist and then be communicated effectively to my audience and other creative practitioners?



Jacques Servin (appearing under the pseudonym Andy Bichlbaum) from *The Yes Men* poses as a representative of Dow Chemical on BBC News .

Professor Christopher French

Throughout my residency at Goldsmiths, I shadowed the cognitive psychologist Professor Christopher French²⁶. I attended his various public and academic lectures, became an active participant on his cognitive psychology course and met most of his departmental colleagues, who all in one way or another were studying the suggestibility of autobiographical memory. It was an exhilarating time, and I found the rigour of their experimental methodology to be accessible, refreshing and eye-opening.²⁷

French's particular area of specialism is in anomalistic psychology, which seeks to find psychological explanations for what are ostensibly paranormal or anomalous experiences. He's also an important figure in what is loosely described as the 'sceptical movement', which broadly speaking is an epistemological position which questions the veracity of claims lacking empirical evidence. Anecdotal evidence for paranormal, pseudoscientific and religious beliefs are held to up to rigorous scrutiny. There is broad agreement within the movement that a scientific investigation of reality leads to the most reliable empirical knowledge, and that the scientific method is best suited to this purpose.

Scientific sceptic, humanist and planetary scientist Carl Sagan (1934-1996) summed up the moral justification for such a position by saying:

Science is [...] a way of sceptically interrogating the universe with a fine understanding of human fallibility. If we are not able to ask sceptical questions, to interrogate those who tell us that something is true, to be sceptical of those in authority, then we're up for grabs for the next charlatan, political or religious, who comes ambling along²⁸

When practiced well, scientific scepticism is also surprisingly open in its critique of its own sacred cow: the scientific method - particularly when it is stretched to breaking point by experimenter bias and a lack of replicable findings. For example, French was instrumental in what has become known as the replication crisis in psychology by questioning the tendency of leading science journals to not publish replication studies, particularly ones that contradicted headline findings.²⁹ He is also well respected in communities that have often been on the receiving end of his criticisms including parapsychologists like Rupert Sheldrake³⁰ who has collaborated with him extensively.

²⁶ Professor Chris French has published over 150 articles and chapters covering a wide range of topics. His main current area of research is the psychology of paranormal beliefs and anomalous experiences. He frequently appears on radio and television casting a sceptical eye over paranormal claims. His most recent book is *Anomalistic Psychology: Exploring Paranormal Belief and Experience*. <https://www.gold.ac.uk/psychology/staff/french/>

²⁷ Suddenly I was hanging around with a group of scientists who were interrogating many of the same ideas that I'd discussed with my colleagues in the art world, but from a very different perspective – one where theories and ideas about the nature of selfhood and autobiographical memory spun off from the best available scientific evidence.

²⁸ From Carl Sagan's last interview with Charlie Rose in 1996 before he died of cancer later that year.

²⁹ Chris French outlines the issue in his 2012 Guardian article *Precognition Studies and the Curse of the Failed Replications*. <https://www.theguardian.com/science/2012/mar/15/precognition-studies-curse-failed-replications>

³⁰ Rupert Sheldrake is an English author and researcher in the field of parapsychology who proposed the concept of morphic resonance, a conjecture which lacks mainstream acceptance.

Although I had heard of the movement before starting my residency, I had naturally gravitated towards French because of his work on false memory. His research focusses on how supernatural or paranormal experiences could be explained by a further understanding of how false memories can emerge in various settings. For example, he has highlighted how memories of alien abductions can develop after an episode of sleep paralysis - a state of consciousness that hovers between sleep and wakefulness, where vivid hallucinatory imaginings blend with real environments. They can be extremely frightening experiences - the paralysis is real but temporary. The victim can't move during the episode despite believing that their fully awake. It's a glitch in our cognition that could help to explain anything from a religious vision through to witnessing a terrifying poltergeist. If you didn't know that such a state of sleep is completely normal, then it would be entirely rational to conclude that you've had a potentially life changing paranormal experience.³¹ French has also been instrumental in illustrating how certain forms of psychotherapy that claim to recover repressed memories risk creating distorted or entirely false memories.³²

As my residency developed, I became increasingly fascinated by this rich area of research from cognitive psychology. It connected with my desire to understand more about how fictions can be believed as being real and how misinformation can influence behaviour. It also felt like I had stumbled across a vivid area of contemporary research into memory that to my knowledge, had been at best neglected, and at worst completely ignored by the visual arts. French was the perfect collaborator on the project. He was generous with his time, kept to deadlines and allowed me to root through and participate in his research over a sustained period. He also introduced me to several cognitive psychologists from the UK, Europe and US who generously hosted research trips, meetings and group discussions that pushed the project into new and unexpected areas. It was a life changing period of research for me that led to an international tour of a new body of work called *The False Memory Archive* and a period of genuine soul searching that shifted some lazy assumptions I had about the nature of memory, the role of science and the primacy of certain philosophical tropes that I'd absorbed during my career as an artist.

³¹ Holden, Katharine and French, Christopher C. (2002). *Alien abduction experiences: Some clues from neuropsychology and neuropsychiatry*. *Cognitive Neuropsychiatry*. 7(3), pp. 163-178.

³² French, Christopher C. and Ost, James. (2016). *Beliefs about memory, childhood abuse, and hypnosis amongst clinicians, legal professionals and the general public*. In: R. Burnett, ed. *Wrongful Allegations of person abuse*. Oxford: Oxford University Press.



Top: *False Memory Archive* logo (2012-2022).

Middle: *False Memory Archive*. (2013). Install shot from The Exchange, Penzance (Photographic documentation from Exchange by Steve Tanner)

Bottom: *False Memory Archive*. (2014). Talbot Rice Gallery, Edinburgh. (Photographic documentation from Talbot Rice by Chris Park)

Chapter 2: Selected works from the False Memory Archive

The False Memory Archive (FMA) national touring exhibition was exhibited between 2012-2014 at Warwick Arts Centre (with Mead Gallery), The Exchange Penzance, Talbot Rice Gallery Edinburgh, Freud Museum London and Carroll Fletcher London. At each solo FMA exhibition there were several events and lectures, culminating in a conference at Freud Museum London in 2014.

In 2018 an adapted cabinet version of the project was exhibited at Schunck in Heerlen, Netherlands and selected works have been shown at Wellcome Collection (as part of *States of Mind: Tracing the Edges of Consciousness* (2016)) and ADM Gallery Singapore (as part of *Exceptions of Rule: Counterpoints to Truth* (2018)). In 2022, I was commissioned by Science Gallery Bengaluru to produce a new work for the project and *Crudely Erased Adults* from the FMA is currently on tour (July 2022 - July 2023) as part of BRAIN(S) at the Centre de Cultura Contemporània de Barcelona and Espacio Fundación Telefónica.

Over the next chapter I will weave a commentary about the specific false memory research I was drawn to and the various works I made for the FMA touring exhibition in response to it. Given the limited scope of this thesis I will be describing five works in depth - their motivations, points of origin and the psychological research that underpinned them.

False Memory Archive - Collecting non-believed memories

*Submit a false memory - it can belong to you or someone else*³³

When I was pitching my research residency to Wellcome through their Arts Awards scheme in 2011, I knew that psychological research into false memory had some different approaches. There are several experiments that explore how suggestion and coercive questioning from authority figures influences recall, and I knew that I wanted to learn more about this activity while at Goldsmiths. There is also research into what cognitive psychologists describe as ‘non-believed’ memories. These are remembered events that for various reasons have been called into question by those who have the memory. A famous example often cited is that of the Swiss psychologist Jean Piaget (1896-1980):

I was sitting in my pram, which my nurse was pushing in the Champs Élysées, when a man tried to kidnap me. I was held in by the strap fastened round me while my nurse bravely tried to stand between me and the thief. She received various scratches, and I can still see vaguely those on her face. Then a crowd gathered, a policeman with a short cloak and a white baton came up and the man took to his heels. I can still see the whole scene, and can even place it near the tube station. When I was about fifteen my parents received a letter from my former nurse saying that she had been converted to the Salvation Army. She wanted to confess past faults, and in particular to return the watch she had been given as a reward on this occasion. *She had made up the whole story, faking the scratches.* I, therefore, must have heard, as a child, the account of the story, which my parents believed, and projected it into the past in the form of a visual memory³⁴

³³ This was my request at the top of the *False Memory Archive* self-fill form and on the project website.

³⁴ Piaget, J. (1962). *Play, dreams and imitation in childhood*. New York: W.W. Norton (p187-188)

In this example, post event information came to light several years later that illustrated how Piaget's memory of this traumatic experience was based on something that hadn't happened. The memory *felt* real and yet he no longer believed that the experience occurred, because he'd received compelling counter evidence. In the first empirical study in 2010 of such non-believed memories psychologists Giuliana Mazzoni, Alan Scoboria and Lucy Harvey discovered that 20% of their participants reported having a memory that they no longer believed in, that the memories shared most recollective qualities of believed memories and that they were more likely to be characterised by negative emotions³⁵. Christopher French is also fascinated in how other people's recollections, stories, dreams and hallucinations could over time be assimilated into accounts of paranormal experiences, so I thought it would be interesting to consider how I could gather such 'false' or non-believed memories from the public.

I didn't think such a collection would amount to much. I was concerned that the premise of an archive of false memories would be tough to grasp; after all it's rare that our memories are called into question and even rarer that we are prepared to admit that a recollection we hold dear could in fact be 'false'. The wording on the call to contribute had to be carefully composed. I included a brief definition of what a false memory is, a quote from French and the simple request to *Submit a false memory - it can belong to you or someone else*. The early prototype version of the archive went well, and I managed to collect over 100 handwritten submissions in two weeks at the Wellcome Collection in London. Like Piaget's vivid description, the best contributions followed a pattern - a memory was described only then to be undermined by evidence that it had never happened.

Some described experiences that happened to someone else (that they had remembered as happening to them) and others described memories that had come from a fictional source like a film or book. Some were memories of clearly impossible scenarios that were most likely to be derived from dreams, while other recollections were just simply doubted as likely, even though they felt like 'real' memories. My tentative sidestep into the realm of crowdsourcing had morphed into something layered and rich. I'd also grown interested in the idea that this collection of anecdotes was an archive of experiences that *hadn't happened* –calling into question the nature of the archival process.

I designed a *False Memory Archive* website where the public could submit their contribution and then teamed up with the Wellcome PR department to spread the word about the project via social media and email. Two months after launch things were going almost too well. I'd received hundreds of submissions to the archive and found myself waiting nervously in the wings of a TV studio waiting to be interviewed live by Jon Sopel on BBC Global News about the project.

Despite this fearful moment of live TV, I managed to not destroy the project and so more submissions continued to come in through the website. Here is just a small sample of them:

I remember having greenish scabs on my arms that smelled gassy and gangrenous when I picked at them, which I wasn't supposed to do but did anyway. There were more and more of them, pus-filled and green. I was too young to realize how serious whatever I had really was. When I think about it now I shudder, but I also remember how horribly attracted I was to the awful smell, like sin and death. It was Pretty gross? I asked my mother about what disease I must have had, and she said no, nothing like that had ever happened to me.

³⁵ Mazzoni G, Scoboria A, Harvey L. (2010). *Nonbelieved memories*. Psychol Sci. Sep 21(9):1334-40.

At around 6 years old my family and I visited relations in Australia; we took a day-trip to the 'Big Pineapple'. I remember loving it there and enjoying every minute of climbing to the top of the huge fibreglass structure to look out over the pineapple fields. When visiting the same relations recently, I mentioned the day-trip and my aunt told me that I was in fact freaked out by the whole place, refused to climb inside the pineapple and spent the whole day in tears.

I Cracked open an egg and it was filled with wires.

I can remember being able to fly as a small child. For years, in my teens I really struggled to accept that this wasn't a real memory. I still have it with me today, memories of a number of separate occasions where I quite naturally flew rather than walked between two places.

I thought that my mother left me for 2 years when I was a child to look for work. I found out in my 20s that she only was gone for 2 weeks.

My mum passes a raw garlic clove from her mouth into mine, in the kitchen.

I remember I had a younger brother - I remember pushing him on the swings in the back garden and that he died at the age of 2. Speaking to my mother years later I discovered that he was still born at full term, plus two weeks.

When I was young my dad and his best friend went fishing in a very remote part of the NZ bush. They got lost and they somehow crashed into a tree. The story was often recollected and retold at gatherings of family and friends. I always thought I remembered the crash so clearly as I was in the car at the time, belted in in the back seat with my friend Nick who was my Dad's friend's son. It was a scary but exhilarating experience for a child. However – I was told as a young adult that we were never there.

The success of this aspect of my residency presented me with a challenge: how was I going to represent the collection to the public? In the first FMA exhibition at The Exchange Penzance I produced a simple, text-based work where a selection of anonymous contributions to the archive scrolled on a screen at the entrance to the exhibition. This was coupled with an area in the gallery café where visitors could contribute to the archive. In later exhibitions at Talbot Rice Gallery Edinburgh and Carroll / Fletcher London a short selection of the archive was printed as part of the gallery guide (intended as a walking accompaniment to the other works on display). This representation of the archive as a curated text was later developed into a full publication called *A.R. Hopwood's False Memory Archive Anthology* featuring around 500 selected submissions from the public³⁶.

In FMA exhibitions at The Exchange, Talbot Rice and Carroll / Fletcher I also presented a short video work made on location at Professor Elizabeth Loftus' lab at University of California, Irvine³⁷. In it I asked Loftus and her team to learn and recite a single false memory submitted to the archive and retell the story as if it was their own memory. The result was a series of short vox pops that seemingly showed an often-heartfelt recollection about misremembering seeing their father in a stage play when they were young. As each anecdote finished it became clear that the next speaker was recalling the

³⁶ *A.R. Hopwood's False Memory Archive Anthology* is available on Amazon.

³⁷ Loftus is a key figure in false memory research, and I go onto explain more about her legacy later in this chapter.

same memory, albeit in their own way. The result was a series of video portraits where each person was represented by a false retelling of someone-else's false memory - yet you learn something about each one of the storytellers through their mannerisms, facial expressions, and references to their own lives in each story.³⁸

I developed this idea further for my site-specific exhibition at the Freud Museum London where the public collection of false memories took centre stage. In the main gallery space at the museum, I presented a digital video work that featured two actors (Lucy Ellinson and Brian Ferguson) reciting from memory over 100 submissions from the FMA as if they were their own false memories. It was presented as a FaceTime video call between the two protagonists (filmed in its entirety at the museum) and in the glass display case in the same space I exhibited handwritten submissions to the archive in neat piles.³⁹

There were other representations of the archival material that came from others throughout the project that I had less control over. Jarvis Cocker read contributions from the archive as part of his Sunday Service BBC Radio 6 programme⁴⁰ and Dan Damon voiced a small selection of them as part of an interview I gave for BBC World Service. Extracts were also used in the bestselling books *The Memory Illusion* (2016) by Julia Shaw and *Diving for Seahorses: The Science and Secrets of Memory* (2018) by Hilde and Ylve Østbe. In 2015, I received an approach from Dutch musician Evelien Van Den Broek requesting access to the archive to create a music project. She used a handful of the submitted texts as lyrics to her new songs and the results were astounding. Van den Broek went on to tour her album *False Memories* throughout the Netherlands and beyond⁴¹. At the *November Music Festival* in Den Bosch, I was invited to speak after Evelien's performance, and it was an exhilarating experience introducing the origins of the work to a new audience.

After the national touring exhibition had drawn to a close, I was approached by the cognitive psychologist Henry Otgaar from Maastricht university about the idea of analysing the FMA to see if anything of scientific value could be drawn from the collection. He, alongside colleagues at the university and beyond produced a paper titled *Non-believed Memories in the False Memory Archive* that was published in *Jarmac* (Journal of Applied Research in Memory and Cognition)⁴². They concluded:

The False Memory Archive is a unique art collection containing hundreds of false memory reports submitted by members of the general population. The current study aimed to analyse these reports. Specifically, we examined whether some of the memories reported in these submissions were better described as nonbelieved memories (NBMs). Furthermore, we investigated the reasons for why people decided that their memory was false and assessed the verification strategies that people used to validate their mental representation. Five hundred

³⁸ Full video is available. File: FMAvideo1

³⁹ Full video is available. File: FMAvideo2

⁴⁰ Listen here at 26m 44sec <https://www.bbc.co.uk/sounds/play/p03jsh9h>

⁴¹ Trailer of performance is available. File: FMAvideo3

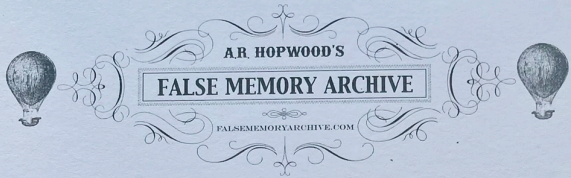
⁴² Henry Otgaar, Charlotte Bücken, Glynis Bogaard, Kimberley A. Wade, A.R. Hopwood, Alan Scoboria, Mark L. Howe. (2019). *Nonbelieved Memories in The False Memory Archive*. *Journal of Applied Research in Memory and Cognition*, Volume 8, Issue 4, 2019, Pages 429-438.

submissions were coded, and more than half (53.4%) met the criteria for NBMs. Social feedback was the most frequently reported reason for reducing belief and asking family members was the most frequently mentioned memory verification strategy. Reports categorized as NBMs were more likely to include mention of memory verification strategies than were believed memories.

This exchange with Otgaar resulted in a new solo exhibition of the FMA at *Galerie Schunck* in Heerlen, Netherlands where details of our cross-disciplinary collaboration were foregrounded and where audiences from the sciences rubbed shoulders with an arts public to discuss the fluid and fallible nature of autobiographical memory. I also collaborated with Evelien Van Den Broek to create a new performance with dancer / choreographer Ulrike Doszmann that was presented during the opening weekend of the exhibition.

It was an enormously satisfying experience seeing the crowdsourcing aspects of the project take on a life of its own and have such an impact. What I found most pleasing was how the archive was both relevant to area of scientific enquiry, whilst being so resonant and fascinating for an art audience. The tedious antagonisms that oft exist between different academic disciplines seemed for a moment to disappear. Scientists were fascinated in how an art project expanded and extended the reach of their research and artists relished the opportunity to learn more about the nature of subjective experience from a different perspective.

It was this bringing together of different publics and disciplines that became for me a key measure of success for the project and my subsequent work.



WE NEED FALSE MEMORIES

"It is possible that much of what we take to be our personal autobiographical history is based upon false, or at least distorted memories"

Professor Christopher C. French, Journal of Consciousness Studies 10, No. 6-7, 2003, p170

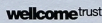
A FALSE MEMORY is a distorted or entirely invented recollection of an experience

>> We are collecting false memories for a False Memory Archive. You can anonymously submit a false memory by using the form overleaf or by going to: falsmemoryarchive.com

>> The false memory can be your own or it can belong to someone else. Selected submissions will be published at falsmemoryarchive.com.



A project by A.R. Hopwood in association with the Anomalous Psychology Research Unit at Goldsmiths, University of London and The WITH Collective



Use the space below to describe your false memory (attach additional sheets if necessary):

I remember I had a younger brother - I remember pushing him on the swings in the back garden. He died at age two.

Speaking to my mother years later I discovered it was a still-birth at full term plus two weeks.

Please submit this form to reception at Wellcome Collection or post to: WITH, C/O Prof. C. French, Goldsmiths College, Dept. Of Psychology, Whitehead building, London SE14 6NW Alternatively you can submit a false memory at falsmemoryarchive.com

Use the space below to describe your false memory (attach additional sheets if necessary):

An Australian and Irish dual citizen, ~~myself~~ I intended to apply for my Irish passport a few years ago. Myself and my parents were convinced that I had done so and obtained the passport until when applying for uni in the UK this year ~~was~~ I was unable to find the passport anywhere in the house. When I visited the Irish consulate in an attempt to get the details for application purposes there was no record of me having applied for a passport. The three of us had imagined the whole thing.

Please submit this form to reception at Wellcome Collection or post to: WITH, C/O Prof. C. French, Goldsmiths College, Dept. Of Psychology, Whitehead building, London SE14 6NW Alternatively you can submit a false memory at falsmemoryarchive.com

Use the space below to describe your false memory (attach additional sheets if necessary):

I have had a strange notion that I can remember an argument my Grandfather had with a friend of his before I was born.

Please submit this form to reception at Wellcome Collection or post to: WITH, C/O Prof. C. French, Goldsmiths College, Dept. Of Psychology, Whitehead building, London SE14 6NW Alternatively you can submit a false memory at falsmemoryarchive.com

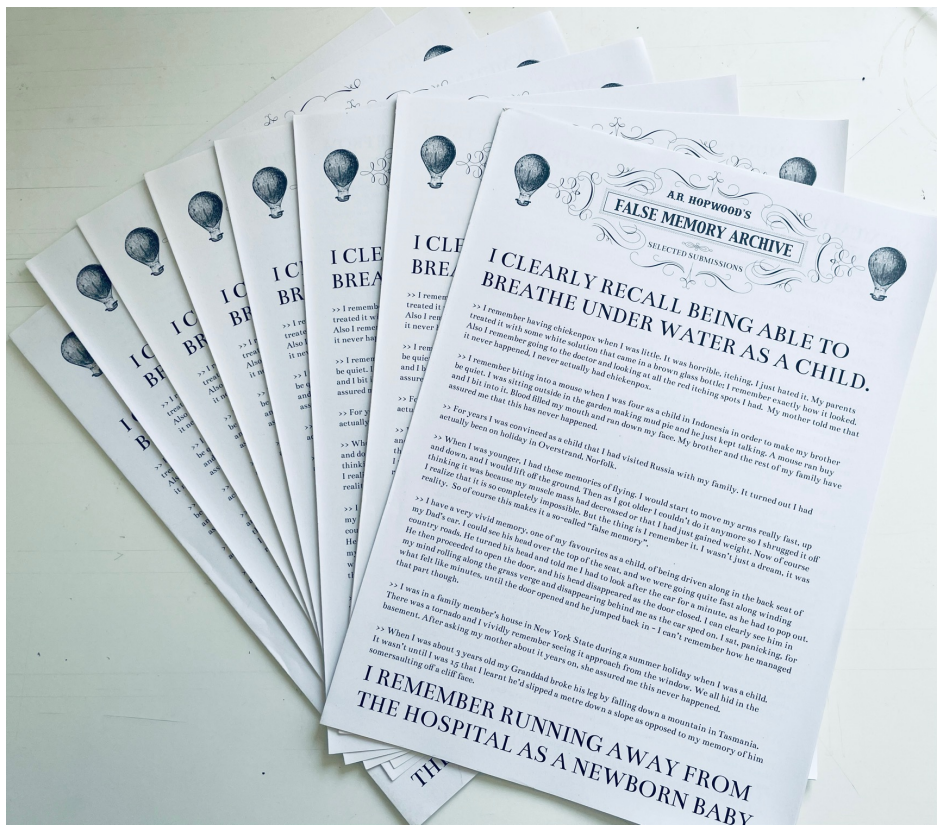
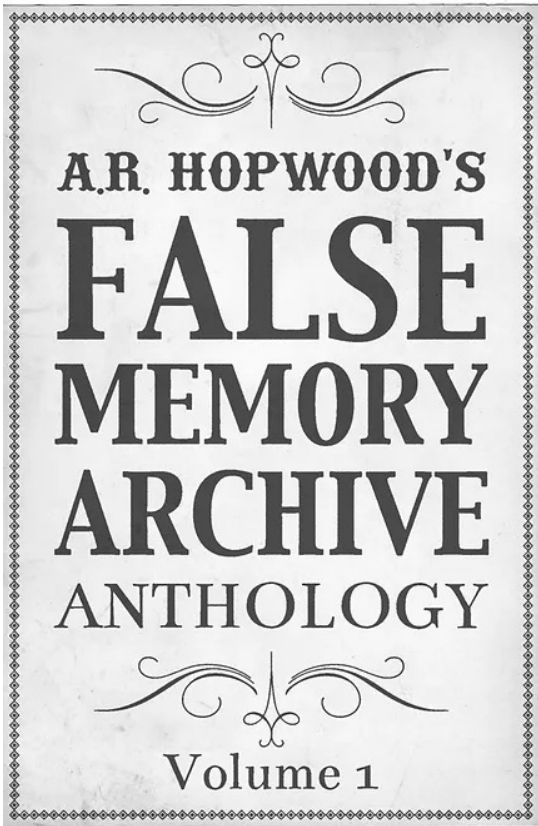
False Memory Archive. Public Submissions. (2012-2014).

The public could submit to the False Memory Archive at the project website, at Wellcome Collection and all exhibition venues.

Over 800 submissions were gathered.



Live interview about *False Memory Archive* on Jon Sopel's BBC Global News. (2013).



False Memory Archive. Public Submissions. (2012-2016).

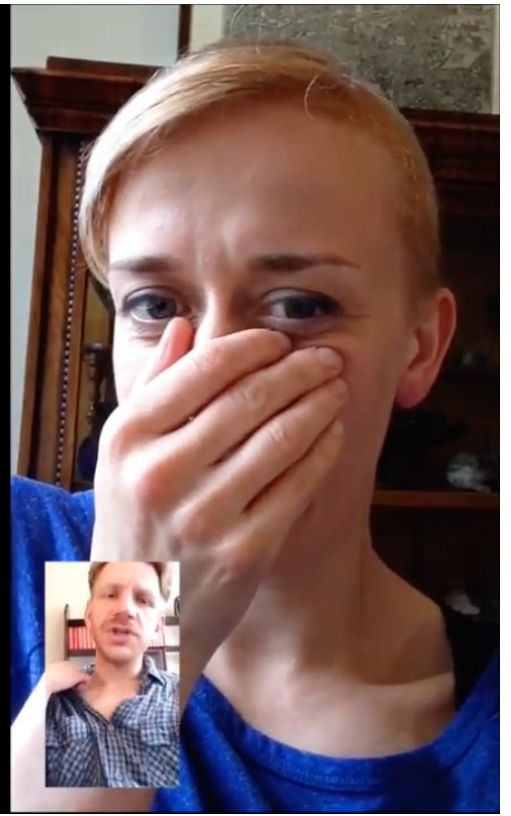
Selected public submissions were exhibited during the *False Memory Archive* exhibition tour as a screen text work and free handout. An anthology of 500 submitted memories were gathered for an anthology publication.

Available here: <https://www.amazon.co.uk/Hopwoods-False-Memory-Archive-Anthology-ebook/dp/B01AWZW2FY>



Professor Elizabeth Loftus and members of her research team recalling the same false memory, from memory, as if it were their own. (2013). Video. Duration: 12min 06sec.

Full video footage available. Filename: FMAvideo1



*False Memory Archive: Two actors reciting submissions to the False Memory Archive from memory via FaceTime. (2013).
Video. Duration: 34m 50sec*

At ADM Gallery Singapore and Freud Museum London (bottom). Full video footage available. Filename: FMAvideo2



False Memories: Evelien van den Broek. (2017)

Musician Evelien van den Broek wrote an album that used submissions to the False Memory Archive as lyrics.

Video trailer footage available. Filename: FMAvideo3



False Memory Archive: Evelien van den Broek and Ulrike Doszmann. (2018) Performance and digital video.

Musician Evelien van den Broek and Ulrike Doszmann collaborated on a performance for the False Memory Archive exhibition at Galerie Schunck in Heerlen, Netherlands in 2018.

Erased Red Datsun (with Professor Elizabeth Loftus)

As I was developing the archive in the early stages of the project, Christopher French put me in contact with Elizabeth Loftus, Distinguished Professor of Psychology at University of California, Irvine. She replied almost immediately and after speaking on the phone she agreed to host a research trip to her department.

Over the last 45 years there has been an explosion of research in false memory and memory distortion by several cognitive psychologists and at the vanguard of that research is Loftus. Her ground-breaking work has led to an acceptance in the scientific community of the existence of ‘false memory’ and the possibility that such recollections can be so strongly believed that a person’s identity and relationships can be adversely affected by that belief. Loftus’ work is lauded internationally in scientific circles with the American Psychological Association naming her in 2002 as the 58th most eminent Psychologist of the 20th Century. The same organisation named her in 2013 as the recipient of its Gold Medal Award for Life Achievement in the Science of Psychology and in 2016 she was awarded the Maddox prize for “her courage in promoting science and evidence on a matter of public interest, despite facing difficulty and hostility.”

In Loftus’ 1979 book *Eyewitness Testimony* she summarised through a comprehensive review of available research, how memory errors can occur when a witness is required to recall an incident. She illustrated that distorted memories can easily develop if witnesses are asked leading questions, or if misinformation is provided by an authority figure after the event has taken place. She also made clear through experiments and interviews that jurors tend to overvalue the accuracy of eye-witness testimony.

In her own experiments conducted throughout the 1970s she illustrated that even the way a question about a past event is phrased can have a significant impact on how it is recalled. For example, after showing experimental participants footage of a car accident, she asked post-event questions in slightly different ways to see what the effect would be. If she asked how fast a car was going when it ‘smashed’ into another car, the witnesses speed estimate was 9mph quicker than if she used the word ‘contacted’ and 7mph faster than if she used the word ‘hit’. The way the question was asked was significantly skewing the answers⁴³.

Her experiments into police line-ups also illustrated just how easily misrecognition could occur in such legal settings. In one study that used footage of a mock crime, witnesses were asked to pick out the assailant from a line-up that didn’t include the perpetrator. Over a third picked someone out even though the ‘criminal’ wasn’t there, however when the police conveyed extra confidence by saying “We have the culprit and he’s in the line-up” the likelihood of an identification went up to 78%. Here was clear evidence that misinformation had a real-world impact on witnesses that could result in someone being convicted of a crime they didn’t commit.

This seminal research was instrumental in changing aspects of the legal system in the US and beyond and it continues to have a significant impact on the way eyewitness testimony is treated in court. Loftus has testified at many high-profile court cases and her work has helped to acquit many innocent

⁴³ Loftus, E. F., & Palmer, J. C. (1974). *Reconstruction of automobile destruction: An example of the interaction between language and memory*. *Journal of Verbal Learning & Verbal Behavior*. 13(5), 585–589

people. US Federal judge Jack B. Weinstein said in a review of *Eyewitness Testimony* in 1981 that Loftus “attacked the subject with the verve of a skilled scientist who is privy to great theoretical truths and is eager to communicate them to those of us who can give them practical application”⁴⁴.

As I made my way through Loftus’ photographic slides during my research trip, I was particularly drawn to a series of images from a 1978 experiment (with D.G Miller and H.J. Burns) called *Semantic integration of verbal information into a visual memory*⁴⁵ - later to become known in shorthand as the ‘stop/yield experiment’. In it, Loftus created a sequence of 30 photographs that illustrated a car turning onto a road and then knocking down a crossing pedestrian. The Kodachrome aesthetic of the images felt richly nostalgic with the hippy protagonists wearing large bell-bottomed jeans and extravagantly coloured shirts. The car was Loftus’ own vintage red Datsun, and it was all shot in an LA street with the Californian sunshine beating down. Nearly 200 experimental participants were shown the images in sequence and then asked questions about what they’d witnessed. The crucial moment in the incident came when the car was at a junction before turning onto the road where the accident happened. Half of the subjects were shown an image featuring a ‘Stop’ road sign at the junction and half were shown the same picture but with a ‘Yield’ sign⁴⁶. Loftus describes the method and results in *Eyewitness Testimony*:

Immediately after viewing the slides, the subjects were asked some questions, one of which was critical. For about half of the subjects the critical question asked was, “Did another car pass the red Datsun while it was stopped at the stop sign?” The remaining subjects were asked the same question with the words “stop sign” replaced by “yield sign”. For some of the subjects, the sign mentioned in the question was the sign that had actually been seen; in other words, the question gave them consistent information. For the remaining subjects, the question contained misleading information.

After completing the questionnaire, the subjects participated in a 20-minute filler activity, which required them to read an unrelated short story and answer some questions about it. Finally, a recognition test was administered. Pairs of slides were presented to the subjects and they had to indicate which member of each pair they had seen before. The critical pair was a slide depicting the Datsun stopped at a stop sign and a nearly identical slide depicting the Datsun at a yield sign.

The results indicated that when the intervening question contained consistent information, 75% of the subjects accurately responded. When the question contained misleading information, only 41% of the subjects accurately responded. If the subjects had been simply guessing, they would have been correct about half the time, or 50%, so the misleading question reduced their accuracy below that which would have been expected from a person who was merely guessing.⁴⁷

⁴⁴ Weinstein, J. (1981). *Columbia Law Review*. 81(2), 441-457.

⁴⁵ Loftus, Elizabeth & Miller, David & Burns, Helen. (1978). *Semantic Integration of Verbal Information into a Visual Memory*. *Journal of experimental psychology. Human learning and memory*. 4. 19-31.

⁴⁶ A Yield sign in the USA has a similar meaning to a ‘Give Way’ road sign in the UK.

⁴⁷ Loftus, Elizabeth F. (1979). *Eyewitness Testimony*. Harvard University Press, P58-60.

The fact that such a crucial piece of information (that had an impact on who was then most responsible for the subsequent accident) could be so easily altered by post-event misinformation was the key finding from the experiment. A significant number of participants had aligned their recollection to what they were told afterwards. They had in reality *seen* a stop sign but they *remembered* it as being a Yield sign (or vice versa) when they were asked a misleading question.

It's clear why such a finding has such significant consequences. In a legal setting witness statements are crucial in piecing together evidence, so that crimes can be prosecuted. If witnesses are questioned by law enforcement officers who have little understanding of how misinformation can impact memory, then the likelihood of a miscarriage of justice is significantly increased⁴⁸. Extrapolating that finding beyond the criminal justice system: the gap between what is seen (or happens) and what is remembered (via a post-event interpretation) is one that can be actively exploited or reconfigured by hostile agents or by those in positions of authority. Our understanding of these risks has been greatly enhanced by Loftus and colleagues, meaning that measures can in theory be taken to mitigate some of their impacts.

Understanding that how you remember an event can be so easily influenced by others, felt to me like a fundamental piece of research that everyone should have access to, and this concern was a great motivating factor for my future work in this area. I also found it fascinating as an artist. Here were a series of images that could be altered in the mind of the viewer by differing verbal interpretations of what had been originally seen. The meaning of the photographs had quite literally shifted once false information had been included in their subsequent interpretation. I became interested in the idea of trying to visualise the tension between the *seen* and the *remembered* in a series of images and a video work called *Erased Red Datsun* (2013).

In the work I used Loftus' original images from the experiment and then created a screen grab video of me doctoring each image in photoshop. In each video, I painstakingly trace around the edges of the red Datsun using the 'lasso' tool. Once the area of the image is selected, I then erase the whole car using Photoshop's automatic 'content aware' function⁴⁹.

When I made the work in 2013 the technology was still in its infancy and prone to significant error - particularly when the selected object was large. This meant that when the Datsun was 'erased' a messy, blended, glitchy collage of data from the rest of the image was left behind. The car had 'gone' and an error strewn guess of what should be there in its absence. These new versions of 35-year-old images (originally used for an experiment into false memory) felt like they'd gone some way towards reflecting on the glitches in cognition that they ultimately represent. The final images were shown throughout the FMA national tour as a series of slides played on loop via an old slide projector.

⁴⁸ *The Innocence Project* (innocenceproject.org) has been campaigning tirelessly to overturn wrongful convictions in the American justice system since 1992. Most cases stem from unreliable eyewitness testimony with the wrongfully accused being exonerated after DNA analysis or when new evidence comes to light that discredits the original witness reports. Artist Taryn Simon made a series of photographs in 2003 called *The Innocents* that featured victims of such miscarriages of justice – most of whom are Black Americans. Loftus has been instrumental in providing a robust scientific evidence base that has enabled the organisation to effectively challenge the US legal system.

⁴⁹ The 'content aware' tool has been designed to remove unwanted objects from photos – primarily from landscapes where a vehicle, person or building is 'ruining' the view. It works by Photoshop's AI reading the information around the selected object and then filling the area with its best guess of what would be behind it *if it wasn't there*.

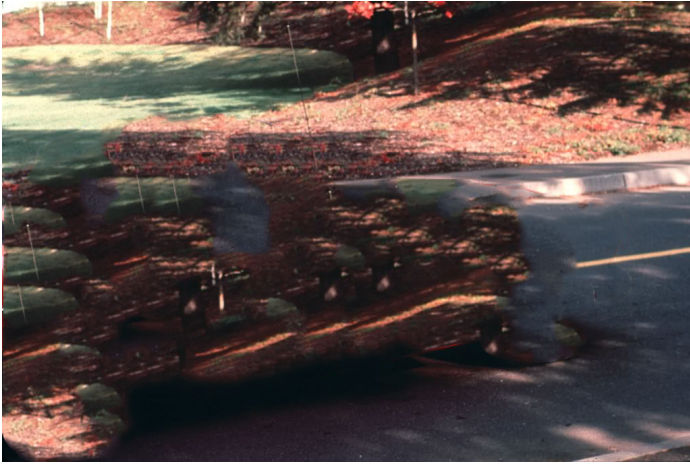
Alongside them, the screengrab video of each image being manipulated was shown in its entirety⁵⁰. It was shown during the FMA national tour at The Exchange Penzance, Talbot Rice Gallery Edinburgh and at Carroll/Fletcher London.

⁵⁰ Full video is available. File: FMAvideo4.



False Memory Archive: Erased Red Datsun. (2013). 35mm slides, digital video (duration: 25m 51sec).

Full video footage available. Filename: FMAvideo4



False Memory Archive: Erased Red Datsun. (2013). 35mm slides, digital video (duration: 25m 51sec).

Selected images from slide show that played alongside the screengrab video.

Crudely Erased Adults

After establishing that eye-witness testimony for real crimes could be significantly distorted by post-event misinformation, Loftus wanted to explore if it was theoretically possible to create entire false memories of emotional past experiences that never actually happened. Her motivation came from observations that certain forms of interrogation could result in false confessions where memories of experiences *that didn't happen* were being recalled by the accused.

There was also a new form of psychotherapy that was growing in popularity through the 80s and 90s that sought to uncover so-called repressed memories of past trauma. The idea was based on Freud's Seduction Theory - that memories of sexual abuse were automatically and unconsciously repressed and that only certain forms of suggestive therapy could bring back into consciousness⁵¹. Freud later dismissed the idea, concluding instead that the abuse memories (that he'd effectively created through highly suggestive interventions) were in fact imaginary fantasies⁵². In 1980s America the theory was revisited as part of a well-meaning attempt by feminists to confront and redress the underreporting and poor conviction rate of sexual abusers. Such abusers are usually men attacking girls and women, so it was an issue of vital importance. The idea that such memories could be repressed, was revisited as part of this campaign - the idea being that Freud changed his mind about the Seduction Theory because he couldn't accept that childhood sexual abuse was so ubiquitous.

As part of this revisionism, memory recovery techniques that sought to uncover such repressed memories were created and popularised through self-help books like *The Courage to Heal*⁵³, and it soon became a popular therapeutic approach. As appalling accusations of past, previously unremembered abuse started to emerge from some who were receiving such therapy, Loftus grew concerned about the techniques that were being used. She knew from her previous work on eyewitness testimony that such suggestive interventions could result in distorted memories, but she didn't have the evidence to prove that this could happen with entire traumatic episodes.

In her 1994 book (with Katherine Ketcham), *The Myth of Repressed Memory*, Loftus illustrated that it was possible for someone to have a memory of an entirely fictional experience under conditions that were like those practiced by therapists who were using techniques that were designed to recover repressed memories. In her first and most famous false memory experiment (now described as *The*

⁵¹ Freud, Sigmund. (1896). *The Aetiology of Hysteria*. The Standard Edition of the Complete Psychological Works of Sigmund Freud Vol. III. pp. 189–221. Freud first outlined his Seduction Theory in a presentation of the same name reportedly given at the Society for Psychiatry and Neurology in Vienna.

⁵² “In a letter to Wilhelm Fliess dated the 21st of September 1897, Freud explicitly abandoned the Seduction Theory. It had become apparent to him that the sexual content arising from free association did *not* always relate to repressed memories of real events. He was moving away from the restrictive model of experiential memory in order to better describe an unconscious he increasingly realised observed distinct laws. He therefore came to postulate that the sexual nature of these hysterical ‘memories’ related not to real experiences per se but instead to Oedipal fantasies and to the constitutively libidinal nature of the unconscious itself” Wright, C. (2021). *Lacan on Trauma and Causality: A Psychoanalytic Critique of Post-Traumatic Stress/Growth*. *J Med Humanit* 42, 235–244.

⁵³ *The Courage to Heal* was written by Ellen Bass, a poet and creative writing teacher and her student Laura Davis. First published in 1988 it claimed that many chronic symptoms could be attributed to repressed memories of childhood abuse. Bass and Davis claimed that by using suggestive techniques like guided imagery, dream interpretation, imagination inflation exercises, hypnosis, regression and meditation that these memories could be recovered, and that a healing process could begin.

Lost in the Mall study⁵⁴) each participant was given summaries of four incidents from their childhood. Three stories were gathered from the participants families and were ‘true’ and one story was entirely false. The false story followed a formula: You got lost in a mall or department store, you cried, you were found by an old person. After being coercively interviewed in the weeks that followed in ways that mimicked the techniques of the therapists, 25% of the participants reported clear memories of the fictional incident. Loftus had effectively created a ‘false memory’ of being ‘lost in a shopping mall’ in the minds of a significant minority of the participants.

This early study was small, and the methods used were crude, however there was enough to indicate that her hunch was right. From that point Loftus went on to create more expansive experiments and since then she and a host of other memory researchers have developed a ‘recipe’ for creating false memories under lab conditions, by tweaking the levels of suggestibility. Memory scientists and cognitive psychologists have since convinced people in a variety of extraordinary experiments that they had memories of a demonic possession, of witnessing fictional political events, of being hospitalised overnight, of committing a crime, of going on a fictional hot air balloon ride, of seeing their parents having sex and of seeing a wounded animal after a bombing. Loftus also persuaded 16% of a study group that they had met Bugs Bunny at Disneyland and in replications researchers sold the same memory to 36% of participants - impossible of course as Bugs Bunny is a Warner Brothers character.

The implantation of false memories in such studies is a surprisingly reliable effect. On average around a third to a half of experimental participants develop rich false memories of the suggested fake event⁵⁵. At the end of each study the participants are informed about the real purpose of the study and debriefed about which life events were real and which were invented. What happens to the false memories after that is anyone’s guess.

Despite high praise for her work within the scientific community, Loftus has been on the receiving end of some extremely unpleasant abuse. She has received death threats and has regularly been misrepresented and vilified by those who believe that she is responsible for throwing doubt on serious accounts of abuse⁵⁶ and for providing a compelling line of defence for real criminals.

⁵⁴ Loftus, E. F., & Pickrell, J. E. (1995). *The Formation of False Memories*. *Psychiatric Annals*, 25(12), 720–725.

⁵⁵ Scoboria A, Wade KA, Lindsay DS, Azad T, Strange D, Ost J, Hyman IE. (2017). *A mega-analysis of memory reports from eight peer-reviewed false memory implantation studies*. *Memory*. Feb 25(2):146-163.

⁵⁶ I was only a short way through my residency at Goldsmiths when it became clear to me that accusations of abuse recovered during certain psychotherapies had been called into question by psychological research into false memory. In truth, I found it deeply uncomfortable and troubling. The idea that one should query what are profoundly distressing memories of the worst possible experiences was very hard for me to accept. As I tentatively made my way through the research, I realised that such personal discomfort isn’t a reason to discard scientific evidence that compels you to challenge your instincts.

Books like *The Courage to Heal* and the revisiting of memory repression as a theory, was most likely meant with the best of intentions. People who knew little about the fallible nature of memory, but who were sympathetic and compassionate wanted to help those who were suffering from health conditions that conventional healthcare had few answers for. However sometimes good intentions can have awful unintended consequences and the techniques that are promoted by Bass and Davis and other advocates of memory recovery, have had real world impacts that are horrifying. The clinical psychologist Katharine Mair has outlined in her 2013 book *Abused by Therapy* some of those consequences and support groups exist across the world for families who have been affected by such discredited psychotherapeutic approaches. The cognitive psychologist James Ost worked sympathetically with retractors in 2017 (people who have recovered memories of abuse

Regardless of how these discussions evolved, scientific research into false memory has clearly illustrated that misinformation tied to repeated false suggestion can be believed to the extent that an individual's memory is significantly affected. This finding has cast doubt on the veracity of memories that are recovered in certain settings and such findings should give pause for thought for anyone who is working with historic memory. Such research has also shown that contrary to popular opinion⁵⁷, memory is not an accurate recording device of past experiences where every experience is stored, ready to be later drawn upon and it has clearly demonstrated that coercive questioning will rarely provide reliable information. There is also little compelling scientific evidence for the popular belief that we automatically repress our most traumatic memories - in fact, the evidence to date suggests that

during suggestive therapies who later concluded that the experiences were not based on real events). His ground-breaking work helped to provide an empirical evaluation of the conditions surrounding memory recovery and the subsequent processes of no longer believing in that recollection (Ost J. (2017). Adults' retractions of childhood sexual abuse allegations: high-stakes and the (in)validation of recollection. *Memory*. Aug;25(7)). The Harvard psychology Professor Richard J McNally has also been instrumental in describing how processes of forgetting and the suppression of traumatic experiences have been misconstrued as being representative of memory repression. As an expert in Post Traumatic Stress Disorder (PTSD) his perspective is worth considering particularly as most experiences of profound trauma have such an impact because they are so difficult to forget.

The most notorious example of how false memories can have a real-world impact is the 'Satanic Panic' that took place in the US, UK and Europe in the 1980s - 1990s, which resulted in over 12,000 unsubstantiated cases of Satanic ritual abuse (SRA). The idea has roots in the evangelical counter-cultural movement in the US, however a key text was the book *Michelle Remembers* (1980 Pub. St Martin's Press) where author Michelle Smith outlined memories of lurid and horrifying satanic ritual abuse that she recovered during highly suggestive therapies. According to Jeffrey S. Victor the book provided a model for numerous allegations of SRA that ensued later in the same decade (Victor, JS. (1993). *Satanic Panic: The Creation of a Contemporary Legend*. Open Court Publishing Company).

In the UK, the journalist Rosie Waterhouse outlined in her brave and troubling investigation into the Orkney child abuse scandal how suggestive therapies were used on children by social workers to illicit false accusations of SRA against innocent parents (Waterhouse, R.T. (2014). *Satanic abuse, false memories, weird beliefs and moral panics*. (City University London)). The *Justice For Carol* campaign (<https://justiceforcarol.co.uk>) is a harrowing account of how regressive therapies performed on a young woman called Carol Myers over a sustained period of time, led to demonstrably false accusations of SRA being levelled at her family. She tragically died in 2005 after having severed all links with her family - her therapist recorded her death with the police, however there are still mysterious circumstances surrounding the incident that Carol's parents and siblings are still trying to unpack. Jon Ronson recently highlighted in episode four of his BBC series *Things Fall Apart* how absurd stories about SRA in the US that grew from religious culture wars in the 1980s, ended up being assimilated into suggestive police interviews and recovered memory therapies. This resulted in appalling abuse accusations being levelled at parents and childcare workers. It's perhaps sobering to now consider how such narratives are again taking root in the pervasive 'Q'Anon conspiracy theory.

This frightening history shouldn't obscure the fact that sexual abuse is real, incredibly difficult to prosecute and life changing for the victims. Just because this area of research calls for a healthy scepticism towards memories that are recovered in certain settings, it doesn't follow that all accusations of abuse are false or that experiences of abuse can't be recalled after not having been thought about for a long time. Scientific memory researchers are clear that such abuse is most likely more widespread than is currently thought, and Loftus has also regularly cited a harrowing childhood experience of sexual abuse as a key reason for her wanting to study memory for such profoundly traumatic experiences. What's clear is that anything that obscures access to justice for real victims of abuse (including false ideas about how memory works) should be discarded at the earliest possible opportunity. There is still much research to be done around how traumatic memories are processed and new evidence should be judged on its merits as it emerges.

⁵⁷ Simons DJ, Chabris CF. (2011). *What People Believe about How Memory Works: A Representative Survey of the U.S. Population*. PLOS ONE 6(8).

traumatic memory can be so problematic because bad experiences are often so difficult to forget and move on from⁵⁸.

I had decided after my research trip to California that I wanted to make a piece of work that referenced Loftus's original 'Lost in the Mall' experiment. It was such a vivid and compelling narrative and there was something innately believable about such an experience. It tapped into childhood fears and those spilt seconds that most of us have probably had in childhood where it feels like we may be lost - that our carer has momentarily disappeared only to be discovered again seconds later.

For an initial piece of research, I decided to head to my local shopping mall with a camera and a notepad to see if any ideas could be triggered from the site. I spent about an hour walking around *Westfield* in Shepherd's Bush London, taking photographs and writing notes, when I suddenly saw two large security guards heading my way with a determined look on their face. They confronted me and asked, "Can I ask you sir why you're taking photographs?" so I replied, "I'm an artist and I'm researching a new project" They didn't seem impressed. They then calmly instructed me to delete all my photos and leave the shopping centre immediately.

Even though they were polite but firm, I wasn't sure what they were accusing me of. I was convinced that I'd done nothing wrong, so I started quizzing them on their reasons for confronting me, hoping that I'd be able to persuade them otherwise. I think the conversation went something like this:

Me: I'm not going to delete my photographs until you give me a reason why I should.

Security guard 1: We've been watching you for a while on our security cameras. You're a lone male, wearing a backpack, looking suspicious, taking random photographs, and writing in a notepad. You fit exactly the profile of a potential terrorist.

Me: What!? Do you have any idea how offensive that is? If I was a terrorist, surely I'd have thought to conceal my activity more effectively? I'm an artist making a visual record of a site that I'm interested in. I can take photographs of whatever I like, whenever I choose – this is a public place. (pointing) Look there's a family over taking photographs of each other.. that's suspicious – who'd want to have a family photograph of a trip to Westfield? The dad looks dodgy to me.

Security guard 2: There's no need to raise your voice sir. This is a privately owned site, and we have very clear rules about what is and isn't reasonable behaviour

Me: How am I being unreasonable?!

Security guard 2: Sir, please stop raising your voice. If you don't leave, we will have to escort you from the premises

Me: So, I can't protest my innocence against your deeply unpleasant accusation? What if I was making drawings instead of photographs? Would that be allowed?

⁵⁸ McNally, R. J. (2004). *The Science and Folklore of Traumatic Amnesia*. *Clinical Psychology: Science and Practice*, 11(1), 29–33.

Security guard 1: That's different sir.

Me: No, it's not... oh ok it is but that's not the point.

Security guard 2: Please leave sir.

Me: Bloody hell. Okay I'll go.

Security guard 2: And delete the images.

Me: Yeah, right whatever.

And I stormed off out of the building, whilst pretending to delete the images.⁵⁹ As I travelled home thinking how unfair the world was, it dawned on me that there was something interesting and amusing about this exchange. In the Loftus study the security guard came to the rescue in the false story by finding the 'lost' child. Here though my real memory of my experience at *Westfield* was of two security guards telling me off and telling me to leave. They'd also told me to delete my photos - the only visual record that I had of my trip. By the time I'd got back to my studio a germ of an idea based on my experience had grown into a new work for the *False Memory Archive*.

I decided to create a set of instructions for a fictional security guard (who worked at Westfield) in the form of a 'faxed' letter that asked him to make a new set of images on my behalf for the project. It read as follows:

It was a surprise to meet you earlier and thanks for taking time to explain the 'no photography' rule at Westfield Shopping Centre. I've deleted every photograph I took on the premises as requested. So that it doesn't feel like a wasted morning, I thought it would be good idea for us to collaborate on a project for my next exhibition.

I'm currently researching 'False Memory' for a series of exhibitions in 2013/14. I'm interested in a memory experiment carried out by Professor Elizabeth Loftus in 1994 where she convinced 25% of her subjects that they'd got lost in a shopping mall as a child. She was attempting to show that it's possible to make people remember an entirely invented experience under certain conditions.

I intended to use my photographs for a new work about this experiment, however you made me delete the images. As you have access to legitimate footage of the centre, I'd be grateful if you could now make the work for me by using stills from your security cameras at Westfield - in return I promise to never take photographs in the shopping centre again. If in agreement, can you please do the following:

>> Find some stills from your security cameras that feature children.

⁵⁹ This confrontation happened before the spate of street level terror attacks on Parisians and Londoners between 2015-2018. I was personally caught up in the Parsons Green underground attack in September 2017 and perhaps my militant stand against the security guards at *Westfield* would have been slightly less cocky if I'd known what was to come – they were after all only doing their job, however ridiculous their actions seemed to me at the time.

- >> Use Photoshop (or something similar) to erase any evidence of adults from each image (do it to the best of your ability).
- >> Convert the images into 'Westfield Red' and get them made into advertising lightboxes.
- >> Deliver the lightboxes to my studio by the 1st January 2013.

I'll then display your images alongside this fax during the False Memory Archive exhibition tour. Many thanks in advance for your help.

Kind regards, AR Hopwood

PS. Sorry I had to fax this. My wireless hub is broken.

I then worked on my photographs from *Westfield* (that I hadn't deleted from my camera) and made them look like the images requested by me in the faxed instructions. I 'crudely erased' all traces of adults from the pictures rendering the remaining children 'lost' within the image. I then doctored the photographs to make them look as if they had been taken from a security camera. The resulting images were chilling: lost children seemed to be interacting with the ghostly shapes created by my deliberately inept erasures. Hung together as glowing red lightboxes they probably felt slightly sinister to many; however, I was more interested in how the fictional story I told from within the work was trying to tell a poignant truth about Loftus' work and the unintended consequences of using what are now discredited psychotherapeutic techniques.



ATTN:

Head of Security
Westfield Shopping Centre
F: 020 3371 2400

6 Feb 2012

Dear [REDACTED],

It was a surprise to meet you earlier and thanks for taking time to explain the 'no photography' rule at *Westfield Shopping Centre*. I've deleted every photograph I took on the premises as requested. So that it doesn't feel like a wasted morning, I thought it would be good idea for us to collaborate together on a project for my next exhibition.

I'm currently researching 'False Memory' for a series of exhibitions in 2013/14. I'm interested in a memory experiment carried out by Professor Elizabeth Loftus in 1994 where she convinced 25% of her subjects that they'd got lost in a shopping mall as a child. She was attempting to show that it's possible to make people remember an entirely invented experience under certain conditions.

I intended to use my photographs for a new work about this experiment, however you made me delete all of the images. As you have access to legitimate footage of the centre I'd be grateful if you could now make the work for me by using stills from your security cameras at *Westfield*; in return I'll name you as a co-author in any future exhibition. If in agreement can you please do the following:

- >> Find some stills from your security cameras that feature children.
- >> Use Photoshop (or something similar) to erase any evidence of adults from each image (do it to the best of your ability).
- >> Convert the images into 'Westfield Red' and get them made into advertising lightboxes.
- >> Send the lightboxes to *The Exchange* in Penzance by the 1st September 2013.

I'll then display your images alongside this fax during the *False Memory Archive* exhibition tour.

Many thanks in advance for your help.

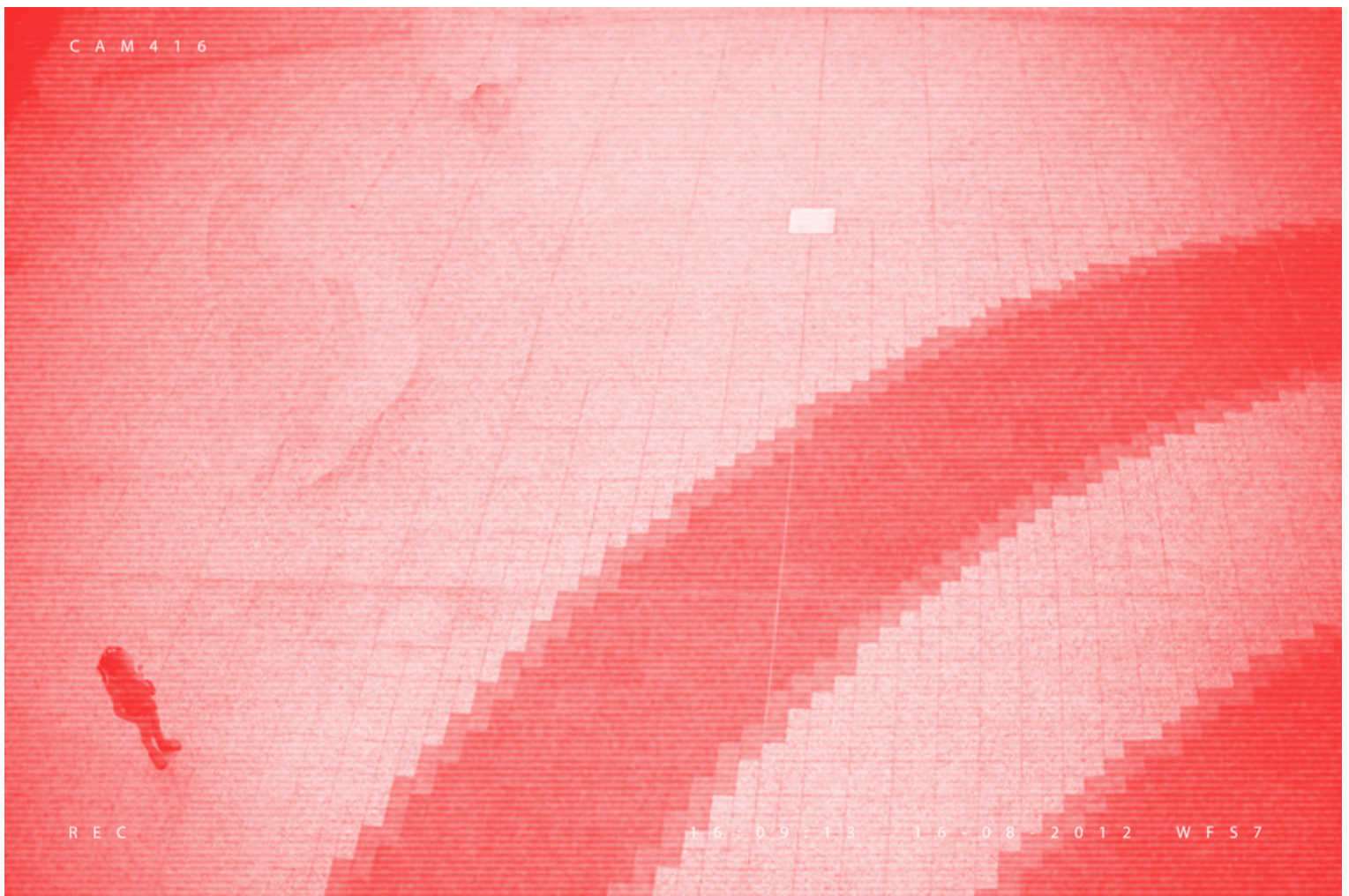
Kind regards,

A.R. Hopwood

AR Hopwood

PS. Sorry I had to fax this. My wireless hub is broken.

→ FALSEMEMORYARCHIVE.COM ←



False Memory Archive: Crudely Erased Adults. (2013). Images 1-2.



False Memory Archive: Crudely Erased Adults. (2013). Images 3-4.



False Memory Archive: Crudely Erased Adults. (2013). Images 5-6.



False Memory Archive: Crudely Erased Adults. (2013).

Install shots from *The Exchange*, Penzance.



False Memory Archive: Crudely Erased Adults. (2013).

Install shots from Carroll / Fletcher London (top) and Talbot Rice Gallery, Edinburgh.

Hot Air – A collaboration with Dr. Kimberley Wade

During my residency at Goldsmiths, I had been introduced to a psychology study from 2002 by Dr Kimberley Wade from Warwick University that explored how doctored photography can influence memory⁶⁰. In it Wade asked twenty confederates to recruit members of their family for the study. There were ten woman and ten men who met the criteria set out by Wade⁶¹ and over a 7–16-day period each participant was interviewed three times about a series of photographs from their childhood (given to Wade by the confederates). In amongst the real photographs was a fake doctored photo of each participant enjoying a hot air balloon ride with their family, which unbeknownst to them had been created by Wade for the experiment.

Each person was interviewed using a technique called the step-wise procedure which was widely used at the time by social services and law enforcement agencies in the UK and North America. They were asked to recall their memories of each photograph from their past *and* the doctored image. At the end of the three interviews 50% of the participants recalled the false event either partially or clearly - claiming to remember at least some details of experiencing a hot air balloon ride in childhood. The doctored photo coupled with suggestion and an effortful memory search had produced false memories of something that didn't happen. The original study was then expanded and compared to narrative accounts of a false hot air balloon ride and similar results were found.⁶²

I found this experiment to be fascinating and timely. It connected to my interest in the idea explored throughout the WITH project that faked artefacts and images could somehow create new memories, whilst highlighting the potential cognitive impact of image manipulation. When the study was created, image doctored was primitive. Looking back at some of the images from the experiment, it's extraordinary to think that so many in the study were fooled. In 2012, when I was first learning about the study, photoshop and other image doctored platforms had improved dramatically so I was aware of how chilling the findings were. Reflecting now in 2022, in a world where the 'deep fake' is very real, this twenty-year-old finding takes on a new significance.

I knew I wanted to make an artwork in response to Wade's experiment. It made sense to introduce it to an audience familiar with visual culture, because it felt like it could open a different type of discussion about how to understand what was then, the relatively new, image saturated world of social media.

I decided to experiment with an entirely new way of working that involved inviting Kimberley Wade to make an artwork *on my behalf* in response to my instructions. I thought it would be fun to send her on a *real* hot air balloon ride and get her to document her experience - I would then exhibit the resulting footage. I was also aware at the time of a new type of camera called a SenseCam. It was in prototype stage and pre-dated the now ubiquitous GoPro. The idea was to hang a small camera around your neck that would then automatically take a photograph every 30 seconds. It's selling point was

⁶⁰ Wade, K.A., Garry, M., Don Read, J. et al. (2002). *A picture is worth a thousand lies: Using false photographs to create false childhood memories*. *Psychonomic Bulletin & Review* 9, 597–603.

⁶¹ 1) had not taken a hot air balloon ride, (2) was at least 18 years old, and (3) had not taken a psychology class.

⁶² Interestingly the narrative accounts were more successful at producing false recall than the doctored photo condition.

that you could diarise your days effortlessly by creating a visual record of your activity⁶³. It seemed like the perfect tool to record Wade's hot air balloon ride with.

Kimberley Wade loved the idea, so I booked the trip and sent her instructions on how to use the device. She later sent me back the camera and a memory stick of the images. They were brilliant. They gave a fisheye lens point of view of her journey that felt almost experiential. I then created a film from the images where I used video doctoring to make it look like the stills had been recorded on an old super 8 cine camera. I included a soundtrack of an old film projector clunking and whirring away in the background just to give it an 'authentic' feel. The result was a video that was difficult to date, that seemed old but also looked new somehow⁶⁴.

It was a record of a real lived experience of a hot air balloon ride, documented by a memory scientist who had implanted false memories of a hot air balloon ride, on a device that could in theory help to improve memory. This layered, looping, poetic process of making, reflected on the methods used in Wade's study and its subsequent findings. The film *feels* like a poignant, nostalgic record of events - a documented version of a real event that was also a lie. The use of a cine style filter referenced the nostalgic aesthetic that was being overlaid on social media images at the time with the fake old, providing a new truth to a throwaway digital image. The work is described in the following way in Emma Lewis' 2014 essay for Photomonitor; *A Case of Misplaced Faith: Photography, Memory and A.R. Hopwood's False Memory Archive*:

Kimberley Wade's research into the effect of photographs on the construction of false childhood memories, for example – which found that when presented with a doctored photograph of themselves in a hot-air balloon as a child, 50% of subjects began to report memories of the event – is represented in two different forms that make up the work *False Memory Archive: Hot Air 2012-13*. The first references the research more directly, presenting a large-scale constructed contact sheet of the fake family snapshots that Wade showed to the participants of her studies. The second uses it as a starting point from which to explore something else entirely and consists of a video projection of a balloon ride that Wade took at Hopwood's invitation, where the footage is from a SenseCam, a device that records events every thirty seconds and is used as a memory-jogging device for patients suffering from amnesia. How the photograph can both support memory and let it down is thus illustrated in one, imaginative leap.

Alongside the video projection I exhibited the original doctored images from Wade's original study and an elegantly framed text in the form of a fake fax, that briefly explained the study and my instructions to Wade. As in *Crudely Erased Adults* it was a prettified facsimile of a fax, with (obviously) faked aging, torn edges, and distressed print.

⁶³ I was aware at the time that the neuropsychologist Catherine Loveday (University of Westminster) was using the camera with an amnesiac patient called 'Claire' to explore if it could help her memory. The artist Shona Illingworth worked with Claire, Loveday, and the cognitive neuropsychologist Martin Conway (1952-2022) on a fantastic 2015 project called *Time Present*. Illingworth's ground-breaking, sensitive, and timely collaborations with Conway (stretching back to 2003) and Loveday provided inspiration and reassurance for me as I made my way through the FMA. I was also delighted to have Martin Conway as a guest speaker at a conference I organised at Freud Museum London, during my *False Memory Archive* exhibition.

⁶⁴ Full video is available. File: FMAvideo5

Julia Langbein in her Critics Pick *Art Forum* review of the *False Memory Archive* at Carroll / Fletcher London said: “In Wade’s case, the psychologist comes out from behind the one-way mirror of the laboratory, and as Hopwood recedes behind his contract-faxing alter ego, the line between a psychologist’s props and an artist’s productions appears as thin as the one between recall and imagination.”

Hot Air was exhibited throughout the *False Memory Archive* national tour at Warwick Arts Centre, Newlyn Art Gallery and The Exchange, Talbot Rice Gallery Edinburgh and Carroll/Fletcher London. Please refer to my accompanying images for full documentation.



ATTN:
Prof. Kimberley Wade
Psychology Department
University of Warwick
CV4 7AL

30 March 2012

Dear Kimberley,

I've been considering how we could collaborate on a project together for my *False Memory Archive*. As you're best known for your false memory experiments involving doctored photographs I thought it would be an interesting idea to *make real* one of your imagined experiences.

I'd like to pay for you to go on a hot air balloon ride in response to your experiment, *A picture is worth a thousand lies: Using false photographs to create false childhood memories* (Wade, Garry, Read & Lindsay 2002), where you used doctored photographs to convince 50% of your participants that they had been on an invented hot air balloon ride when they were young.

All I'd ask you do in return is to record your experience of the balloon ride by wearing a camera that automatically takes a photo every 30 seconds. It's called a *SenseCam* and it's been developed to help amnesiacs 'remember' - it hangs around your neck and is very simple to use. I'll then create a short slideshow movie from the footage and make it look like it's been filmed in Super 8.

Once complete I'll show the film throughout the *False Memory Archive* National Tour alongside a version of this fax and a series of your original doctored images from the experiment. Afterwards I'll convert the footage into real Super 8 film and leave it in an attic for a number of years. All digital versions will be destroyed.

Kind regards,

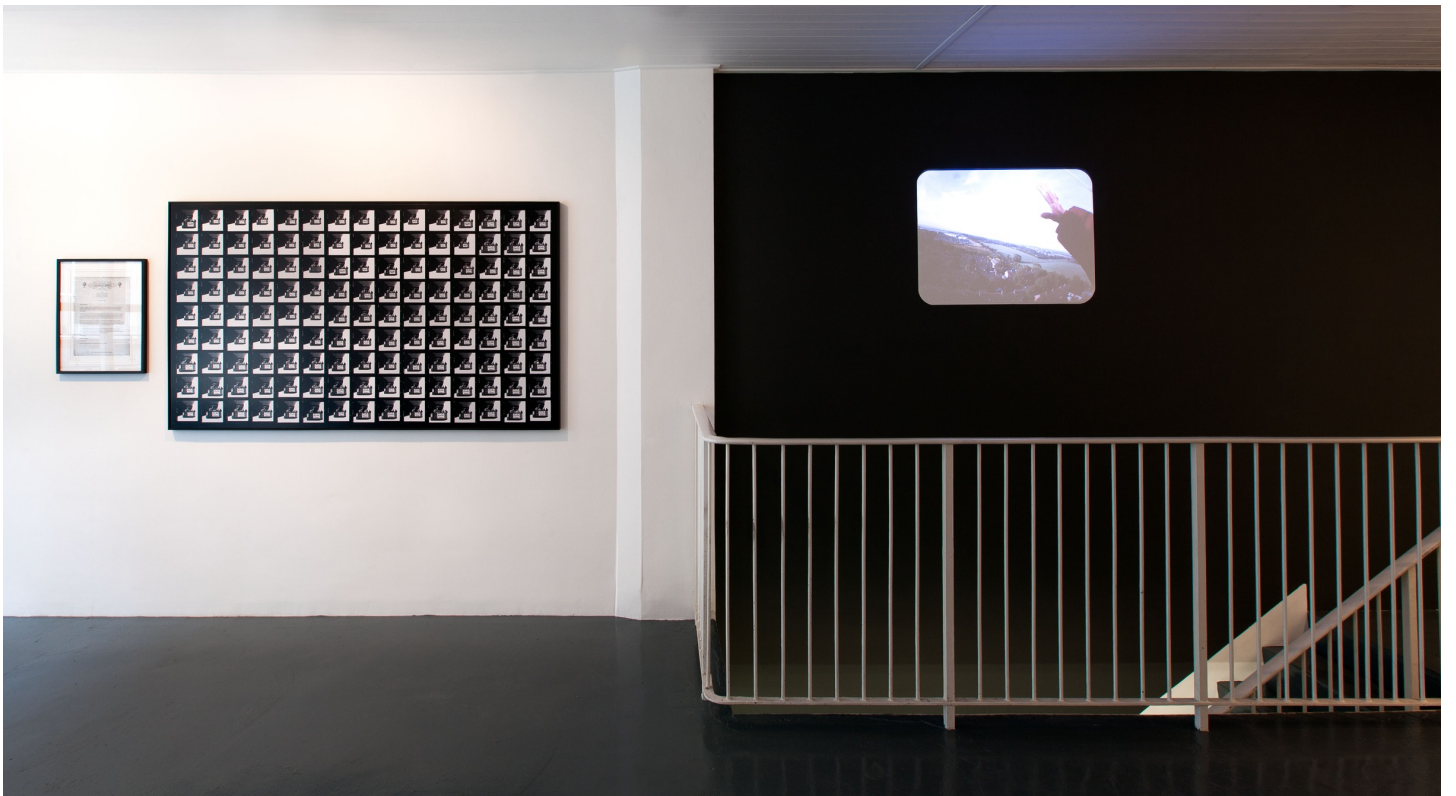
A.R. Hopwood

A.R. Hopwood

PS. Sorry I had to fax this - my internet access is sporadic.

False Memory Archive: Hot Air. (2013). 'Fax' invite to Kimberley Wade.

NB: There is a slight error in this text. In the third paragraph I state that the SenseCam was developed specifically to help amnesiacs. This is not the case. I developed a 'false' memory about the technology most likely because it has been used in an experiment with an amnesiac patient. Please see footnote number 63.



False Memory Archive: Hot Air. (2013). Fax, Psychology experiment images, Digital video (duration: 5mins 18secs).

Install shot from Carroll / Fletcher London. Full video footage available. Filename: FMAvideo5



False Memory Archive: Hot Air. (2013). Fax, Psychology experiment images, Digital video (duration: 5mins 18secs).

Install shot from Talbot Rice London (top). Detail of images from Kimberley Wade's experiment (bottom).

Exit Latency Silences – The Album (with Dr. James Ost)

Creating art works in response to experiments by cognitive psychologists was a strategy I continued to explore in a collaboration with Dr. James Ost from the University of Portsmouth⁶⁵. We created together an audio work of *Exit Latency Silences* that had been recorded during one of his false memory experiments that was exhibited and played throughout the FMA exhibition tour.

Ost's name had regularly come up in my discussions with colleagues at Goldsmiths and it was clear that he was a highly respected and well-liked researcher. He was fascinated in how easily memory could change in suggestive interviewing and how it could distort over time in real life settings. In a series of studies, he explored what are known as 'flash-bulb memories'; significant moments in history that are supposedly etched into our memories never to be contaminated or forgotten. He wanted to see if they really were as robust as is instinctively thought, so he asked participants about their memories relating to the death of Princess Diana in 1997 and the terrorist attacks in Bali 2002 and London in 2005. 40-50% of the participants across the studies reported memories of seeing critical footage from these incidents that never existed (including footage of Diana's car crash and explosions from the bombings). In one of the experiments⁶⁶ there was a strong correlation between having such false memories and being 'fantasy prone' - a personality description used by psychologists to describe "a disposition or trait in which a person experiences a lifelong, extensive, and deep involvement in fantasy"⁶⁷ Individuals with such traits are creative, more likely spend significant periods of time daydreaming, more likely to report out of body experiences and have a tendency to believe in paranormal phenomena. They have active imaginations and tend to be more open to new experiences than others.

I became interested in this definition not least because it covered aspects of my own personality and it also felt like it quite neatly described a few of my colleagues and friends in the arts. Here was evidence that such a disposition could have an impact on how you remember experiences from the past. There have been several similar attempts to link these tendencies with a higher likelihood of developing false memories with some success. However, it's important to note that in a 2008 study by Christopher French, no significant differences in susceptibility to false recall were noted between 19 self-proclaimed alien abductees and a control group matched for age and gender⁶⁸

⁶⁵ In 2019 James died tragically after a short illness at the age of 46. I look back on my time getting to know him with great fondness. James was deeply concerned about the consequences of distorted memories, and he worked closely throughout his career with families that had been affected by false memories that had emerged during discredited interviewing techniques. His obituary can be seen here: <https://psycnet.apa.org/fulltext/2022-18165-001.html>

⁶⁶ James Ost, Pär-Anders Granhag, Julie Udell & Emma Roos af Hjelmsäter. (2008). *Familiarity breeds distortion: The effects of media exposure on false reports concerning media coverage of the terrorist attacks in London on 7 July 2005*. *Memory*, 16:1, 76-85.

⁶⁷ Lynn, Steven J.; Rhue, Judith W. (1988). *Fantasy proneness: Hypnosis, developmental antecedents, and psychopathology*. *American Psychologist*. 43 (1): 35-44.

⁶⁸ For an overview of research linking fantasy proneness to susceptibility to false memory and subsequent replication see: French, Christopher C.; Santomauro, Julia; Hamilton, Victoria; Fox, Rachel and Thalbourne, Michael A. (2008). *Psychological aspects of the alien contact experience*. *Cortex*, 44(10), pp. 1387-1395

Despite this finding there is reasonable evidence to suggest that an active imagination or fantasy prone personality could be a contributing factor to a susceptibility to false memories⁶⁹. Described in his obituary as “a naturally gifted comedian and with the aura of an old-school rockstar”, James Ost was also fascinated in the idea of a fantasy prone personality, so he developed several idiosyncratic experiments that attempted to explore a possible link with false recall. During my first trip to see him at his lab in Portsmouth he bundled me into a side room to participate in an experiment that involved me seeing a list of words on a screen, doing a brief distraction task, a personality analysis questionnaire and then attempting to remember the words I’d seen previously. In the last remembering task, I had instructions to press a record button on the computer before I started recalling the list, and then to press the same button to finish the recording, once I couldn’t remember any more words.

After the experiment, Ost explained that the key part of my contribution that he was interested in understanding, was the period that it took for me to switch off the recording *after* my last remembered word. That ‘exit latency silence’ was then to be studied to see if it’s length (representing how effortful the memory search was for a final word from the original list) corresponded with my ‘fantasy proneness’. My contribution was one of many and we then sat listening to several exit latency silences from other participants. Some were a matter of seconds, while others went on for minutes, but none of them were ‘silent’. What the audio had captured was an act of remembering with all the “ums”, “ahs” and “ers” that you’d expect from trying to complete what was a cognitively demanding task. There were also noises of tapping fingers, shuffling feet, white noise from the room and interference from mobile phones. A few had whispered expletives as they attempted to find one last word, while some berated themselves about how terrible they are *at this sort of thing*. They were amusing and the fact that they were recordings of such pregnant, loaded pauses meant that an idea of how to use them for an album of silences for the *False Memory Archive* soon started to formulate⁷⁰.

James and I agreed that we’d create an album that compiled all the exit latency silences that he had collected in the lab. He’d provide the recordings and necessary permissions’ and I would design the album cover and cover all production costs with the project budget. We then framed the master copy and presented it alongside a fake ‘fax’ that briefly described his research and our collaboration. In front of the framed works the 12-inch record quietly played on an old-fashioned record player, thus filling each gallery with the sound of people trying to remember. The album ironically appropriated

⁶⁹ It is important to note, that such an observation could imply that false memories only happen to certain people when we’re all prone to such distorted memories.

⁷⁰ I first ‘heard’ John Cage’s 4:33 when I was 12 years old. My sister, an accomplished musician, had been selected to ‘play it’ at a school concert. She got up from her place in the orchestra as lead violinist, sat down at a piano, opened the sheet music, lifted the lid from the keys and then just sat there – doing nothing. What then followed was of course 4 minutes 33 seconds of silence punctuated by much hilarity and several derogatory comments about John Cage and his ilk. Essex in the 1980s was an interesting audience to test the piece on and perhaps unsurprisingly it was all thought of as a big joke by a con artist, however I can remember being fascinated by it; not least because it was a break from endless screeching recitals of Vivaldi’s Four Seasons that was the mainstay of school concerts. During my time at art college, I’d started listening to Cage and became fascinated by minimalist composition, eventually settling on composers like Steve Reich, Morton Feldman and Phillip Glass who at least occasionally satiated some of my instinctive need for a good tune. I also went to college with a conceptual artist called Jonty Semper who in 2001 his released his epic *Kenotaphion* that compiled all the available 2-minute silences for Armistice Day recorded at the Cenotaph from 1929 – 2000. It was a work that I loved and after hearing James’ selection of ‘silences’ I thought it would be great to add my own contribution to what is in truth, an ever-growing list of silent compositions. Wikipedia provides a comprehensive overview of the ‘silent’ genre: https://en.wikipedia.org/wiki/List_of_silent_musical_compositions

the crass, lurid design of the old *Top of the Pops* albums from the 1970s that featured covers of famous songs of the era, speedily produced to save money on royalties. The re-recorded songs were often a pale imitation of the original – a mere gist of what had gone before⁷¹. The coquettish (forced) pose of the female model on the front evokes a memory of an era (recently called into question) where such sexist imagery was part of the cultural wallpaper. Here though she was seen alongside a dry description of the academic paper that grew from the experiment that documented a link between a “more effortful memory search” and a fantasy prone personality.

Exit Latency Silences was exhibited throughout the False Memory Archive tour in exhibitions at The Exchange Penzance, Talbot Rice Edinburgh, Carroll / Fletcher London and Galerie Schunck Heerlen.

⁷¹ Cognitive psychologists often describe memory as only a gist of an experience rather than an accurate recording.



ATTN:
Dr. James Ost
Psychology Department
University of Portsmouth
F: [REDACTED]

15th December 2012

Dear James,

Thank you for seeing me yesterday – I really enjoyed learning more about your research.

I had a thought that I'd like to turn a selection of your recorded 'Exit Latency Silences' from your experiment *Is Fantasy Proneness Related To A More Exhaustive Memory Search*, into a limited edition vinyl LP.

If in agreement please send me all of your Exit Latency Silences recordings, so I can make a 'greatest hits' version of the collection for the record. I'll then instruct each partner gallery to play the record throughout my *False Memory Archive* touring exhibition, alongside a framed version of this fax and a master copy of the record that describes the experiment in full on the back cover.

Let me know what you think – I really like the idea that the sound of people 'trying to remember' will fill the exhibition.

Kind Regards,

AR Hopwood

PS. Sorry to fax – I've moved studio and no Internet as yet.



False Memory Archive: Exit Latency Silences. (2013). Fax, framed vinyl record, record player.

Install shot from Carroll / Fletcher London.

12" Vinyl Outer Sleeve - 3.5mm Spine



False Memory Archive: Exit Latency Silences. (2013). Fax, framed vinyl record, record player.

Album artwork proof (top). Install shot from Talbot Rice Gallery, Edinburgh (bottom).



False Memory Archive: Exit Latency Silences. (2013). Fax, framed vinyl record, record player.

Install shots from The Exchange, Penzance.

Other works from the False Memory Archive

In the images accompanying this commentary I have included a selection of other works that I made for the *False Memory Archive*. They include an epic doctored photo montage called *Erased UFOs: A collection of found UFO images with all evidence of the UFOs removed, presented in 242 used frames*, that was made over 2 years and inspired by my conversations with Christopher French and encounters with sceptics and believers alike during my residency. As suggested by the title I found 242 images of UFO sightings from the internet and then methodically removed evidence of each UFO in photoshop. Many of the images were themselves doctored, so in most instances I was simply returning the photograph to its original state. They were then printed at the size I found them, framed in old frames bought from Deptford market in London and hung floor to ceiling in each exhibition.

In another similarly exhaustive work, I carefully hand painted in *reverse colours* an entire deck of playing cards and then framed the results. Simply called; *A full deck of hand-painted reverse colour cards* the work was inspired by a 1949 psychology experiment by Jerome S. Bruner and Leo Postman called *On the Perception of Incongruity: A Paradigm*⁷² where reverse colour cards were used to examine if participants could ‘see’ an anomalous card in amongst a selection of ordinary playing cards. Due to limitations with printing technologies in the late 1940s Bruner and Postman also had to hand-paint their cards in the opposite colour to achieve the desired effect.

In another exchange with a leading cognitive psychologist and memory researcher Guiliana Mazzoni⁷³, I arranged for an online psychic called ‘Crystal’ to regress to a past life *on her behalf* for £40. I sent over the necessary information and then received a written text of who Mazzoni ‘was’ in one of her (many) past lives. In an extraordinary twist she had (according to Crystal) been the famous 19th century mariner and explorer John R. Jewitt, who was captured for several years by ‘The Savages of Nootka Sound’⁷⁴ during an expedition in 1803.⁷⁵ The 1000-word overview sent by Crystal outlining this eventful ‘past life’ was presented as a wall text alongside a fax outlining our collaboration, and two books mounted in a glass case. One book was Mazzoni’s *Si puo credere a un testimone* that featured an image of an alien on the front and outlined research into the fallibility of eyewitness testimony, and the other was an original first edition from 1815 of John R. Jewitt’s eyewitness account of his experiences with the Nootka Sound tribe - a diarised ‘narrative’ of events that was questioned at the time of writing for the authenticity of the written recollections.

⁷² Bruner, J.S. and Postman, L. (1949). *On the Perception of Incongruity: A Paradigm*. Journal Of Personality, 18: 206-223.

⁷³ Mazzoni has worked extensively with ‘non-believed’ memories and also studied what is known as ‘Highly Superior Autobiographical Memory’ (HSAM). These are rare cases where individuals exhibit a remarkable ability to remember details from the past. They tend to be avid diarists, regularly encoding their day-to-day experiences in written or image form. In a 2013 study Lawrence Patihis et al discovered that those with HSAM are as susceptible to false memories as a control group. (Patihis L, Frenda SJ, LePort AK, Petersen N, Nichols RM, Stark CE, McGaugh JL, Loftus EF. *False memories in highly superior autobiographical memory individuals*. Proc Natl Acad Sci USA. 2013 Dec 24;110(52)).

⁷⁴ This is how they were dismissively described on the front of Jewitt’s book of his experiences. Nootka Sound is in the Pacific Ocean on the West Coast of Vancouver Island.

⁷⁵ It’s often the case that people paying to discover more about their ‘past lives’ end up being someone who was famous or significant. Quite a coincidence considering the billions of non-famous people who have died throughout history.

I also presented a crowd sourced work called *Failed Prophecy I* where contributors filmed the sea at the exact minute the world was meant to end, according to contemporary interpretations of the Mayan calendar. I collaborated with a tailor in Vietnam to create a replica (from memory) of the pink Chanel suit worn by Jackie Kennedy on the day her husband (US president John F. Kennedy) was assassinated in 1963. The resulting outfit was then exhibited on a mannequin in various gallery storerooms and viewable through a peephole cut into the door. I also created some handmade paper from the pulp of a selection of trashy misery memoirs that were then simply framed as enigmatic monochromes, and I collected several 'failed facial recognition' images from iPhoto that were then presented on 35mm slides. I also exhibited a series of photographs where Elizabeth Loftus can be seen performing the Heimlich manoeuvre on each of one of her PhD candidates⁷⁶.

For each exhibition on the tour, I made a site-specific work. At The Exchange in Penzance, I collaborated with local resident Penny Batten whose father Ted George was a renowned local model boat maker. Penny told me a story about how one of Ted's boats had gone missing after he lent it to a collector in Switzerland. In response, I attempted to find the original boat for her, and I promised that if I didn't, I would commission a model maker to create a replica based on old photographs she'd provided. The status to the exhibited boat was only revealed to Penny, but the gallery visitors were left guessing as to its authenticity.

In the same exhibition I also commissioned artist Barry Sykes to continue his ongoing series of delegated sculptures in his work *A Sculpture I Once Saw, Which I've Always Liked, By An Artist I Can't Remember, Remade From My Written Description By Someone I've Never Met* – a work that was delightfully self-explanatory and relevant for the exhibition.

At Talbot Rice Gallery I worked with neuroscientist Sergio Della Sala on a work about the nature of forgetting. I collected several marble busts and paintings from the storeroom of the Playfair Library at the University of Edinburgh that were of *unknown* status in terms of title and authorship. These works were then simply exhibited alongside a fax outlining aspects of our exchange and a first edition of Della Sala's book *Forgetting* that was available for visitors to read at the gallery.

And finally, at the Freud Museum London⁷⁷ I created a site-specific work that responded to a last-minute change of plan by the museum that resulted in a new series of photographs. About a month before the exhibition was due to launch, I was told that they didn't want any art works hanging on the walls of the museum outside the temporary exhibition space. This was a problem as I'd planned to exhibit several wall-based works in these spaces. The reason given was that previous exhibitions by other artists had caused significant damage to the walls, and they just didn't want to risk creating more. It was true and I could understand why this was a problem. Previous exhibitors had indeed caused serious damage to the interior of the museum - particularly in the hallway, stairs, and landing. Drilled holes, tears to the wallpaper and dirty hand marks had made a significant impact. It was something I'd flagged up in previous meetings, however there were no plans for the damage to be

⁷⁶ Loftus worked with others on a study where they implanted false memories of nearly choking as a child: Mazzoni, Giuliana & Loftus, Elizabeth & Kirsch, Irving. (2001). *Changing beliefs about implausible autobiographical events: A little plausibility goes a long way*. Journal of experimental psychology. Applied. 7. 51-9.

⁷⁷ Freud Museum London was the final home of Sigmund Freud, the founder of psychoanalysis and home then to his daughter the child psychoanalyst, Anna Freud. The museum is laid out as if it's still a home with Freud's study being one of its main attractions.

repaired. This last-minute change was initially frustrating as I'd offered to help patch-fix the walls pre and post installation, but I had little choice but to accept the ruling.

In response, I asked the museum if I could pay for a professional decorator to make good and repaint the entire hall, landing and stairs of the museum to *make good* the damage. It hadn't been done since the museum was wallpapered in the 1980s, so it was a big, expensive job to complete⁷⁸. They agreed; however, my seemingly generous offer came with a caveat. Before redecorating I was to take a series of macro photographs of the damage before it was fixed and painted over. I would then print and frame the photos at a large size (1000mm x 1000mm) and hang them on the newly decorated walls. The memory of the damage had therefore been erased and subsequently amplified - it was both a true *and* false representation of what was there previously. The gesture felt like a worthwhile rumination on the nature of memory as described in both cognitive psychology (that memories are *gists* of original experiences that can distort and amplify) and psychoanalysis (that damaging memories from the past are hidden beneath the surface). I was however keen to subtly question the latter position by implying that an excavation of *the hidden* can in fact lead to *false* representations.

⁷⁸ The paint had to be matched to the colour of the wallpaper. The colour was described as 'gardenia' named after the colour of Freud's favourite flower. I made a short video of the paint being mixed ready for the job that was exhibited alongside the photographs.



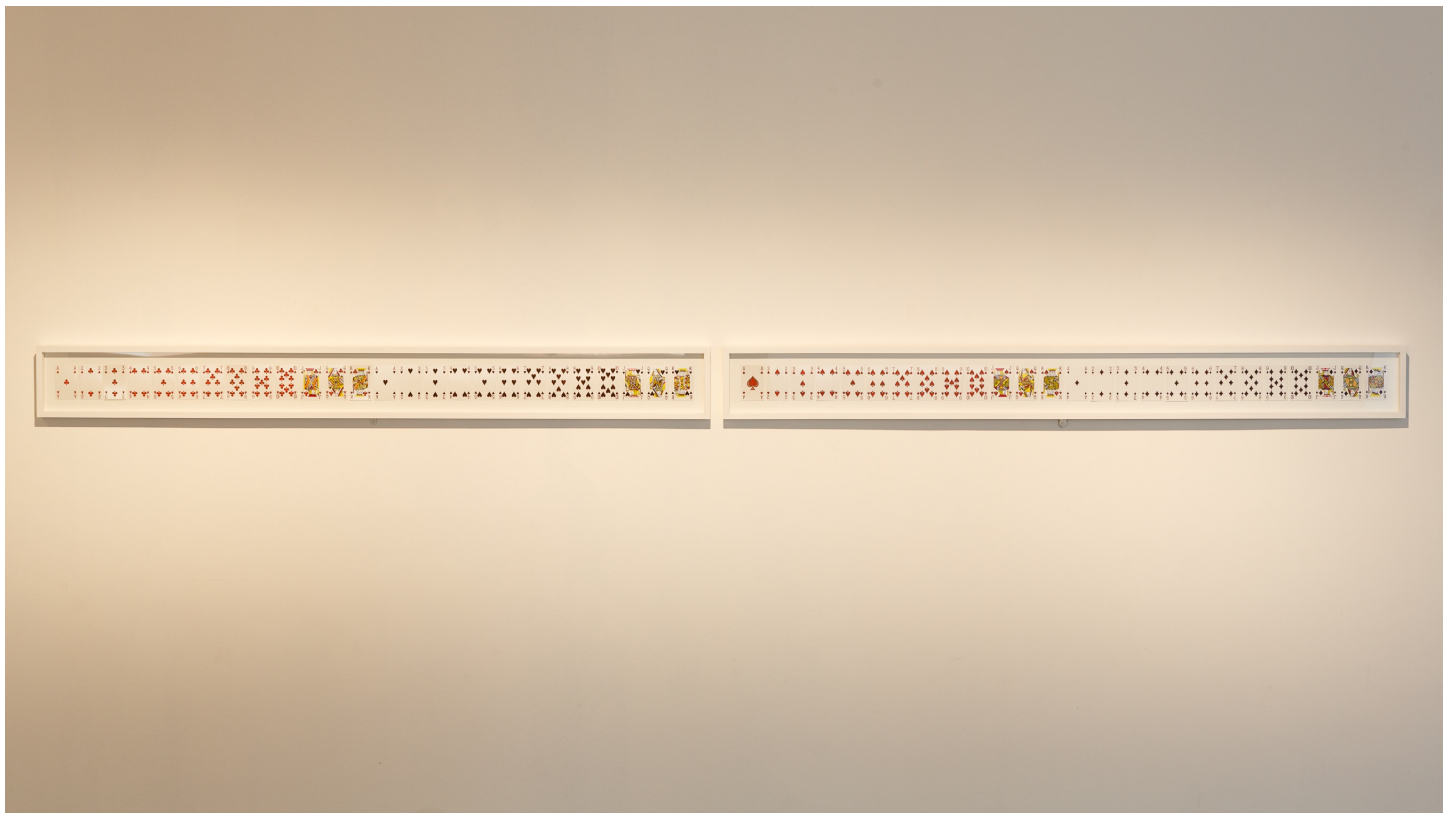
Erased UFOs: A collection of found UFO images with all evidence of the UFOs removed, presented in 242 used frames. (2012-2014).

Install at The Exchange, Penzance (top), Detail (bottom).



Erased UFOs: A collection of found UFO images with all evidence of the UFOs removed, presented in 242 used frames. (2012-2014).

Install at Carroll / Fletcher London (top) and ADM Gallery Singapore (bottom).



False Memory Archive: A full deck of hand-painted reverse colour cards. (2013).

Install at The Exchange, Penzance.



ATTN:
Blair Todd, Curator
The Exchange, Penzance
F: 01736363714

30th October 2012

Dear Blair,

Many thanks for inviting me to show the *False Memory Archive* at *The Exchange* in 2013. To kick off the process I would like you to send the following message to a selection of subscribers on your gallery mailing list:

At 11:11am GMT on the 21/12/2012 the world will end, according to some interpretations of the Mayan calendar. You have been selected to mark the occasion by participating in a new collaborative work for the False Memory Archive exhibition at The Exchange in Penzance.

Here are your instructions:

- >> *At 11:00am GMT on 21/12/2012 you must arrive at a coastal location of your choice with some video recording equipment.*
- >> *At 11:11am GMT you must record a single, static shot of the sea for one minute, whilst thinking about something appropriate.*
- >> *The sea's horizon must be in the frame.*
- >> *No one off-camera can speak or make an inappropriate noise.*

If the world doesn't end please send your recording to The Exchange by 26/09/2013. Your recording will then be played throughout the False Memory Archive exhibition at the gallery, alongside this message and a number of other collaborative works.

Hopefully that's fairly self-explanatory - I'd like about 10 people to contribute. If the world does end then apparently the Earth's north and south magnetic poles will immediately reverse so they should get a good view of the event. Good Luck.

Kind Regards,

AR Hopwood

P.S. Sorry to fax - no internet yet in my new studio.

↔ FALSEMEMORYARCHIVE.COM ↔



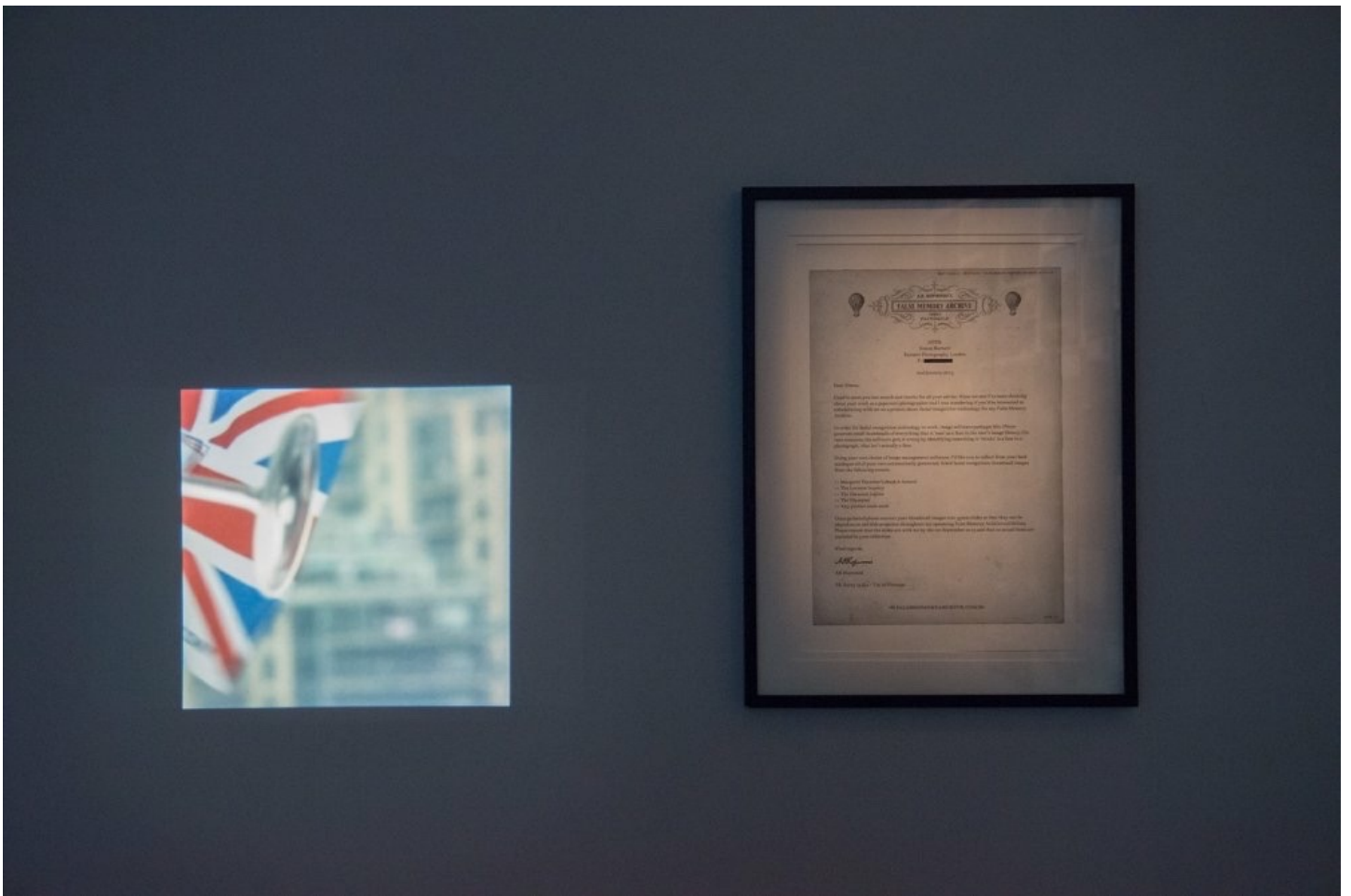
False Memory Archive: Failed Prophecy I (11:11:00, 21/12/2012). (2012). Fax, 13x1-minute digital videos.

Install at The Exchange, Penzance (top) and Talbot Rice Gallery, Edinburgh (bottom).



False Memory Archive: Flashbulb I (Jackie). (2013).

Install at The Exchange, Penzance.



False Memory Archive: Failed Facial Recognition Images (2013). Fax, 35mm slides.

Install at Talbot Rice Gallery, Edinburgh (top) and ADM Gallery, Singapore (bottom).



Deliberately aged photographs of Professor Elizabeth Loftus performing the Heimlich Manoeuvre on members of her research team (and one of them doing it to her). (2013).

Install at Talbot Rice Gallery, Edinburgh (top) and The Exchange, Penzance (bottom).



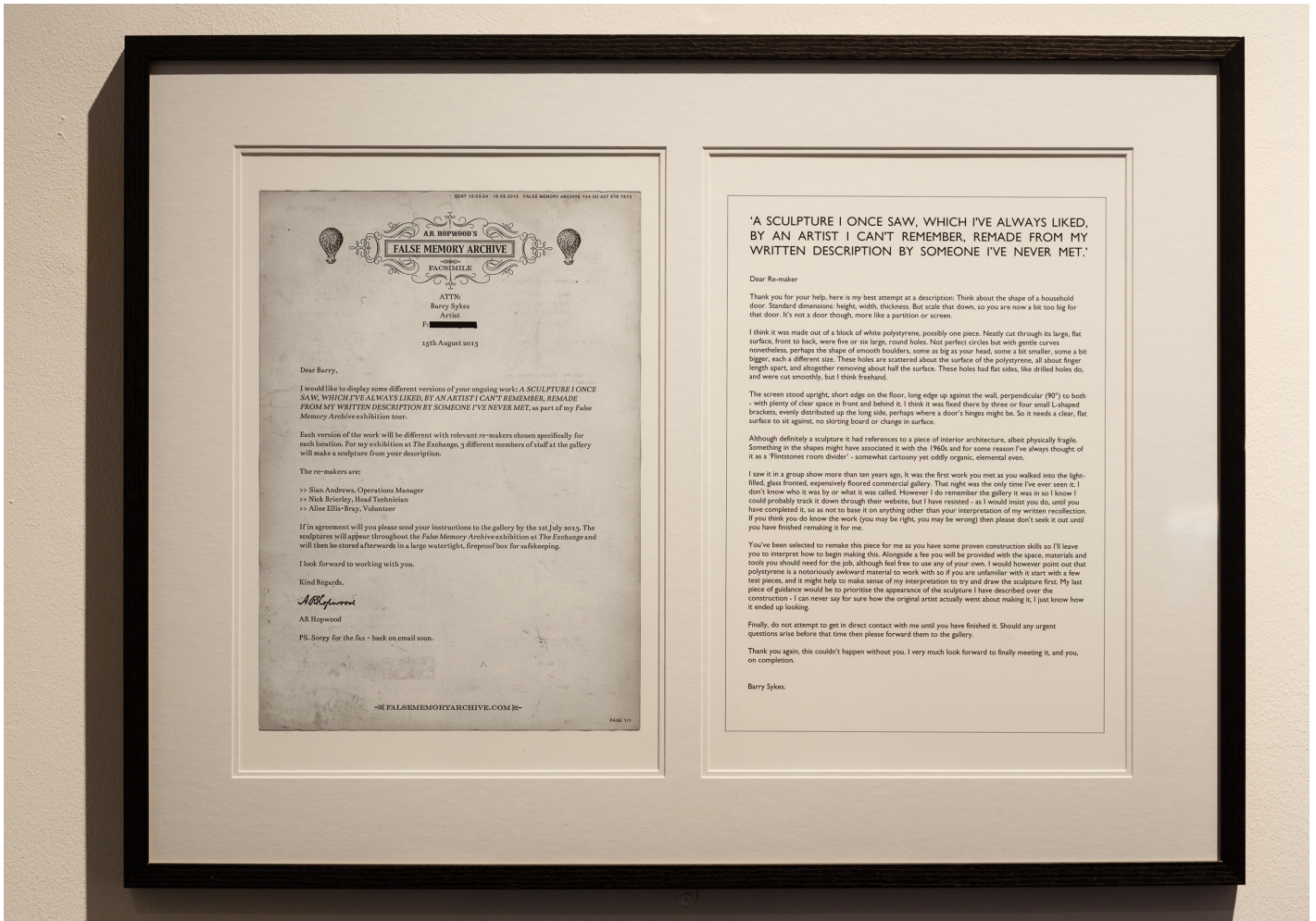
False Memory Archive: Misery Memoir Recycled Paper. (2013).

Install at Talbot Rice Gallery, Edinburgh.



False Memory Archive: Recovering the Marie Sophie. (2013).

Install at The Exchange, Penzance.



A Sculpture I Once Saw, Which I've Always Liked, By An Artist I Can't Remember, Remade From My Written Description By Someone I've Never Met. (2013). Barry Sykes.

False Memory Archive commission. Install at The Exchange, Penzance.



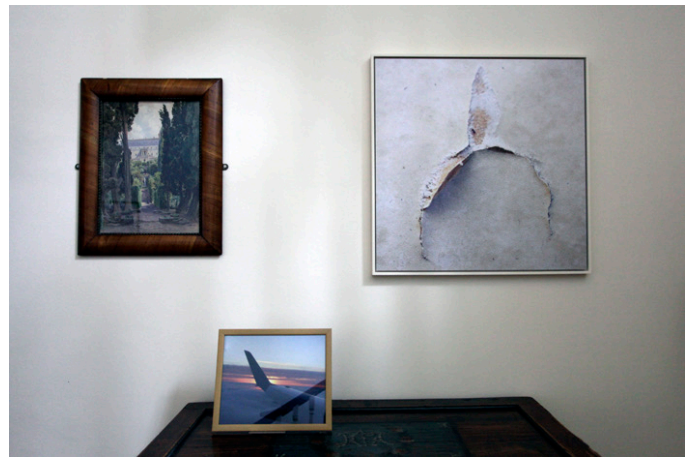
False Memory Archive: Unknown by Unknown. (2014).

Install at Talbot Rice Gallery, Edinburgh.



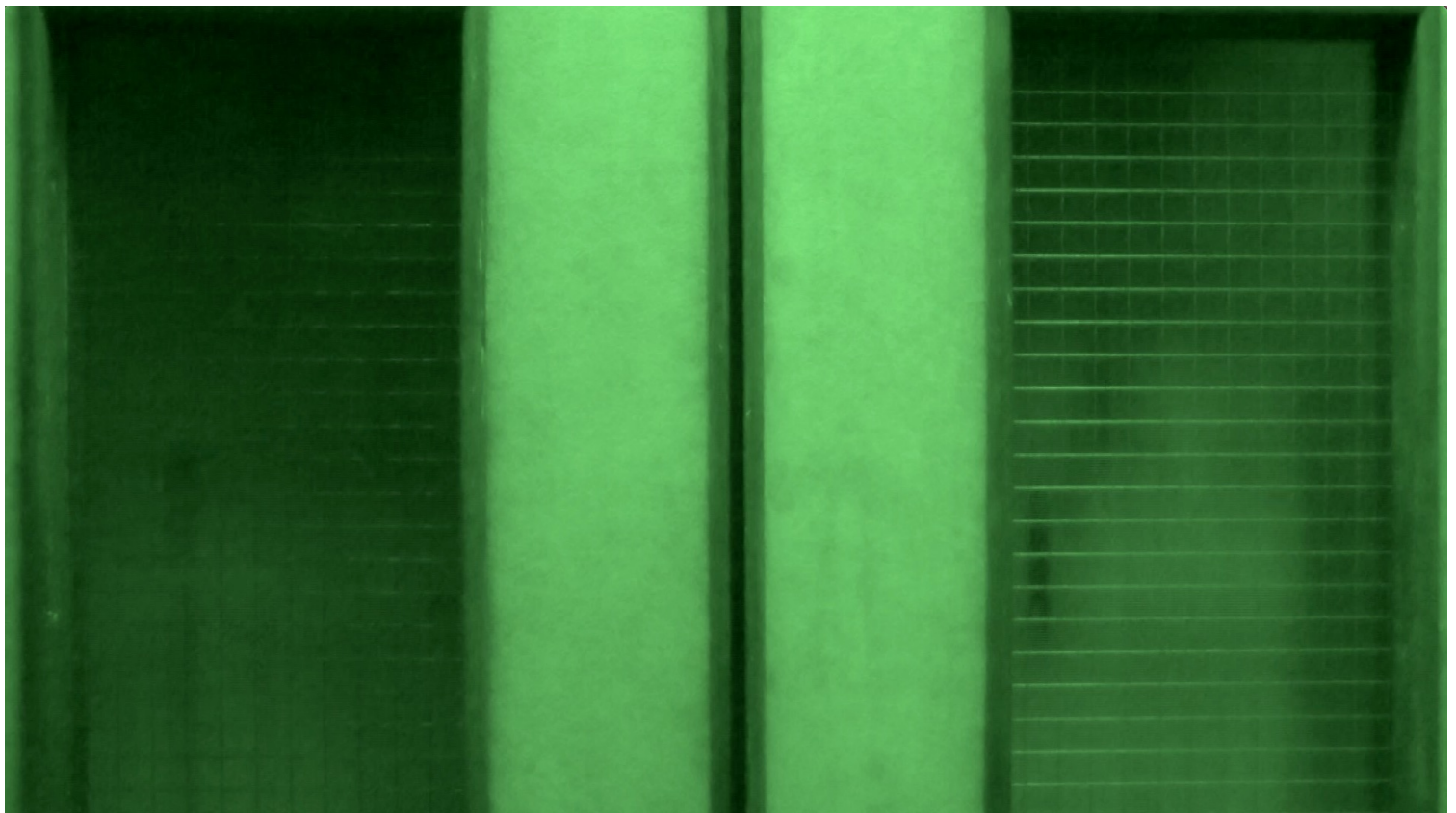
False Memory Archive: Damage caused to the walls of The Freud Museum London by previous art exhibitions. (2014).

Install at Freud Museum London. Photographic documentation by Lloyd Goodall.



False Memory Archive: Damage caused to the walls of The Freud Museum London by previous art exhibitions. (2014).

Install at Freud Museum London.



Top: *False Memory Archive: Plaster-cast HelmetCams (Freud's study)*. (2014) [2010].

Bottom: *False Memory Archive: A Never Ending Lift (descent)*. Looped night vision footage of Freud's personal lift at the Freud Museum London. (2014). Digital video (duration 5mins).

Installed at Freud Museum London. Full video footage available. Filename: FMAvideo6.

Chapter 3: How research can change practice

Soul Searching

The art works described in the previous chapter go some way to illustrating my conviction that research from cognitive psychology is an incredibly fertile ground to explore artistically, culturally, and politically. For artists interested in instrumentalising their work for political ends it sheds considerable light on how misleading information and misinformation can impact our memories. For tactical media artists it usefully problematises the use of parafictions in the public realm by highlighting the way that undeclared fictions can be misremembered as real events. For artists working with autobiography, it illustrates how memories from our past can easily distort, while highlighting how we instinctively storify our past to make sense of our experiences. And for artists interested in mystical, anomalous and paranormal narratives it shows that such experiences could have compelling psychological explanations.

As indicated in chapter two, research findings from cognitive psychology also provide a counterpoint to theories about *the hidden*, *the unconscious* and *the repressed*, that I had initially been introduced to at art college and regularly exposed to as an artist. This unexpected challenge to my art school introduction to ‘Critical Theory’ (or *critique*) was initially uncomfortable and it led to much soul searching during my residency and creative journey through the science of false memory.

I had gone to art college as an undergraduate from 1995-98 and certain theorists were regularly name-checked by tutors, lecturers and visiting artists. During my BA, it was mainly Jaques Lacan (and by association Sigmund Freud), however Barthes, Benjamin (and by association Karl Marx), Derrida, Foucault, Lyotard and Baudrillard were from memory the most cited. The artist Simon Bill created a more comprehensive list of these art school staple theorists in his 2018 essay *The Two Cultures: Where Are We Now?* that for context is perhaps useful to consider:

So, who are we talking about here? These are some of the canonical figures: Ferdinand de Saussure; Claude Levi-Strauss; Roland Barthes; Jacques Derrida; Michel Foucault; Louis Althusser; Julia Kristeva; Jean Baudrillard; Jacques Lacan (already mentioned above); Luce Irigaray; Frederic Jameson; Gaston Bachelard; Jean Francois Lyotard; Georges Bataille; Gilles Deleuze; Felix Guattari; Jacques Ranciere; Alain Badoiu; Bruno Latour; Pierre Bourdieu...⁷⁹

As a young art student, I found the insight provided by many of these theorists to be revelatory. I’d not heard of many of them before I went to university, having had a limited grounding in philosophy from my standard comprehensive education. I was also not a natural reader in my early twenties. I loved fiction and making art, but I struggled with the verbosity of the philosophical texts we were given, so I relied on the cartoonish ‘for beginners’ and ‘Introducing’ book series published by Icon and Totem for the bulk of my early theoretical learning.

My interest in these positions certainly came from my desire as a young, left-wing artist to challenge the conservative status quo. From an early age, I had only known life under conservative governments and my parents had taught me to question almost everything they stood for. Here was a way for me to try to understand why their ideology seemed so untouchable. Perhaps ironically, it was also my desire

⁷⁹ Bill, S. (2018), *The Two Cultures: Where are we now?*. FEBS J, 285: 1786-1790.

to impress those in positions of authority at the university that led me to some of my attempts to justify my work through my limited knowledge of some of these thinkers. That's not to say such a journey wasn't enlightening - it really was, and it influenced the work I wanted to make as a young artist. I took so much from this time, and there are three key *narratives* from my early exposure to critical theory that influenced my work for many years.

The first idea took its cue from Jacques Derrida and his theories of deconstruction - that we cannot rely on the idea of authorial intentionality (or rather what is *meant*). Rather we must interpret texts and objects as being full of political, social, historical and cultural assumptions that need to be unpicked or deconstructed. I understood it as a radical form of scepticism where everything is to be questioned and nothing is to be taken at face value: that there is no right answer, only a range of differing perspectives.

I found this notion particularly helpful regarding the interpretation of artworks - it helped me to develop a useful set of critical tools with which to approach artworks and artefacts from visual culture; how can a broader meaning beyond the received histories and intentions of the author be picked away from the object in front of me?⁸⁰

But I also perhaps found it politically convenient, as it satiated my desire to undermine those who I perceived at the time to be 'in' power. It gave me a different way to think about those who I disagreed with. Instead of just having a different opinion from me, I started to see them as fodder for a form of cultural analysis. What they said they 'meant', *they didn't really*, and the content of these utterances were merely texts for me to extrapolate a wider meaning from. *They* didn't understand that what *they* were saying, doing, and reading was a representation of a different hidden narrative *they* were in thrall to. It made me feel better even though in hindsight it patronised, depersonalised and othered half of the population.⁸¹

The second key theoretical idea that I absorbed at art college was that any expression of truth was nothing more than a reflection of the political ideology of the person who was making the claim. Rooted in a beginner's guide knowledge of Foucault, Lee McIntyre in his 2016 book *Post-Truth* describes such a position in the following way:

Michel Foucault's idea was that our societal life is defined by language, but language itself is shot through with the relations of power and dominance. This means that at base all knowledge claims are really just an assertion of authority; they are a bullying tactic used by the powerful to force those who are weaker to accept their ideological views.⁸²

⁸⁰ Such deconstructionist ideas also inspired me artistically to experiment with notions of authorship. Patched crudely together with my art student take on Roland Barthes ever popular essay *The Death of the Author* I have spent a lot of time making mischief by working under various pseudonyms including WITH and A.R. Hopwood.

⁸¹ Although my views about the Conservative Party haven't changed, I do have friends and extended family members who have voted for them. I don't think they're more blinded to an alternative viewpoint than I am, although I'm happy to confess that I think they're wrong on most things (as they do with me). Despite discussions about the merits or otherwise of a Hayekian or Keynesian economic model, we tend to agree to differ - neither party having budged an inch and our love for each other still left in-tact.

⁸² McIntyre, Lee. (2018). *Post-Truth*. MIT Press, P.126.

This positioning felt to me like a useful way to try to understand why certain societal structures like class, monarchy and church were still such dominant forces in modern British society. Trying to understand and overturn centuries of verbal engineering by such ideological constructs seemed a good idea - a *mission* that I could buy into.

But there was always a dissonance that I felt in relation to such a notion. I couldn't see how it pertained to what I understood to be scientific truths (or facts), like for example the curvature of the earth, man-made climate change and the theory of evolution. Was I now just to think of the evidence underpinning such conclusions as part of a *narrative*? I only ever imagined applying this radical scepticism to things that I disagreed with; not to areas of empirical knowledge that had improved human health or shed light on the origins of life through decades of evidence gathering. These were ideas that I secretly thought to be too precious and *too truthful* to be undermined in such a way. After all, if you equalise all forms of knowledge in this way, then how can one for example discriminate between a lifesaving treatment and a quack therapy?

I rarely expressed this anxiety professionally or academically as I couldn't work out how to express my worries through the critical frameworks we were being encouraged to adopt. As I ploughed through paragraph after paragraph of text that I often just didn't understand, I secretly felt more and more alienated and intimidated by the *mission*. I also just naively thought that no one would use this idea to critique the bits of the post war consensus that I liked and seemed worthwhile (like democracy, environmental protections, and human rights). I also never thought that the theocratic, fascistic, authoritarian, and monarchical institutions that I believed it should be used against, could in theory employ such a relativistic line in defence of their own positions.

Finally, and with most relevance to my residency at Goldsmiths was the idea of repression that has its origins in psychoanalysis. The idea as I understood it seemed so rich and appealing - that our brain has a defence mechanism that pushes our most primal, destructive thoughts and behaviours into our unconscious. It was also applied by Freud in his Seduction Theory to how traumatic memories are processed: to protect ourselves from the worst kind of experience, we have an inbuilt mechanism that automatically represses such memories, to the point where they are not consciously accessible⁸³. A key idea that has its origins in psychoanalysis is that the therapeutic process should bring the repressed back into consciousness to allow the analysand (patient) to understand destructive behaviours that could be influenced by this hidden self. It's an extremely thoughtful proposition and one that has many broader applications. For example, if we can imagine repression on an individual level then it's not a huge leap to consider how it may work across society: what do we collectively 'repress' and how do we use critique to diagnose and recognise these hidden pathogens?

The idea then of the pervasive influence of the unconscious, repressed or 'hidden', was one that I had absorbed through regular exposure. Such notions were the quick drying cement around the central pillar of critical theory *for beginners* that had been communicated to me as an art student. As

⁸³ As described chapter 2 it's important to state that Sigmund Freud abandoned the Seduction Theory. Freud's legacy is often contradictory and theories that he later refuted have still have a currency because they have been re-interpreted at a later stage. The growth of recovered memory psychotherapeutic techniques is just one example. This complex legacy was why I wanted to exhibit the FMA at Freud Museum London. After he abandoned the Seduction Theory Freud went onto say in *The Interpretation of Dreams* (1899) that "our memory has no guarantees at all, and yet we bow more often than is objectively justified to the compulsion to believe what it says". A perspective that is in tune with modern scientific perspectives on memory.

Elizabeth Anker and Rita Felski point out in their introduction to *Critique and Postcritique* (2017) the idea that a meaningful critique of a text or object should be *diagnostic* in this way has become an almost inescapable trope within arts academia and cultural studies. They remark:

For the Freudian reader what defines the symptom is its unintended and involuntary status: the text unwittingly reveals an often shameful or scandalous truth that it would prefer to deny. In classic Freudian interpretation, repression is the mechanism by which such truths are hidden from view, creating contrast between manifest meaning and what lurks beneath⁸⁴

Anker and Felski also characterise the Foucauldian scholar as also being a symptomatic reader. They claim to have an acute awareness of the entanglement of knowledge and power that is hence internalised and used diagnostically to any given text to “trace out the hidden capillaries of power in the dispassionate manner of clinicians diagnosing the pathologies of the social body”⁸⁵

But what of the Marxist reader (the one that I have long felt most affinity towards)? Felski and Anker point towards Fredric Jameson who in *The Political Unconscious* (1981) describes his own approach as the “diagnostic revelation of terms or nodal points implicit in the ideological system which have, however, remained unrealized in the surface of the texts, which has failed to become manifest in the logic of the narrative, and which we can therefore read as what the text represses.”⁸⁶

Over many years I could hear key ideas of symptom, repression and diagnosis echoing around the oft empty spaces of contemporary art galleries and on occasions such ideas provided me with a useful veneer for whatever endeavour I’d foisted on the public. As is now probably clear I always had nagging doubts about their dominance.

In the first instance I was never interested in committing myself to venerating a particular thinker and their followers, interpreters, and associates - not least because it feels bizarrely theocratic. I also change my mind *all the time* and my long running and instinctive *belief* in science⁸⁷ seemed always to run counter to many of their utterances. I also like the freedom of moving between positions that can be contradictory or oppositional. There is much in Lacan and Foucault that I find enlightening, however on occasions I can also find other *things* like the bible (even as an atheist), Adam Smith, Susan Blackmore, Oscar Wilde, Aristotle, Stephen Pinker, Oliver Sacks and Take a Break Magazine to be similarly revelatory (and lots of other things too).

⁸⁴ Anker, E. S., & Felski, R. (Eds.). (2017). *Critique and Postcritique*. Duke University Press. EReader page 8-9/258.

⁸⁵ Ibid. EReader page 9/258.

⁸⁶ Ibid.

⁸⁷ My dad is a retired health professional and my sister studied Chemistry at university. Their influence on my ‘belief in science’ is not to be underestimated and it’s important to acknowledge that being nurtured in such an environment had an impact. That said, as a bolshy teenager I’d goad them over their insistence on evidence for everything and I like to think that they also learnt from my interest in art and culture. I should also qualify that my belief has never been *blind faith*. I’m fascinated in how scientific processes have evolved and the role that various institutions have had in shaping the modern world for good *and* ill. At the core of my belief is a conviction that when taken as whole, science has improved the quality of our lives enormously.

I also always had an instinctive sense that many of the concepts that I was being taught at art college were at best esoteric and counter to personal experience. The idea of repressed memory for example seemed to be at odds with how I understood and remembered traumatic experiences from my own past. As with most people I have some difficult memories, having lost two very close childhood friends in two separate car accidents. My grief was the opposite of repressed: in fact, my memory of being told about their deaths was (and still is) always with me in some form or another, never far from the surface. My recollections of these difficult times can be triggered by a song, a smell, a fleeting glimpse or dream. I may not have thought about it for a while, but the trauma is never forgotten. I have often tried to *suppress* those memories by trying (and failing) to *forget* them⁸⁸ but that's a very different cognitive process to the repression of traumatic memories⁸⁹. I also couldn't understand why friends and mentors who were proponents of psychoanalysis were so resistant to having such theories tested scientifically. I was far more likely to hear them dismiss the idea that it was even possible to test such theories in an objective way.

As I discussed some of these issues with Christopher French and his associates at Goldsmiths it became clear to me that they thought these narratives were not revelatory but, in their opinion, outdated. They presented a compelling argument for why some key ideas that I'd absorbed from art school and carried with me for so long should be reconsidered. For example, at the start of my residency Christopher French confirmed that there's little compelling scientific evidence for the repression of traumatic memories and that if one attempts to uncover such hidden depths, you're likely to find meanings that are erroneous (or demonstrably false) rather than 'true'⁹⁰. It was a key moment for me that led to me questioning almost everything that I thought I knew about memory.

⁸⁸ "Some clinical theorists believe that certain experiences are so overwhelmingly traumatic that many victims dissociate their memory for the experience (Cleaves, Smith, Butler, & Spiegel, this issue). Unfortunately, clinicians who endorse this hypothesis often exhibit confusion about the very studies they cite in support of it. For example, they often misinterpret everyday forgetfulness that develops after a trauma with an inability to remember the trauma itself; they confuse organic amnesia with traumatic amnesia; they confuse psychogenic amnesia (massive non-organic retrograde amnesia coupled with loss of personal identity) with (alleged) inability to remember a traumatic event; and they confuse not thinking about something (e.g., sexual abuse) for a long period of time with an inability to remember it (i.e., amnesia)" McNally, R. J. (2004). *The Science and Folklore of Traumatic Amnesia*. *Clinical Psychology: Science and Practice*, 11(1), 29-33.

⁸⁹ According to Encyclopaedia Britannica: "Repression, in psychoanalytic theory, is *exclusion* of distressing memories, thoughts, or feelings from the conscious mind". The American Psychological Association says that repression is "in classical psychoanalytic theory and other forms of depth psychology, the basic defence that excludes painful experiences and unacceptable impulses from consciousness. Repression operates on an unconscious level as a protection against anxiety produced by objectionable sexual wishes, feelings of hostility, and ego-threatening experiences and memories of all kinds. It also comes into play in many other forms of defence, as in denial, in which individuals avoid unpleasant realities by first trying to repress them and then negating them when repression fails."

It's important to acknowledge that psychoanalysis has evolved as a broad field of research where different positions around issues relating to repression are contradictory. There is no one agreed perspective on what repression *is* and how it is manifested. Psychoanalyst Phil Mollon in his book *Freud and False Memory Syndrome* published in 2000 (published by Icon) stated that Freud was in fact far more interested in how the repression of thoughts, feelings and desires beyond our conscious control could impact on our daily lives, rather than repressed memories. He also asserts that Freud's later work was remarkably in tune with today's perspectives on memory, stating: "After giving up the *Seduction Theory* Freud began writing his book on dreams, illustrating how the mind inherently contains the capacity for self-deception. He also wrote his paper on Screen Memories, arguing that many memories of childhood may not be genuine memories at all, but instead later constructions, and he showed that memories can be like dreams or works of fiction - and that the subjective experience of remembering is no guarantee of the literal truth of a memory".

⁹⁰ But I would say to my science chums "the falsity is a kind of truth – a decent analysis of the meaning of the fiction can be obtained and illuminate the subject if given the chance". They'd nod and look at me sympathetically and I'd then pause to

What then if replicable observations from the psychology lab could be extended to our attempts in art, literature and the humanities to find hidden depths in whatever text or object sits before us begging to be diagnosed? The fact that such interrogations rely so heavily on ideological positions means that any diagnosis resulting from the excavation are surely blinded by the inquisitor's confirmation bias and pre-existing beliefs? Isn't this analogous to the fundamentalist religious reader desperate to find God (or the devil) in a text, piece of music or image when they simply aren't there? I also felt that the radical scepticism proposed by dominant critical narratives could easily slip into what the technologist Aviv Ovadya has described as *reality apathy*, when trust in all systems of communication and knowledge has dissipated to create a sense that *nothing* is worth defending or believing in⁹¹. Rather than feeling inspired to make the world a better place or to try and understand what actually works, the sink hole of apathy opens up beneath you: there is no hope! there is no future!

How convenient it is for the powerful for this conclusion to be reached. Instead of an active, engaged public, they can instead rely on a lack of political engagement to retain power. But before I start to sound too conspiratorial, we should also consider how a conspiracist mindset can be inadvertently nurtured if there is an assumption that the truth is always 'hidden' from view.

In many meetings, lectures, tutorials and seminars in galleries and universities, I have witnessed how the spectre of *they* or *them* has been evoked. The sense that there is an invisible *other* constantly obscuring access to true meaning. I usually assume it to mean a shady neo-liberal or capitalist elite, however who this mysterious *other* is, is rarely explicitly voiced. But is this evocation of a hidden army of powerful malcontents useful? Does it really get to the heart of how we rise to the multitude of global political challenges we face? Particularly as radical conservatism now plays the same game. Political figures like Donald Trump, Nigel Farage and Giorgia Meloni are adept at framing socio political problems as being a sign that traditional culture has been corroded by an all-powerful 'liberal' elite. This myth has been propagated by alt-right groups and conspiracy theorists who too often decide to take matters into their own hands.⁹²

During my residency I was then being introduced to research by cognitive psychologists, that helped me to further understand the creative idiosyncrasies of human memory and why attempts at objectivity are so crucial to human flourishing. They were not my 'enemy' or from what I could see a malign power structure. They were smart critical thinkers full of healthy doubt, with a passion for social justice - their version of the truth seemed worth listening to. As well as introducing me to the science of subjectivity and the very real dangers of attempting to excavate the past for repressed traumatic memories they also introduced me to an academic parody that had serious consequences.

try and understand what I'd just said, only to realise that I was surrounded again by rabbits running off in different directions. Hmm which one to follow...

⁹¹ Aviv Ovadya is a visiting scholar at Cambridge University and was chief technologist at MIT's Centre for Social Media Responsibility. He runs the Thoughtful Technology Project.

⁹² The 'Pizzagate' conspiracy is one such example where a belief that such a liberal elite was engaging in satanic ritual abuse at a pizzeria in Washington called 'Comet Ping Pong' led to Edgar Maddison Welch attacking the restaurant with a gun. He was doing what he thought was the right thing by attempting to save the children – he saw himself as a hero in the narrative. No evidence of such appalling crimes was found at the restaurant and Welch was subsequently sentenced to four years in prison.

A Sokal Sidenote

Although I didn't know it at the time, in the second year of my Fine Art degree in 1996 the physicist Alan Sokal submitted a paper to the leading humanities journal *Social Text* called *Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity*. It was accepted and published in *Social Text*'s Science Wars special⁹³. The essay (which namechecked Lacan, Kristeva and Deleuze throughout) was verbose and slippery, concluding through layers of surface complexity that postmodern science had abolished the concept of objective reality and that physical reality is a social and linguistic construct. So far so good... until of course you find out that the piece was in its entirety a fake. A satire, a hoax (a parafiction?), written by Sokal in what he considered to be the impenetrable style of a *Social Text* essay. Ironically, here was a piece of writing using postmodern methods of appropriation and pastiche that was undermining the leading humanities journal of the era. Sokal said of the false conclusion drawn in the essay:

“Anyone who believes that the laws of physics are mere social conventions is invited to try transgressing those conventions from the windows of my apartment. (I live on the twenty-first floor.)”

This provocative act from a scientist towards his academic colleagues in the humanities didn't just happen in a vacuum. Sokal and many others had grown frustrated by what they considered to be damaging claims emanating from the 'postmodern' discipline of Science Studies that science was just another social construct⁹⁴. He couldn't understand why his fellow liberals across the campus were in his view undermining their own political efforts to make the world a better place, by attacking the roots of evidence-based thought.

“Theorising about the social construction of reality won't help us to find an effective treatment for AIDS or devise strategies for preventing global warming. Nor can we combat false ideas in history, sociology, economics and politics if we reject notions of truth and falsity”⁹⁵

It was fascinating to learn about the Sokal hoax and its fallout (albeit 16 years after it was written). It triggered many of my own hidden anxieties about key critical theories that I'd *suppressed* for many years. But I also had reservations about his deceptive approach. It felt mean-spirited and divisive, and it just meant the tribes became more militant (there's little room for nuance and interdisciplinarity in a war of attrition between academic departments). He also seemed to fundamentally misunderstand the creative right to play with ideas, without necessarily having to rely on evidence to justify that play. Such an approach is not fine in a science lab where the method of an experiment should be (in theory) rigorous but it IS fine (and probably essential) if you're trying to make a piece of art or write a fiction for example.

⁹³ Sokal, A.D. (1996). *Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity*. *Social Text*, 217-252.

⁹⁴ “In our Arts & Humanities departments, saying ‘Science is a social construct...’ conveys an impression of knowledge and thoughtfulness that it should not, because in practice it's the first half of a sentence, the unspoken second half of which is ‘...so that makes it fine to never think about it.’” Bill, S. (2018). *The Two Cultures: Where are we now?* *FEBS J*, 285: 1786-1790.

⁹⁵ Sokal, A. D. (1996a). *A Physicist Experiments with Cultural Studies*. *Lingua Franca*, 4.

Regardless of whether an important point had been made, it was an episode that no one came out of unscathed. On the surface it seems so localised; an academic spat that couldn't really have much effect on the real world. Could it? It was perhaps because the Sokal hoax seemed to have so much relevance to the world as I was experiencing it in the 2010s, that was one of the key reasons why it felt so important again during my false memory residency.

Social media was only just starting to metastasise into the beast it is now. Post Barack Obama's second election victory in the US something started to change and weaponised misinformation (or so-called Fake News) against liberalism, the political left⁹⁶ and science, seemed to be one of it's the main mutations. Suddenly an academic fallout nearly two decades before seemed to be queasily prescient. Here was rapidly spreading, deliberately misleading, divisive misinformation where fictions were being presented as fact. In a very real sense how could the academic left fight back meaningfully, if so many of us literally didn't believe that the 'truth' existed beyond the subjective? How could left wing activists take issue if the fake news strategies that were being used by the alt right, had been directly lifted from their parafictional tactical media antics in the early 2000s?⁹⁷

At the same time, I was learning about a scientific discipline that made it very clear through decades of *evidence* gathering and replication that it was quite straightforward to convince people to listen to, understand and ultimately believe in information that is demonstrably false. So, during my residency at Goldsmiths I was thrown into something of an existential crisis about where I stood on these fundamental issues. Is it an ethically legitimate creative tactic to deceive your audience with knowingly false information that isn't declared as a fiction? Did I really believe that a psychoanalytic discourse was the best one to turn to when exploring human memory⁹⁸ and should I play convenient lip service to the 'postmodern' idea that there is no such thing as objective truth when the digital world was drowning in poisonous lies? Or should I be turning against these art college tropes and instead now revealing my secret faith in science by taking seriously what my new colleagues were discovering about memory and the pervasive nature of misinformation through scientific experimentation? I decided to choose the latter - but with some heavy caveats.

As I explained to my colleagues in the psychology department at Goldsmiths, postmodernism in art was crucial and liberating moment for all artists⁹⁹. The idea that art and creativity can just progress

⁹⁶ What these definitions mean now is a matter of debate. When I refer to 'liberals' and the political left in this context I'm referring to those who are socially progressive and promote social welfare. More broadly it's everyone who doesn't identify as being conservative (in UK context) or Republican (in the US).

⁹⁷ This shift in how misinformation was becoming weaponised was sobering and it made me reflect again on the parafictional in art. If the aim of such an approach is to use an undeclared fiction to trigger a form of useful critique, then weren't we just now playing the same game as the alt-right?

⁹⁸ In my experience, when autobiographical memory is being grappled with by contemporary artists, psychoanalysts are most likely to be asked by galleries to provide an accompanying text or commentary on the work. The salience of such interpretations depends of course on each author and what position they adopt regarding psychoanalytic discourse. However, as recently as 2022 the psychoanalyst Adam Phillips was asked to write about the *Surrealism Beyond Borders* exhibition at Tate Modern in the Spring issue of Tate magazine. In his essay titled *Free Your Mind* he says: "Freud argues that many of the patients he himself was treating were repressing or driving painful wishes from their memory, and, in so doing, protecting themselves from psychic pain. But these wishes remained in the unconscious, waiting for a chance to become active again" (P. 41-42)

⁹⁹ Most of them understood this already of course.

along a narrow linear path with set rules and methodologies is a recipe for making the most boring and stultified art. As most artists trained at art college over the last forty years already know, a preoccupation with stifling aesthetic and methodological principles was the death knell of the modernist project in art and architecture. I wouldn't have it any other way and the creative freedoms that artists have fought for are worth still defending.

Turning to the simplified (designed for a public) description of *Postmodernism in Art* on the Tate website is perhaps a useful reminder about why:

Anti-authoritarian by nature, postmodernism refused to recognise the authority of any single style or definition of what art should be. It collapsed the distinction between high culture and mass or popular culture, between art and everyday life. Because postmodernism broke the established rules about style, it introduced a new era of freedom and a sense that 'anything goes'. Often funny, tongue-in-cheek or ludicrous; it can be confrontational and controversial, challenging the boundaries of taste; but most crucially, it reflects a self-awareness of style itself. Often mixing different artistic and popular styles and media, postmodernist art can also consciously and self-consciously borrow from or ironically comment on a range of styles from the past¹⁰⁰

I am a passionate advocate for this 'postmodern' sensibility; however, it also does a disservice to artists to describe these fundamental principles of creative thinking as being uniquely 'postmodern'. We conveniently describe them as such but the principles that underpin the anti-authoritarian and experimental tendencies of artists could be traced back to periods well before 20th Century art. One could also argue that anti-authoritarian and experimental principles were fundamental to the development of the scientific method, which throughout history has challenged and countered the oppressive authoritarianism of religion and monarchy.

Scientists also still have a right to play with those conventions and to push beyond perceived methodological limits. Sokal for example did exactly that: he was 'reflecting a self-awareness of style itself' in order to 'ironically comment' on the pomposity of a certain form of academic groupthink through work that was 'funny, tongue in cheek and ludicrous'. A desire then to challenge authority and orthodoxy is at the root of both art and science - however it's also important to acknowledge where they must by necessity diverge. Science can't *play* as much as art does, but then art can't meaningfully develop when artists are told what to do and how they should do it. The idea that there is not one 'truthful' way to make art is in my opinion as fundamental to human flourishing as the quest for objectivity is in the scientific method.

A re-evaluation of my approach to theory and my turn towards cognitive psychology was not to completely abandon it or to become a mindless cheerleader for scientific authority. There is still a lot wrong with many of our scientific institutions and much to be done regarding the development of the scientific method. Foucault still seems important here. When he was writing his scathing attacks on science and psychiatry (including Freud of course), homosexuality was still considered to be a form of mental illness¹⁰¹ and many of the world's finest scientific minds were engaged in creating weapons of mass destruction. It's no wonder he wanted to pick apart such a pervasive hegemony. Science must be

¹⁰⁰ <https://www.tate.org.uk/art/art-terms/p/postmodernism>

¹⁰¹ Foucault, M., (1978). *The History of Sexuality*. 1st ed. New York: Pantheon Books.

better at grappling with criticism from outside its own ranks from historians, sociologists, journalists, politicians, artists, and members of the public. As with all disciplines there are some shameful moments in the history of science that must be understood, discussed, and redressed not just in the confines of various societies and institutions but out in the public gaze. This shouldn't be left to those who simply want to discredit all science (or scientific method), but by those who want to make it more effective, more reasonable, more accountable, and more accessible to those whose lives it seeks to change. It also must be more honest about scientific disagreement and the relationship between profit and research - particularly regarding the oft-skewed priorities of big pharma, defence, and the energy industry.

But we too in the arts and humanities must also be willing to listen to concerns from outside our silos about the unintended consequences of certain philosophical tropes. We also must be open about how some concepts have gradually seeped beyond the academy and been co-opted by those they were originally designed to undermine. There are sadly now numerous examples of how the reactionary architects of our so-called post-truth age have turned towards critical theory to justify their positions. The founder of the creationist concept *Intelligent Design* Philip Johnson has said that science doesn't have anything to do with reality and that evolution is just an imaginative story (he's also described himself as a postmodernist and deconstructionist). The influential, right wing conspiracist blogger Mike Cernovitch has claimed that he reads Lacan and that all he is doing is providing an alternative to the dominant narrative and Steve Bannon likes to claim that his aim is to deconstruct the 'administrative state'¹⁰². In 2006, Eyal Weizman from *Forensic Architecture* pointed towards the risks of this tendency in his essay *Lethal Theory* which explored how the Israeli army was turning towards critical theory to develop new urban warfare strategies. Weizman was however mindful not to scapegoat theory itself but rather it's misappropriation.

I would argue that instead of laying blame at theory's doorstep, it is more productive to concentrate on recognizing and attempting to understand the contemporary uses of particular strands of leftist critical theory that are being deployed not to subvert power (as they were originally intended to do), but in order to protect it.¹⁰³

This still feels like a reasonable position, however if we take seriously the deconstructionist view that authorial intent is a moot point, then should it follow that a reappropriation of a theory by malign forces is by association, part of the political narrative of that theory?

There's also possibly something else going on in relation to a shifting perception of power that is worth acknowledging. According to data compiled by Steven Pinker in *Enlightenment Now* (2019) the curve of belief in populations across the world is gravitating towards more liberal, plural, tolerant sensibilities¹⁰⁴. In the UK, the recent gold standard annual *British Social Attitudes Survey* into public opinion concluded that despite divisions caused by Brexit that Britain is becoming a more liberal society.¹⁰⁵

¹⁰² McIntyre, Lee. (2018). *Post-Truth*. MIT Press. In Chapter 6 McIntyre outlines what he describes as 'Right-Wing Postmodernists'.

¹⁰³ Weizman, E. (2006). *Lethal Theory*. *Log*, 7, 53–77.

¹⁰⁴ Pinker, S. (2019). *Enlightenment Now*. Penguin Books.

¹⁰⁵ British Social Attitudes Survey 39 <https://www.bsa.natcen.ac.uk>

It is then perhaps reasonable to assume that ‘in theory’ the future looks bleak for nationalist, monotheistic, conservative parties once younger generations take political power (even though their lies and manipulations of the truth have allowed them to retain real power for now). It is then unsurprising that those who passionately believe in such anachronistic ideologies could perceive that they are an oppressed minority who need to adopt theories that were originally designed to undercut those in positions of power. The *Liberal Elite* myth has been propagated so successfully for the very reason that many who aren’t liberals feel like their beliefs no longer count in a media sphere that they perceive as being dominated by progressivism. It’s no surprise then that right wing commentators like Ross Douthat are now claiming that Foucault firmly belongs to the right - particularly considering the Covid 19 pandemic and the perception that it’s predominately liberals who are now asking us to ‘trust science’:

[Foucault’s] work [is] useful to any movement at war with established “power-knowledge,” to use Foucauldian jargon, but dangerous and somewhat embarrassing once that movement finds itself responsible for the order of the world. And so the ideological shifts of the pandemic era, the Foucault realignment, tells us something significant about the balance of power in the West - where the cultural left increasingly understands itself as a new establishment of “power-knowledge,” requiring piety and loyalty more than accusation and critique.

This is most apparent with the debates over Covid-19. You could imagine a timeline in which the left was much more skeptical of experts, lockdowns and vaccine requirements - deploying Foucauldian categories to champion the individual’s bodily autonomy against the state’s system of control, defending popular skepticism against official knowledge, rejecting bureaucratic health management as just another mask for centralizing power.¹⁰⁶

These contemporary shifts were starting to play out whilst I was in residence at Goldsmiths, and my subsequent reappraisal of certain positions (and my acknowledgement of my anxieties in relation to them) were impacted by this changing cultural landscape. Many leading scientists have been forthright in blaming ‘postmodernism’ for our so-called post-truth, misinformation age. In 2017 the philosopher and cognitive scientist Daniel Dennett went as far as to say he thought postmodernists were “evil” and responsible for “the fad that made it respectable to be cynical about truth and facts”¹⁰⁷ and Richard Dawkins has also repeatedly made the link, asking in a tweet from 2019 if Donald Trump was “the first Postmodern President”¹⁰⁸.

These attacks from well-respected figures in the science community are extremely damaging. I’ve found them challenging because I think both Dennett and Dawkins are brilliant. I love their books and I find joy in their abilities to communicate complex scientific research to a non-specialist reader. But their utterances about ‘postmodernism’ are straw man arguments, that don’t get to the truth of the matter, leading to more infighting by people who are ostensibly on the same side. At worst they are reactionary and conspiratorial. Such rhetoric also reminds me of the miserabilists who go around

¹⁰⁶ Douthat, Ross. (2021). *How Michel Foucault Lost the Left and Won the Right*. New York Times (published 25th May).

¹⁰⁷ Cadwalladr, Carole. (2017). Daniel Dennett: ‘I begrudge every hour I have to spend worrying about politics’. Interview in Guardian Newspaper published on 12 Feb 2017.

¹⁰⁸ From Richard Dawkins Twitter account @RichardDawkins posted on 11th Feb 2019

galleries pointing at the fire-extinguisher and saying in a chuckling voice “Is this art?!”. There’s also a lack of nuance with such broad-brush terminology; do they really mean *postmodernism* or some lines of thought that are loosely grouped under the banner of critical theory? How do they square disagreement between so-called postmodern theorists if all of ‘postmodernism’ is to take the blame? Is there *really* nothing of value to take from the postmodern era? Has our culture not been greatly enriched by a more pluralistic, open, and playful approach to the creative arts for example?

A critique of critique from the arts and humanities

The bombastic position of Dawkins et al also chooses to ignore those from within the arts and humanities, who have also expressed anxieties about certain postmodern assumptions. During fallout from the Iraq war and the layers of lies that emanated from the Bush White House, the father of ‘postmodern’ Science Studies (and the main source of Sokal’s ire), Bruno Latour (1947-2022), wrote in his 2004 essay *Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern*;¹⁰⁹

In these most depressing of times, these are some of the issues I want to press, not to depress the reader but to press ahead, to redirect our meagre capacities as fast as possible. To prove my point, I have, not exactly facts, but rather tiny cues, nagging doubts, disturbing tell-tale signs. What has become of critique, I wonder, when an editorial in the New York Times contains the following quote?

“Most scientists believe that [global] warming is caused largely by man-made pollutants that require strict regulation. Mr. Luntz [a Republican strategist] seems to acknowledge as much when he says that “the scientific debate is closing against us.” His advice, however, is to emphasize that the evidence is not complete.

“Should the public come to believe that the scientific issues are settled,” he writes, “their views about global warming will change accordingly. Therefore, you need to continue to make the lack of scientific certainty a primary issue.”

[..] Do you see why I am worried? I myself have spent some time in the past trying to show “the lack of scientific certainty” inherent in the construction of facts. I too made it a “primary issue.” But I did not exactly aim at fooling the public by obscuring the certainty of a closed argument—or did I? After all, I have been accused of just that sin. Still, I’d like to believe that, on the contrary, I intended to emancipate the public from prematurely naturalized objectified facts. Was I foolishly mistaken? Have things changed so fast?

He goes on to say in unambiguous terms that:

Entire PhD programs are still running to make sure that good American kids are learning the hard way that facts are made up, that there is no such thing as natural, unmediated, unbiased access to truth, that we are always prisoners of language, that we always speak from a particular standpoint, and so on, while dangerous extremists are using the very same argument of social construction to destroy hard-won evidence that could save our lives. Was I

¹⁰⁹ Latour, Bruno. (2004). *Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern*. Critical Inquiry. 30. 225-248.

wrong to participate in the invention of this field known as science studies? Is it enough to say that we did not really mean what we said? Why does it burn my tongue to say that global warming is a fact whether you like it or not? Why can't I simply say that the argument is closed for good?

Latour's public reappraisal has been rather cruelly described by some as mea-culpa; however, I think credit is due for acknowledging where some of his early theories might have faltered - albeit in ways that he didn't intend. As Dawkins and Dennett would agree this is what scientific method also tells us to do. Update your theories based on evidence even if it contradicts your hypotheses. Latour saw how rapidly the world was changing in the early 2000s and he knew he had to change course. This is old news now for arts and humanities scholars who have continued to question the veneration of certain postmodern theorists and the prevalence of critique as diagnosis.

For example, in 2009 Nicolas Bourriaud proposed the idea of *Altermodernism* to describe new tendencies in art that moved beyond standardisation and commercialism¹¹⁰. He was clear that such a sensibility signalled the end of postmodernism, that it was against cultural relativism, and that new definitions were needed to capture a culture for the 21st century that was rooted in the global. Bourriaud wanted to reflect how communication, travel and migration was reshaping the world with a new spirit and energy. It was political, optimistic and positioned within the world's cultural gaps. Artists captured by the definition tended to be nomadic and interested in producing work that was 'docufictional' (original paths where boundaries between fiction and documentary were blurred). This bold attempt by Bourriaud to define a unique contemporary moment feels now in hindsight to be naive given the political upheavals that followed. It was though reflective of a mood within art and culture that wanted to move beyond the frustrating stasis and endgame of postmodernism. In some ways *Altermodernism* has faltered, however it helped to create a climate for how other ways of thinking *about meaning* could be formulated. It also helped to crystallise the right of artists to move freely between epistemologies and disciplines to excavate new links and research pathways. A legacy that I clearly owe a debt to.

Within literary criticism there has also been a *postcritical turn* that has used Latour's anxieties as a springboard to question certain pedagogies. In *Critique and Postcritique* (2017) Elizabeth S. Anker and Rita Felski describe his shift in position:

Bruno Latour contends that a hermeneutics of suspicion has become the preferred weapon of conservative thinkers and conspiracy theorists alike. Tactics forged by the left - scepticism about the status of facts, exposure to the problematic motives of scientists - now drive the arguments of the right, evidenced in positions such as climate change denial. It is time, Latour declares, to adopt new tools; to move from a spirit of debunking to one of assembling, or from critique to composition¹¹¹

Anker and Felski go onto question the historical origins of critique, identified by Paul Ricoeur as being underpinned by Marx, Nietzsche, and Freud. They problematise the role of repression as a central tenet of cultural analysis and describe critique as "a form of rhetoric that is codified via style,

¹¹⁰ Bourriaud described the *Altermodern* for the exhibition of the same name that he curated at Tate Britain in 2009. <https://www.tate.org.uk/whats-on/tate-britain/altermodern>

¹¹¹ Anker, E. S., & Felski, R. (Eds.). (2017). *Critique and Postcritique*. Duke University Press. EReader page 16/258

tone, figure, vocabulary, and voice [...] that attends to certain tropes, motifs, and structures of texts at the expense of others.” They raise concerns that critique’s inherent pessimism is limiting and predictable. By rethinking critique, the authors contest that stronger links between intellectual life and the non-academic world can be forged. They say:

At a time when higher education is under siege, it seems urgent to articulate more compelling accounts of why the humanities matter and to clarify to larger audiences why anyone should care about literature, art, or philosophy. Accustomed to a rhetoric of dismantling and demystification, critique lacks a vocabulary and set of established rationales for mounting such defences. Meanwhile, it has often encouraged an antagonistic and combative attitude towards the public world; in the wake of poststructuralism, especially, critique has often been synonymous with a pronounced aversion towards norms and an automatic distrust of instrumentality and institutions. One result of this spirit of marginality is to keep serious thought sequestered in the ivory tower, thereby working to ensure its lack of impact or influence on the public sphere [...]. As long as critique gains its intellectual leverage from an adversarial stance, it will continue to presume a populace deluded by forces that only the critic can bring to light. Such a mind-set, however, is hardly likely to influence or persuade that same populace.¹¹²

Through a collection of essays by Anker, Felski, Christopher Castiglia, Russ Castronovo, Simon During, Jennifer L. Fleissner, Eric Hayot, Heather Love, John Michael, Toril Moi, Ellen Rooney and C. Namwali Serpell the legacy of key theorists is discussed, problematised and revitalised to provide a working taxonomy of what *postcritique* could be. Interpretations framed by joy, hope, idealism, imagination, and optimism are proposed. Aesthetics, surface reading, a new erotic and renewed emphasis on efficacy and affect are suggested. It isn’t a call to ‘dumb down’ or to negate necessarily the political in art. It is, however, an attempt to understand it’s limitations as well as its potential. As Russ Castronovo says in his essay *What Are the Politics of Critique? The Function of Criticism at a Different Time*:

“Instead of seeing critique as political, as not political enough, or as a false politics, it may be more productive to understand critique as the impossible pursuit of political relevance and meaning, one that anticipates but is destined never to achieve is exigent ends”¹¹³

Considering the journey described in this commentary, a salient contribution to this post-critical, post-postmodern milieu is what Timotheus Vermeulen and Robin van den Akker describe as *Metamodernism*. The use of the prefix ‘meta’ derives from Plato’s *Metaxis* which according to Luke Turner describes “an oscillation and simultaneity between and beyond diametrically opposed poles”¹¹⁴. Metamodernism assumes that postmodern irony and cynicism is a default, ingrained characteristic for a generation who grew up in the 80s and 90s on a diet of *The Simpsons* and *South Park*. And yet it also acknowledges that this same generation yearns for sincere meaning, a belief in progress and expressive freedom. As Turner explains.

¹¹² Ibid. EReader Page 19/258.

¹¹³ Ibid. EReader page 182/258.

¹¹⁴ Turner, Luke, (2015) *Metamodernism: A Brief Introduction*. In the Press, Theory, January 2015.

Whereas postmodernism was characterised by deconstruction, irony, pastiche, relativism, nihilism, and the rejection of grand narratives (to caricature it somewhat), the discourse surrounding metamodernism engages with the resurgence of sincerity, hope, romanticism, affect, and the potential for grand narratives and universal truths, whilst not forfeiting all that we've learnt from postmodernism. Thus, rather than simply signalling a return to naïve modernist ideological positions, metamodernism considers that our era is characterised by an oscillation between aspects of both modernism and postmodernism. We see this manifest as a kind of informed naivety, a pragmatic idealism, a moderate fanaticism, oscillating between sincerity and irony, deconstruction and construction, apathy and affect, attempting to attain some sort of transcendent position, as if such a thing were within our grasp. The metamodern generation understands that we can be both ironic and sincere in the same moment; that one does not necessarily diminish the other¹¹⁵

Vermeulen and van den Akker insist that metamodernism isn't a philosophy or an art movement because it doesn't attempt to define a specific system of thought or prescribe aesthetic values. In many respects, it feels anti-ideological. It is descriptive rather than prescriptive - it's an attempt to articulate a structure of *feeling* for which the vocabulary of postmodernism is no longer sufficient. Despite their webzine *Notes on Metamodernism* ending in 2016, the term is still in use and subject to much debate. For example, the curated website *What is Metamodern?* edited by Greg Dember and Linda Ceriello has since 2013 collected examples of 'the metamodern' across definitions as broad as art, bicycles, culture, language, TV and film, music, sports and religion. They state: "In our view, metamodern cultural products engage the conflicts between modernist conviction and postmodern relativism, in part by embodying an aesthetic that braids the sensibilities of modernism and postmodernism with an emphasis on felt experience"¹¹⁶

I find myself instinctively drawn to these attempts imagine life 'after' postmodernism. As an artist who until recently would have balked at the idea of being described as an 'academic' they are reassuring. Altermodernism, Postcritique and Metamodernism are evolving positions that allow artists to move beyond the tribalism of the modern vs. the postmodern, into a space where the best of each can still be mined.

Reflecting on my work as WITH, the idea that something can be both ironic and sincere feels resonant. The WITH solutions were never intended to be empty, nihilistic vessels of angst-ridden ironic apathy. They were instead rooted in a yearning for meaning and a desire to somehow transcend the limitations of a singular, *one chance only* existence. It reflected a fear of not being good enough or 'missing out' and it provided elegant, funny, and cathartic solutions to these universal anxieties. It functioned in the realm of adult play where our desire for the sublime and our boredom with the everyday could be solved - albeit through solutions that were entirely fictional. In hindsight such an approach feels now to be uniquely metamodern - even though I didn't realise it at the time.

My work on the *False Memory Archive* grappled with my desire to retain this sense of poignant mischief, alongside an ambition to effectively communicate an area of little-known scientific research. As part of that journey, I found myself instinctively oscillating between different modern and postmodern positions and getting obsessive over which path I should *choose* to the point where I

¹¹⁵ Ibid.

¹¹⁶ *What is Metamodern* website <https://whatismetamodern.com>

was calling my status as an artist into question (Am I a secret empiricist? A scientific sceptic? A positivist? A rationalist?). It was only when I realised that I didn't have to commit to one belief system or epistemological position that my creative process was liberated. Although I wasn't spending my evenings reading *Notes on Metamodernism* at the time I clearly should have been - perhaps it could have helped me more effectively navigate some of the anxieties outlined in this chapter.

Beyond my PhD I am keen to refine how my work sits within a post-critical sensibility. It's a journey only recently undertaken, and I am aware of the risks of planting a flag in territories that are by their very nature anti-territorial. Starting from a loose metamodern position where I acknowledge that all systems of knowledge should in some way be doubted (but with some more doubted than others), I'm particularly interested in attempting to define my own scale of 'doubtfulness' in relation to my own beliefs in science and art, and my disbelief in for example, the paranormal. I also like the idea that certain types of knowledge will fall off the bottom of such a scale into the *too doubtful for me* category, never to be considered again until someone *out there* gives them the chance to escape from the *too doubtful for me* abyss. I'll then use the ideas that I think should occupy the top of the doubtfulness scale (the least doubted) to either push them back into the abyss or to give them a tiny foothold right down at the bottom of the ladder.

Moving on

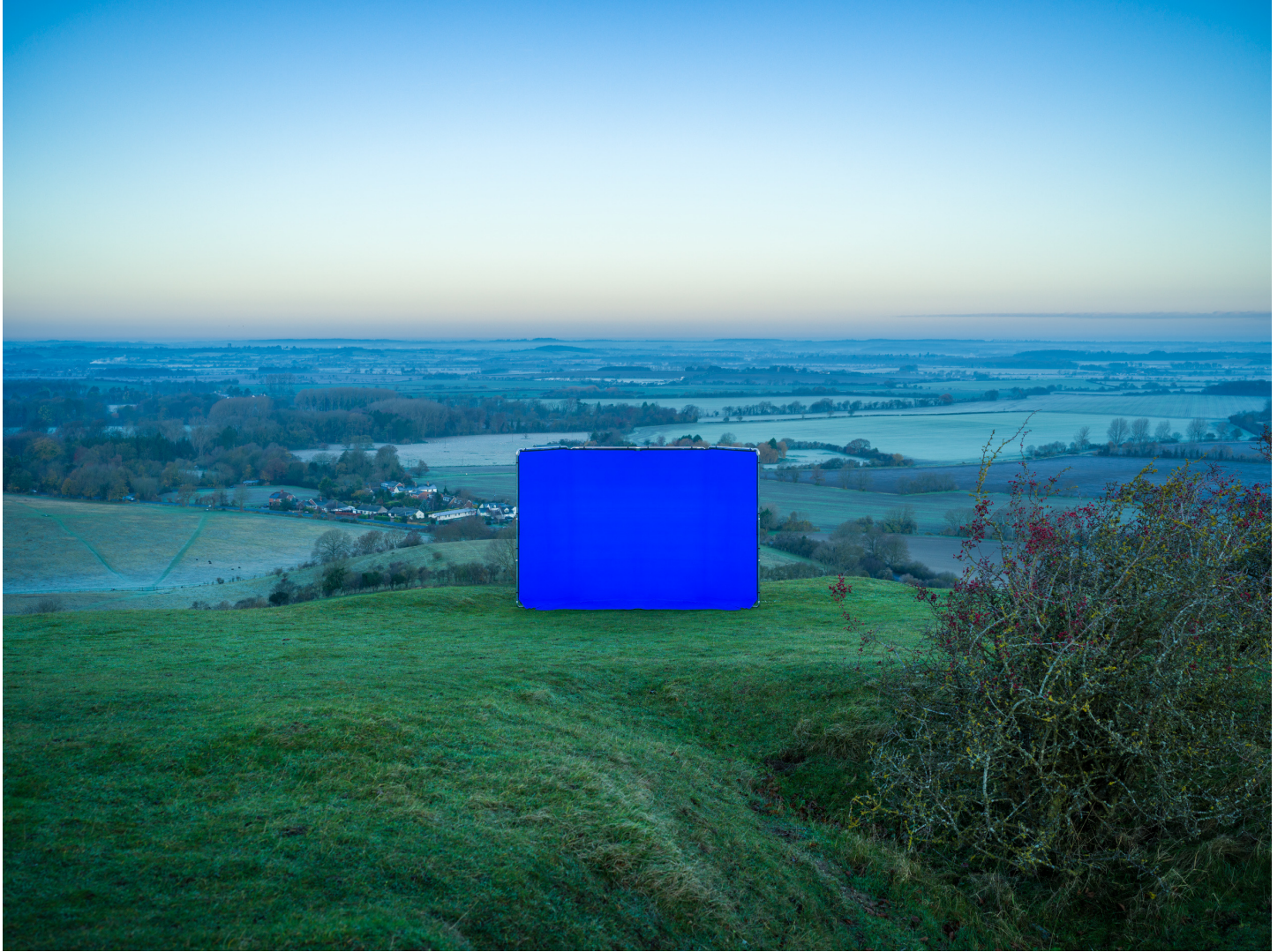
What is important to consider in relation to this thesis is that my shifts in perspective around these key issues were evolving at pace during my *False Memory Archive* residency. I decided at that time to represent these developments by making artworks that explored the suggestibility of memory, problematised the myth of memory repression and that proposed the idea that the science of subjectivity (and its findings) can be legitimately used as *inspiration* for the making of new artworks. As I resolved myself to this position, I allowed myself to be liberated from my art school baggage that taught me to be suspicious of *everything*, including every word (and gaps between words) of empirical research - replacing that nihilistic cynicism with what I hope is a more productive *healthy scepticism* that I hope can find some room to breathe in one or more of the post-critical sensibilities outlined above.

This is a scepticism that acknowledges the immense contribution that science has made to our lives without becoming a mindless cheerleader for its primacy over everything, a sceptical position where my starting point is not to promote a particular ideology over another but rather an interest in where the evidence for a truth claim originates from. A sceptical position that accepts that certain facts about the nature of things (as established through the slow, methodological work of evidence gathering) are (beyond localised nuance) true (until proven otherwise). A sceptical position that believes art should be free to break rules, inform, baffle, enrich, annoy, provoke and entertain its audience without having to imply that everything that audience believes in, is somehow false.

I am now approaching the historical origins of critique with that same healthy scepticism, without losing sight of the need to critically interrogate the objects, ideas, received wisdoms and power structures that surround us. I will continue to ask whether the aims of the author (intended and otherwise) correspond with my own reading of the work. I will still attempt to understand the cultural and political context that give rise to certain ideas, while understanding that I'm always limited by my own biases. I want to proceed on the basis that useful doubt is liberating: If there is a consistent

meaning that I could attempt to pin on my output as an artist over the last twenty years, it is the fostering of doubt about our automatic ways of thinking. My varied projects are all in some form a call to a form of useful metacognition where the assumptions of the remembering biased self are called into question.

The challenge to what *I thought I knew* and more broadly how I'd been taught at art school to diagnose the *meaning of things* was then initially destabilising and unexpected. This disquiet soon shifted into a feeling of freedom, as it allowed me to acknowledge and confront some long-standing anxieties about certain foundational narratives that have long been part of an academic discourse in the arts and humanities. It was a shift in perspective that not only influenced my work on the *False Memory Archive* but also subsequently my Wellcome Trust Engagement Fellowship and my curatorial project *Smoke and Mirrors: The Psychology of Magic*.



Temporary Chromakey Memorial 2/6. (2021). Commissioned by Wellcome Collection.

Chapter 4: Wellcome Trust Engagement Fellowship

The Fellowship

It is my aim to instigate a discussion about the relationship between art and science that transcends current preconceptions and prejudices. In the sciences there is scepticism about artists playing a role in the mediation of complex scientific theory and similarly in some quarters of the art world there are suspicions that art that directly engages with science risks being reductive or illustrative. I am interested in exploring and challenging these concerns head on by critically examining the efficacy of different forms of public engagement across disciplines. I would seek to introduce an art audience to research into psychology and neuroscience that conceptually links with key art world concerns, and I will introduce a science audience to modes of display and art making that will challenge pre-conceptions about art's relevance in a science setting.¹¹⁷

As I was touring the *False Memory Archive* in late 2013, I was chosen by the Wellcome Trust to be one of their engagement fellows. On offer was a substantial investment into my career, access to fantastic resources at Wellcome and a short cut to their network over a two-year period. The news had come at an important moment - being an artist is incredibly hard financially and despite my relative success, I knew that I was running out of time and money. It was also a huge boost to be given such a vote of confidence and a relief that I had a guaranteed income beyond the end of the FMA tour.

At the start of my fellowship in mid 2014 Wellcome encouraged me to think big and to develop ambitious projects¹¹⁸. There were heavy hints that if things went well more funding could be available, so I entered the first year of the fellowship with a radical optimism and a real sense that I could get things done. I started by writing a film related to my work into false memory, whilst also doing some research into the feasibility of setting up an artist run project space called *The Reality Monitoring Initiative* (RMI). I decided that I'd give both projects a year and then choose which one to focus on in the second part of my fellowship. By the end of the first year both ideas were progressing well, however it was at my midpoint meeting with my lead at Wellcome when the mood around the fellowships suddenly changed dramatically. There had been a significant change of personnel at the Trust and the organisation's funding model was about to be dramatically redesigned. It meant that whatever I'd been led to believe about the ambitions of the fellowship (and the potential of further funding) was now in the main, redundant.

Although this was disappointing, I still wanted to make the most of the opportunities I had left to explore. I decided to drop my plans for the RMI. It felt like too much of a challenge to get the necessary supporters together without a clear idea of how Wellcome could help long term. I relooked at my remaining budget and decided to use it over two years instead of one. Over the period of my extended fellowship, I completed two film scripts, redesigned my websites, and wrote my *False Memory Archive Anthology* publication. I worked with the Dutch musician Evelien Van den Broek on a musical adaptation of the FMA and I also started developing plans for an FMA international tour. I

¹¹⁷ Extract of 'Aims' statement written in my application for a Wellcome Trust Engagement Fellowship.

¹¹⁸ I was awarded the fellowship in mid 2013, however I was allowed to start the fellowship in July 2014 once my FMA national tour had completed.

made new links with Maastricht University in the Netherlands and Nanyang University in Singapore that ultimately led to exhibitions at Galerie Schunck Heerlen and ADM Gallery Singapore.

I'd also used the time and space afforded to me to continue my research into cognitive psychology. I had complete freedom and trust from Wellcome to spend the fellowship monies as I saw fit. Despite some of the unexpected shifts (described above) this funding model was genuinely radical and progressive. Institutional interference was minimal, and I was left to get on with it - occasional reports had to be submitted on release of each tranche of funding, but this was entirely self-directed and a useful part of my ongoing evaluation.

Beyond the bubble

As I was leading this rather idyllic existence the world outside was changing. In 2016 Donald Trump was elected president of the US and in the UK the British public voted to leave the European Union. These two seismic political events were marked by dramatic increases in the use of ideologically motivated misinformation on social media. In November 2016 after Hilary Clinton's shock defeat at the hands of Trump, Barack Obama said to reporters in Berlin that:

In an age where there's so much active misinformation, and it's packaged very well, and it looks the same when you see it on a Facebook page, or you turn on your television. [...] If everything seems to be the same and no distinctions are made, then we won't know what to protect [...] If we can't discriminate between serious arguments and propaganda, then we have problems.¹¹⁹

The impact of the misinformation and conspiracist memes that surrounded Trump's election win is hard to quantify. How do you really get under the skin of its assumed efficacy and who was responsible for its dramatic ascendancy? Was it a concerted effort by Trump and his political allies or was there pre-planned, outside interference by a hostile power? Or did one feed the other? In her 2018 book *Cyberwar: How Russian Hackers and Trolls Helped Elect a President* (Oxford University Press) Professor Kathleen Hall Jamieson concluded that propaganda designed by the Russian *Internet Research Agency* swayed the election result. Recent events in Ukraine make such theories more troubling, however there is still little agreement from experts about how to empirically prove the link between exposure to 'bad' information (whatever its origin) and subsequent voter intention.

In the UK Boris Johnson, Nigel Farage and the Vote Leave campaign were accused of using deliberately misleading statistics, photographs, adverts, and social media posts to promote their campaign to leave the EU. Much was made of this activity, however Vote Leave won, Johnson became Prime Minister and Farage a well-paid media pundit. This is despite the IFS and UK Statistics Authority concluding that the infamous Vote Leave £350million NHS claim on 'the bus' was misleading¹²⁰. Johnson's disgruntled former advisor Dominic Cummings has since admitted that the Vote Leave campaign deliberately used provocative tactics that were designed to "disorientate people

¹¹⁹ Woolf, Nicky. (2016). *Obama is worried about fake news on social media – and we should be too*. Observer article published 20th November. <https://www.theguardian.com/media/2016/nov/20/barack-obama-facebook-fake-news-problem>

¹²⁰ UK Statistics Authority statement in relation to the claim: <https://uksa.statisticsauthority.gov.uk/news/uk-statistics-authority-statement-on-the-use-of-official-statistics-on-contributions-to-the-european-union/>

on the other side”¹²¹ saying cynically in his 2021 BBC interview with Laura Kuennsberg “That’s politics”¹²². But pinning the blame for the referendum result just on misleading information coming from Farage and Vote Leave *feels* anecdotal. So much was at play, not least the fact that many of the British public wanted to vote against a government addicted to austerity economics (who were leading the Remain campaign).

As these events were playing out, I realised that there was very little commentary about *why* we may be psychologically vulnerable to the kind of disorientating tactics that Cummings was referring to. There was outrage, there were attempts to publicly correct bad information as it emerged, but little discussion about why it ‘in theory’ works. What is it about our consumption of misleading information that can lead us to make certain decisions or to remember events in a biased way? And how can we be alert to such manipulations? It seemed to me that psychological research into false memory was extremely useful in illuminating this territory. If it’s possible to convince someone through misinformation to remember emotional experiences in their past that are entirely invented, does it follow that our beliefs can also be similarly influenced by false narratives? If so, then what are the consequences politically and how could such research be used meaningfully by artists?

As I was struggling to make sense of these events during my fellowship, I remembered a study by the psychologist Steven Frenda produced in collaboration with the journalist Will Saletan. In *False Memories of Fabricated Political Events*¹²³ (2013) Frenda and Saletan worked with the popular online magazine *Slate* to create what is to now the largest ever false memory experiment. Crucially the experiment was able to establish links between political orientation and the likelihood of remembering fake political events using doctored photography. Republicans were found to be more likely to remember a controversial fake photo of Barack Obama and Democrats reported false memories in relation to an invented image of George Bush.¹²⁴

Here was compelling evidence that pre-existing political beliefs *can* have an impact on what fake political stories are likely to be remembered as being true. Rediscovering this prescient study towards the end of my fellowship was instructive because it helped me to make sense of the contemporary

¹²¹ Fletcher, Martin. (2021). *Dominic Cummings has admitted the Leave campaign won by lying – we should never forgive him*. New Statesman UK Edition. Published 23rd July. <https://www.newstatesman.com/politics/2021/07/dominic-cummings-has-admitted-leave-campaign-won-lying-we-should-never-forgive-him>

¹²² Full Cummings interview is here: <https://youtu.be/vgrcnONOfn4>

¹²³ Steven J. Frenda, Eric D. Knowles, William Saletan, Elizabeth F. Loftus. (2013). *False memories of fabricated political events*. *Journal of Experimental Social Psychology*, Volume 49, Issue 2, Pages 280-286.

¹²⁴ In the study the researchers created (with *Slate*’s design team) 5 doctored photos of fake or altered political events in the US. Each of the 5279 respondents were also asked to report their voting preferences as part of the study, and this is where the most interesting results were found. All the images worked in one way or another, however the entirely fake pictures of Obama shaking hands with Ahmadinejad and the image of Bush hanging out with Clemens (a baseball star) during Hurricane Katrina were the most compelling. 34 % of progressives shown the Bush image remembered the incident (vs 14% of conservatives) and 45% of conservatives remembered the Obama incident with 36% claiming that they’d seen the handshake. Interestingly 49% of Democrats also remembered the fake Obama incident, however only 26% claimed to have seen the encounter.

political climate and it gave me some new ideas that I wanted to explore for a curatorial project¹²⁵ that examined the way our perceptual systems can be hacked by deceptive strategies. I wanted the project to be focussed on psychology and responsive to the so-called ‘post-truth’ age that seemed to be spinning out of control, whilst not being cringingly worthy or overtly partisan. I needed a framing device that could transcend the tribalism of the day and allow enough space for meaningful self-reflection.

Back in the bubble

In March 2017 I had a meeting with James Peto (then Head of Programme at Wellcome Collection) where we discussed my ideas about developing a curatorial project and the challenge of responding creatively to a febrile political climate. The conversation gently meandered from politics to entertainment - specifically to how magicians also use misinformation in their performances to misdirect the audience. James mentioned that he’d always wanted to do an exhibition about magic but could never work out how to justify such an indulgence it at Wellcome... and then something clicked.

During my residency at Goldsmiths, I’d briefly met a brilliant researcher called Dr. Gustav Kuhn¹²⁶ who used conjuring to investigate suggestibility and the psychology of deception. He approached the subject matter in an idiosyncratic yet accessible way often through his own performances as a magician. I told James about his work, and we agreed for me to put together a pitch for an exhibition about magic that reflected more broadly on the psychology of misinformation and misdirection. Over the following 6 months I developed a full exhibition proposal for consideration that I called *Sleight of Hand*. The opening line on the proposal read:

“*Sleight of Hand* investigates where the magician’s toolkit has been used to expose and explain fraudulent claims of paranormal phenomena. It is a journey that goes to the heart of the psychology of perception, belief, and memory and to the tension between the scientific and the magical.”

In early October 2017 I was told by the curatorial team that my proposal had been selected for an exhibition at Wellcome Collection scheduled for spring 2019, and that I’d begin the process of developing the exhibition the following month.

From Sleight of Hand to Smoke and Mirrors

The original premise for the exhibition was to use the fascinating history of the magician investigator¹²⁷ to examine more broadly the psychology of deception and the ease at which our beliefs can be manipulated. There would be a series of in-depth case studies spanning 150 years that would be framed by Gustav Kuhn’s research and used as a prompt for a range of artistic responses. My magician investigator subjects were Hodgson and Davey, John Neville Maskelyne, Harry Price, Harry

¹²⁵ I have always felt that curatorial methodologies should just be considered as another set of materials and tools for artists to work with at will. My MA at Goldsmiths was in curating, however I considered myself as an artist in residence during my time on the course.

¹²⁶ Gustav Kuhn is a Reader in Psychology at Goldsmiths, University of London.

¹²⁷ This is a term I created to describe magicians who campaign against the use of magical illusions in settings where the deceptive nature of the performance isn’t declared.

Houdini, James Randi, Dorothy Dietrich, Basava Premanand and Derren Brown. All have used conjuring performances to debunk psychics, mediums, preachers and gurus who claimed to have special supernatural powers when all they were doing is performing simple tricks. What links this compelling cast of characters is a shared dislike of those who pose as something they're not - the take home message being; don't let your cherished beliefs be manipulated by frauds. The implicit thinking behind the idea was that these histories could be instructive by providing examples of how misinformation has been effectively countered in the public realm. What could be learnt from such strategies as we try to respond meaningfully to a post-truth political climate?

After about six months researching these histories, it became apparent that the approach was making some at Wellcome nervous. There was (I think) concern about how the activities of our key protagonists could be construed as being an attack on religion and esoteric 'new age' systems of belief. The exhibition proposal was more nuanced than that and even though I'd found some great objects to represent the case studies, I could sense that I was going to be asked to change tack. I found these institutional worries overcautious particularly as I'd been so used to working independently without interference, however in hindsight I'm glad that my original idea was challenged and then subsequently reconfigured.

I was also incredibly fortunate at this stage of the project to be teamed up with Honor Beddard - one of Wellcome Collection's senior and most experienced curators. Beddard had originally programmed my *False Memory Archive* exhibition at the Freud Museum when she was the curator there (a bold move), so I knew her well and respected her work. She had left the museum to start her job at Wellcome before we had the chance to work together, so it was a nice moment when we were teamed up on the project. I also knew that she would speak directly and honestly to me about anything she wasn't comfortable with and when we disagreed, we disagreed well without any offence being taken on either side. It was a genuine, robust and supportive collaboration and Beddard's commitment and support for the project was invaluable.¹²⁸

In truth, the exhibition that developed from this point onwards was a much richer, open, compelling vision than my original idea. Instead of focussing on a series of case studies we switched gear and instead placed the spotlight on specifically exploring the *psychology of magic*. This sidestep allowed us to touch on the fascinating history of the magician investigator in the first section of the exhibition without having to just rely on materials that represented those stories. The new framing also allowed us space to explore the ethics of deception. This was important because it allowed me to continue my interrogation of the fictive in art making, whilst still being drawn to its potential. How can you *lie* ethically to your audience as an artist in an age that is being increasingly defined by misinformation? This predicament is one that magicians have defined effectively on their own terms without necessarily damaging the efficacy of their performances. I was interested in asking what artists could learn from this tendency, as well as exploring some of the broader political questions that informed the original proposal.

¹²⁸ Honor Beddard previously curated *Making Nature* (2016-17) and *The Institute of Sexology* (2014 (with Kate Forde)) at Wellcome Collection. It's important to state that my overview of *Smoke and Mirrors* over the coming pages is my own interpretation of the exhibition. Honor Beddard came on board to help facilitate that vision, however she will have her own unique take on the content we presented that may diverge from my position.

Chapter 5: Smoke and Mirrors: The Psychology of Magic

Why an exhibition about Magic?

At the time of writing *Smoke and Mirrors: The Psychology of Magic* was the first and only exhibition to inform the public about the unique role magic has played in the history of psychology. This influence is two-fold. Firstly, magic tricks and conjuring have been used directly in a series of experiments that can be traced back to the origin points of the discipline to the present day. Secondly, psychology has attempted to understand through an investigation into our perceptual flaws why many of us are so compelled to believe in what is described as ‘real magic’ or in ‘supernatural / paranormal’ phenomena. The unique combination of curated materials presented in *Smoke and Mirrors* provided an insight into this history to reflect more broadly on how our ‘post-truth’ contemporary moment could impact our memories and beliefs. The aim of the exhibition was to encourage the audience to critically reflect on their own ways of seeing and thinking (to embrace the idea of metacognition) by presenting through exhibits some of the manipulative tactics that can be used to persuade through misinformation. I also wanted to use the project to learn more about the use of deception in performance and visual culture to clarify some of my thinking about the ethics of using fiction in my own work as an artist.

I was also drawn to an investigation of magical practice because the paranormal, the anomalous and the psychic have long been points of reflection for artists, writers and performers. This fascination with the mystical as a counterpoint to the perceived strictures of western rationalism has come in and out of fashion, however over the last 20 years there has been a significant turn towards an interest in magical thinking within contemporary art.

For example, in 2013 the British occultist Aleister Crowley (1875-1947) was included in the Venice Biennale¹²⁹. Crowley was an accomplished conjurer who used his charisma to great effect in his shamanic personae and formulation of his esoteric religion *Thelema*. It’s easy to see his appeal to an art-world that considers itself to be progressive and countercultural. His belief in the concept of freedom was central to many of his more interesting contributions stating that homosexual and bisexual people should not suppress their sexual orientation¹³⁰. His evocative dictum of “Do What Thou Wilt” was inscribed on the vinyl of Led Zeppelin’s album *Led Zeppelin III* (1970) and he was feted by other high-profile celebrities like The Beatles, David Bowie and Ozzy Osbourne. He was serious about being outrageous and offending the religious and moral sensibilities of his era that were so pervasive. He was also genuine in his desire to re-appraise the spiritual and metaphysical in revolutionary and subversive ways to challenge traditional Christianity. This legacy is one to still consider, however it is only a very partial narrative.

On the flip side, like all cult leaders, he had an acute understanding of how the ‘free-will’ of others could be manipulated or exploited in ways that ultimately increased his authority. He, like Helena Blavatsky (1831-1891)¹³¹ before him was from an upper-class background and he clearly enjoyed the

¹²⁹ As part of the 55th International Art Exhibition *Il Palazzo Enciclopedico (The Encyclopaedic Palace)*, curated by Massimiliano Gioni and organized by la Biennale di Venezia chaired by Paolo Baratta.

¹³⁰ Hutton, Ronald. (1999). *The Triumph of the Moon: A History of Modern Pagan Witchcraft*. New York: Oxford University Press. Page 174.

¹³¹ Blavatsky was a Russian aristocrat, mystic and author who founded the Theosophical Society in 1875.

freedom and power that his financial security afforded him, once describing his ideology as an “aristocratic communism”. He thought of democracy as an “imbecile and nauseating cult of weakness”¹³² and in Thelema’s central sacred text *The Book of the Law* he stated that “there is the master and there is the slave; the noble and the serf; the 'lone wolf' and the herd”¹³³. His biographer Lawrence Sutin thought Crowley “a spoiled scion of a wealthy Victorian family who embodied many of the worst John Bull racial and social prejudices of his upper-class contemporaries”, noting that he “embodied the contradiction that writhed within many Western intellectuals of the time: deeply held racist viewpoints courtesy of society, coupled with a fascination with people of colour”¹³⁴. He was also a misogynist and thought of women as “moral inferiors”: Crowley wasn’t against the establishment. He *was* the establishment. He just had a radical veneer to misdirect from what was a deep-set and unpleasant conservatism. Part of his legacy is now seen in *Scientology* whose founder L. Ron Hubbard was involved with Thelema in the 1940s. One of Scientology’s little-known but most effective techniques is a form of recovered memory therapy that seeks to uncover lost memories of past lives... and we now know how that can end.

The re-contextualisation of Crowley as an *artist* of note in the 2013 biennale was then a clear indication of a direction of travel that has continued to gather pace in contemporary art. Although he demonstrated enormous creativity within his numerous texts, rituals, drawings and performances, I personally find it hard to forget that he used his inherited wealth to create a cult that was steeped in his own adulation, and which relied on the subservience of others.

During my research into false memory and my early forays into the psychology of magic, I had also been made aware of how fraudulent psychics and spiritualist mediums have a history of cajoling and manipulating the vulnerable through trickery. This history has however been largely ignored by curators and artists who are enamoured by the radical, overlooked and undoubtedly creative histories of such mystical operators. For example, Spiritualist artists like Hilma of Klint and Georgina Houghton have been re-evaluated as pre-dating early 20th Century abstract painting in major retrospectives at the Serpentine and Courthold respectively (both 2016) and contemporary artists Chiara Fumai, Zadie Xa, Tai Shani and Tabita Rezaire have evoked the occult, the mystical, the spiritual and the psychic in videos, writings, installations and performances. In 2019 Alice Bucknell celebrated a group of artists called the “New Mystics” where she states that:

Artists are using the atmospheric potential of new technology to resurrect ancient belief systems bleached out of history, repositioning them as a powerful communal cipher into the present. Inside their ambient installations, race and identity politics are explored, forgotten folklore is resurrected, and the violent superstructures of colonialism and capitalism are critiqued¹³⁵

¹³² Morgan, Mogg. (2011). *The Heart of Thelema: Morality, Amorality, and Immorality in Aleister Crowley's Thelemic Cult*. The Pomegranate: The International Journal of Pagan Studies. **13** (2): 163–83.

¹³³ Pasi, Marco. (2014) [1999]. *Aleister Crowley and the Temptation of Politics*. Ariel Godwin (translator). Durham: Acumen.

¹³⁴ Sutin, Lawrence. (2000). *Do What Thou Wilt: A Life of Aleister Crowley*. New York: St Martin's Press.

¹³⁵ Bucknell, Alice. (2019). *The New Mystics: High-Tech Magic for the Present*. Mousse 69.

Such ambitions have also been echoed in several curated exhibitions in major institutions over the last few years. In 2017 the Irish Museum of Modern Art presented *As Above, So Below: Portals, Visions, Spirits and Mystics* with the gallery text stating:

The title, *As Above, So Below*, echoes an often quoted saying, employed by artists, poets, writers, and astrologers alike, as a means to describe and understand the mysterious but familiar world around us. To look at spirituality in such secular times is a provocation in itself, and the exhibition traces and questions the genesis of deep religious, mystical and occult beliefs that continue to shape the ideas of contemporary artists today.

The current, pandemic disrupted Hayward touring exhibition *Not Without My Ghosts: The Artist as Medium* takes this tendency even further:

(By) Bringing together 26 international artists from the 19th century to the present day, it explores the changing historical and aesthetic terms of artistic engagement with mediumship, from perceived spiritual inspiration and creation during séances and trances, to practices of automatism, channelling, and paranormal investigation, whilst also considering clairvoyant practices in relation to the history of feminism¹³⁶

This fetishization of the mystical in art has been echoed in popular culture with a 2021 study concluding that psychic services in the US had grown by 52 per cent since 2005 and that they are now worth \$2.2 billion per year¹³⁷. Dedicated websites, TV stations, magazines and Gwyneth Paltrow's popular lifestyle brand *Goop* all offer mediumistic and psychic services (at a price), and contemporary mediums still play to packed theatres across the US and UK. There has also recently been a growth in millennials seeking solace in astrology, and an upsurge of occult beliefs - but why? After 120 years of research, mainstream science still rejects the idea that humans have psychic powers and cognitive psychology provides compelling explanations for why we may have such anomalous experiences. There is also a wealth of knowledge that clearly illustrates how such phenomena can be achieved through trickery and how such illusions can be used by manipulative performers to exploit others. Art critic JJ Charlesworth in his 2022 essay for *Art Review* magazine *The Return of Magic in Art* tries to find an explanation:

Arguably, what underpins today's growing sympathy for occultism is the terminally declining influence of a rationalistic, secular modern worldview that is now associated with the depredations of capitalism, patriarchy, and ecological disaster. Today's magical revival is a rejection of the experience of the modern present, along both historical and topographical axes: historical because it reaches back to the worldviews, myths and rituals of the times and cultures before the modern era; topographical, because it privileges those cultures in the present that still exist in contrast to the prevailing forms of social modernity (technologically developed, industrially advanced societies of twenty-first-century global capitalism, inheritors of the industrial revolution and the European Enlightenment).

¹³⁶ Part of introductory text produced by The Drawing Room who worked in collaboration with The Hayward on producing the exhibition. <https://drawingroom.org.uk/exhibitions/not-without-my-ghosts-the-artist-as-medium>

¹³⁷ *Psychic Services in the US industry trends*. (2016-2021). Industry Research Report compiled by IbisWorld.

If Charlesworth is right then these *feel* like relatable and worthy intentions; however, during my fellowship at Wellcome, I was starting to have doubts about the ethics and efficacy of this shift and the academic presumptions that underpin such tendencies. There is an emerging body of recent commentary that has started to voice some of these concerns, by highlighting links between a revision of the mystical (that has roots in the spiritual, esoteric and ‘new age’ movements of the 20th Century) and far right political organisations. ‘Q’Anon is just one example of how such a link has been established with critic Marisa Meltzer observing the “strange convergence of counterculture and hate in ‘Q’Anon’s unexpected roots in New Age Spirituality”¹³⁸. Michael Peters has usefully outlined some of this discussion in his 2022 essay, *New age spiritualism, mysticism, and far-right conspiracy*, where he concludes that:

While New Age spirituality encouraged universal peace, hope and love as the basis for spiritual transformation in the 1970s and 80’s, today aspects of these beliefs have been peeled away from the spiritual heart of the movement to emphasise the ‘dark Enlightenment’ and the organising forces of the European and American far-right, often dressed up with allusions to Nietzsche, and embellished with spiritual values of health and self-improvement. Spiritualism and experiences of closeness to God that underlined the New Age movement and produced much of value in humanistic psychology and education, not least a persuasive narrative of personal transformation, can be easily ideologically manipulated and appropriated by far-right groups. Perhaps the time is ripe for a reappropriation and interpretation by the left of spiritual values that sustain social democracy.¹³⁹

In part, I wanted *Smoke and Mirrors* to reflect on these tensions by exploring how an introduction to the psychology of magic could foster a healthy scepticism towards a new, (albeit sincerely felt) embrace of the mystical in art and culture. Perhaps more generously, I also wanted to consider how our enduring love and fascination with the paranormal can sit alongside (or oscillate between) a rational, informed *disbelief* in such phenomena. Is contemporary culture’s re-embrace of the supernatural as fraught as I was starting to believe at the time, or is it simply a reflection of our need to *play* in fictional realms during a secular age?

¹³⁸ Meltzer, Marisa. (2021). *QAnon’s Unexpected Roots in New Age Spirituality. Masculinity, faith and the strange convergence of counterculture and hate*. Washington Post Magazine. March 29. <https://www.washingtonpost.com/magazine/2021/03/29/qanon-new-age-spirituality/>

¹³⁹ Peters, Michael A. (2022). *New age spiritualism, mysticism, and far-right conspiracy*. Educational Philosophy and Theory.

The Exhibition

I am structuring this next part of this thesis around the narrative of the exhibition as displayed to the public. In total we displayed over 150 objects in 3 sections across the main ground floor gallery space at Wellcome Collection. I will describe the themes of each section and highlight a small selection of exhibits displayed in each. This overview is presented alongside a photographic record of the exhibition illustrated in the accompanying images.

After the introductory panel of the exhibition¹⁴⁰ we introduced the exhibition by presenting materials from a psychology experiment that used a magic trick as part of its method. Shown was a projection of a simple, slightly pixelated, amateurish video of a person (framed from neck to waist) holding a pen¹⁴¹. After a few seconds they made a pressing gesture with both hands on the pen covering it from the viewer. In a split-second the hands then opened to reveal that the pen had disappeared. The video lasted approximately 10 seconds; however, the effect was remarkable. The pen had vanished into thin air and even after repeated viewings it was difficult to see how it had been done. It was created by a team of cognitive psychologists based at McGill University in Montreal Canada in 2015 for an experiment called *Explanations of a magic trick across the life span*¹⁴². The researchers Jay Olson, Irina Demacheva and Amir Raz were interested in what kind of explanations individuals from different age ranges would attribute to the trick - the aim being to explore how magic could work as a tool to study cognitive development over a life span. When they asked 1008 adults and 167 children how the pen disappears in the video, they noticed that children are more willing to offer an impossible explanation. Many attributed the effect of the trick to a magic potion or superpower. By adulthood we are drawn to seemingly more rational or realistic explanations, such as the pen being collapsible.

Crucially, the psychologists learned that a majority of the respondents were overly confident in their assumptions. Even though very few people offered a correct explanation of the trick's method (0% in children and 5-9% in adults), many felt sure they had guessed correctly. Confidence in the explanations seemed to recede as children became older, however it *increased* in the older adult age groups.

Curatorially this study felt like a helpful way to consider how the analysis of a simple magic trick (in the accompanying text panel we asked the audience "Can you explain how this trick was performed?") can reveal fascinating patterns of thinking. The fact that children were drawn to the supernatural feels instructive. It reveals an innate human need to call upon paranormal explanations for something which looks on the surface to be inexplicable. Similarly, the confidence that adults had in their more rational (but wrong) explanations suggests that we have a strong cognitive mechanism

¹⁴⁰ The text read: "Watching a magician perform a trick feels like the impossible is happening before our eyes. Why is magic so compelling? Why are we so easily fooled? Magicians use many techniques to create different illusions. They perfect their craft using insights into how people think and behave, gathered during thousands of hours of performing. Since the late 19th century this knowledge has played a key role in helping psychologists understand how we perceive, reason and remember. In our everyday lives we make assumptions about how things work. These can be exploited by magicians. By studying how people experience magic tricks, psychologists can learn how we make sense of the world around us. *Smoke and Mirrors* explores the relationship between the magicians' craft and psychology. It asks why the art of deception is still such a powerful force today."

¹⁴¹ Video available. File: Smokevideo1

¹⁴² Olson JA, Demacheva I, Raz A. (2015). *Explanations of a magic trick across the life span*. *Frontiers in Psychology*. March.

that flatters our explanatory powers even when we're interpreting something that is outside of our knowledge. That this becomes more pronounced as we get older is useful to know, so that we can be on guard against confident assertions as we age.

Most importantly the study illustrated how we might be more susceptible to trickery and deception than we instinctively believe. A useful first message to communicate as the visitors then made their way into the first section of the exhibition.

Smoke and Mirrors

The Psychology of Magic

Watching a magician perform a trick feels like the impossible is happening before our eyes. Why is magic so compelling? Why are we so easily fooled?

Magicians use many techniques to create different illusions. They perfect their craft using insights into how people think and behave, gathered during thousands of hours of performing. Since the late 19th century this knowledge has played a key role in helping psychologists understand how we perceive, reason and remember.

In our everyday lives we make assumptions about how things work. These can be exploited by magicians. By studying how people experience magic tricks, psychologists can learn how we make sense of the world around us.

Smoke and Mirrors explores the relationship between the magicians' craft and psychology. It asks why the art of deception is still such a powerful force today.

The exhibition includes a programme of live performances inside the gallery:

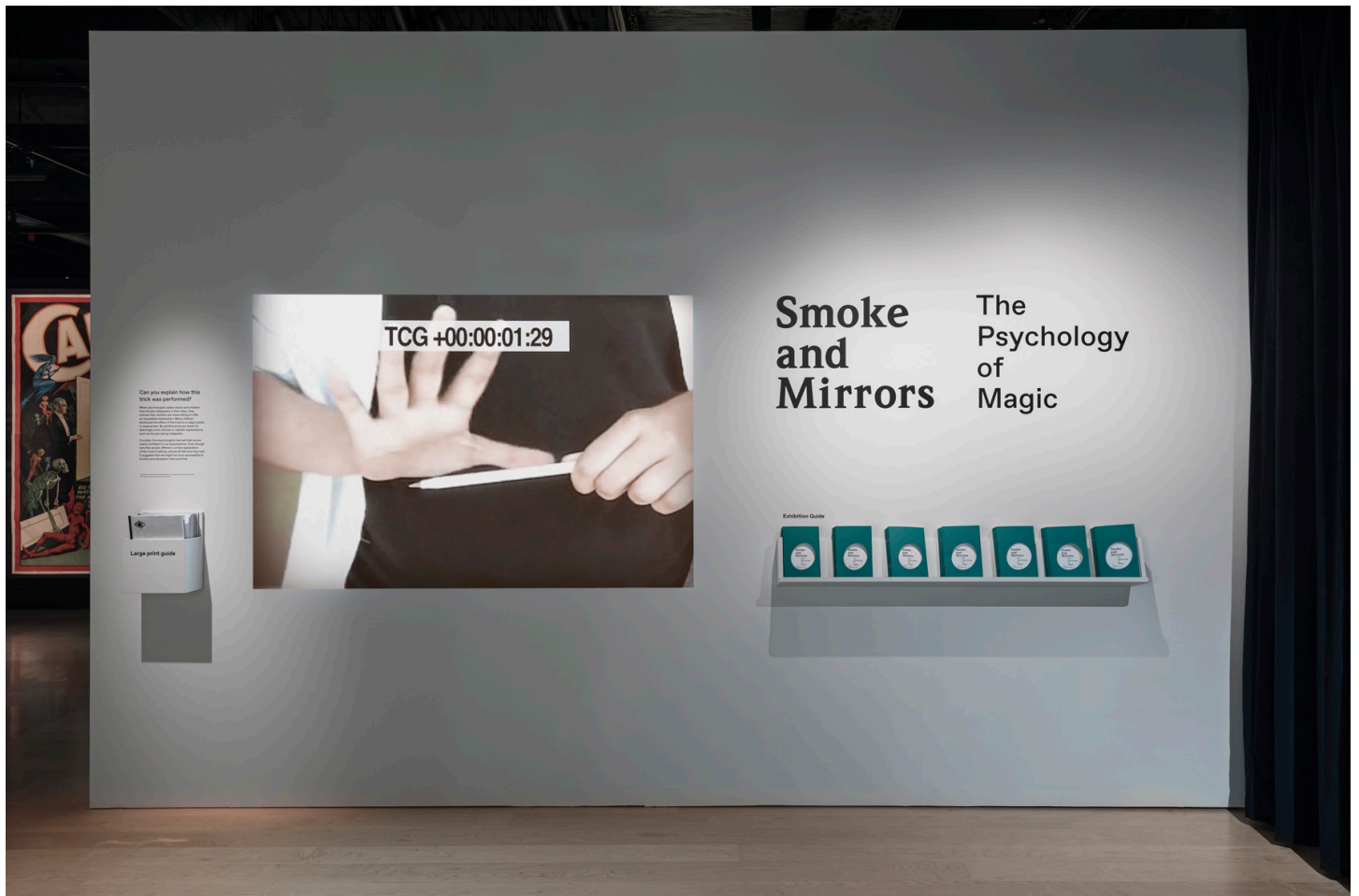
Tuesday 13.30 and 14.30

Thursday 13.30 and 15.30

Saturday 11.30 and 12.30

Performances last 20 minutes.

You can drop in for free, but spaces are limited.



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection. (2019).

Introduction text (top), Video from the 2015 study *Explanations of a magic trick across the life span* Jay Olson, Irina Demacheva and Amir Raz. Full video footage available. Filename: SmokeVideo1.

Section 1: The Medium

The curatorial methodology at Wellcome Collection in 2019 was to divide each exhibition into thematic sections. The subjects that were usually explored in the galleries were broad, so this ‘chapter like’ approach had a logic to it. It was a method that was useful for *Smoke and Mirrors* as it gave us licence to present three interlinking themes that narrated aspects of the histories we were presenting. This story-telling aspect of the exhibition felt important. The case studies and objects on display were all in some way grappling with the tension between fact and fiction and the ethics of deception. The mode of display that we settled on with our exhibition designers *Plaid*¹⁴³ took advantage of this tendency by allowing the audience to immerse themselves in the stories we were telling.

In the first section of the exhibition, we explored how the discipline of psychology grew from a period of history in the 19th Century that also saw the development of western esoteric religion and the growth of stage magic as a profession. The stories we told from this era were by necessity limited to cultural developments in the global north: specifically in the US, UK, and Europe. The history of the links between conjuring, religion and psychology in the global south is as (if not more) fascinating, however the archival trail is complicated and demands a different kind of approach. It’s an area I’d love to explore further in the future, however I would need to work closely with experts who have an intimate contextual understanding of the key issues.¹⁴⁴

It was with this complicated history in mind that we decided to be very specific with our references in the first section of the exhibition, titled *The Medium*. The section gathered artefacts from the 1840s to the 1930s that illustrated the fascinating growth of Spiritualism in the US and Europe alongside materials that charted attempts by magicians to debunk the supernatural claims of the religion. We also displayed objects and images from scientific experiments that attempted to test under controlled conditions the abilities of spiritualist mediums. The introductory panel to the section read:

The ravages of war and disease in the late 19th and early 20th centuries caused widespread loss. These conditions gave rise to spiritualism — the belief that the dead can communicate with the living. Many people attended séances where a medium claimed to contact the dead directly. At its peak spiritualism had millions of followers.

¹⁴³ Plaid are a collaborative design duo Lauren Scully and Brian Studak. <http://plaid-london.com>

¹⁴⁴ Throughout our research we became aware of how much the international *other* (in particular, India and China) was in turn fetishized, demonised and appropriated in much of the iconography used by magicians and spiritualists in the late 19th Century and early 20th Century. The *mystery of east* was a recurring trope in stage magic and mediumistic performances where gaps in the public understanding of other cultures could be exploited as part of the supernatural narrative. It also tapped into a colonial mindset where ideas, images and belief systems (as well as objects) were routinely looted from communities by Europe’s upper classes. The founders of Western esotericism were guilty of such a game, with the Russian aristocrat Helena Blavatsky and her Theosophical movement being at the forefront.

Peter Lamont together with Richard Wisemen researched the vivid history of the *Indian Rope Trick* which started with a hoax article written by the editor of the Chicago Tribune. This piece of so-called ‘fake news’ then triggered what appeared to be exaggerated or ‘false’ recollections of many of the newspaper’s readers who claimed to have seen the same trick performed during visits to India. Despite the Tribune then publishing a full clarification about the hoax, the story had escaped and then became warped into a narrative that tapped into a certain kind of ignorance about the ‘ancient wisdom’ and presumed otherness of India.

Alongside this popular interest in spirit communication, the disciplines and institutions of modern science were being founded. In 1882 the Society for Psychical Research became the first organisation to carry out research into the phenomena witnessed in the séance room.

Psychical researchers collaborated with magicians, who drew on their knowledge of conjuring tricks and illusions to test the paranormal claims of mediums. They laid the foundations for important discoveries about the nature of belief and memory that psychologists still draw on today.

The first two objects in the exhibition were an etching that illustrated the supernatural goings on of a high society séance in 1871 and a grainy photograph from the late 19th century of a cottage owned by the Fox family in Hydesville New York. The origins of the modern Spiritualist movement are traced back to this house where in 1848 two young girls, Maggie and Kate Fox, reported hearing a series of raps on their bedroom walls and furniture, that they claimed were communication from the spirits. The Fox Sisters subsequent performances were haunting and seemingly inexplicable, and they were enough to convince many about the reality of spirit communication despite both sisters admitting in later life that it was all a hoax¹⁴⁵.

The idea that certain individuals were in tune with messages from beyond the grave then gave rise to the growth of mediumship as a profession and amateur pursuit in the US and Europe. Many were carried out in the private homes of the upper classes, however working-class culture in the UK soon turned towards spiritualism and the idea of mediumship. In the former, extravagant séances (performed in darkened, unlit rooms) became high society events that were reported in full detail in the press and in the latter, older, usually female members of the family would be described as having the ‘gift’.¹⁴⁶ Some of the tools of this mediumistic trade were displayed in a large vitrine at the centre of section one, alongside new technologies from the era including a telegraph machine and plate camera.

Ira and William Davenport were the first to take this practice from private homes into the full glare of a theatrical stage show in what they described as their *Public Cabinet Séance*. The brothers started by giving mediumistic demonstrations in upstate New York a few months after word got out about the Old Fox Cottage and their performances then developed into full blown stage shows that toured internationally. In the accompanying publication for *Smoke and Mirrors* the psychologist, magician, and writer Matthew Tompkins¹⁴⁷ described a Davenport Brothers performance as follows:

A typical demonstration involved a large wooden cabinet, similar in size to a wardrobe fitted with bench seats. Various musical instruments such as a guitar, trumpet, and tambourine, were hung upon the wall of the cabinet or laid out on the floor. The brothers would invite an

¹⁴⁵ Podmore, Frank. (2011) [1902]. *Modern Spiritualism: A History and a Criticism*. Methuen & Co. p. 188.

¹⁴⁶ My dad grew up in post war Brixton in a road populated by his aunts, uncles, and cousins. He has a memory of his aunt Ethel regularly performing seances for the family and using her gift to heal. He has a vivid recollection of her laying hands on his head when he was a young boy after being plagued by night terrors – apparently this simple act cured the problem... despite having worked in science labs as a young man and having a career as a dentist he still looks back fondly on this experience as being a key moment in his childhood.

¹⁴⁷ Matthew Tompkins is someone I met through Gustav Kuhn and his Science of Magic network. He’s a wonderful storyteller and I lobbied hard to have him author the book. It was his first published work.

‘investigative committee’ of audience members on stage to examine the apparatus, then seat themselves on the benches within the cabinet, and instruct the committee members to bind their hands and feet with ropes. Then the doors of the cabinet would be locked, and the lights of the theatre would be dimmed. In time, music would begin to emanate from the cabinet; sometimes the audience might see glowing, disembodied hands floating around the stage. When lights were re-lit, and the cabinet unlocked, the brothers would be found sitting calmly, still bound by the ropes.¹⁴⁸

The performances were effective not least because they were hosted by the restoration movement minister and spiritualist paster J.B. Ferguson who set the tone of the events by sternly assuring the audience that the brothers worked by spirit power and not deceptive trickery. Here was a theatrical entertainment presented with missionary zeal. The aim being to astonish with inexplicable effects, leaving the audience with little doubt about the truth of what they saw with their own eyes - that spiritualist communication was real. It also helped that audiences paid good money to see the events, meaning the Davenports could afford to tour the US for 10 years before coming to the UK in 1865. The poster on display at *Smoke and Mirrors* was an original advertising the brothers’ performance at the Queen’s Concert Rooms in Hanover Square. The message delivered makes clear that extraordinary effects will be witnessed, however its representation pushes artistic licence to the edge. In reality, the doors of the cabinet would have been closed, concealing the brothers as the instruments took on a life of their own, and the theatre would have been thrown into darkness before the performance began. Perhaps unsurprisingly all was not what it seemed, and it took a 25-year-old watchmaker and amateur magician John Neville Maskelyne to reveal what was really going on.

On March 7th, 1865, Maskelyne attended a Davenport Brothers performance in Cheltenham Town Hall. During the act he claimed to have glimpsed through a small gap in the cabinet, Ira Davenport throwing musical instruments by hand and rigorously ringing one of the bells. Maskelyne was outraged and after failing to convince other audience members about the fraud, he set about trying to find a compelling way to debunk the claims. It was a moment that inspired Maskelyne into a lifetime career as a stage magician. Matthew Tompkins described his response in the *Spectacle of Illusion* in the following way:

Maskelyne built his own version of the Davenports’ spirit cabinet with the help of George Alfred Cooke (1825-1905). Maskelyne and Cooke spent several months rigorously training themselves to escape from ropes, and later that year they debuted their own ‘anti-spiritualist’ demonstration. Not only did they apparently duplicate the feats that the Davenports had performed, they also held their first show in the theatre where Maskelyne had first glimpsed Ira’s surreptitious bell-clanging. Like the Davenports they charged admission. Unlike the Davenports, they explicitly declared that their feats were the result of trickery. Newspapers gleefully reported the performances as ‘The Davenport Brothers Outdone’.¹⁴⁹

The objects about Maskelyne gathered in *Smoke and Mirrors* related to these popular stage performances. Posters from his 20-year residency at Egyptian Hall in London illustrated extraordinary paranormal phenomena from flying musical instruments to dancing skeletons, an original programme

¹⁴⁸ Tompkins, Matthew. (2019). *The Spectacle of Illusion: Magic, the Paranormal and the Complicity of the Mind*. Thames and Hudson and Wellcome Collection. P.66.

¹⁴⁹ Ibid.

from one of his shows included reference to being 'antispiritualist' and the performance of "New Light and Dark Seances including all the most recent machinations of so-called "Spirit Media." And the exquisite lantern slides (here shown for the first time in public) show Maskelyne earnestly practising his cabinet routine while bound in ropes and thereby revealing some of the secrets of the spirit cabinet trick.

Maskelyne and Cooke's performances were incredibly successful, pulling in huge audiences over two decades. Here was an act that was in effect doing the same thing as the Davenports original performances with the only difference being that Maskelyne admitted that the paranormal phenomena were manifested through trickery alone. This disclaimer didn't seem to spoil the fun for the thousands that attended the shows, and it is assumed that this overt debunking of spiritualist phenomena had an impact on the public's willingness to believe in spirit communication. It is though also true that despite clearly illustrating how the Davenports could have achieved their effects, committed spiritualists like Arthur Conan Doyle refused to accept that trickery could be at play in their performances. In his 1926 two volume book on *The History of Spiritualism* Conan-Doyle described the Davenports as "probably the greatest mediums of their kind that the world has ever seen"¹⁵⁰.

Conan-Doyle was representative of the spiritualist kickback against the magician debunkers of the era – wilfully choosing to ignore the possibility that mediums could be achieving their effects through trickery, fraud, and deception. He based his assertions about his faith from bearing witness in person to extraordinary phenomena in the séance room: he *knew* that what he saw and subsequently remembered was a true reflection of what happened. Evidence of trickery was explained away as the actions of a few bad apples and no mere replication of an effect was going to be enough to change his view.

¹⁵⁰ Conan Doyle, Arthur. (1926). *History of Spiritualism (Vol. 1)*. Cassell and Co Ltd. P. 90.



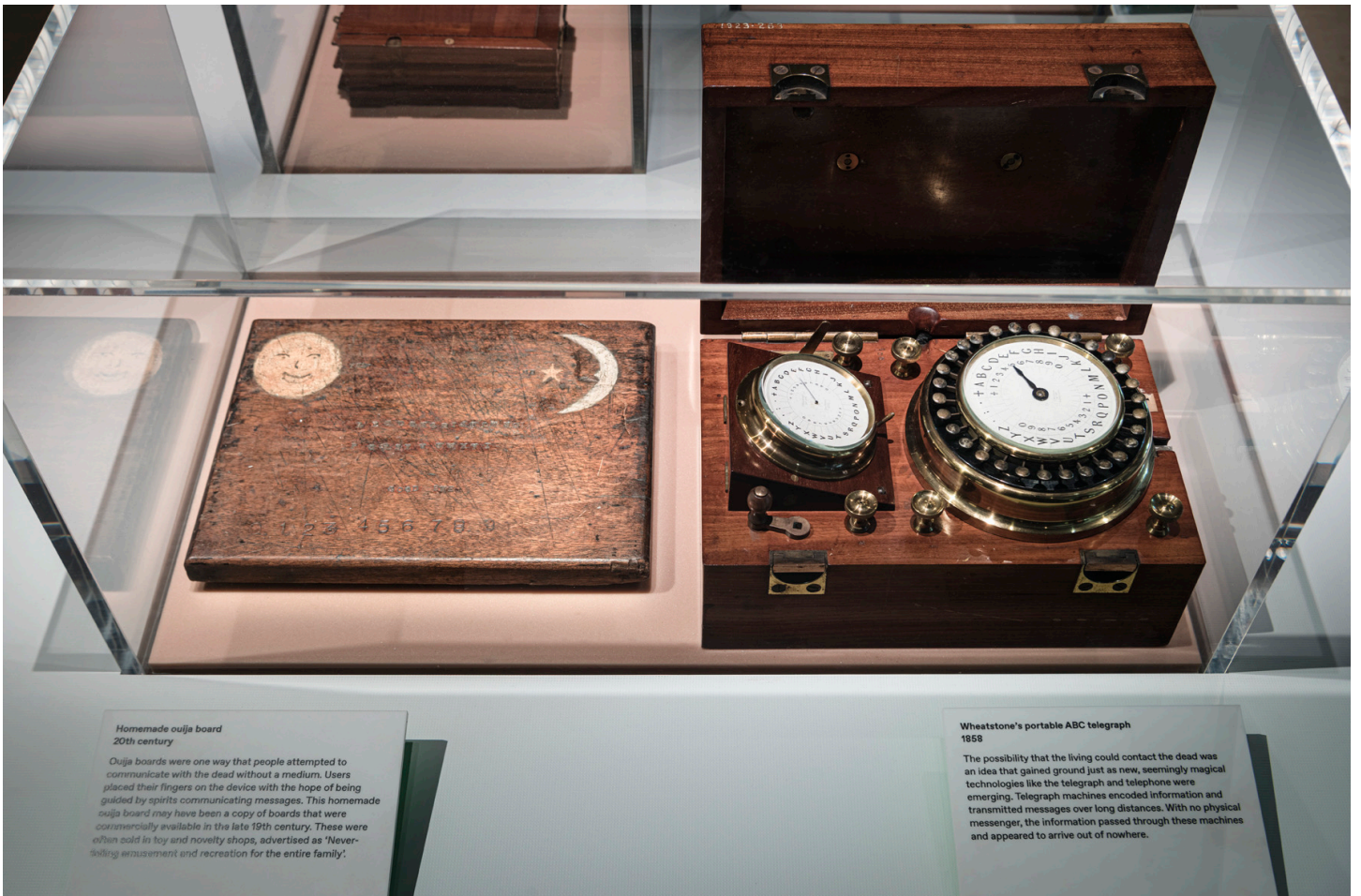
Smoke and Mirrors: The Psychology of Magic. Wellcome Collection. (2019).

Section 1: The Medium. Install shots. (All photographic documentation from *Smoke and Mirrors* by Thomas Farnetti unless otherwise stated)



Carter the Great promotional poster. (Around 1926). Paul Kieve collection, London.

The spirit cabinet was a popular act performed by many illusionists, including American stage magician Carter the Great. Magicians commissioned their own publicity posters and used strikingly dark imagery which hinted at the supernatural to evoke mystery and attract audiences. This poster was designed for one of Carter's seven world tours and would have been pasted on local billboards.



Homemade ouija board
20th century

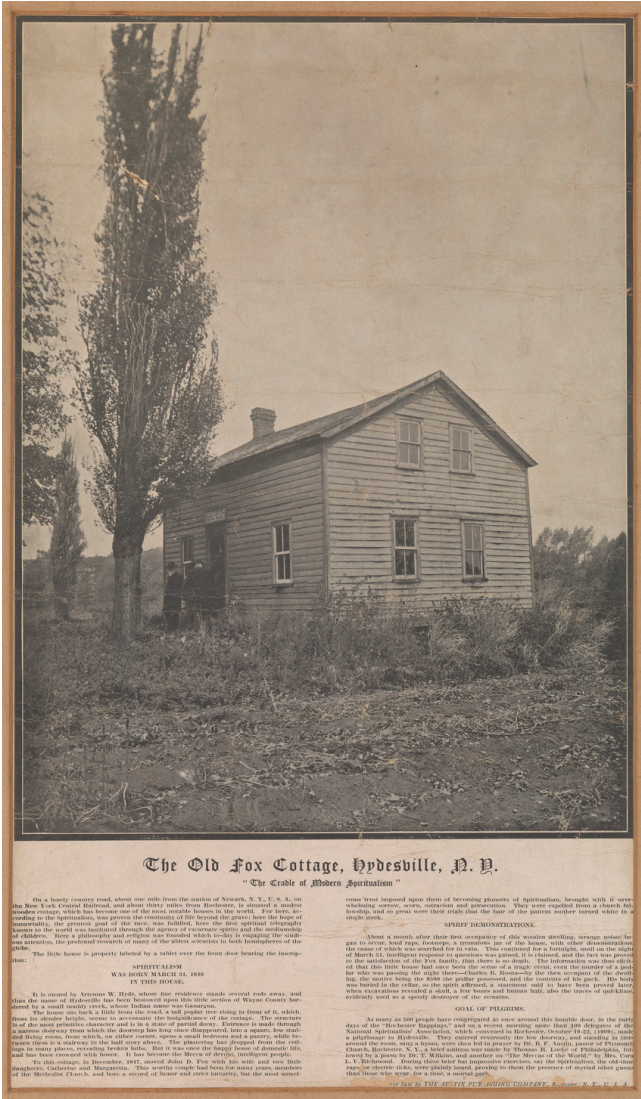
Ouija boards were one way that people attempted to communicate with the dead without a medium. Users placed their fingers on the device with the hope of being guided by spirits communicating messages. This homemade ouija board may have been a copy of boards that were commercially available in the late 19th century. These were often sold in toy and novelty shops, advertised as 'Never-satting amusement and recreation for the entire family'.

Wheatstone's portable ABC telegraph
1858

The possibility that the living could contact the dead was an idea that gained ground just as new, seemingly magical technologies like the telegraph and telephone were emerging. Telegraph machines encoded information and transmitted messages over long distances. With no physical messenger, the information passed through these machines and appeared to arrive out of nowhere.

Top: Collected spiritualist artefacts used by mediums and magicians.

Bottom (left to right): *Homemade ouija board*. (20th century). Museum of Witchcraft and Magic. | *Wheatstone's portable ABC telegraph*. (1858). Science Museum Group.



Left: *The Old Fox Cottage, Hydesville.* (Early 20th century). Senate House Library, University of London.



Right: 'Witchcraft in 1871' an exciting séance held by Frank Herne and Charles Williams at Katherfelto Row, Hamburg Square, London (from *The Graphic*), Arthur Boyd Houghton (1871). Paul Kieve collection, London.

THE DAVENPORT BROTHERS'
PUBLIC CABINET SÉANCE.



NOW BEING HELD AT
THE QUEEN'S CONCERT ROOMS,
HANOVER SQUARE.

This Drawing is the Copyright of Messrs. Robert Cook and Co., London.

The Davenport Brothers' Public Cabinet Séance. (1865). Victoria and Albert Museum.

Magician investigator

In 1865 magician John Nevil Maskelyne attended a performance of the Davenport Brothers' Public Cabinet Séance in Cheltenham Town Hall. When a piece of drapery fell from the window, Maskelyne is said to have witnessed Ira Davenport throwing musical instruments by hand from inside the cabinet.

This moment inspired Maskelyne and George Alfred Cooke's own 'anti-spiritualist' show in which they performed the effects of the public séance as magic tricks. As public interest in mediums continued to grow, other magicians also began to publicly investigate mediums they suspected of using trickery. They attempted to expose them by replicating their effects in hugely successful, popular and profitable magic shows.



Maskelyne and Cooke's Marvellous Entertainment, 1887

The British Library

Mrs Daffodil Downey's séance presented by Maskelyne and Cooke, around 1885

The British Library

Maskelyne and Cooke programme, around 1870s

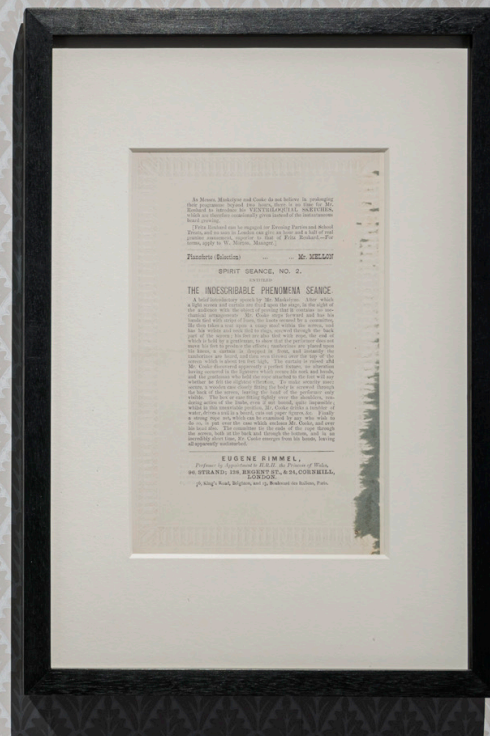
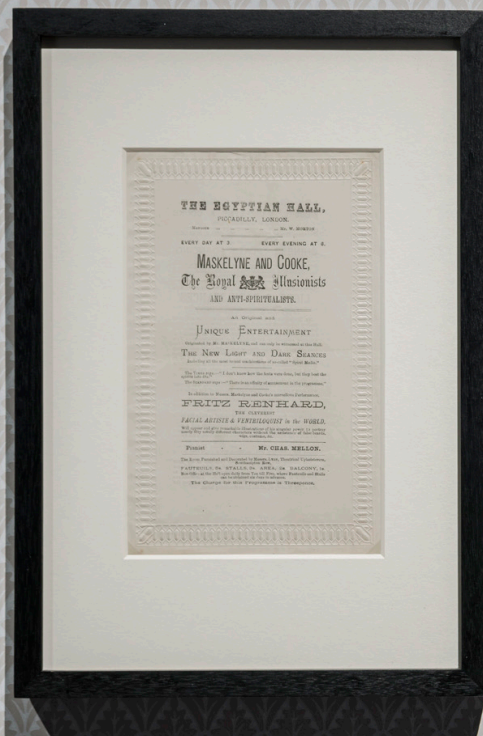
Wellcome Collection Reference: E106164 - Reverso reproduction

Lantern slides showing John Nevil Maskelyne duplicating the Davenport Brothers' tricks, 19th century

Spirit House Library, University of London

Séance tie trick, 20th century

British Magic Museum



Top: *Maskelyne and Cooke's Marvellous Entertainment*. (1887). The British Library.

Bottom: *Maskelyne and Cooke programme*. (around 1870s). Wellcome Collection.



Top (left to right): *Maskelyne and Cooke's Marvellous Entertainment*. (1887). The British Library. | *Mrs Daffodil Downey's séance presented by Maskelyne and Cooke*. (around 1885). The British Library. | *Maskelyne and Cooke programme*. (around 1870s). Wellcome Collection. | *Lantern slides showing John Nevil Maskelyne duplicating the Davenport Brothers' tricks*. (19th century). Senate House Library, University of London.

Bottom: *Lantern slides showing John Nevil Maskelyne duplicating the Davenport Brothers' tricks, 19th century*. Senate House Library, University of London.



Sir Arthur Conan Doyle. (1928). Video lent by University of South Carolina MIRC.

Arthur Conan Doyle was one of the most high-profile supporters of spiritualism and President of the College of Psychic Studies from 1926 to 1930. In the film shown at Smoke and Mirrors the author of the Sherlock Holmes mysteries discusses how he came to have psychic experiences and why he devoted his life to the question of spiritualism.

Psychical Research and the testing of spiritualist mediums

At the same time as Maskelyne, Cooke, Conan-Doyle, The Davenports and many others were making claims about the reality (or otherwise) of spirit communication, scientific committees, societies and organisations were being formed throughout the UK, and science was rapidly turning into a profession. In 1882 the *Society of Psychical Research* (SPR) was formed in London as “the first scientific organisation ever to examine claims of psychic and paranormal phenomena”. Set up by high profile spiritualists, non-spiritualists, and agnostics alike the aim was to test mediumistic phenomena in controlled ‘scientific’ conditions. Early members included leading scientists of the day, physicist William F Barrett, chemist Sir William Crookes, physicist Sir Oliver Lodge and psychologist William James. The SPR’s first president was the philosopher and economist Henry Sidgwick and other members included famous artists, authors, and philosophers of the era.

This burgeoning discipline of ‘psychical research’ housed by the society was attempting to apply rigorous scientific methods to investigate spiritualist claims. They’d record each sitting in writing and subsequent reports, which were then later published in a public journal called *The Proceedings of the Society for Psychical Research* (they also had their own ‘members only’ publication called *The Proceedings of the Society for Psychical Research*). They would attempt to record phenomena with cameras (very difficult in darkened rooms with early, unreliable equipment) and document the sitters’ recollections of each séance. Their aim was to ask whether natural explanations could be found for these seemingly unexplainable events or whether they revealed aspects of human consciousness unknown to science.¹⁵¹

The SPR started to contribute meaningfully to the public discussion about spiritualism when pertinent questions started to be asked about the reliability of the sitters’ recollections and when they had the foresight to work with conjurers on the experiments. SPR member and leading psychical researcher Richard Hodgson was committed to rooting out fraud wherever he could find it. He was instrumental in inviting John Neville Maskelyne to be on the investigative committee for a famous experiment in Cambridge in 1895, with the famous medium Eusapia Palladino - where he caught her surreptitiously freeing herself from the physical controls of the experiment¹⁵². Palladino was not only an expert conjurer but also an adept escapologist, however Maskelyne’s experience in the field was hugely valuable and became instrumental to her exposure¹⁵³. The photographs displayed in *Smoke and*

¹⁵¹ Before the SPR was founded, experiments with mediums did take place, however they were rather crude and open for manipulation. Excuses would be made that certain phenomena could only be expected to manifest in certain settings and that some test conditions were not conducive to the spirits. It meant that the controlled conditions were often created in collaboration with the mediums being tested and as a result many became even more compelled about what they were witnessing. Scientists like Arthur Russel Wallace, Crookes and Lodge were particularly convinced, citing their powers of observation as scientists as reason for them to be trusted. Crookes for example became convinced about the reality of spirit communication after he created experiments with several leading mediums of the day, including Daniel Douglas Home, Florence Cook, Kate Fox and Anna Eva Fay. These experiments were often held at Crookes’ home, and he often developed a personal relationship with his subjects. He was representative of an approach that wore the authority of science and yet his methodology was ripe for manipulation – being a chemist didn’t necessarily mean he would become a decent psychical researcher.

¹⁵² Harry Houdini (1874 – 1926) and psychologist Hugo Munsterberg (1862-1916) also caught her freeing her hands from restrictive scientific controls. (See Tompkins, Matthew. (2019), *The Spectacle of Illusion: Magic, the Paranormal and the Complicity of the Mind*, Thames and Hudson and Wellcome Collection (p.43)).

¹⁵³ This is an early example of how other disciplines can improve a scientific method.



Photographs and audio from the investigation of Eusapia Palladino. (1895).

Cambridge University Library and the Society for Psychical Research; Senate House Library, University of London

The Italian medium Eusapia Palladino baffled international researchers with her performances. In 1895 she was invited to Cambridge to be investigated by the Society for Psychical Research and magician John Nevil Maskelyne. She was caught freeing her hands from the researchers' restraints so that she could perform tricks.

Mirrors were taken at one of the Cambridge sittings of Palladino in mid-performance. The images were accompanied by a simple audio that read aloud from the SPR proceedings entry for the same séance.

The findings from this experiment (and others that followed) raised serious doubts about the reality of Palladino's claims of spirit contact. However, it didn't necessarily mean that her supporters turned their backs on her, with Sir Arthur Conan Doyle saying in 1926 that "It may be truthfully said of her that no medium has ever more certainly been proved to have psychic powers, and no medium was ever more certainly a cheat upon occasions"¹⁵⁴. As philosopher Paul Kurtz surmises:

[Palladino] was caught red-handed in blatant acts of fraud by members of the Society for Psychical Research in Cambridge and by scientific teams at Columbia and Harvard Universities. She was shown to be substituting her hand or foot and using them in darkened seances to move objects so that they appeared to be levitating. Even her defenders conceded that she cheated, at least some of the time. The problem that puzzles me is this; If one finds sleight-of-hand techniques being used some of the time by such individuals, then why should one accept anything else that is presented by them as genuine?¹⁵⁵

In the accompanying image essay, I present a case study from the exhibition that illustrated how the famous magician Harry Houdini attempted to expose the prominent medium Margery Crandon through a series of high-profile experiments in the early 1920s. The story also represents the lengths that scientists and magicians would go to exposing mediums who were often able to defy the most stringent of controls. This fascinating battle was another clear example of how two opposing beliefs in the reality (or otherwise) of spirit communication were continually at odds with each other throughout the era.

This *resilience of belief* despite overwhelming evidence of deception was then a psychological tendency that was explored in depth in this first section of the exhibition. It felt like an issue of vital importance given the increasingly deceptive nature of British and American politics in 2019 where demonstrable lies from reactionary politicians were seeming to persuade large sections of the electorate. The artefacts on display in section one illustrated the push and pull between various factions in the public debate about spiritualism: one that felt relatable to our contemporary moment. As Stephanie Merritt stated on the BBC Radio 4 during a discussion about the exhibition Saturday Review:

The thing I was most conscious about is that there is a huge elephant in the room, which is not made explicit – and I think it's very smart that they haven't made it explicit – it's about what we're living through now, in a post-truth, fake news age. This is an exhibition that is about our willingness to be deceived, how easy it is to manipulate the mind and to play to people's confirmation biases.

¹⁵⁴ Tompkins, Matthew. (2019). *The Spectacle of Illusion: Magic, the Paranormal and the Complicity of the Mind*. Thames and Hudson and Wellcome Collection. P.37

¹⁵⁵ Vern L. Bullough; Timothy J. Madigan. (1994). *Toward a New Enlightenment: The Philosophy of Paul Kurtz*. Transaction Publishers. p. 159.

In response to Merritt's point host Tom Sutcliffe tactfully said:

I don't think any adult is going to go into this without thinking about a certain two option choice we were recently given [Brexit] and how open that choice was and what followed from it...¹⁵⁶

¹⁵⁶ Full review can be listened to here: <https://www.bbc.co.uk/sounds/play/m0004dw9>

Houdini vs. Crandon

A case study from section one (*The Medium*) of *Smoke and Mirrors: The Psychology of Magic* at Wellcome Collection



In 1924, Mina ‘Margery’ Crandon attempted to win \$2,500 offered by *Scientific American* to any medium who could demonstrate their powers under scientific controls. The judging committee included the magician Harry Houdini. The experiments made the front pages, as the world’s most famous magician fought a public battle of wits with the most charismatic medium of the era.

Houdini’s own performances shared many elements in common with the escape techniques used by fraudulent mediums to evade scientific controls during testing. He was able to use this understanding of escapology to create extraordinary test conditions for Margery. The prize money was never awarded, and Houdini went on to include his exposé of her in his own stage act.



Margie box. (Original 1924, replica 2019). Reproduction photograph of Margery Crandon in the Margie box.

Houdini constructed a special box to contain and control Margery during testing. Initially the lid of the cabinet was fastened by two thin brass hinges but was later supplemented with four further clasps, staples and a padlock after Margery was suspected of lifting the brass strips with her shoulders and ringing the bell box, with her head



Chair used by Margery Crandon during her séances. (before 1923). The Libbet Crandon de Malamud Collection.

Chinese dress worn by Margery Crandon. (before 1923). The Libbet Crandon de Malamud Collection.

Boston Herald. (1925) Reproduction Senate House Library, University of London.



Photographs of Margery Crandon during a séance. (1926). Senate House Library, University of London.



Poster for Houdini's Water-Filled-Torture-Act. (1912 (possibly)). Museums Sheffield.

HOUDINI
278 WEST 113th STREET
NEW YORK, N. Y.

August 20, 1924.

Mrs. Mina S. Crandon,
10 Lime Street,
Boston, Mass.

Dear Mrs. Mina S. Crandon:-

Enclosed you will find a few more snap shots and will bring along prints from the other negatives.

By the way, I have given snap shots to Bird, O. D. Munn and Dr. Prince.

You mention that the only solution of the matter is red-light phenomena. -I am perfectly agreeable to any condition where there can be no question about the control.

I would like you to please remember that I am honestly not a skeptic, and sincerely trust that we will get dependable results. I know that with your willingness you are ready to try any of the various controls and assure you that I will be agreeable to anything, where eventually no one can question the control.

At no time would I permit the Committee to harass or put you to any inconvenience of physical discomfiture. Harmony must reign, but the control at all times, should be satisfactory to all present.

With kindest regards and best wishes, 202

Sincerely yours,

Houdini

HH:JS

Letter from Harry Houdini to Margery Crandon. (1924). The Libbet Crandon de Malamud Collection.

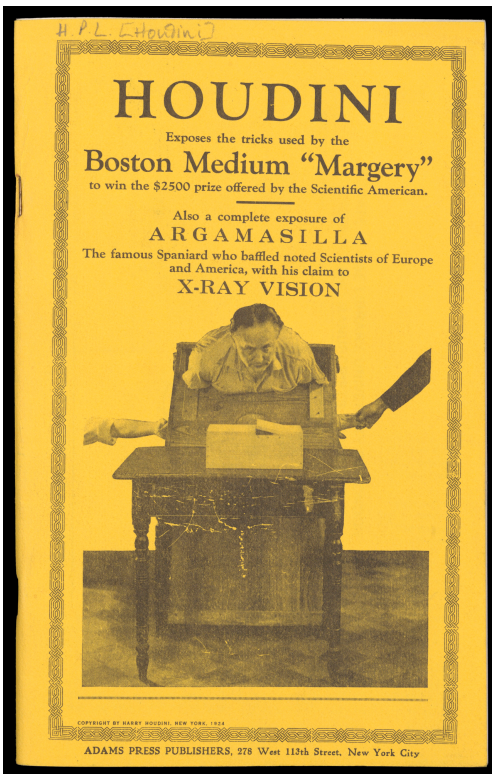
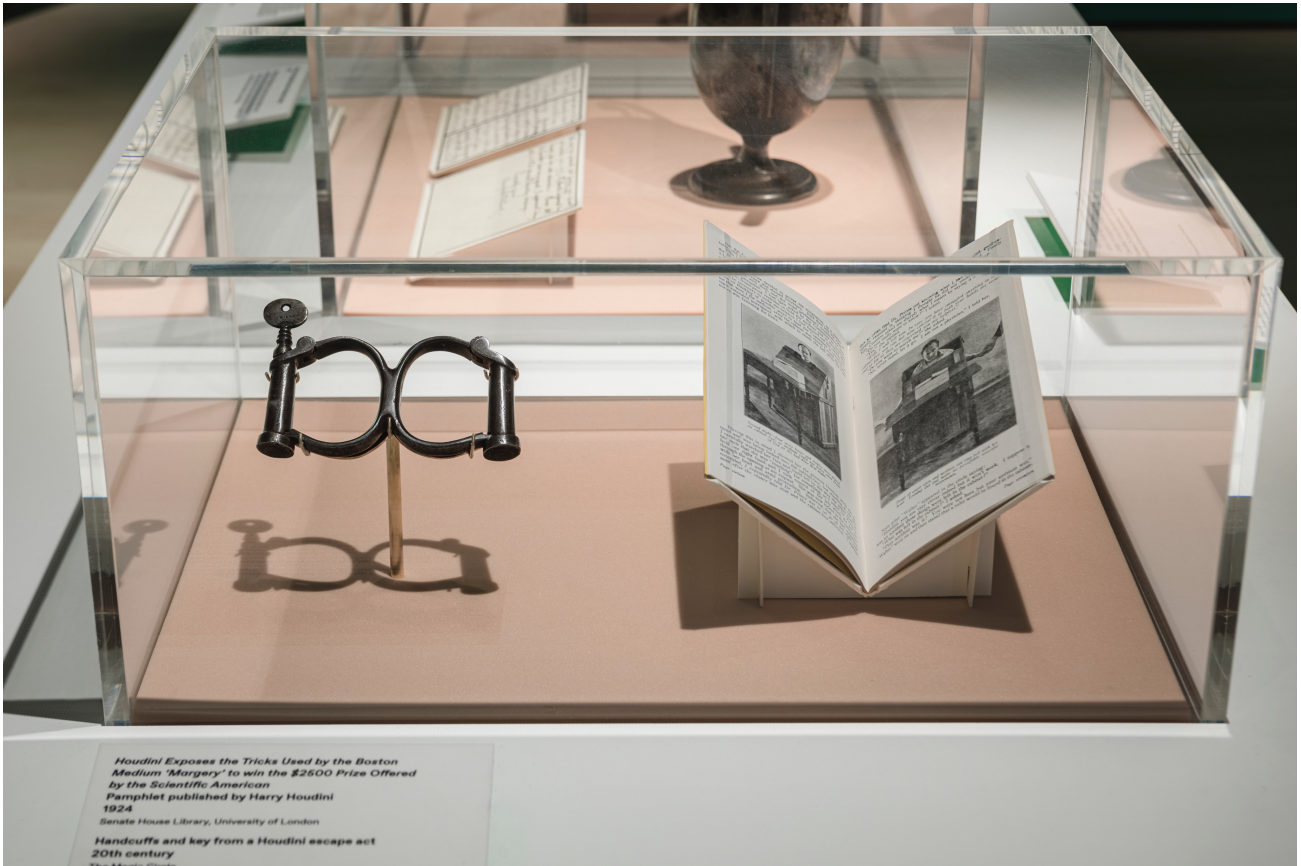


Bell Box made for Harry Houdini. (around 1924). Ken Klosterman/Salon de Magic

Houdini used this box to test Margery's psychic abilities. When pressed, the hinged wooden plate at the top of the box completed an electrical circuit, ringing a bell inside. The bell box was placed between Houdini's feet, while Margery's hands and legs were kept in contact with sitters on either side of her. Despite the test-like conditions, the bell rang repeatedly — a ringing that Margery attributed to her spirit guide 'Walter'.

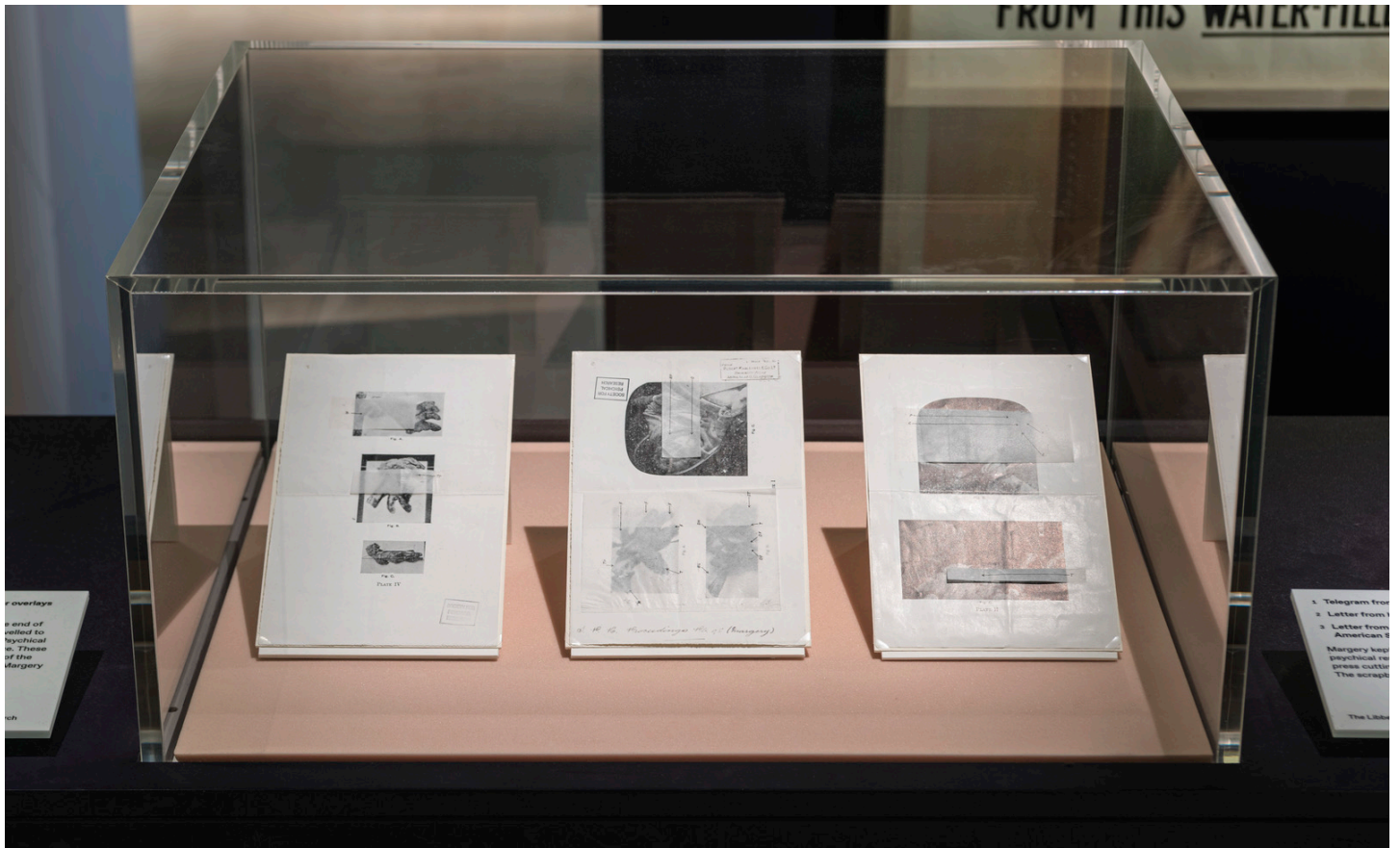
Margery Crandon with Harry Houdini and the bell box (1924). The Libbet Crandon de Malamud Collection.

This photograph shows Margery's leg being restricted by Houdini, who has rolled up his trousers so as to better detect any muscle movement she might make.



Handcuffs and key from a Houdini escape act. (20th century). The Magic Circle

Houdini Exposes the Tricks Used by the Boston Medium 'Margery' to win the \$2500 Prize Offered by the Scientific American. Pamphlet published by Harry Houdini. (1924). Senate House Library, University of London



Top: Three book plates with annotated tracing paper overlays. (1927–30s). Cambridge University Library and the Society for Psychical Research.

Margery carried on with her mediumship after the end of the Scientific American competition and later travelled to London, where she was tested by the Society for Psychical Research and the British College of Psychic Science. These annotated book plates show the society's analysis of the different materials that appeared to emanate from Margery during a séance.

Bottom: Telegram from Harry Houdini to Margery's husband Dr Crandon. (1925). The Libbet Crandon de Malamud Collection.

Margery kept all her correspondence with sitters and psychical researchers, pasting it into scrapbooks alongside press cuttings and poetry sent to her by her supporters. The scrapbook on display was one of 22.



Loving cup. (1925). The Libbet Crandon de Malamud Collection.

This cup was given to Margery by Arthur Conan Doyle and friends of the British Psychic College 'in recognition of their heroic struggle for truth' (inscribed). Conan Doyle wrote separately to Margery's husband, Dr Crandon, expressing his hope that the cup would be 'of use in a press publicity sense'.



Margery Crandon being restrained during testing
1926

Margery was often put under considerable physical restraint during testing in an attempt to rule out trickery and conjuring. Test conditions were agreed between her and the researchers before the experiments.

Senate House Library, University of London
(Photograph of Margery in a hand restraint: reproduction)

Margery Crandon being restrained during testing. (1926). Senate House Library, University of London.

Margery was often put under considerable physical restraint during testing in an attempt to rule out trickery and conjuring. Test conditions were agreed between her and the researchers before the experiments.



Margery Crandon with hand-like form making finger prints. (1926). Cambridge University Library and the Society for Psychical Research (1) and Senate House Library, University of London (2&3)

A notable feature of Margery's sittings was her apparent ability to produce an 'ectoplasmic' hand-like form from different parts of her body. Margery claimed the hand belonged to her dead brother, Walter.



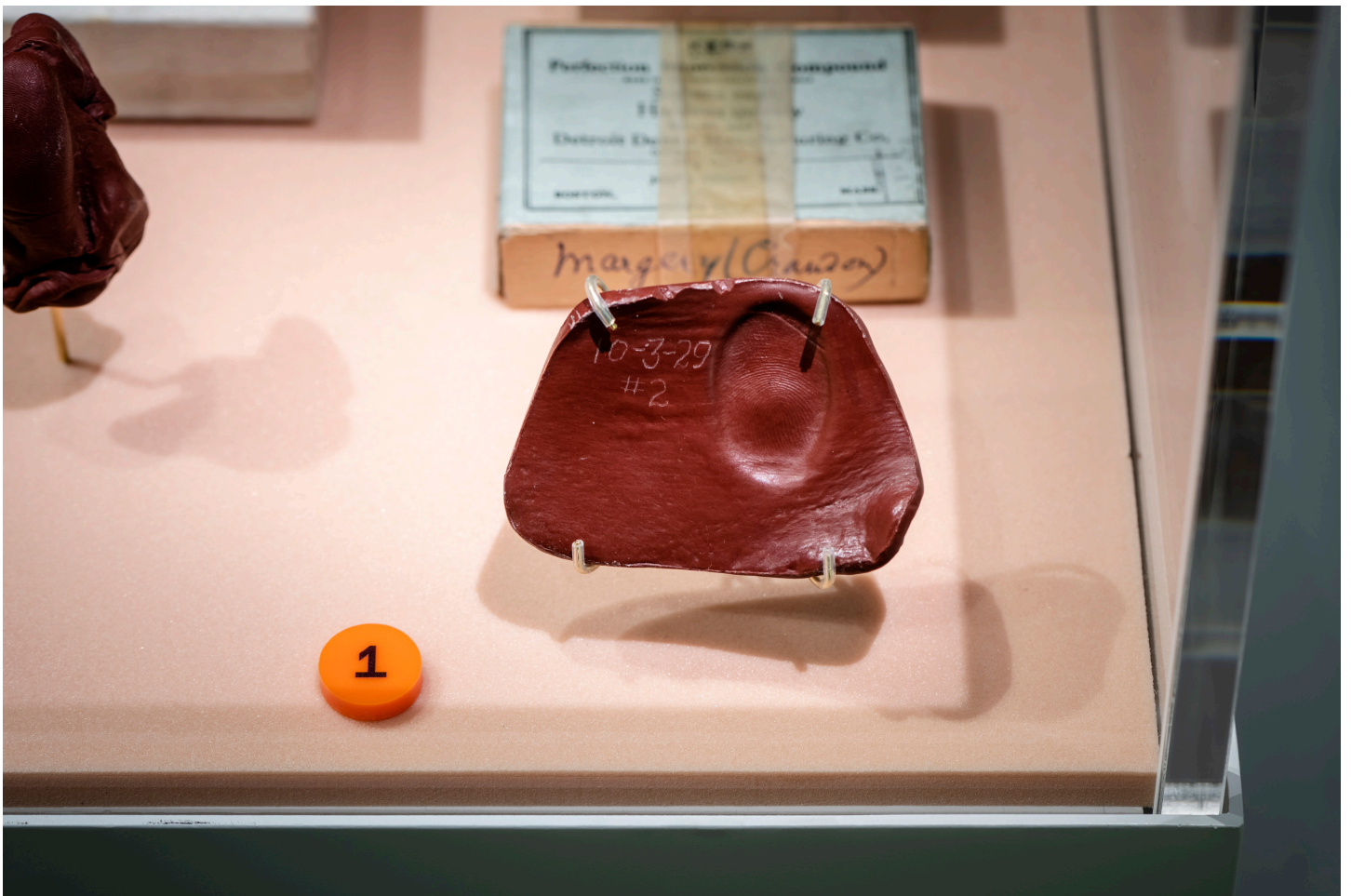
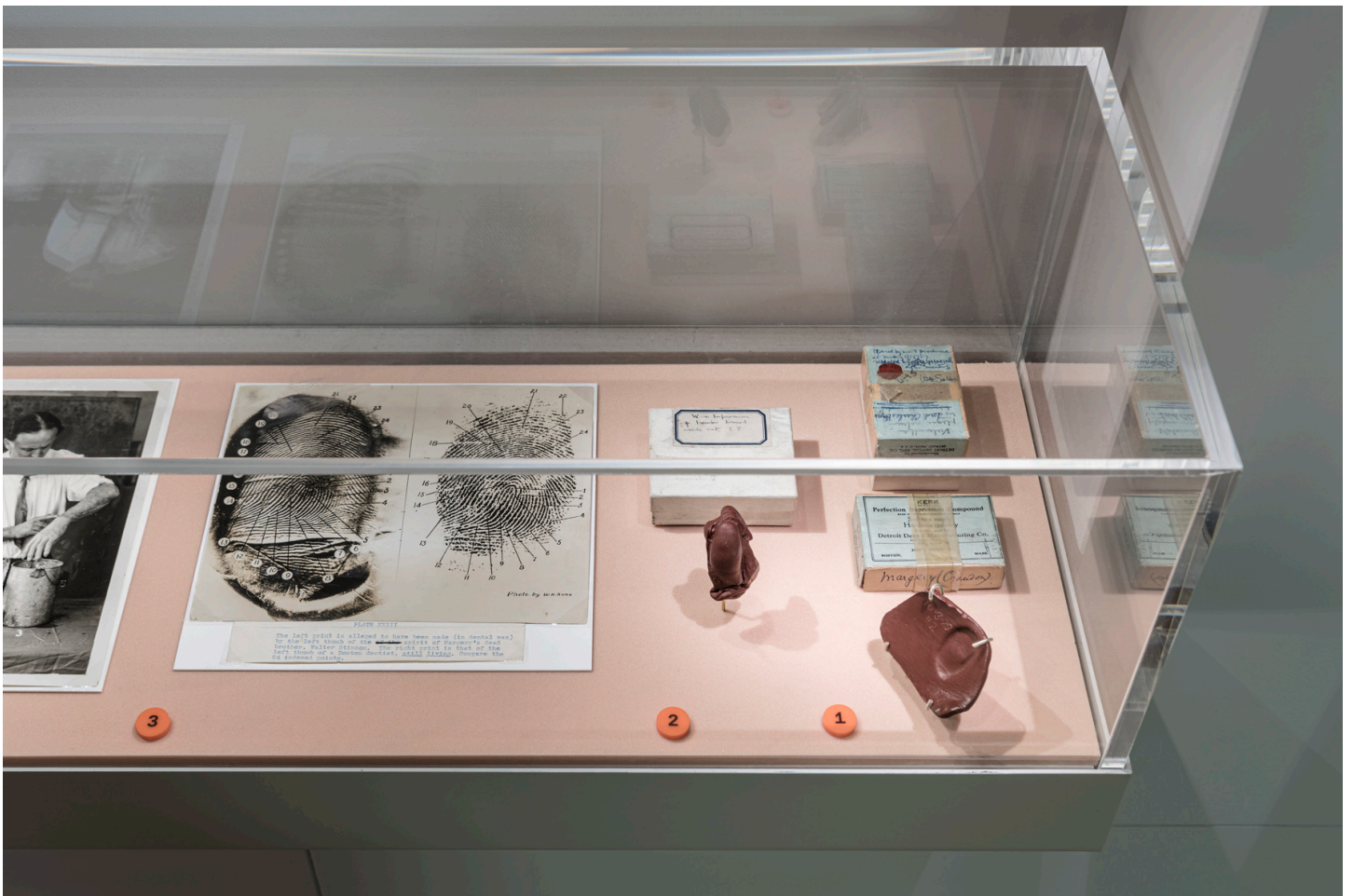
Book plates featuring the fingerprints of sitters at Margery Crandon's séances 1927-30s

Researchers suggested that the hand-like form that appeared to emanate from Margery resembled animal lung tissue. In response, 'Walter', the only spirit she channelled, began to leave fingerprints in wax during the séances. As part of their investigations, the Society for Psychical Research took fingerprints of all those in attendance so that they could not be mistaken for Walter's.

Cambridge University Library and the Society for Psychical Research

Book plates featuring the fingerprints of sitters at Margery Crandon's séances. (1927–30s). Cambridge University Library and the Society for Psychical Research.

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1. Wax fingerprint with blue box, likely attributed to Walter. (1929) | 2. Wax impression of a thumb with white box. (1929). | 3. Comparison of the thumbprint of 'Walter' with that of Boston dentist Frederick Caldwell W H Kunz. (1929). Cambridge University Library and the Society for Psychical Research.

Margery was finally discredited when it was discovered that a thumbprint allegedly produced by Walter was identical to that of Margery's dentist, Dr Frederick Caldwell. Caldwell later admitted to having given her a piece of dental wax impressed with his thumbprint.

Belief and memory

The final part of the first section we presented psychological research that has attempted to understand how different people can perceive and remember the same event in different ways depending on their pre-existing beliefs.

The first experiment was a landmark study from 1887 by psychical researcher Richard Hodgson¹⁵⁷ called *The Possibilities of Mal-Observation and Lapse of Memory from a Practical Point of View*. Hodgson had observed anecdotally that recollections of what happened at a spiritualist séance could vary wildly depending on who was asked to remember. SPR member Eleanor Sidgwick had asked Hodgson whether it was possible to test the memories of séance participants, so he set about designing a study. With the help of magician SJ Davey, he created a series of fake séances where disembodied messages from the dead were being mysteriously written on chalkboards (or slates as they were called then). Sitters were invited to take part, but they were unaware that what they were witnessing was a conjuring trick. Hodgson then asked each participant to write down what they remembered of the séance after the event. He then cross-referenced each written testimony to see if the recollections correlated and if they accurately described what happened.

The results were startling. Some individual recollections of the séances were markedly different from others who attended the same event with members of the same family recalling events in a different order, with different outcomes. Perhaps most tellingly some memories could be shown categorically not to have happened during the séance they attended. Their memories were not just distorted or misplaced recollections but rather demonstrably ‘false’. Those who had the most compelling ‘paranormal’ experiences tended to have a pre-existing belief in spiritualism, while the more sceptical tended to remember events more accurately (albeit without a convincing explanation for the apparently supernatural events).

This remarkable experiment was recorded in the SPR journal in 1887 and thanks to the psychologist Richard Wiseman¹⁵⁸ has come to be thought of as the first recorded experiment that explored the fallible nature of eyewitness testimony and false memory.

The curatorial challenge was to find a way to present the key findings from the study in a way that was compelling and accessible. The only object available was a written account of the experiment in the SPR Proceedings journal, so we decided to create a display that communicated the key findings: that memories of the fake séance differed significantly, and that false memories were more likely to be held by sitters who had a pre-existing belief in the supernatural.

In the SPR journal report, one set of testimonies stood out as an excellent example. A family of three were invited to witness Davey’s séance together and then to record what they remembered after the event. The family was made up of an adult daughter and her elderly parents. The daughter was agnostic in her beliefs about the paranormal, her mother was a committed believer, and her father was

¹⁵⁷ Hodgson, R, Davey, S. J. (1887). *The Possibilities of Mal-Observation and Lapse of Memory from a Practical Point of View: Experimental investigation*. Proceedings for the Society of Psychical Research. 4, 381-495.

¹⁵⁸ Richard Wiseman has created a series of fake séances that use Hodgson and Davey’s methodology as a starting point. His journey through these various events and experiments is described at his website: <https://richardwiseman.wordpress.com/research/psychology-of-the-seance/>

a sceptic – their interpretations of what happened neatly aligned along those positions. The mother’s recall was fantastical with events embellished in ways that differed from the true chain of events recorded by Davey. Inexplicable phenomena were the result of spirit communication, and the intensity of the experience was chillingly communicated. The father was baffled to such a degree that he called upon a pseudo-scientific explanation to speculate about the origins of the phenomena. The daughters’ memories differed again from her parents, and it seemed like her recollections were torn between what she believed possible and what she’d witnessed. She hovered between belief and disbelief. None of the sitters recalled events accurately or mentioned the possibility that what they were witnessing was trickery.

To illuminate these testimonies, we created a three-screen installation where a series of photographs illustrating the explanations were presented in voiceover (performed by actors). The script was lifted directly from the letters sent by each witness to Hodgson after the experiment. It felt like a succinct way to visually represent the study for a gallery audience in 2019, however it’s important to note that it wasn’t the first time the experiment had been re-presented to the public.¹⁵⁹

Since 1995 the magician and experimental psychologist Richard Wiseman has also replicated aspects of Hodgson and Davey’s study several times. In the exhibition, we presented objects from his 2003 study *Belief in the paranormal and suggestion in the seance room*¹⁶⁰ alongside original footage from a 1997 experiment created by Wiseman for the Channel 4 documentary *Equinox: The Secrets of the Psychics*. The take home findings from these ‘fake séance’ studies are remarkably like that of Hodgson’s original work; that memories of such experiences are unreliable and that such recollections are influenced by pre-existing beliefs. Perhaps most significantly Wiseman has also established that those who believe in the paranormal are more likely to be influenced by false suggestions in such settings; whether it be claims of an object moving (when it wasn’t) or a drop in room temperature (when it stayed the same).

This fascinating research provides genuine insight into how the limits of our perceptual systems can be influenced by belief. It also provided a timely reminder for the audience that *Smoke and Mirrors* was about far more than just magic. Here was evidence from a vivid set of psychology experiments that was relevant for the political moment in 2019.

It was at this point in the exhibition that we introduced visitors to the *False Memories of Fabricated Political Events* study by Frenda, Saletan, Knowles and Loftus described in chapter 4 of this commentary. We exhibited the two most compelling doctored photos from the study (Ahmadinejad shaking hands with Obama and Bush holidaying with Clemens) alongside the original ‘real’ images they were drawn from. Next to these images the psychologist Professor Christopher French gave a short interview to camera about the Hodgson and Davey study, whilst highlighting how misinformation can have a substantial impact on how we remember events in our past.¹⁶¹

¹⁵⁹ Video footage available. File: SmokeVideo2

¹⁶⁰ Wiseman, R., Greening, E., & Smith, M. (2003). *Belief in the paranormal and suggestion in the seance room*. *British Journal of Psychology*, 94(3), 285-297.

¹⁶¹ Video footage available. File: SmokeVideo3.



Top: Eye-witness testimonies from the study *'The Possibilities of Mal-Observation and Lapse of Memory from a Practical Point of View'* by Hodgson and Davey. (1887) (recreated for an installation in *Smoke and Mirrors* 2019). The videos produced for the exhibit are available. See file 'SmokeVideo2' (video produced in collaboration with Ben Gilbert, Thomas Farnetti, Jeremy Bryans, Ricardo Barbosa and Ollie Isaac).

Bottom (from left to right): *Objects from the study Belief in the paranormal and suggestion in the séance room.* (2003). Richard Wiseman collection. | *Equinox: The Secrets of the Psychics.* Magician Richard McDougall. (1997). Open Media Ltd.



Top: *Photographs from the study 'False Memories of Fabricated Political Events.'* (2013).
Steven J Frenda, Eric D Knowles, William Saletan
and Elizabeth F Loftus/Slate magazine.

Bottom: *Interview with Professor Chris French.* (2019).
Produced by Jeremy Bryans, Ricardo Barbosa and Ollie Isaac
for Wellcome Collection.
Available to view as file: SmokeVideo3



Leonora Piper confession poster. (1901). Cambridge University Library and the Society for Psychological Research.

Prominent mediums such as Piper gained celebrity status and often made front-page news. On 20 October 1901, the *New York Herald* printed a statement from Piper, advertised as a confession, where it was reported that she didn't believe that the spirits of the dead spoke through her. Five days later the *Boston Advertiser* published Piper's denial of the statement. The poster was pasted on Boston billboards for weeks.

Section 2: Misdirection

In the second section of *Smoke and Mirrors* we explored how magic tricks work by exploiting gaps in our perceptual systems. We displayed objects from the psychology lab alongside stage props, magic kits, photographs, videos, and posters. The section was introduced in the following way:

Magic has been one of the most popular forms of entertainment for centuries. But even if we agree to be deceived, do we really know when and where the deception takes place?

When using misdirection, the magician draws attention to one thing to ensure we are unaware of something else. It is one of the most important skills a conjuror must learn. Audience misdirection includes making us relax our focus at a key moment and guiding us to look in the wrong place at the right time — or the right place at the wrong time.

Psychologists study the art of misdirection to help understand how we perceive and process our daily experiences.

By drawing more broadly on the mechanics behind a magical deception we illuminated how the limits of our perception can be exploited. Why can we be so easily misdirected or distracted from something that is hidden in plain sight? Could having an increased awareness of such tendencies make us better at spotting when we're being manipulated? Using magic as an analogue to explore such questions was another way for us to subtly reference the use of such tactics in a political realm without being too literal. Within a UK context misdirection is a tactic used by politicians to turn voters' attention away from something negative. Boris Johnson described such a tactic in a March 2013 article in the *Daily Telegraph* in the following way:

Let us suppose you are losing an argument. The facts are overwhelmingly against you, and the more people focus on the reality the worse it is for you and your case.

Your best bet in these circumstances is to perform a manoeuvre that a great campaigner describes as 'throwing a dead cat on the table, mate [...] The key point, says my Australian friend, is that everyone will shout 'Jeez, mate, there's a dead cat on the table!'; in other words, they will be talking about the dead cat, the thing you want them to talk about, and they will not be talking about the issue that has been causing you so much grief.

At the centre of a *magician's* attempt to misdirect there is always some form of misinformation that is either amplified or muted by subtle changes of language, tone and gesture. Understanding how such misinformation works in an entertainment context could then help us to understand how it can be used to great effect elsewhere.

Psychological research into misdirection is also fascinating for artists and curators as it allows us to reflect on how our focus, attention, memory, and sight can be understood more effectively. The idea that seeing is more than 'just looking' is a notion that has been central to my training as an artist. Most famously John Berger examined what it means to really 'see' in his seminal 1972 BBC TV documentary *Ways of Seeing* (and his book of the same name¹⁶²) where he explored the hidden meanings that emerge when a viewer truly attends to a work of art or examines popular imagery. This art college staple champions an approach rooted in semiotics that is still key: it connects vision or the

¹⁶² Berger, John. (1972). *Ways of Seeing*. London: Penguin.

act of looking with how we then interpret the world around us meaningfully. Artists and curators ask their audiences to grasp this fundamental idea if they are to become better viewers of whatever epistemological thing has been presented to them - there is a call to *attend* to the encounter in ways that move beyond a mere glance. Firmly positioned as a fundamental part of critical theory developed in parts by Ferdinand de Saussure, Charles Sanders Peirce, Walter Benjamin, Jacques Lacan and Roland Barthes (to name but a few) this key notion could be both supported and to a degree, challenged by contemporary psychological research.



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection. (2019).

Section 2: *Misdirection*. Install shots.



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection. (2019).

Section 2: Misdirection. Install shots.



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection. (2019).

Section 2: *Misdirection.* Install shot.

Dr Gustav Kuhn explains misdirection of reasoning, perception and memory

In 3 short videos shown in this section of *Smoke and Mirrors* cognitive psychologist Dr Gustav Kuhn described a series of experiments that used magic tricks and eye-tracking technology to understand how misdirection works.¹⁶³ In one such study participants were told to carefully watch a simple trick performed by Kuhn where it looked like a cigarette and lighter had vanished into thin air¹⁶⁴. When viewed for a second time on the video (after Kuhn had explained the method) it became clear that he subtly dropped both items whilst misdirecting our attention; merely creating the impression that the objects had disappeared. When Kuhn studied the eye-tracking results from the original study something startling emerged. While many followed the misdirection (in this case a series of simple glances and movements from Kuhn) some were looking *directly* at the hand that dropped the items when the trick was performed. Despite apparently looking in the right place at the right time the method of the illusion had not been perceived.

This finding feels significant for artists interested in semiotics. Here is proof that just *looking* at something is an unreliable guide to understanding what is really going on – we can be literally blind to something that we are apparently looking at. Being armed with this knowledge gives more strength than to the key argument that Berger et al make; that we should try as viewers to move beyond a first encounter with an object – to spend time, dwell, attend, scrutinise and *see* the thing in front of us until meanings of substance begin to emerge. But there is also another issue to consider that potentially conflicts. The idea that we have control over what we choose to attend to *is itself illusory* so we can still miss significant, salient information that gives us a full picture of what is really in front of us.

In another video shown in *Smoke and Mirrors*, Kuhn describes how he and colleagues used the *Princess Card Trick* in an experiment to examine this tendency¹⁶⁵. The observer of the trick is shown 5 different picture playing cards (Jacks, Queens, Kings) of varying suits on video and is asked to focus intently on one of the cards. The cards are then shuffled back into each other, and the participant is told to think about their card. It's explained to them that the magician will now 'read' their mind through the screen and make their selected card disappear. As the cards are then redisplayed their chosen jack, queen or king has gone and only 4 cards remain. It's a remarkable effect and if successfully performed very baffling.

What is really going on is that *all the cards* have been replaced with other picture cards from other suits – replaced surreptitiously by the magician by sleight of hand. Because the participant is asked to focus intently on just one card, a significant majority (57%) failed to notice the specific details of the other picture cards. This simple trick (performed via pre-recorded video) exploits our inability to *see* beyond a small focal range and our limited capacity to remember all the information that appears in front of us at any one time.

¹⁶³ Each video is available to view. File: SmokeVideo4 (Reasoning), SmokeVideo5 (Perception) and SmokeVideo6 (Memory).

¹⁶⁴ See SmokeVideo4 (Reasoning), (Kuhn G, Tatler BW. (2005). *Magic and Fixation: Now You Don't See it, Now You Do*. Perception. 34(9).)

¹⁶⁵ See SmokeVideo6 (Memory). (Jeniffer Ortega, Patricia Montañes, Anthony Barnhart, Gustav Kuhn. (2018). *Exploiting failures in metacognition through magic: Visual awareness as a source of visual metacognition bias*. Consciousness and Cognition. Volume 65, Pages 152-168.)

Our brains are very adept at disguising these perceptual limitations by making illusory predictions about what is happening in front of us. In the final short video Kuhn describes another experiment that uses the vanishing ball trick¹⁶⁶. A magician is filmed throwing a ball repeatedly up in the air and catching it. On the last throw the ball is not thrown in the air and simply ‘palmed’, however the magician creates the impression that it has been thrown upwards in the same way as before. In the original study Kuhn says:

63% of observers perceived the ball leave his hand, move upwards, and disappear even though the ball did not leave the magician's hand. Moreover, observers' illusory perception of the ball was determined by cues that indicated the ball's location, namely the magician's head direction, rather than the percept itself.

Such an analysis of this simple trick suggests that our brains are efficient predictors of events as they are happening (people thought they ‘saw’ the ball move upwards and leave the top framing of the screen) but that deceptive processes can short-circuit this attribute. Perhaps most interestingly Kuhn et al reported a discrepancy between what was perceived and the participants eye movement. Tracking technology indicated that participants ‘saw’ the trick accurately with people initially glancing at the magician’s social cues and then following the ball when it was being thrown. When the ball was palmed, most observers still glanced at the magician’s cues but *didn’t* then follow the movement of the ball they were imagining – indicating that the actions of the performer were enough to create the perceptual illusion. As Kuhn notes “These results illustrate a remarkable dissociation between what participants claimed to have seen and the way in which their eyes behaved”.

Evidence of a difference between what is *seen* and then *perceived* is a fundamental finding from psychology. Magicians are particularly adept at exploiting these gaps, however in the real world our intuitive ability to predict what might happen next is extremely useful, when reacting quickly to a threat or for example catching a ball travelling at speed. We’re also creatures of focus - we are good at doing one task at a time but when other demands are made on our attention, we can literally miss something that is right in front of our eyes.

In a now famous 1999 experiment called the *Selective Attention Test* by the psychologists Simon Chabris and Dan Simons¹⁶⁷ (shown in *Smoke and Mirrors*) participants were asked to watch a video of two teams of basketball players throwing the ball to each other and to count the amount of time the ball was thrown. About half-way through a person dressed in a gorilla suit walks across the screen, stops, bangs her chest, and then walks off. Astonishingly over half of the people who take part in the experiment simply don’t see the ‘gorilla’ walking into the middle of the basketball court. Their attention is so focussed on counting the passes that all other visual information is seemingly excluded from how the video is perceived. This phenomenon known as *Inattentional Blindness* plays a crucial role in determining what we actually ‘see’ in any given scenario. Like Kuhn’s vanishing ball illusion, eye-tracking studies confirmed that people looking directly at the gorilla are just as likely to miss it as

¹⁶⁶ See SmokeVideo5 (Perception). (Gustav Kuhn, Michael F. Land. (2006). *There's more to magic than meets the eye*. Current Biology, Volume 16, Issue 22, Pages R950-R951.)

¹⁶⁷ Simons DJ, Chabris CF. (1999). *Gorillas in our Midst: Sustained inattentional blindness for dynamic events*. Perception. 28(9):1059-74. Video can be found at: <https://youtu.be/vJG698U2Mvo>

those looking elsewhere¹⁶⁸. These limits to our perception are useful to know about if for example you're designing policy for road safety. Studies show that drivers speaking on a mobile phone are far more likely to have an accident than those who are not - even when 'hands free'¹⁶⁹. Their attention is being distracted to the point that they could be 'looking' at something on the road that they just don't see.

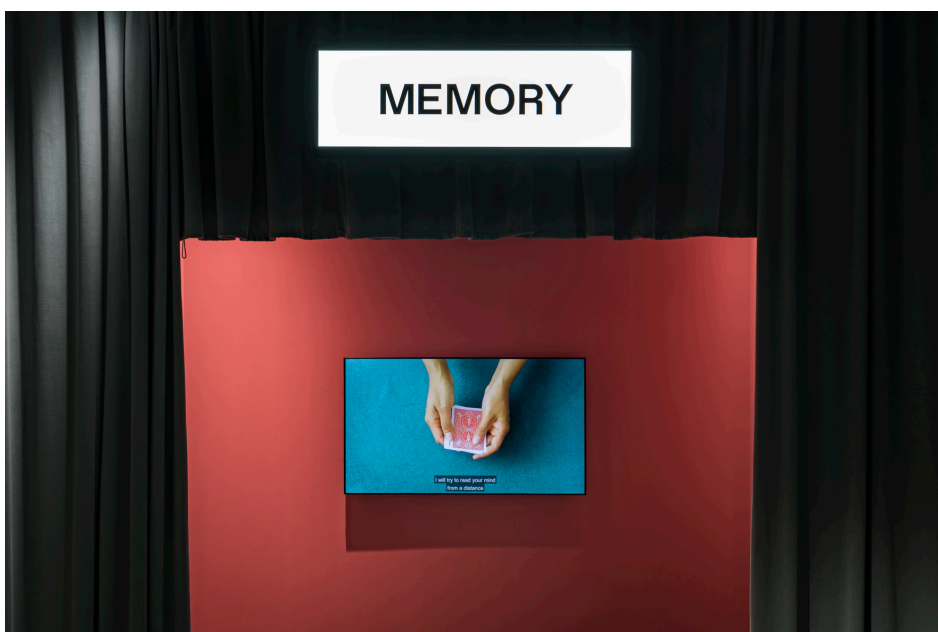
There are important lessons for artists and curators to draw from such findings. Why when we're revelling in the wonders of subjective interpretation of an art object are we not framing our discussions with *a basic understanding of how we actually see*? If we're demanding as artists that our audiences attend meaningfully to what we present, then grasping some of these established psychological principles feels to me to be of the utmost importance. John Berger talked about how to read artworks and objects as representations of ideological constructs - that within the interpretation of the visual there are hidden capillaries of power waiting to be discovered. How we read these narratives though is surely reliant on how our visual systems process the objects in the first place? By grasping the science of how we look, see and then perceive, we can become better artists and interpreters without necessarily feeling the need to make work that is literally about such research.

And what of those narratives that Berger et al are suggesting in relation to a meaningful interpretation of the visual? Like for example, that imagery of women in art and popular culture reflects patriarchal agenda and that the history of art is indicative of a history of wealth, power and privilege? To me, these meanings still feel incredibly salient, compelling and truthful, but I'm far more likely to be drawn to such narratives because they connect with the stories that I tell my 'self' about the way the world works. What if I have little control over what information I attend to? Perhaps I'm more likely to perceive objects that are better at re-asserting my pre-existing beliefs and biases in ways that I like to think are *challenging me to think in different ways*. But when I'm honest about the nature of this challenge who am I imagining? Is it what I think of as 'me' or *the other* - the next viewer who I think should be seeing the world in the way that I think it works? Often the challenge it poses to me, is just a case of gradually joining the dots of my own inner beliefs and fictions.

Berger made a similar point himself in *Ways of Seeing* by making clear that perception is influenced politics and culture, highlighting that what we may see differs among people and between different groups. The science of subjectivity here illustrated by three simple experiments using magic tricks, appears to bolster some assertions made in semiotics about the true nature of seeing, whilst also highlighting the fact that close attention to a *thing* can still result in conclusions that are illusory and erroneous.

¹⁶⁸ Daniel Memmert, Daniel J. Simons, Thorsten Grimme. (2009). *The relationship between visual attention and expertise in sports, Psychology of Sport and Exercise*. Volume 10, Issue 1, 2009, Pages 146-151.

¹⁶⁹ University Of Utah. (2003). *Cell Phone Users Drive 'Blind'; Study Explains Why Hands-Free Phones Just as Bad as Hand-held*. ScienceDaily. www.sciencedaily.com/releases/2003/01/030129080944.htm



Dr Gustav Kuhn explains misdirection of reasoning, perception and memory. (2019).
Videos produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

In three videos Dr. Gustav Kuhn describes how magical illusions can illuminate fundamental psychological insights about how we see, behave and remember. Each video is available to view. Files: SmokeVideo4 (Reasoning), SmokeVideo5 (Perception) and SmokeVideo6 (Memory).

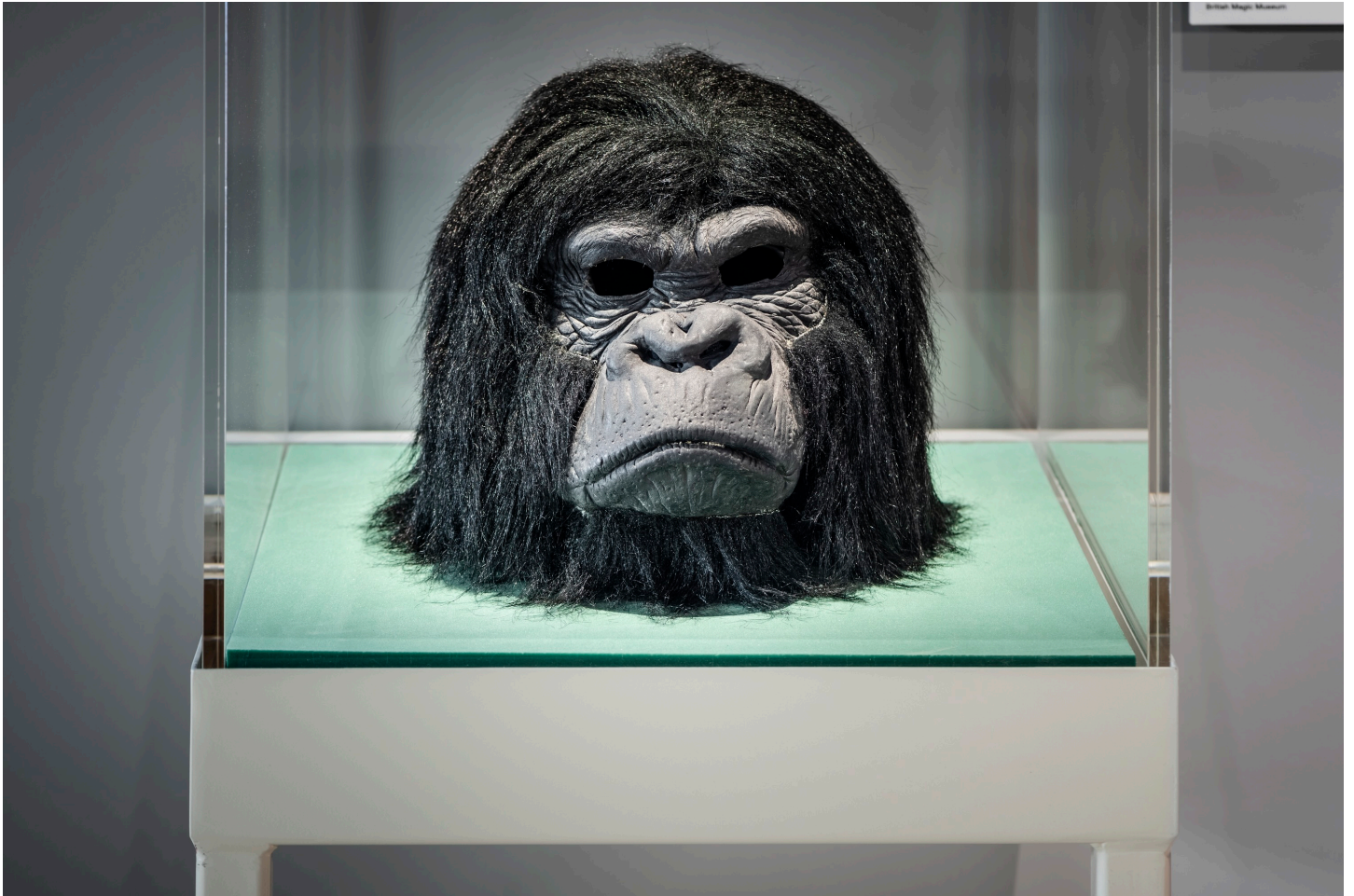


Selective Attention Test
1999
1 min 21 sec

Many forms of misdirection exploit our ability to focus attention and avoid distraction. This video is from an influential study demonstrating the surprising way that our attention can influence our awareness of the world around us.

Daniel J. Simons and Christopher F. Chabris

Selective Attention Test. (1999). Daniel J Simons and Christopher F Chabris.



Head of a gorilla suit, worn by Derren Brown in his stage show 'Mind Reader: An Evening of Wonders'. (2007–08). British Magic Museum.

Brown's sold-out show featured a tribute to the video from the Selective Attention Test created in 1999 by Daniel J Simons and Christopher F Chabris, shown nearby. In the original experiment, around fifty per cent of the participants who watched the video did not see the gorilla walk across the screen.

Tommy Cooper, Magic sets, wands, and a sawing in half box

Alongside these glimpses into fundamental questions posed by a broader understanding of the psychological processes that underpin our experiences of magic, we also displayed a range of objects charting the development of magic as a form of popular entertainment and hobby. A video projection of the famous and well-loved British magician Tommy Cooper showed him performing an exquisite piece of misdirection called the *egg-bag trick* where an apparently bumbling, inept and shambolic performance was designed to hide skilful sleight of hand. It was an example of a ‘sucker’ trick, the audience is led to believe they know how the trick is done but are later proved wrong. This was shown alongside his famous ‘fez’ and two stage drawings where his meticulous plans for each performance revealed the intricate method behind his seemingly improvised madness.

We also displayed a range of magic wands that all looked the same but that performed different functions, magic kits from the Victorian era to the present day, a book series by Pearson’s called *Amusements for the Home* (1913-1925) that illustrated how to perform a range of simple magic tricks, an original poster advertising the Tarbell Correspondence Course (1929) that was the first home study course in magic and a range of materials from *Davenport’s* – the world’s oldest family magic business founded in 1898. We exhibited a replica of the first ever sawing in half box originally designed by PT Selbit in 1921, here recreated by the famous British magician Paul Daniels. It was used to saw his assistant Debbie McGee in half in one of his hugely popular television specials in 1982.

The use of female assistants in magic performance was an anachronistic tendency that we wanted to touch upon in this section. Even though their role within the performance was presented as being subservient and secondary to the male magician, female assistants were often the most crucial part of the trick. They were not just a simple misdirection - if anything the male performer was often the one misdirecting the audience’s attention away from the assistant, because they were often responsible for the completion of the illusion by using extraordinary physical dexterity and great skill. McGee is now considered to be a legendary figure within British magic having received the prestigious Maskelyne Award from the Magic Circle in 2017.

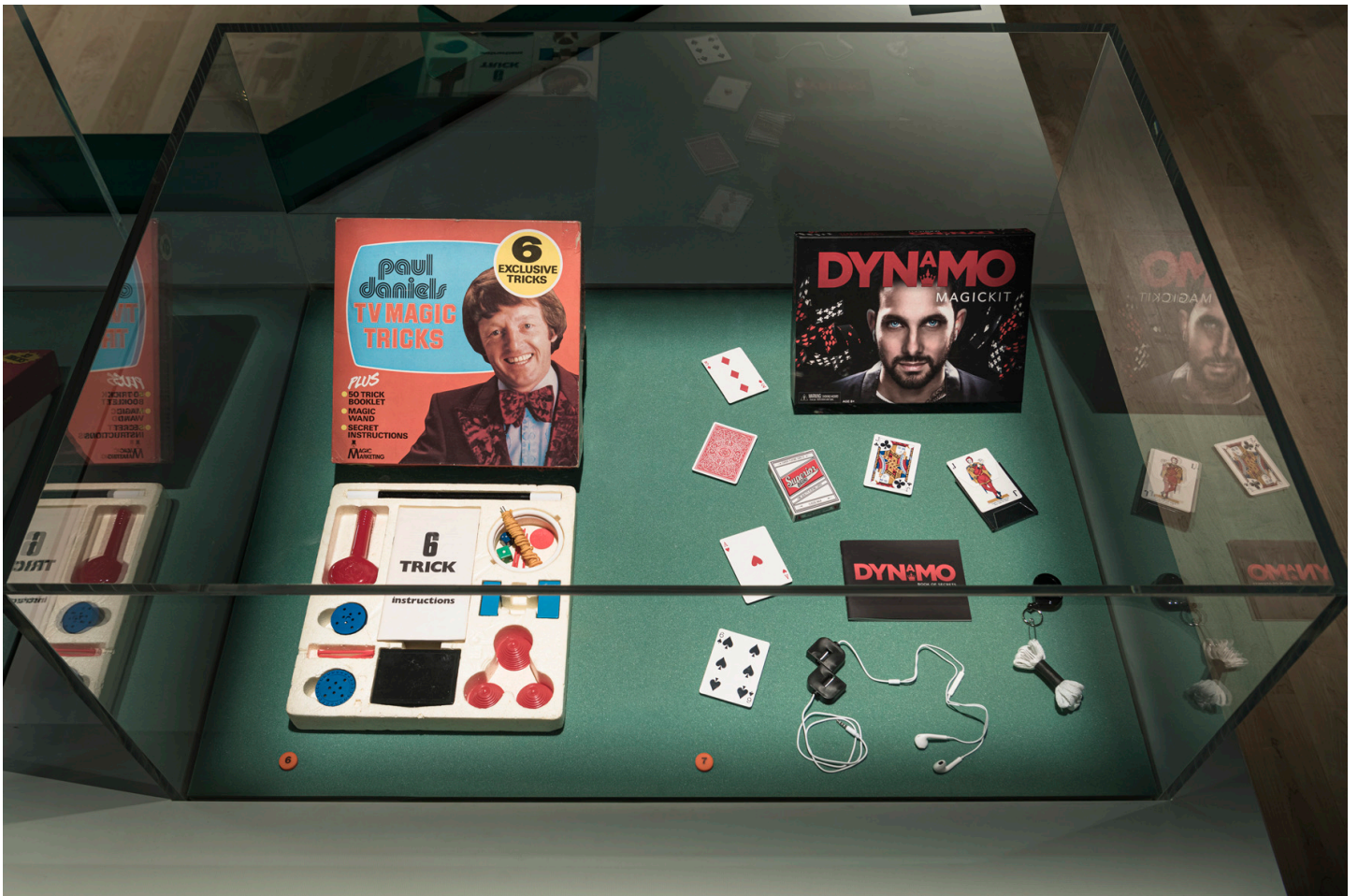
This uneasy relationship between male and female magic performers was explored further in an artwork by Daria Martin at the end of the section. In *Closeup Gallery* (2003) shot in 16mm film and seen within a purpose-built projection space, a magician and his female assistant engage in a strange game of illusion, transformation and sleight of hand, exploring the formal and abstract qualities of a performance. He is practising the tricks with a deck of cards while she looks on and attempts to copy him. They both occasionally make mistakes and exchange charged glances and uncomfortable smiles with each other. A dynamic exists where he seems to want to be in control and despite his slick, confident demeanour he seems *small*. What is his intention? Why does he strive to deceive and how does he perceive the role of his assistant? She is keen to learn, and her body language is responsive, however there’s a sense that she’s aware of the power she has as a performer to complete whatever idea he has in mind. As individuals you sense they’d fall short as performers, but together they seem to emit a collective energy that is compelling to watch. The work is also about the materiality and oddness of 16mm film as a magical medium in a 4K world. The footage is hard to place in time – shot in 2003 and experienced in 2019 in a dark room with a whirring projector, it *feels* like it could be the 1970s or 80s - an era that evokes a different time in entertainment when gender roles were more prescribed and popular culture was riven with prejudice. Something feels uncertain and unresolved. There are hidden powers at play being illustrated in this uncanny piece of filmmaking by Martin that

are overwrought and manipulative but it's hard to place who is orchestrating them more effectively.
Was it the assistant or the magician?



Top: *Tommy Cooper performing the egg bag trick.* (1975). Fremantle Media/The Tommy Cooper Estate.

Bottom: *Handwritten stage plan and prop set-up by Tommy Cooper.* (20th century). Victoria and Albert Museum. | *Fez belonging to Tommy Cooper.* (20th century). Shaun Prendergast collection.



Top (left to right): *Box of Tricks*. (1843). British Magic Museum. | *Ernest Sewell's Cabinet of Conjuring Tricks*. (1927–30). Philip David Treece. | *Maskelyne's Mysteries*. (1954–56). Philip David Treece.

Bottom (left to right): *Paul Daniels TV Magic Tricks*. (1980s). *Dynamo Magic Kit*. (2015). Both purchased by Wellcome Collection for exhibition.



Top: Books from the 'Amusements for the Home' series published by C Arthur Pearson Ltd. (1913–25). Philip David Treece.

Bottom (left to right): Original artwork for magic trick advertisements. (20th century). British Magic Museum. | Tarbell Correspondence Course. (1929). Paul Kieve collection, London.



Magic wands. (1925–50). Private collection.



Top: *Sawing through a woman*, cabinet used by Paul Daniels and Debbie McGee. (20th century). British Magic Museum.

This famous illusion is an example of how the female assistant has been used as a form of misdirection. The audience may assume that she is secondary to the (male) magician, while she secretly performs acts of incredible skill to make the illusion work. Designed by magician PT Selbit in 1921, this replica of his original box was used by Paul Daniels to saw Debbie McGee in half in 1982.

Bottom: Stock poster *American Beauty*. (Around 1920). Paul Kieve collection, London.



Closeup Gallery. (2003). Daria Martin. 16mm film displayed at *Smoke and Mirrors*. Daria Martin, courtesy Maureen Paley, London

Section 3: Mentalism

The final section of *Smoke and Mirrors* looked closely at a branch of stage magic called *Mentalism*. Made famous in recent years by the popular UK performer Derren Brown, mentalism creates the impression that a magician can perform extraordinary acts of mind-reading, mind-control and extra sensory perception (ESP) on audience members. The section text introducing the objects on display read:

A mentalist is a magician whose performances include mind reading and other mind control stunts. Some magicians claim to be genuinely psychic and some to read hidden psychological ‘tells’. Others admit to using trickery and illusion.

Such performances captivate the public, but how far can a magician really control your thoughts, beliefs and decisions? Can some psychological traits be secretly exploited to influence our decision-making? Are our beliefs as resilient as we think they are? How susceptible are we to suggestion?

The potential of ‘psychic forces’ has fascinated audiences, scientists, artists, and the military throughout the late 20th and early 21st centuries. The magician creates performances that satisfy this need to believe in the extraordinary. In the laboratory scientists are using similar techniques to explore whether free will — the idea that we choose our actions freely — is merely an illusion.

We gathered artefacts and stage props from the art of mentalism and presented them alongside psychology experiments that explored what happens to audiences when they are exposed to something that is seemingly inexplicable. We contextualised these insights by clearly illustrating how such techniques (when not framed as trickery) can be used to exploit our belief in free-will, our fascination in extra sensory perception and psychic phenomena. We concluded the exhibition by focussing on the work of cognitive psychologist Jay Olson who uses mentalist techniques in the lab to see if they can encourage self-healing and the placebo effect. These combined elements boldly revealed some of the technique’s used by magicians, psychics and preachers to control others, with the aim of encouraging the viewer to reflect on the ethics of such deceptions.



Smoke and Mirrors: The Psychology of Magic. Wellcome Collection. (2019).

Section 3: *Mentalism*. Install shots.



Top: Materials documenting the creation of the Hypnotism Act. Wellcome Collection.

The Hypnotism Act was passed in 1952 for the licensing of public hypnosis stage shows. It was introduced after a prominent court case in which 18-year-old Diana Grace Rains-Bath successfully sued the American hypnotist Ralph Slater. She claimed to have suffered mental damage as a result of being hypnotised at Slater's show at the Brighton Hippodrome. Psychiatrist Carlos Paton Blacker helped the MP Barnett Stross to make a case for the Act by giving an assessment of the health risks of stage hypnosis.

Bottom (left to right): *Dunninger, The Master Mind of Stage and Radio* poster. (20th century). The Magic Circle. | *Derren Brown Mind Reader* (2007–08). The Magic Circle. | *Trailer for Derren Brown's 'The Push'*. (2016). Netflix, Inc.



Top: Mask worn in a mind-reading act. (20th century). British Magic Museum.

Masks are worn by stage mind readers to create the illusion that they cannot see visual clues that might help their predictions.

Bottom: Selection of contemporary mind-reading tricks from Davenport's Magic Shop. (2018). Purchased by Wellcome Collection.

McGill researchers show how magicians sway decision-making

The section began by the audience being asked to take part in a simple magic trick. On a screen, a full deck of cards was being automatically flipped through by a computer in 1.7 seconds. The audience was then asked to freely select a card at random from the deck they'd just seen at speed. What they didn't know was that one card was paused on for a fraction of a second longer than the others. It was in magic parlance *forced* on them. The video was first used in a psychology study where 30% of the participants named the target card as their choice¹⁷⁰. This is a significant minority, however, when the forcing trick was repeated in person by a magician, the overall hit rate for the forced card was a staggering 98%. The social cues and a persuasive encounter with another person dramatically improved the effectiveness of the technique, providing compelling evidence that a trick's success is reliant on the person performing it.

The other significant finding from the study was that 91% of the participants believed that they had freely chosen the card on their own terms and that their choice had not been manipulated by the performer. The simple idea of analysing why a basic card trick works, starts then to provide some tentative evidence that belief in our own free-will (at least in certain settings) is illusory. If the participants felt like they were in control of their decisions when it was demonstrably not the case, then how can such a perceptual gap be mined by stage magicians *and also* those who don't admit to being conjurers?¹⁷¹

¹⁷⁰ Jay A. Olson, Alym A. Amlani, Amir Raz, Ronald A. Rensink. (2015). *Influencing choice without awareness*. *Consciousness and Cognition*, Volume 37, Pages 225-236



McGill researchers show how magicians sway decision-making (2015). Participant Sophia K Metcalf. Jay Olson, McGill University.

On the reverse of this screen, visitors were asked to pick a card from a computer that flicked through a full deck of cards at speed. People most commonly chose the Queen of Hearts. This card was forced — it was shown longer than the others. When scientists repeated this in person, flipping the deck themselves, 98% of participants chose the card shown longest. 91% of participants felt the choice had been entirely their own. A video about the experiment can be viewed at <https://youtu.be/9JFYDENm64w> .

Magic Performances - When Explained in Psychic Terms by University Students

In 2018 a large group of young psychology students in Lucerne watched an incredibly moving performance by a psychic. A video documenting event was shown in *Smoke and Mirrors*. The footage showed a softly spoken, down to earth performer. After an introduction by the psychology professor at the university and an initial faltering performance, he called a random member of the audience up on stage to see if he could help her reconnect to someone she had lost.

The young woman was also nervous. She was asked to think of someone she knows who might have passed away and then after a while, the psychic started to get some messages through from beyond the grave. He managed to establish that her father had died and that he was starting to get communications from him. He nearly guessed his name (Jack not 'Zach') and then managed to describe a hobby that was important to him. It was then that the participant started to break down in tears. He gently consoled her and assured her that all was well and that he's very proud of her. The audience sat in stunned silence and the tension in the room was palpable. It looked like an extraordinary, affecting and life changing moment for the performer, the participant and audience.¹⁷²

But the performance was a hoax designed as part of a psychology experiment looking at how audiences explain and understand anomalous experiences¹⁷³. The shambolic psychic was an experienced magician, and the seemingly 'random' member of the audience was a confederate: an actor who did a remarkable job of convincing everyone that she was genuinely affected. After the performance and before the debrief, the audience was asked to feedback about what they witnessed and to attribute the affects either to religion, genuine psychic phenomena, or trickery. Despite being psychology undergraduates, nearly three-quarters described the performance as being genuinely psychic or religious in origin.

This wasn't the first time that psychology students had been duped in this way by a lecturer. In 1980 Victor A Benassi designed a similar experiment, giving a different pre-brief for the participants. For some he implied that the magician was genuinely psychic and in the other he said the magician was performing tricks. In conclusion Benassi noted:

These instructional sets succeeded in manipulating proportion of occult belief. However, proportion of occult belief was above 50% and far exceeding magic beliefs in each experimental condition, even though, as indicated by a manipulation check, subjects in the Magic conditions heard and understood the instructors' assertions that the accomplice was a magician who would be faking a psychic performance.¹⁷⁴

It seems that despite knowing better, we're still magnetically drawn to the narrative that some people have psychic abilities, that the mystical is touchable and most worryingly that were willing to believe what someone is telling us - even when we're aware that it's laced with extravagant lies.

¹⁷² See file: SmokeVideo7

¹⁷³ Lesaffre, L., Kuhn, G., Abu-Akel, A., Rochat, D., Mohr, C. (2018). *Magic Performances – When Explained in Psychic Terms by University Students*. *Frontiers in Psychology*.

¹⁷⁴ Benassi, Victor A.; Singer, Barry; Reynolds, Craig B. (1980). *Occult Belief: Seeing Is Believing*. *Journal for the Scientific Study of Religion*. Dec. Vol. 19, No. 4.

The Fallacy of Personal Validation: A Classroom Demonstration of Gullibility

In Los Angeles in 1948 the psychologist Bertram Forer discussed with his 39 students a new personality test he'd created called the *Diagnostic Interest Blank* (DIB)¹⁷⁵. He claimed could create an accurate personality description with the DIB based on answers to simple questions. The idea appealed to his students, and they asked if they could complete the test. Forer duly obliged and asked them to fill out the forms. He then spent a week 'analysing' the responses and creating a short vignette for each participant that described their unique personality. When the students were handed their personality overviews, they were asked to rate the accuracy of the of the description on a scale of 0-5, with 5 being the most accurate. The average score was 4.26 – a significant result and proof that Forer's DIB was effective at analysing personality traits.

After Forer had revealed the results of the accuracy ratings, he then informed his class that each personality description was in fact *identical*. Each student had received the same overview that covered a range of differing personality traits. In *Smoke and Mirrors* we displayed a large text projection of the personality statements Forer originally used in the study, that read as follows:

1. You have a great need for other people to like and admire you.
2. You have a tendency to be critical of yourself.
3. You have a great deal of unused capacity which you have not turned to your advantage.
4. While you have some personality weaknesses, you are generally able to compensate for them.
5. Your sexual adjustment has presented problems for you.¹⁷⁶
6. Disciplined and self-controlled outside, you tend to be worrisome and insecure inside.
7. At times you have serious doubts as to whether you have made the right decision or done the right thing.
8. You prefer a certain amount of change and variety and become dissatisfied when hemmed in by restrictions and limitations.
9. You pride yourself as an independent thinker and do not accept others' statements without satisfactory proof.
10. You have found it unwise to be too frank in revealing yourself to others.

Forer then explained to the students that he'd drawn the descriptions from a newspaper horoscope column. Forer wrote in his original paper "Since many of the class had indicated their embarrassment at having been "taken in," the writer suspected that the dynamics of the memory process would operate in the direction of healing the results of this assault to self-esteem."

This landmark study has been replicated consistently¹⁷⁷ and was for a while known as the *Barnham Effect* after the famous showman P.T. Barnham who was reported of saying that there was a "sucker"

¹⁷⁵ Forer, B.R. (1949). *The Fallacy of Personal Validation: A classroom demonstration of gullibility*. *J Abnorm Psychol*. Jan;44(1):118-23.

¹⁷⁶ This line has suffered slightly from the passing of time and was not included in the projection shown at *Smoke and Mirrors*. A contemporary reader can safely assume that what is meant is that going through puberty was a challenge.

¹⁷⁷ For example see Johnson, J.T., Cain, L.M., Falke, T.L., Hayman, J., & Perillo, E. (1985). *The "Barnum effect" revisited: Cognitive and motivational factors in the acceptance of personality descriptions*. *Journal of Personality and Social Psychology*, 49, 1378-1391.

born every minute. This is now rightly seen as a rather ungenerous name for an effect that has wide implications for how we can *all* misread generic information as being specific and personal. Similar techniques are widely used by mentalists and across the psychic industries to create an uncanny sense that they are ‘receiving’ salient information about the person they’re with. It’s called *cold reading* and there are different ways that certain generalised statements can be re-tailored in one-to-one settings to get closer to what feels like a personal truth.

In *Smoke and Mirrors* the psychologist, magician and fake psychic performer Rob Bailey explained on video how it can work.¹⁷⁸ Generalised Forer style statements are combined with common sense impressions of the sitter. If for example someone is in their 20s then you can make a series of educated guesses about why they’re motivated enough to pay for such a service – it could be that they’ve lost a grandparent or a parent, so you’d vaguely gesture in that direction and then ‘read’ their response and tailor your reply accordingly. With this method even ‘misses’ can become ‘hits’. The performer adapts the narrative as the reading progresses. If they get it wrong, they can simply claim that the messages are slightly confused or hard to hear. Some performers are better than others, but when done well it can be an incredibly affecting experience.

¹⁷⁸ See file SmokeVideo9.



Left to right:

Video from the study Magic Performances - When Explained in Psychic Terms by University Students. (2018). Lise Lesaffre, Gustav Kuhn, Ahmad Abu-Akel, Déborah Rochat and Christine Mohr.

A large group of psychology students watched a staged magic performance that mimicked a psychic reading. Afterwards they were asked how to explain what they saw - whether in terms of conjuring tricks, psychic powers or a religious miracle. Results showed that around three-quarters of the audience considered the performance to have been genuinely paranormal. File: SmokeVideo7

Interview with Professor Christine Mohr. (2019). Produced by Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection.

Christine Mohr is a professor at the Institute of Psychology at the University of Lausanne, Switzerland, where she studies the psychology of belief. Most recently, she has been investigating the use of false psychological demonstrations by magicians, asking whether this can create misleading beliefs. Video Available. File: SmokeVideo8

Statements from the study The Fallacy of Personal Validation: A Classroom Demonstration of Gullibility. (1948). Bertram R Forer.

In 1948 psychologist Bertram Forer asked his students to complete a personality test. They were then given an analysis of their personality and asked to rate it on a scale of 0–5, with 5 being the most accurate. The average score was 4.26. Forer revealed that each student had received the same analysis, inspired by an astrology column'. The study illustrated that we tend to accept generalised descriptions as being representative of our individual personalities.

Footage of the exposé of Peter Popoff

Alongside the Rob Bailey video we displayed a poster advertising the famous stage mentalist *Alexander the Great* who used such techniques to great effect alongside another method called ‘hot reading’ that is designed to create the impression that he knew highly specific details about members of his audience. Hot reading is when a ‘mind-reader’ has managed to access information about the audience prior to performing. To illustrate how these techniques can work, we exhibited a short video from 1985 of the televangelist Peter Popoff performing a hot reading trick on his congregation.

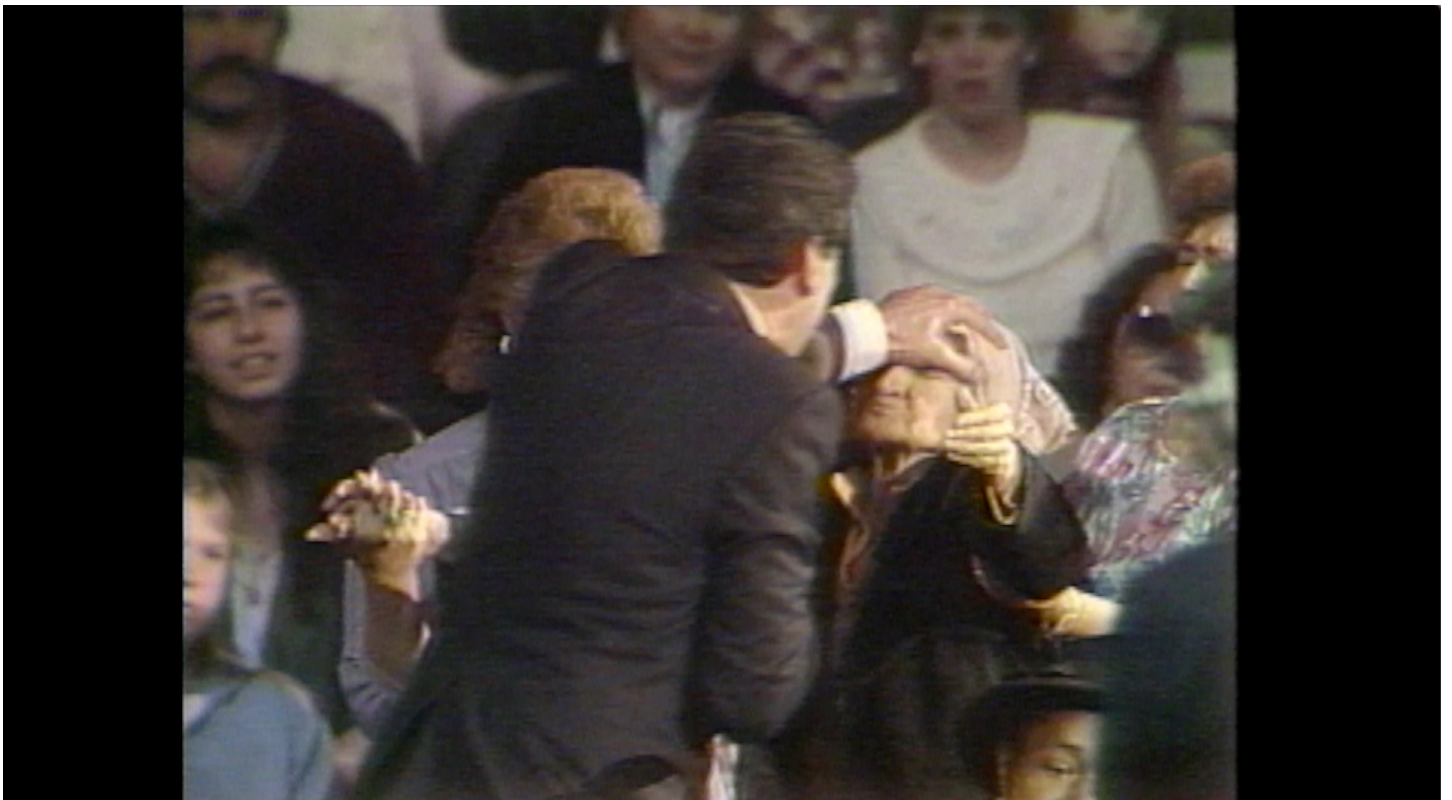
In the 1980’s Popoff was at the vanguard of the evangelical counter-cultural movement in the USA. Dedicated TV channels were used as missionary devices by evangelical preachers, to communicate and recruit new members to their churches. In Popoff’s passionate televised addresses in packed auditoria, he claimed that he could literally perform healing miracles. He would stalk around the stage calling upon God and praising Jesus at the top of his voice. Gradually a message would start to come through; hard to hear at first but then a name, that he’d call out to the audience. He’d then move into the congregation, approach the ‘chosen one’ and pull them out into the full glare of the audience. He’d hold them, touch them, lay his hands on their head, whilst all the time providing extraordinarily detailed messages from God about where they were from, why they were there and what ailment they wanted to heal.

Then suddenly he’d burst forth, slamming his hand on their foreheads while shouting a healing prayer. The recipient would collapse backwards seemingly overwhelmed by the invocation. Popoff would catch them as they fell and then lower his tone, reassuring them that all was well and that they were healed. They would be told to throw away their glasses and hearing aids, dispatch wheelchairs and walking sticks. The audience would be in rapture and the large buckets being handed around each row of the congregation, would be filled to the brim with money.

Throughout the 1980s the famous magician James Randi had been challenging several psychics on live TV. Stings included swapping Uri Geller’s equipment to illustrate that his psychic abilities were mere tricks (on *The Tonight Show with Jonny Carson*) and goading claimed psychic James Hydrick on *That’s My Line*. Randi’s debunking antics were popular with the public, in the same way John Neville Maskelyne had wowed the crowds in Victorian London. Here was a trained magician smelling a rat and wanting to inform the public that they were being exploited by a range of simple, easy to perform tricks.¹⁷⁹

When he heard about Popoff, Randi was convinced that he was using hot reading; somehow, he was finding out information about his congregation before they attended his sermons and Randi wanted to find out how. Working closely with his associate Steve Shaw (stage name *Banachek*) and the crime scene analyst Alexander Jason, Randi set about trying to debunk Popoff for a live TV sting on *The Tonight Show*. With computerised radio scanners, Jason illustrated that Popoff’s wife Elisabeth was feeding him information via a wireless radio transmitter from off stage to an earpiece. The information had been taken from prayer cards that had been completed by members of the congregation before Popoff took to the stage. She just took the ‘best’ ones and communicated the salient information to her husband. Jason was able to record several examples of the practice, which he then spliced together with recorded footage from the performance.

¹⁷⁹ At time of writing the debunking of Geller can be seen at <https://youtu.be/zD7OgAdCObs>. Footage from Randi’s challenge to Hydrick can be viewed here: <https://youtu.be/9cS6DjeBz7g>



Top (right to left): *Comedian and psychologist Rob Bailey explains cold reading.* (2019). Video produced by Wellcome Collection. Video available. File: SmokeVideo9 | *Alexander The Man Who Knows.* (1920). Paul Kieve collection, London. | *Footage of the exposé of Peter Popoff.* (1985). Jason Alexander and Tyler Measom.

Bottom: *Footage of the exposé of Peter Popoff.* (1985). Jason Alexander and Tyler Measom. Video Still.

Popoff is a televangelist who in 1985 was exposed by magician James Randi for wearing an earpiece during his healing sessions. The equipment allowed him to receive radio messages from his wife offstage with information that audience members had pre-submitted on prayer cards. This is known as hot reading, a technique where the reader already knows more than they admit about the person receiving the reading. Video available. File: SmokeVideo10.

The recordings made clear that the Popoffs never expected their communications to be made public. Elisabeth and her associates could be heard laughing at people with terminal illnesses and using the ‘N’ word to describe Black members of the congregation. There was also a complete disregard for the future wellbeing of their victims with suggestions of giving up lifesaving medication being repeated after the healing. The footage was first shown to a shocked audience on *The Tonight Show* in 1986 and not long after the disgraced Popoffs were declared bankrupt.

The footage shown in *Smoke and Mirrors* was lent by Alexander Jason through the filmmaker Tyler Meason who (with Justin Weinstein) had made the 2014 film about James Randi called *An Honest Liar*. I worked with original uncut footage from the sting and edited together a three-minute version where the Popoffs could be seen going about their disturbing business. It’s a difficult watch – it pulled few punches and illustrated exactly why being armed with a knowledge of how certain stage manipulations work, can be revelatory and emancipatory. It was also a clear example of how certain types of personality can weave a spell over audiences. There was something about Popoff’s performance that evoked the worst of Donald Trump, Nigel Farage and Boris Johnson, but there was more than a hint of the Uri Geller and Aleister Crowley about him too. The way in which megalomaniacs can easily control others, was I hope stripped bare by the video.¹⁸⁰

There is of course sadly a sting in the tail of Randi’s masterful debunking. Uri Geller is still a ‘go to’ psychic for the tabloids and daytime TV in the UK, and he has since called the Randi sting as the night that made his career. Despite Geller’s continued success, claiming that you can bend a spoon with the power of your mind is perhaps a little less potent than claiming to heal the terminally ill. I’m disappointed to report that Peter Popoff has again become a multi-millionaire. This time by selling his own unique brand of *Miracle Spring Water* through his personal website.

The Popoff video was a pivotal moment towards the end of *Smoke and Mirrors* where the misuse of the magician’s toolkit was laid bare. It reflected on how committed belief, motivated reasoning and confirmation bias can empower a powerful actor. It showed how a potent fiction can be weaponised for the enrichment of others, while reminding us that we must all be on our guard against such manipulations.

But the sad fact that Popoff is still getting away with it shows that committed belief can still be blind. If like Randi, we clearly illustrate how con artists and fraudsters get power at the expense of others but *still* it doesn’t work, then what is left to do? What can we really learn from these stage manipulations and the thankless, possibly fruitless task of communicating how belief and faith can be manipulated in these ways? This is where a broader understanding of *how and why we think in certain ways* can be useful - an ambition that was at the core of *Smoke and Mirrors*. By learning about fascinating experiments that explore how we interpret and understand the world around us, we can be more attentive to gaps in our perception, our biases, and the limits of our memories. Armed with such knowledge we can then be on our guard against those who are instinctively drawn to exploiting those traits. I am reminded at this point of Emma Ridgway’s comments in Chapter 1 about the intent of WITH to “jolt each individual from being a self-conscious visitor to being a self-aware, critical, thinking viewer”. The use of fiction is perhaps one way to achieve such an end, but on occasions calling upon the facts can be just as (if not more) effective.

¹⁸⁰ See file SmokeVideo10



Beyond the claim and counter claim of what might be *true* or *not true* there are some remarkable human characteristics and stories that emerged from the histories that *Smoke and Mirrors* touched on. It is clear that most of us need to believe in something bigger than ourselves. That our desire to encounter the impossible and to gaze in wonder at something seemingly inexplicable is an innate human need that is seen (as far as we know) across all forms of human culture.

This spiritual and metaphysical dimension of human experience is one that can produce extraordinary acts of empathy and kindness, and there is of course still much we don't know about the nature of reality. As someone who grew up in the 1980s on a diet of Ghostbusters, E.T. and Star Wars part of my fascination in *the magical* was a desire to find evidence of the extraordinary - wouldn't it just be fantastic if we did have extra sensory perception? If we could transcend our bodies with telepathic communication and if we could somehow speak to the those we lost too soon? But now I firmly believe that such mentalist attributes would be at best inconvenient and counterproductive. The tiresome gags about people 'knowing what you think' all the time would be enough to make you want to trade in your superpowers.

I've since concluded that our ordinary brains are extraordinary enough without having to evoke the supernatural. The explanations that are only starting to emerge from cognitive psychology and neuroscience about the nature of memory and belief are themselves laced with fascinating mysteries. I find my own spiritual needs are more than satisfied by a further understanding of some of these scientific findings, as well as a love of the natural world and the company of wonderful friends and family that I'm privileged to have around me. I also find wonder in the concept of deep time and idea that the short time I'm here on earth is all there is. It gives meaning and solace to me that this life is the only life we have and that it is worth living well. But I also understand that others will need more than that, and I am of the view that we should be free to believe in whatever stories make the most sense, as long as those stories don't cause harm to others.

In *Smoke and Mirrors*, Honor Beddard and I set out to communicate three key ideas to our audience: Firstly, that the rise of spiritualism, the birth of science as a profession and the explosion of the entertainment industry in the late 19th Century created a pivotal moment in the development of psychology as a discipline that is often not acknowledged. Secondly, that the art of Magic is now making vital contributions to contemporary psychology and our understanding of the human mind, and thirdly that we must think critically about the way our cherished beliefs can be manipulated by others.

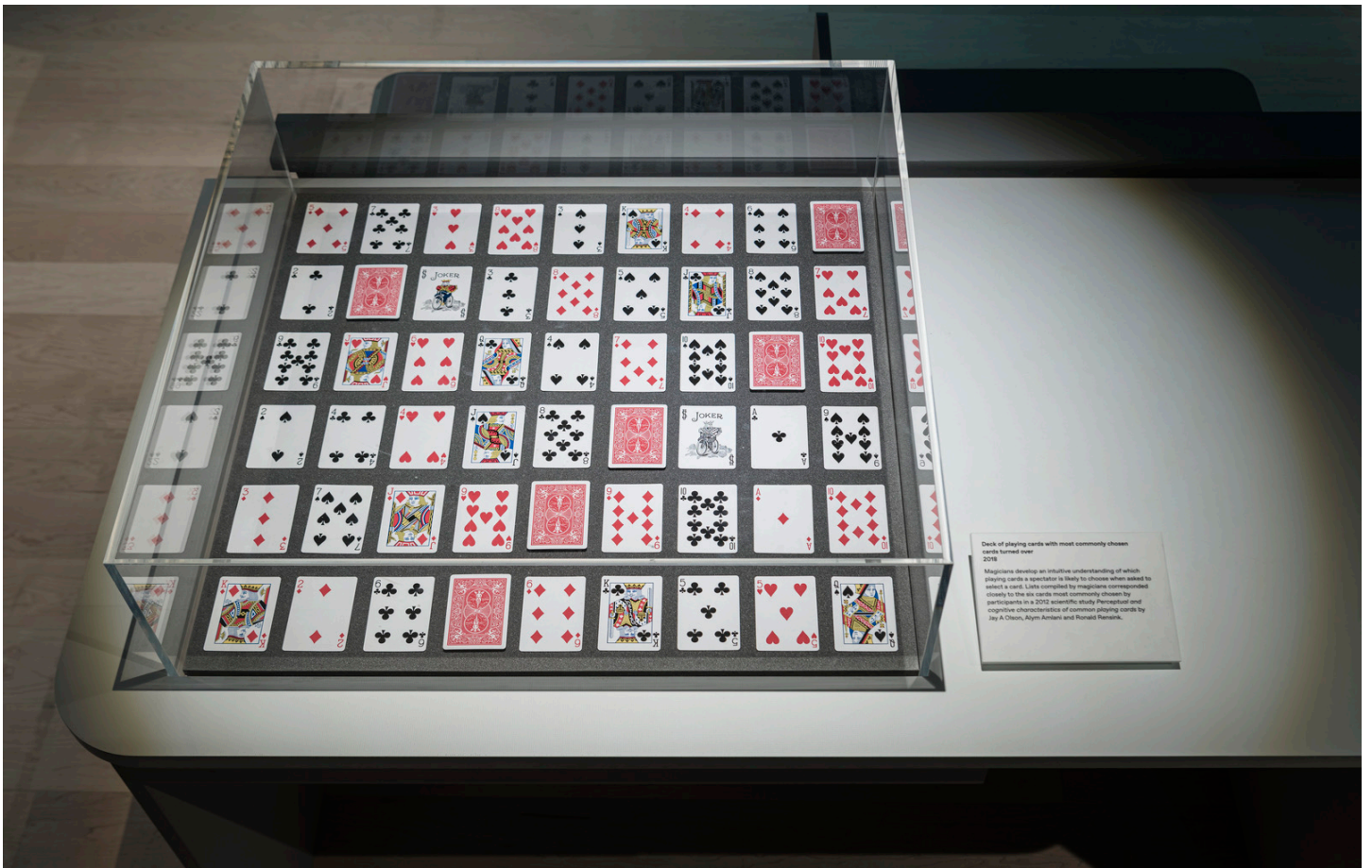
Smoke and Mirrors was probably the highlight of my career to date. The project attracted a huge audience. We had 175,000 visitors over the exhibition and on several days, queues went around the whole ground floor of the building. The live events attracted 19,000 people and during one late event the queues stretched around the building. To put it into context it was the busiest exhibition Wellcome had since their opening show. To have such a phenomenal response from the public was beyond exhilarating. The exhibition buzzed with energy, and it felt like the key themes were being understood and discussed. The reviews were great, and critics seemed to get the fact that we were tilting the exhibition towards a (healthy) scepticism without being condescending or dismissive. To have such a phenomenal response from the public was beyond exhilarating and I look back on the experience with pride and fondness, particularly considering the professional challenges I have faced since then, through a devastating pandemic and beyond.



Top: Postcards from public submissions to the BBC's extra-sensory-perception (ESP) experiment. (1967). Cambridge University Library and the Society for Psychical Research.

The BBC broadcast a public ESP experiment in 1967. The backs of ten playing cards were shown and viewers were asked to sense the suits and numbers of the cards and send their answers to the Society for Psychical Research, London. The letters and cards were then scored. This is a small selection of the hundreds that were submitted.

Bottom (left to right): *Agent Force* comic. (1962). | *Kreskin's ESP* board game. (1967). | *Telepathy Cards*. (1939). Cambridge University Library and the Society for Psychical Research.



Deck of playing cards with most commonly chosen cards turned over
2018

Magicians develop an intuitive understanding of which playing cards a spectator is likely to choose when asked to select a card. Lists compiled by magicians corresponded closely to the six cards most commonly chosen by participants in a 2012 scientific study Perceptual and cognitive characteristics of common playing cards by Jay A Olson, Alym Amlani and Ronald Rensink.



Top: Deck of playing cards with most commonly chosen cards turned over. (2018).

Magicians develop an intuitive understanding of which playing cards a spectator is likely to choose when asked to select a card. Lists compiled by magicians corresponded closely to the six cards most commonly chosen by participants in a 2012 scientific study Perceptual and cognitive characteristics of common playing cards by Jay A Olson, Alym Amlani and Ronald Rensink.

Bottom: *HEXEN 2039 — new military occult technologies for psychological warfare.* Suzanne Treister. (2006).
The artist, Annelly Juda Fine Art, London and P.P.O.W., New York.

Treister’s fictional alter ego Rosalind Brodsky travels through time researching histories of mind control and advances in neuroscience. *HEXEN 2039* attempts to link occult groups, witchcraft, the US film industry, and British Intelligence agencies. It also encompasses Soviet brainwashing, behaviour control experiments of the US Army and recent practices of its Civil Affairs and Psychological Operations Command (PSYOP).



Top: Magician Michael Vincent performs at *Smoke and Mirrors* as part of the live programme. (2019). Photo: Steven Pocock.

Bottom: Researcher / Performer Naomi Paxton performs in the reading room at Wellcome Collection as part of the *Smoke and Mirrors* live programme. (2019). Photo: Steven Pocock.



Top: My children.

Bottom: Banners outside Wellcome Collection.

Conclusion

False Memory Archive

In early 2022 I was commissioned by Science Gallery Bengaluru to create a new work for the *False Memory Archive* as part of their online exhibition *Psyche*¹⁸¹. Our discussions led to the idea of creating an actual false memory experiment that explored whether an Indian audience could have false memories of so-called fake news stories. I teamed up with psychologist Steven Frenda¹⁸² for the study and we based our methodology on similar experiments that he'd created for US study groups. Together we created three fake news stories featuring encounters between popular American celebrities and well-known Indian politicians - all of whom had links to the Indian film industry. Two of these narratives were then chosen at random and mixed with eight stories that were real news events covered by the mainstream press across India. The events were all positive in nature because we were interested to see if supporters of certain politicians would be more likely to have false memories of their preferred politicians being praised, rather than criticised.

Thanks to support from the Indian news website *The Wire*¹⁸³ we received over 800 useable survey submissions to the study. 25% of respondents had false memories of the fake news stories and there was a correlation between pre-existing political beliefs and the likelihood of remembering positive news events about a preferred political figure. We also asked how much sleep the contributors had the night before they completed the survey. Those who had less sleep were more likely to remember the fake stories as real. Steven Frenda and his research team at California State University are currently writing up the results from the study, which they'll then submit for publication in a psychology journal. I will be a co-author. It's the largest study of its kind carried out in India and its findings have a clear resonance within a scientific, political and artistic context.

This experience was an interesting one for an artist who enjoys his hobby of reading cognitive psychology papers. Although I was named as a co-author on the Maastricht University study on the public submissions to the *False Memory Archive*, I wasn't directly involved in the creation of scientific content. In this new work with Frenda, the distinction between artwork and scientific study disappeared. I was in effect using the structure and methods of a false memory experiment as a 'readymade' that was then exhibited as part of an online art exhibition with a major gallery. In truth, I'm not sure how I feel about this development. I enjoyed the collaboration immensely and it was a fascinating process trying to craft imaginary news stories that were designed to be believed. These fictions were deliberately benign news events, however a substantial minority of the experimental participants were taken in, until of course they were fully debriefed at the end of the survey.

I can see myself working in this way again in the future, but whether I can really call this type of exchange an 'art project' is open to question. For some, that will make the collaboration more interesting: here is an example of interdisciplinarity working effectively to create a study that would

¹⁸¹ Science Gallery Bengaluru's second digital exhibition-season PSYCHE was open to the public from April 01, 2022 to May 15, 2022. The exhibition-season was designed as a public platform for visitors, especially young adults, to explore various facets of the brain and the mind. <https://bengaluru.sciencegallery.com/psyche-archive>

¹⁸² Steven Frenda was responsible for the Obama / Bush doctored photo study referenced above.

¹⁸³ *The Wire* is an Indian nonprofit news and opinion website which publishes in English, Hindi, Marathi, and Urdu. It was founded in 2015 by Siddharth Varadarajan, Sidharth Bhatia, and M. K. Venu. <https://thewire.in>

have otherwise not existed. But I'm not so sure. It places me outside of my area of expertise (making and exhibiting art) into one where my knowledge set is by necessity limited to my intermediate level understanding of a highly complex area of scientific research. The critical and creative distance that I'm able to work with when I'm making an artwork *in response* to this kind of research is still the territory that I'm most interested in occupying. By naming this kind of exchange as 'art' the risk is that it implies that art is only useful when it is being instrumentalised for a higher purpose. I hope in the future to be involved in experimental design, however it's important that this doesn't limit the freedom I enjoy in my creative practice. I will hopefully be returning to work with the team at Science Gallery Bengaluru on a future 'In Real Life' exhibition at the gallery that uses my collaboration with Steven as a point of departure, rather than sole reference.

This experiment and the others that I've described throughout this commentary clearly illustrate that human memory is prone to distortion and susceptible to misinformation and suggestion. This presents an ethical challenge to anyone who works in an interview setting or who presents information to the public, whether they be clinical psychologists, psychotherapists, legal professionals, journalists, politicians, sociologists and creative practitioners. Being aware of how our memories can shift and distort over time feels to me to be a fundamental and empowering notion to grasp. It allows us to be on our guard against how our biases can be exploited, whilst arming us with an awareness of how our past can play tricks on us. Most of the time false memories are harmless, however when they implicate others in events that didn't happen, or shift a political narrative in a particular direction then problems can emerge.

Much of the *False Memory Archive* was concerned with communicating these issues to a wide audience, however beyond these didactic ambitions there is a more playful, generous heart to the project. The collection of non-believed memories submitted by the public and the various creative responses outlined in this PhD explore the interplay between our imaginations and our memories. They suggest that we are consistently navigating our way through truths, half-truths, fictions and believed fabrications in order to make sense of our experiences. It's what makes us human. Imagine (because we can) a world where everything was factually recalled by everyone all the time. How incredibly dull and predictable that world would be. Perhaps memories would never be discussed, and past experiences never retold in lurid, amusing, exaggerated details. Music would be rubbish, there wouldn't be much art, certainly little comedy and the exquisite contradictory joys of romantic melancholy would all but disappear. As Catherine Loveday and Martin Conway point out in their 2014 article *Remembering, Imagining, False Memories and Personal Meanings*:

All memories are to some degree false in the sense that they do not represent past experience literally. They can, of course, be wholly false but nonetheless be experienced as memories by a rememberer who may be unaware that the source of a memory is not experience but imagination. One of the main functions of memories is to generate meanings, personal meanings, that allow us to make sense of the world and operate on it adaptively. Memories are, perhaps, most important in supporting a wide range social interactions where coherence is predominant and correspondence often less central.

A strong implication of this view is that false memories far from being damaging to the individual can often be of considerable benefit, particularly in maintaining a coherent, confident, and positive self. Our time-compressed memories with their inferred and

remembered details, their mixture of coherence and correspondence, serve this function perhaps for all of us.¹⁸⁴

Neuroimaging provides further evidence about how our imaginations, our memories and our ability to project into the future are part of the same cognitive process¹⁸⁵. I find such evidence to be liberating and timely. We are instinctive fiction makers who make sense of our experiences by telling stories that are in the main based on a gist of a lived experience. Our imaginations fill in the gaps. As well as highlighting where this can go wrong, I'm also interested in exploring in the future why such an attribute is crucial for human flourishing and how we can harness this tendency to improve health (and to make art).

¹⁸⁴ Martin A. Conway, Catherine Loveday. (2015). *Remembering, Imagining, False Memories & Personal Meanings*. *Consciousness and Cognition*. Volume 33, Pages 574-581.

¹⁸⁵ Schacter, Daniel L. and others. (2012). *Neuroimaging of True, False, and Imaginary Memories: Findings and Implications* in Lynn Nadel, and Walter P. Sinnott-Armstrong (eds), *Memory and Law*. Oxford Series in Neuroscience, Law, and Philosophy (New York).



Images used for the work *Perspectives on News Events | False Memories of Fabricated Political Events in India*. (2022). Psychology experiment, online survey, found digital photography. Hopwood & Frenda. Commissioned for *Psyche* by Science Gallery Bengaluru.

Smoke and Mirrors: The Psychology of Magic

During the development of *Smoke and Mirrors*, Honor Beddard and I met the British mentalist, Derren Brown and there was something he said that really connected with us both. He told us that he still regularly receives communications from members of his audience ‘healed’ during his acclaimed theatre tour *Miracle*, years after they attended his performance.

Brown’s stage show appropriated the format of a Popoff style event, however it was reframed as being entirely non-religious in origin, *even though* he was calling upon ‘god’ throughout the performance. He reiterated this position repeatedly throughout, describing the rhetoric he was evoking as merely a device to enable self-healing, whilst revealing the manipulations of evangelical Christianity. He knew that ‘in the moment’ of performance his participants (who were not stooges) would respond in similar ways to Popoff’s congregation. They would feel momentarily better from their minor ailments, be it a bad back or poor eyesight. They would *feel* like they were better, perhaps because the ritual triggered a surge of adrenalin that greased the wheels of their expectation.

The temporary healing effect induced by such tricks (however illusory) is anecdotally reliable in a performance setting, however there is no empirical evidence that it has a long-term impact. Brown was surprised then to be receiving the communications and joked that it would make a great scientific study - to do a quasi-religious style healing ceremony on lab participants’ and then see if anyone gets a permanent effect. What we agreed was probably happening was that the ailment just healed itself through time, or that a powerful placebo effect had enabled the participant to retake control of their chronic condition. If it was the latter, then that was an extraordinary idea worth exploring.

In the final space of *Smoke and Mirrors*, we presented a video that outlined new research by psychologist Jay Olson: a researcher who has regularly used conjuring tricks in the psychology lab. In a fascinating experiment Olson created a fake MRI scanner to see if he could create the impression that the machine was implanting thoughts into the minds of his participants¹⁸⁶. Before going into the inactive scanner, volunteers were told that a number between 1-100 would appear in their mind during the scan, thanks to a new type of technology embedded within the machine. In reality no such thing was happening. Once participants came out of the scanner, Olson used sleight of hand to make it look like the machine had indeed predicted the number eventually chosen by the participant. The effect was dramatic for those involved. A simple illusion had created the convincing impression that a machine could hack your brain and insert a random number.

The sense that agency over a decision was compromised by a machine, was a fascinating finding from the study, however it was the way that participants described the sensation of having the thought ‘inserted’ that grabbed Olson’s attention. It was described as a throbbing, unusual physical sensation, like something viscerally controlling your thoughts that was impossible to resist. But the machine was inactive, and the process was fake. It clunked and whirred in the same way that real MRI scanners do, but it wasn’t actually doing anything. The mere suggestion that a number was being inserted by the machine had been enough to elicit a significant physical reaction.

¹⁸⁶ Olson, Jay & Landry, Mathieu & Appourchaux, Krystèle & Raz, Amir. (2016). *Simulated Thought Insertion: Influencing the sense of agency using deception and magic*. *Consciousness and Cognition*. 43. 11-26.

Olson has since developed pilot studies that explore how such an inactive procedure could have a positive impact on physical health and his early results have been encouraging. In his experiment *Super Placebos: A Feasibility Study Combining Contextual Factors to Promote Placebo Effects*, Olson and colleagues placed participants into an inactive MRI scanner, which they were told could help the brain heal itself through the power of suggestion¹⁸⁷. The study included 11 children between the ages of 6-13 who had been diagnosed with a range of disorders including ADHD, Tourette Syndrome, chronic skin picking and migraines. Over 2-4 sessions in the fake MRI machine the children were given positive suggestions about the powers of self-healing over a period of a month. Astonishingly parents of the children reported improvements in the conditions in ten out of the eleven children tested, including “minor transient changes, to long-term reductions in subjective and objective symptoms (e.g., migraines and skin lesions)”.

This small study needs to be built upon and whether the effects are permanent remains to be seen. There is however something remarkable at play. Even if these effects are temporary, such a theatrical placebo illustrates how the use of fiction and suggestion can be used together to help minor health conditions. The anecdotal evidence from Derren Brown’s Miracle tour also points in a similar direction. Here then are indications that our susceptibility to deceptive and suggestive techniques don’t always result in negative outcomes. The question is how such approaches can be harnessed in the future in ways that are ethical and acceptable to medical practitioners.¹⁸⁸

¹⁸⁷ Olson JA, Lifshitz M, Raz A, Veissière SPL. (2021). *Super Placebos: A Feasibility Study Combining Contextual Factors to Promote Placebo Effects*. Front Psychiatry. March.

¹⁸⁸ Video of Jay Olson describing the study is available to view. File: SmokeVideo11.



Top: Photographs from the study 'Simulated thought insertion: Influencing the sense of agency using deception and magic'. Photographer Mélanie Bolduc (2016). These photographs depict the laboratory in which the study took place and the fake brain scanner.

Bottom: *Interview with Jay Olson*. (2019). Produced with Jeremy Bryans, Ricardo Barbosa and Ollie Isaac for Wellcome Collection. In this short film, Jay Olson discusses his research and the opportunities it offers for improving human health. Video available to view. File: SmokeVideo11.

WITH (withyou.co.uk)

There is something about the experience of being knowingly fooled that I find deeply satisfying. Magic as an art form has played with this contradiction for centuries, by allowing audiences to suspend their disbelief in seemingly impossible feats, without having to attribute the effects to anything other than the performer. Magicians are honest liars. They declare that what they are doing is just a trick and then they go on to produce extraordinary, seemingly inexplicable effects. To these ends magic uses deception as a form of sophisticated *play* allowing us to imagine and wonder about the supernatural, if only just for a moment. A metamodern approach understands that our need for spiritual connection and a desire to believe in the paranormal is not incompatible with a *disbelief* in such phenomena. Instead, these anomalies can still be experienced through acts of pretending and storytelling. *I know it's not real but it's fun to imagine that I do (even if just for a little while)*. In Sara Helen Binney's essay *Oscillating Towards the Sublime* she remarks;

The movement of the fantastic, between the real world of the text and a folkloric supernatural, functions in the same way as the metamodern movement between irony and enthusiasm. This metamodern balancing act allows for the creation of a sublime which is kept in check by the constant motion between its two extremes, unbelievably Romantic and utterly empty.¹⁸⁹

This oscillation between scepticism and romanticism (that can hover in mid-air around a suspension of disbelief) is a territory that is fascinating to me as an artist. Even if we don't believe in something, it doesn't mean that we can't be entertained, enthralled, educated, amused, scared, or moved by it. The fact that it is transparently described as a fiction, means we can make an informed decision about whether we want to have such an experience. These WITH solutions described at the project website withyou.co.uk are in this uncertain, contradictory, oscillating, yet pleasing territory.

In *miraclemaker* we create evidence of a life-changing spiritual experience. From weeping statues to floating apparitions our convincing renderings will help you reconsider a rational mentality. Proof of your miraculous awakening will be presented in an elegant archive box or framed and mounted for your pleasure.

In *anomelastic* we contact you if you die. We'll use all contemporary and traditional forms of communication, and we won't stop until we get a satisfactory reply. Whether for work or personal reasons *anomelastic* is a perfect way to maintain relationships in the most difficult circumstances. All communications will be archived in an attractive manner and presented to your friends and family in a wooden box.

In *poltergeist* we're a presence in your home. We'll create several frightening scenarios that suggest a haunting or visitation from the afterlife in your home. Evidence will be presented in a variety of highly convincing formats and then minted as an NFT.¹⁹⁰

Writer Anouchka Grose described the appeal of WITH's unusual embrace of this knowing (dis)belief in an entirely made-up scenario in her 2008 essay WITH (withyou.co.uk):

¹⁸⁹ Binney, S.H. (2015). *Oscillating Towards the Sublime*. Notes on Metamodernism.

¹⁹⁰ WITH solutions 03, 14 and 18 at www.withyou.co.uk

Why should this overt fictionality be so enjoyable? Is it because it exposes the emptiness of so many of the contemporary ‘solutions’ to the problems of existence? Therapies that ‘cure’ us so we can carry on doing jobs we hate? Holidays that relax us so we can return to the unbearable stresses of our everyday lives? Cosmetic treatments that temporarily hold off the visible signs of our approaching deaths? Medical interventions that enable us to live longer, but for what? Or is the brilliance of WITH’s services that they don’t try to persuade us of *anything* but are content to function in the realm of phantasy and play? Like in a cartoon where a body can be crushed by a bulldozer and immediately spring back to life, WITH propose a series of utterly consequence-free but peculiarly exciting scenarios — journeys, deaths, fights, betrayals, all the stuff of classic fiction. And [...] we are invited to find comedy in the swing between the intolerable weight of existence and the utter inconsequentiality of it all.¹⁹¹

As much as I have enjoyed making work for my *False Memory Archive* and loved researching historical and scientific case studies for *Smoke and Mirrors*, I still feel a magnetic pull towards the WITH project. Having engaged in a long period of research about the ethics and darker edges of fiction, I think I’m now well placed to revisit the project over the coming years. In 2019 I was commissioned by the Museum of Old and New Art in Tasmania to produce a new range of WITH solutions for the group exhibition *Gorillas In Our Midst* curated by Pippa Mott and the cognitive psychologists Chris Chabris and Dan Simons¹⁹². This felt like an opportunity to break with some of the misdirection’s of the past that rooted WITH in a parafictional space, into one where the fictional positioning of the work is more foregrounded. My first step was to clearly state who the work is authored by. The labelling of the WITH exhibit under my name (instead of being by ‘WITH’) meant that the audience understood that what they were encountering was an artificial scenario. I was accountable for what was displayed and there was no attempt to convince the audience about the reality of the WITH solutions beyond an art context. This felt like an important development for the project, and it meant that a different type of encounter was possible – the audience was clearly signposted to the fact that what was being presented was an extravagant fiction about a series of performances that weren’t really happening. This approach is now mirrored on the WITH website. The ‘about us’ page makes clear who the project is by and the key figures who have made it a reality over the last 18 years.

There is still a risk that some audiences won’t get that WITH is a fiction, however on balance I don’t think this is reason to finish the project. Such a response indicates a lack of attention to how WITH is phrased and now transparently framed; whether that be an unwillingness to read between the lines of the absurdist solution descriptions or by missing the declaration that it is an artist project. A quick glance at the project website combined with a literalist mindset could result in the ‘company’ WITH being dismissed as a bit weird, and never being thought of again. That’s ok - the project isn’t for everyone. The project is also not spreading misleading political statements – it never has, and it never will. This is a territory that I believe is unwarranted and unethical given the research I’ve highlighted in this thesis.

I still think that WITH has something to offer from a more sustained, attentive engagement. There are still plenty of people who seem to ‘get it’ and enjoy reading the solution descriptions and

¹⁹¹ Grose, Anouchka. (2008). *WITH (withyou.co.uk)*. Essay commissioned by Rokeby London.

¹⁹² Creators of the ‘Invisible Gorilla’ selective attention test described in chapter 5.

experiencing the work that spins off from those provocations. I look forward to making new WITH works in the future for an audience that understands how it uses humour to critically reflect on the nature of selfhood, the unreliability of memory and the nature of belief. I'd like the project to oscillate away from a default scepticism, into a space that explores how fictional narrative can provide solace and catharsis. This is a territory that I have recently started to explore in more recent works and a sister project I launched in 2021 called WITH TV.



WITH solutions #61 (Fomona). 2019. Commissioned by Museum of Old and New Art (Mona), Tasmania. Installation views.

The pandemic and WITH TV

After *Smoke and Mirrors: The Psychology of Magic*, I was in advanced negotiations with major museums in Washington and Singapore about how I could produce similar exhibitions. These were to be well paid, part-time curatorial projects that would be starting in mid 2020. In November 2019 I was also awarded a new artist residency at Kings College London. The plan was to develop a new body of work throughout 2020 for the *Intelligence Festival* run by the university in 2021. This commission meant that I had income in the short and medium term that would allow me to complete my PhD in 2020. It was a good plan until the Covid pandemic changed everything.

Within a month of the first UK lockdown all my projects were cancelled. It was a devastating financial blow. I have two small children and my wife is a nurse who worked throughout the whole pandemic, so given the challenges we faced as a family, work seemed a million miles away. The institutional model of working that I'd developed was also under threat. The impact of the pandemic was exacerbated by Wellcome's decision to close their arts award funding scheme. Despite what was long-running and mutually beneficial relationship, it became clear that funding artist projects was no longer part of their plan. The Wellcome Engagement Fellowship scheme has since been discontinued and the organisation's public engagement funding is now filtered through the trust's funded researchers. The most exciting, productive period of my career had abruptly ended and in many respects, it felt like I was starting all over again.

During the first lockdown when playgrounds were closed, and my kids couldn't meet their friends we would disappear off to our local woods to play for hours in dens made of fallen branches. These unselfconscious public sculptures made collectively by several different families became important spaces for us. We imagined our way out of our crisis by pretending to be different characters who lived in the temporary structures. Whole improvised narratives spun from the site, acting out scenarios where we had to hunt and gather for our food and protect ourselves from being attacked by hidden foes in the forest. Despite my professional worries these long afternoons with my kids were joyous, memorable and carefree. In the short time I had in the studio in between home schooling and applying for emergency funding, something surprising started to happen - I began drawing again. It was the first time I'd put pencil to paper in such a way for many years. My subject was the dens I'd been playing in with my children and once I started, I couldn't stop. I produced a triptych of detailed studies of the structures. I gifted the first two drawings to my wife and my parents, and I sold the third to an artist friend.

I kept the drawings secret for a long time, however the reality of my financial situation meant that I needed to explore different ways of generating income. *Artist Support Pledge* had started to expand, and I decided to produce an edition of each work for the scheme. I sold enough of to ease some short-term worries; however, it was the fact that I'd returned to ways of making that I'd long dismissed that gave me most pause for thought. Was there a way that I could combine my research led, conceptual approach with my rediscovery of drawing? My den drawings were simple representations of spaces that were about play and escapism. For a long time, I'd been interrogating where fiction can *go wrong*, but quite suddenly, during an awful pandemic full of personal and political challenges, I wanted to shift my emphasis onto where it can go right.

WITH TV is a project that explores the role of fiction in our lives and the interplay between our imaginations and memories in ways that are collaborative and playful. There are three speculative

services offered at the project website www.withtv.co.uk, however only one of them is currently available. Called *The Storyboard* it is described in the following way:

“In our *Storyboard* service you can commission a hand-drawn storyboard that represents a pivotal moment from an imaginary film that fictionalises an experience from your past.”¹⁹³

WITH TV proposes that we can enjoy playing with alternative versions of events from the past that are firmly rooted in fiction (these are not experiences to be believed) where regrets can be challenged, new journeys discovered, and different scenarios visualised. As in narrative film, these flights of fancy can be plausible or completely fantastical. They can be everyday or feature all the tropes of classic fiction. WITH TV stories are consequence free, however they are intended to be meaningful and cathartic.

As outlined in this thesis, we know from over 40 years of scientific memory research that autobiographical memories can easily distort over time - we add in details from different sources, place ourselves at the centre of the action and reconstruct whatever story makes the most sense at any given time. Through the *False Memory Archive*, I became interested in how visual culture influences the way we remember - what did memory 'look' like when film and TV didn't exist?

Acknowledging that memory can shift over time doesn't mean that we abandon truth telling or that we should doubt the veracity of all our cherished memories. It just means that we can think more clearly about the way we think about our experiences, allowing us to develop a healthy scepticism towards some of our assumptions. It's also a wonderful, slightly dysfunctional system that blends real events and our imaginations to create the story of our 'self'.

WITH TV is intended to reflect artistically on this reconstructive and fluid nature of memory by suggesting that we can perhaps try to wrestle some form of control over how we choose to remember. It explores the idea that we can decide to tell a different type of story about ourselves - one that is still truthful but that helps to release us from some of the burdens of the past. The drawings that have emerged from my recent WITH TV commissions should not be thought of as enabling such a process (I would never want to claim that it could – it's not therapy), however it does reflect on such a notion from within the safety of a fictional construct.

Since 'soft' launching the project in 2021, I have completed five storyboard commissions. For the director of Artist Mentor Ceri Hand, I created an idea for a short film based on a true story from Ceri's childhood where her parents dressed her up in a paper mache petrol pump outfit for a school fancy dress party at the age of 7. I transformed this early experience into source of pride - one that inspired the fictional version of Ceri to become a leading climate change activist. In the imaginary film *Beg Forgiveness, Not Permission*, 'Ceri' works undercover to expose how a leading oil company was green washing their reputation while secretly developing new oil fields in the global south. In the scenes visualised in the storyboard Ceri is leading a protest and deliberately getting herself arrested so that she can raise the profile of her campaign. She ends up defending herself in court and publicly shaming the company into action.

¹⁹³ Case studies from recent commissions can be seen here: <https://www.withtv.co.uk/thestoryboard>

In a two-page storyboard commission, the memory expert and cognitive psychologist Robert Nash asked me to fictionalise the evening he met his husband, and to consider how accurate their memories of that evening might be. In the imaginary WITH TV film *Sent to Coventry* (set in 2006) twenty different versions of the lead character ‘Robbie Nash’ have twenty different experiences of the same night, over a series of short vignettes. In all the short stories each ‘Robbie’ decides to go clubbing at short notice after receiving a text message from a friend, and in every version, Robbie always ends up meeting his future husband at the nightclub. However, as the film progresses each retelling becomes more eventful, making their chance meeting less and less likely.

In the WITH TV storyboard the sixth version of ‘Robbie’ is waiting for a bus, when his phone goes off in his pocket. Just as he’s about to read the message it’s snatched from his hand by two thieves on a moped. We then see Robbie chase down the assailants and deal with them. As he reads the all-important message, he slowly realises that the chase has coincidentally taken him to the door of the nightclub...

Robert said: “The process of working with Al Hopwood throughout the commission was brilliant. After our initial discussion he built an idea around this important night in my life, and I really love the results. I am a scientist who researches memory, and WITH TV deals in such a fun and compelling way with the subject of how our precious memories change and evolve over time.”

For the TV producer and art collector Connal Orton, I reworked an amusing family anecdote for his Storyboard commission. Connal told me that his mum has a memory of seeing a photograph of him in a bar, wearing a novelty chicken suit. He insists that the photograph doesn't exist and that he's never worn a chicken suit in his life... I used this contested memory as the inspiration for the fictional film *Chicken* where the lead character ‘Connal Orton’ is accused of an appalling crime, based on doctored evidence created by the real perpetrator. Connal’s mum Babs (a retired barrister) then goes to work to prove the image is a fake to exonerate her son. The storyboard drawings represent a pivotal moment in the film where Babs reveals the truth to a shocked courtroom. Connal gave his mum the commission as a present and he said: “WITH TV is absolutely brilliant. The final drawings are better than I could have hoped for, and the hilarious accompanying letter is such an integral part of the work. Utterly surprising, really great fun. Honestly, I could not be happier”



Secret Drawing 1. (2020).

We make high quality films about you

We take an experience from your past and fictionalise it

We then bring the story to life

#truefictions

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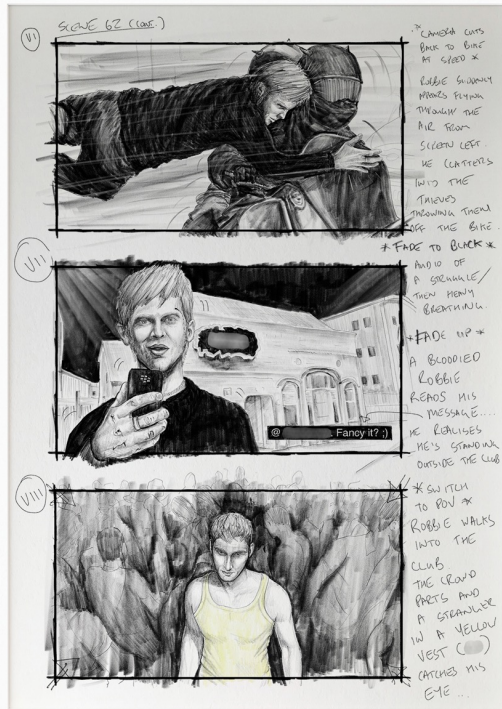
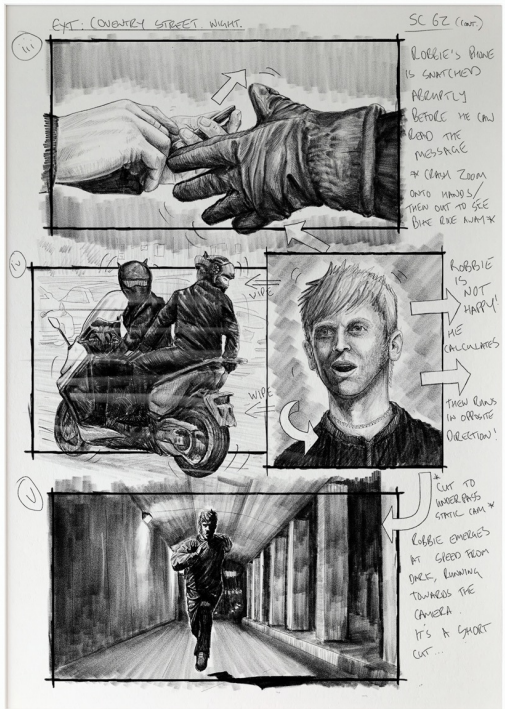
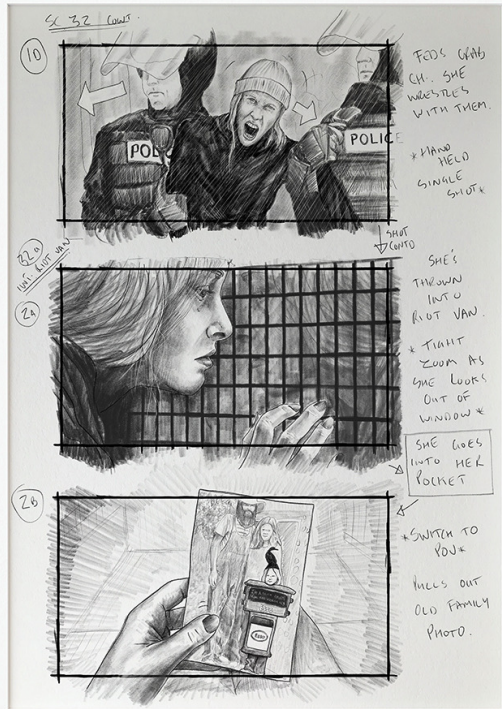
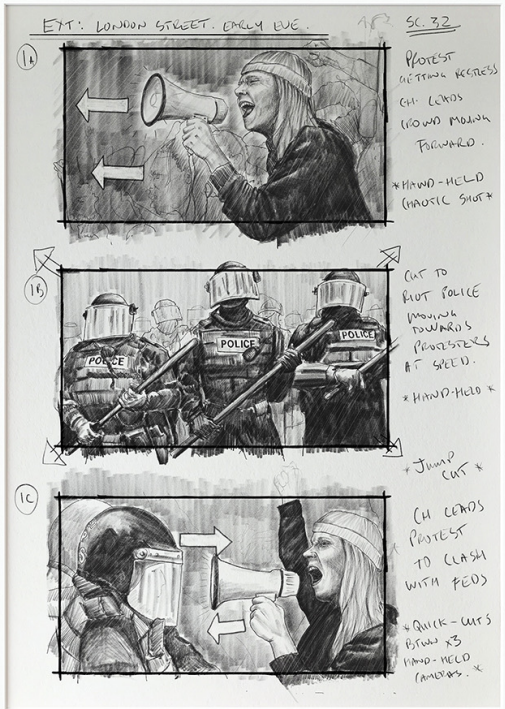
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WITH TV is a project by artist AI Hopwood. His studio is based just outside London on the edges of Hertfordshire in the UK.

The best way to get in touch is through the [contact page](#) or by emailing alhopwood@withtv.co.uk. All WITH TV projects are conceived and produced by AI Hopwood.

Other projects by AI Hopwood include [WITH](#), [False Memory Archive](#) and [Smoke and Mirrors: The Psychology of Magic](#).





Top: WITH TV - Ceri Hand: Beg Forgiveness, Not Permission. (2021)

Bottom: WITH TV - Rob Nash: Sent to Coventry (2021)

INT: COURTROOM - MORNING

SC 152

8



THE IMAGE IS
GROWN ANIMATED.
CO. LOOKS AT
THE SCREENS
AROUND THE
COURT

* SLOW PAN
L TO R /
CUT TO
CLOSE UP
OF BABS *



SHE GIVES
A RE-ASSURING
GLANCE TO
HER SON
AND THEN
CHANGES THE
IMAGE ON
SCREENS..

* RACK FOCUS
FROM BABS
TO SCREEN *



THE DOCTOR'S
PHOTO IS
SHOWN ALONGSIDE
THE ORIGINAL
IMAGE. ARROWS
ILLUSTRATE
SIMILARITIES.
(COURTROOM
GASPS).

* TIGHT ON
COURTROOM SCREEN *

The Future

WITH TV is an experimental project. It's a work in progress; however critical feedback has been encouraging and it was reassuring to be asked in 2022 to exhibit the Ceri Hand case study in a group exhibition at The Royal Standard in Liverpool¹⁹⁴. The commercial orientation of WITH TV grew out of a very real need to restructure the institutionally reliant model of working that I've presented throughout this PhD by Publication. Arts organisations and universities are dealing with a rapidly shrinking budgets for the arts, and artists will have to shift established ways of working if they are going to survive - this is my first attempt to do just that.

I do however think there are some fascinating ways in which the project could develop within an academic setting. I can imagine working with psychologists to understand how this kind of imaginative rethinking of an experience impacts on the way it's remembered. I'd also like to pose a speculative question: could reworking a difficult memory from the past into a fictional representation of that experience, help to lessen the impact of the memory? If so, then how could such an intervention be handled in a way that is both sensitive and ethical? Narrative Therapy attempts to do just that - however, it is an experimental approach with a limited evidence base¹⁹⁵. False memory researchers have tried to change memories of certain foods to encourage healthier eating, however ethical concerns have halted research into the implanting of 'positive' false memories¹⁹⁶. Virtual Reality Therapies digitally recreate traumatic experiences to confront and neuter the impact of PTSD; however, the re-immersion of a victim into a moment of horror seems at least instinctively to be a risky endeavour¹⁹⁷. Finding potential scientific collaborators who would be interested in exploring how the re-storifying of an experience through drawing could *improve* mental health, is a fascinating area I'd like to explore in the future beyond my PhD.

In early 2023 I'm launching a new online project called the *Museum of Revelatory Fakes* (MoRF) created in collaboration with sociologist Patricia Kingori from the University of Oxford. The project was developed in the second year of the pandemic, and it explores the 'use value' and future of 'the fake' in a post-truth age. I've made a series of drawings, video works and curated case studies for the project. I'm also currently writing a script for a proposed TV drama series about a lost pilot for a TV makeover show that attempted to implant false memories as a form of 'identity enhancement' and I'm developing a new immersive exhibition project with Gustav Kuhn and a well-known magician that looks at themes of belonging and connection.

¹⁹⁴ The exhibition *Do They Owe us a Living?* (17/8/22 – 24/9/22) was curated by Simon Willems and featured artists Beagles & Ramsay, Terry Bond, Dreamchord (nil00 & Yank Scally), Pil & Galia Kollektiv, Rachel Garfield, Julika Gittner, Al Hopwood, Sumuyya Khader, Manual Labours (Sophie Hope & Jenny Richards), Chad McCail, Ian Monroe, Simon Willems.

¹⁹⁵ Narrative therapy is a style of therapy that helps people become - and embrace being - an expert in their own lives. In narrative therapy, there is an emphasis on the stories that you develop and carry with you through your life. <https://www.verywellmind.com/narrative-therapy-4172956>

¹⁹⁶ Bernstein, Daniel & Permat, Nicole & Loftus, Elizabeth. (2011). *The False Memory Diet: False Memories Alter Food Preferences*. Handbook of Behaviour, Food, and Nutrition.

¹⁹⁷ Vianez A, Marques A, Simões de Almeida R. (2022). *Virtual Reality Exposure Therapy for Armed Forces Veterans with Post-Traumatic Stress Disorder: A Systematic Review and Focus Group*. Int J Environ Res Public Health. Jan 1;19(1):464.

At the start of my PhD, I set out to describe an artistic journey that was inspired by research from cognitive psychology. This has been a valuable way for me to evaluate my work over the last ten years and I hope it has illuminated my conviction that such research is useful for other artists and creative professionals. For artists interested in the mystical and paranormal it shows that such experiences could have compelling psychological explanations, for artists working with autobiographical memory it sheds light on how memory storifies the past, for those interested in instrumentalising their work for political ends it illustrates how misinformation can be weaponised, for tactical media artists it usefully problematises the use of parafictions in the public realm. Throughout this commentary I have identified some key areas that I hope will give my colleagues in the arts pause for thought, however I hope that the projects presented also move well beyond the limits of my discipline.

It's important to make clear that I am not an expert in cognitive psychology or the science of subjectivity. Such a claim can only be made by those who have committed themselves to a career of dedicated scientific work. I am instead an artist who stumbled across an area of scientific research that I found challenging, fascinating and in many ways, life changing. I am an enthusiastic amateur - a hobbyist who has developed a geeky obsession with a discipline that has a fascinating take on the nature of subjective experience. My introduction to this research inspired me to challenge some of my own ways of thinking and as part of that ongoing process I initiated and curated a major exhibition at Wellcome Collection and made a series of art works for my *False Memory Archive* that have been exhibited internationally over the last 9 years. My ambition throughout this journey has been to introduce new audiences to what I find interesting about this area of study, in the hope that others would too. Where possible I have given a platform to experts and cognitive psychologists to communicate their research findings in new and distinct ways, while giving my audience time to reflect on the wider consequences of that research.

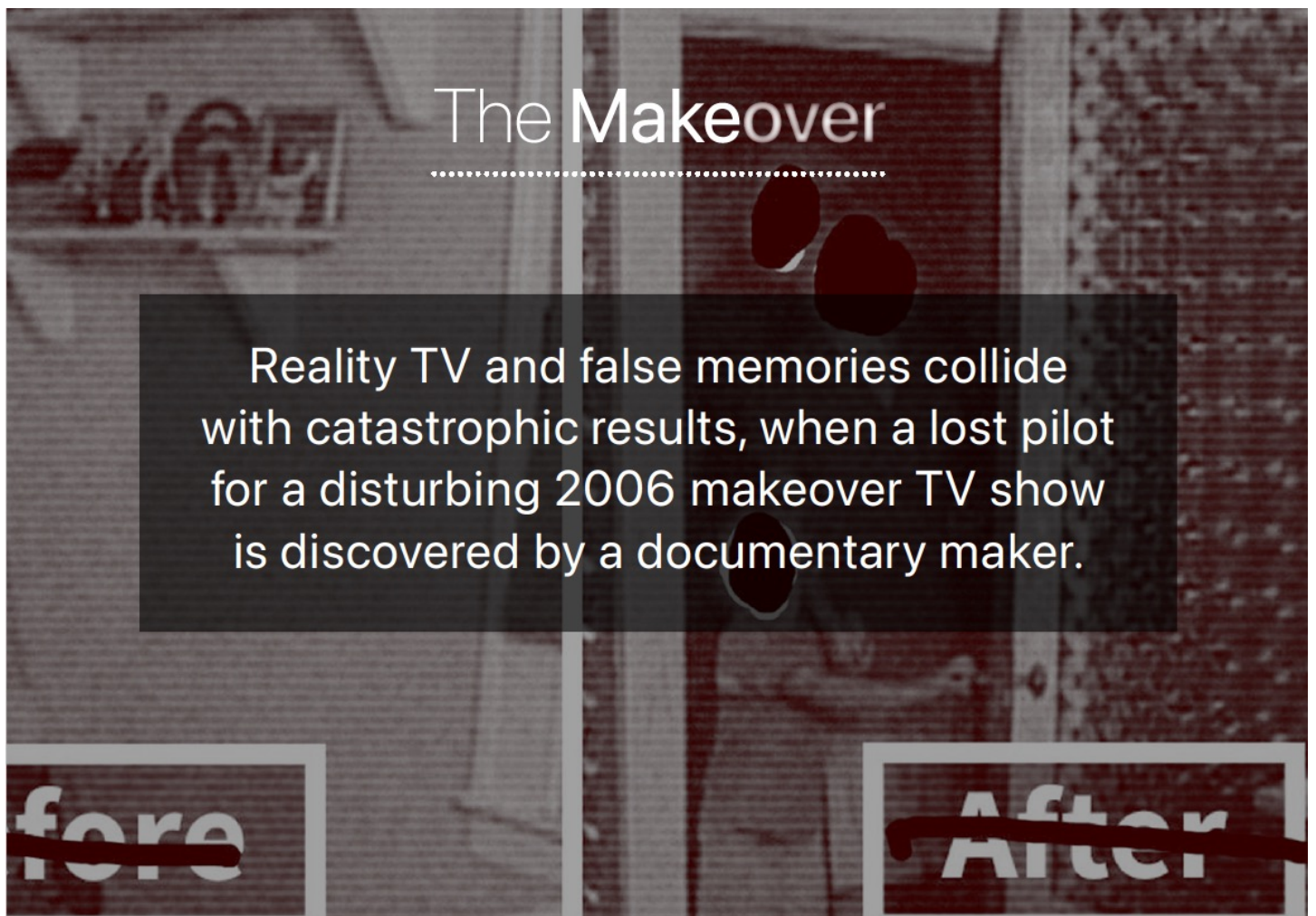
Research findings from cognitive psychology illustrate how our memories and beliefs can shift and warp over time and be influenced by suggestion, misinformation, visual culture, our imaginations, our dreams, and our interactions with other people. Cognitive psychology has clearly illustrated through a range of fascinating experiments that we construct much of our reality from the *inside out* and that what we perceive, remember and believe is not necessarily based on an accurate interpretation of what really happened. The paradox that an objective empirical endeavour has reasserted the primacy of subjective experience is for me a fascinating conundrum. If we consider autobiographical memory as a 'creative act' and if one understands that the fictive plays an important role in understanding the formation of a subjective truth, then how can we attempt to objectively identify and challenge pathological delusions, misinformation, and damaging myths? (As we must!), At what point and in what context does a blend of fact and fiction provide consolation, and in what circumstances should fiction leave the facts alone?

WITH (withyou.co.uk), *False Memory Archive* and *Smoke and Mirrors: The Psychology of Magic* have attempted to interrogate these questions, while exploring how artists can meaningfully respond to research from cognitive psychology. The artworks and curatorial projects that have emerged from my research into the science of subjectivity, the subsequent transference of knowledge between different disciplines and the creative journey described throughout this commentary, all represent a unique contribution to knowledge.

“If we can be more honest about memory’s quirks, we can get along with it better [...] It might be a fiction, but it’s my fiction, and I treasure it. Memory is like that. It makes storytellers of us all.”
Psychologist and novelist Charles Fernyhough.¹⁹⁸

¹⁹⁸ Fernyhough, Charles. (2012). *The Story of the Self*. Article in Guardian Newspaper. Published 13th January 2012.
<https://www.theguardian.com/lifeandstyle/2012/jan/13/our-memories-tell-our-story>

MORF *The Museum Of Revelatory Fakes*



Top: Logo for *Museum of Revelatory Fakes*. Due to launch January 2023. Created in collaboration with Patricia Kingori.

Bottom: Page from TV pitch for *The Makeover*. Created in collaboration with Chloe Thomas.

Appendix 1: Additional Acknowledgements

John Parkin (1973-2019)

On the eve of the exhibition install for *Smoke and Mirrors* my silent business partner John Parkin died suddenly in tragic circumstances at the age of 46. John had been an incredible support throughout my career and it's hard to overstate his impact on me as an artist and person. He helped financially when times were tough, he invested in WITH and he proudly collected and displayed my work throughout his home. We'd agreed a partnership in 2004 where he would become a co-director on the WITH project and my business partner. The agreement was very weighted in my direction with any profit share only being considered once my 'salary' had been covered. It was essentially a generous form of patronage rooted in John's love of my work and an instinctive altruism.

He never wanted or asked for any acknowledgement, and we had fantastic moments together throughout my journey as an artist. He was to be my first guest at *Smoke and Mirrors*. A private tour followed by drinks and dinner, but we never got there. Thank you for everything JP. I couldn't have done any of this without your unwavering support over many years. In 2021 I was commissioned by Wellcome Collection to make a work in tribute to John called *Temporary Chroma Key Memorials*: <https://wellcomecollection.org/articles/YTtDxRAACUAJ33H>

Friends

I'm lucky to have a close group of friends that I've known since primary school. They are good men who have offered help, encouragement and emotional support throughout my career and this PhD. Rob, Ben, Jason, Dick, Rich, John and Cliff: you are my brothers from different mothers. Special thanks also to David and Ed who we lost far too soon. You continue to inspire me every day.

Special thanks to Sean Parfitt who worked with me on the creative content for WITH from 2005 – 2010. Sean is the funniest person I've ever met, and I loved spending so much time with him during such an exciting time in my career. He's a dear friend who had a huge impact on my development as an artist and I hope we can work together again at some point in the future. Special thanks also to Barry Sykes for being a wonderful friend, advisor, mentor, creative companion and occasional critic (of the best kind). I met Barry on my Foundation in Thurrock (Essex), and we've lived together and shared many studios over the years. It's about time the art world properly acknowledged just how bloody brilliant both Sean and Barry are. In time, I hope. Thanks also to Martin Clark, Kim Noble, Susannah Colborn, Tom Dale, Ian Footitt and Stuart Silver for their inspirational friendship during the Sheffield years (and beyond). Thanks also to Sophie Hope, Angela Hicks and Nadine Lee for their support, friendship and encouragement over the London and Hitchin years.

Special thanks to Tord and Kimberley Stallvik for your advice, friendship and support throughout this PhD by Publication.

Special thanks to the wonderful Gill Hedley who transformed my career after we were paired up by Tim Eastop as artist and mentor on an Artists as Leaders course (at the British Council). Gill introduced me to the Wellcome Trust in 2011 after I made her aware of my interest in cognitive psychology. She paved the way for me to have a long and productive relationship with the organisation and I will be forever grateful for her support, advice and friendship over many years.

WITH (withyou.co.uk)

I have been solely responsible for final creative decisions and direction of the WITH project, however I have collaborated extensively with many other people to make the project a reality. As mentioned, John Parkin and Sean Parfitt were long running collaborators and their impact on WITH should not be underestimated. Anders Petterson was also instrumental. He designed the first WITH website (in the days of dial up connections) and offered help and support with the first ever WITH newsletters. William Bloor designed the WITH logo that is seen at the project website. Will's branding insight and design work on the project between 2003-2004 was incredibly helpful and he deserves enormous credit for creating such a memorable logo.

Jo Spencer was something of a lucky charm in the early days of WITH. She suggested that I talk to John about investing in the project and she also cheekily smuggled a WITH brochure onto the desk of the head of comedy at Granada Productions (where she worked at the time). These two introductions led to some amazing adventures and I'm grateful to her for her foresight and support. Laura Schooling was the first person to commission a WITH solution in 2004 and she has continued to be a supportive friend to the project, including organising a WITH themed party in New York.

I have worked with many curators on WITH projects, however special mention should go to David Crowthorn and Naomi Siderfin (Beaconsfield), Sophie Hope / Sarah Carrington (B&B), Emma Ridgway, Jennifer Thatcher, Paula Orrell, Hannah Firth and Pippa Mott who were brave enough to take a risk on the project. I was represented by Rokeby Gallery (Beth and Ed Greenacre) between 2008-2012 and they were bold and generous in their support for WITH throughout. Arts Council England deserve thanks for funding the early stages of WITH under the combined arts funding stream. Salette Gressett was my relationship manager at ACE and her support and advice was invaluable. Thanks also to the many writers and critics who helped make WITH a success. Jennifer Thatcher, JJ Charlesworth, Emma Ridgway, Jessica Lack, Rebecca Geldard, Anouchka Grose and Skye Sherwin wrote about the project in accessible and insightful ways.

I have worked with several photographers, filmmakers, designers and videographers on WITH. Ian Newcombe, Angela Hicks and Tom Dale were instrumental in helping me to visualise the project in ways that fell outside of my skillset at the time. Thanks to Modern Activity for designing the 'WY' WITH logo and WITH website that ran from 2008-2011 and thanks to Stephen Read for teaching me how to design a website and use Adobe Creative Suite.

Thanks also to the various friends and colleagues who I roped in to be WITH agents over the years. Actors David Morley Hale, Gary Abrahams, Stephanie Hart and Margaret Cabourn-Smith were incredibly patient and completely brilliant in the roles that were foisted on them at our residency at the ICA and beyond. We had a series of enjoyable WITH cabaret evenings over the years with a range of performers including Simon Munnery, The Puppini Sisters, Bedwyr Williams and Noble and Silver – thanks to them and to all those who took part. Thanks also to my two studio assistants Corinne Bannister and Sinéad McCarthy who put up with an awful lot of silliness – thanks for being so incredibly patient with Sean, John, and I during our busiest times.

False Memory Archive

Special thanks to Wellcome Trust for funding the FMA to a level where the project was able to exceed my expectations. Jenny Paton was instrumental in advocating for me during her time as an arts

advisor at the organisation and I'm forever grateful for her support. Special thanks to Emily Phillipou who had just started working in the PR department at Wellcome when I started my residency at Goldsmiths. She was a wonderful support throughout, and she was responsible for generating a huge amount of support, media coverage and energy around the project as it evolved. Thanks go to Arts Council England for funding the national tour and to Creative Scotland for supporting the Talbot Rice Gallery exhibition. Thanks to Vicon Revue and Harman Technology who sponsored the project.

Special thanks go to all my academic collaborators on the *False Memory Archive* mentioned throughout this thesis. In particular Christopher French and Elizabeth Loftus were a great support throughout, generously hosting time-consuming research trips and residencies. James Ost, Kimberley Wade, Steven Frenda, Henry Otgaar, Giuliana Mazzoni, Sergio Della Sala and Robert Nash were brilliant advocates and supporters for the project.

Gill Hedley was instrumental in attracting several galleries to host the national tour and thanks go to the curators who commissioned solo exhibitions including Fiona Venables (Mead Gallery, Warwick Arts Centre), Blair Todd (The Exchange, Penzance), Patricia Fisher and James Clegg (Talbot Rice Gallery, Edinburgh), Honor Beddard, Carol Seigal and Sophie Leighton (Freud Museum London) and Danielle Horn and Jonathon Carroll (Carroll / Fletcher, London). Thanks to curator Floor van Dijk for taking the FMA to Schunck in Heerlen and thanks also to curator Michelle Ho from ADM Gallery in Singapore for hosting the FMA. Thanks also to Jahnavi Phalkey and Madhushree Kamak from Science Gallery Bengaluru for my recent FMA commission with Steven Frenda.

The FMA was a difficult exhibition to install with many technical challenges. Special thanks to Nick Brierley and Tommy Stuart who worked tirelessly to help fulfil my vision throughout the national tour. Thanks also to my studio assistants Rebecca Peters and Hanne Lillee for all their hard work.

Smoke and Mirrors: The Psychology of Magic

Special thanks to Honor Beddard who was a brilliant co-curator. Her experience was so valuable throughout the development of the project and her ideas, advice and support were always gratefully received. She worked tirelessly - often doing much of the administrative heavy lifting and I'm grateful for her patience with me and commitment to the project. Special thanks also to James Peto who was a continual support and advocate for me during my time at Wellcome. Thanks also to the rest of the curatorial team at Wellcome including Laurie Britton Newell, Emily Sargent and Kate Forde who offered warm words of encouragement and support throughout. Special thanks to all those at Wellcome who supported my fellowship application that led to the creation of the project - in particular Tom Ziessen, Jenny Paton, Lisa Jamieson, Rosie Stanbury and Meroe Candy.

Thanks to project manager Amy Higgitt and registrars David Chan and Marianne Templeton. Thanks to Brian Studak and Lauren Scully from Plaid for their thoughtful exhibition design and to Stefi Orazi for her graphic design and branding for the project. The technical challenges for installing the exhibition were many and special thanks to gallery manager Christian Kingham who worked with good humour, great skill and patience on the project.

Special thanks to the production and photography teams at Wellcome who did such a brilliant job in creating content for the exhibition. Ben Gilbert and Thomas Farnetti were accommodating and supportive throughout my fellowship and were always willing to help with several photography related requests throughout *Smoke and Mirrors*. The slate and chalk images they created for the

Hodgson and Davey installation were exquisite and I'm grateful for their support, creativity and good humour. Jeremy Bryans, Ricardo Barbosa and Ollie Isaac worked incredibly hard on creating and producing the video content for the exhibition as well as being responsible for the AV elements of the install. Their patience, good humour, creativity and support was instrumental in the success of the project.

Special thanks to all those who lent such wonderful objects to the exhibition (acknowledged throughout the exhibition documentation). Special thanks to Gustav Kuhn who was a brilliant scientific collaborator providing timely and innovative advice. He curated the live programme that helped to animate the exhibition in such brilliant ways. Special thanks to Christopher French, Richard Wiseman, Christine Mohr, Christopher Chabris, Daniel Simons and Jay Olson who provided such clear and compelling content to the exhibition. Special thanks to Matthew Tompkins who did such an excellent job of writing the accompanying publication for the exhibition in record time and for your inspirational work on the psychology of magic.

Appendix 2: Useful links for further reading

For an extensive overview of press, broadcast coverage, essays, reviews and writing about *Smoke and Mirrors: The Psychology of Magic*, *False Memory Archive* and *WITH* (withyou.co.uk) visit:

<https://www.arhopwood.com/press-and-essays>

Artist website:

www.arhopwood.com

WITH website:

www.withyou.co.uk

False Memory Archive website:

www.falsememoryarchive.com

Wellcome Collection links about *Smoke and Mirrors: The Psychology of Magic*:

https://wellcomecollection.org/exhibitions/W_vuwBQAACoA_SY2

<https://wellcomecollection.org/articles/XQuTjxIAAMhJ2504>

For additional articles about *False Memory Archive* please visit:

<https://www.falsememoryarchive.com/press>

For article about 2022 *False Memory Archive* commission (with Steven Frenda) at Science Gallery Bengaluru please visit:

<https://science.thewire.in/the-sciences/false-memories-political-science-gallery/>

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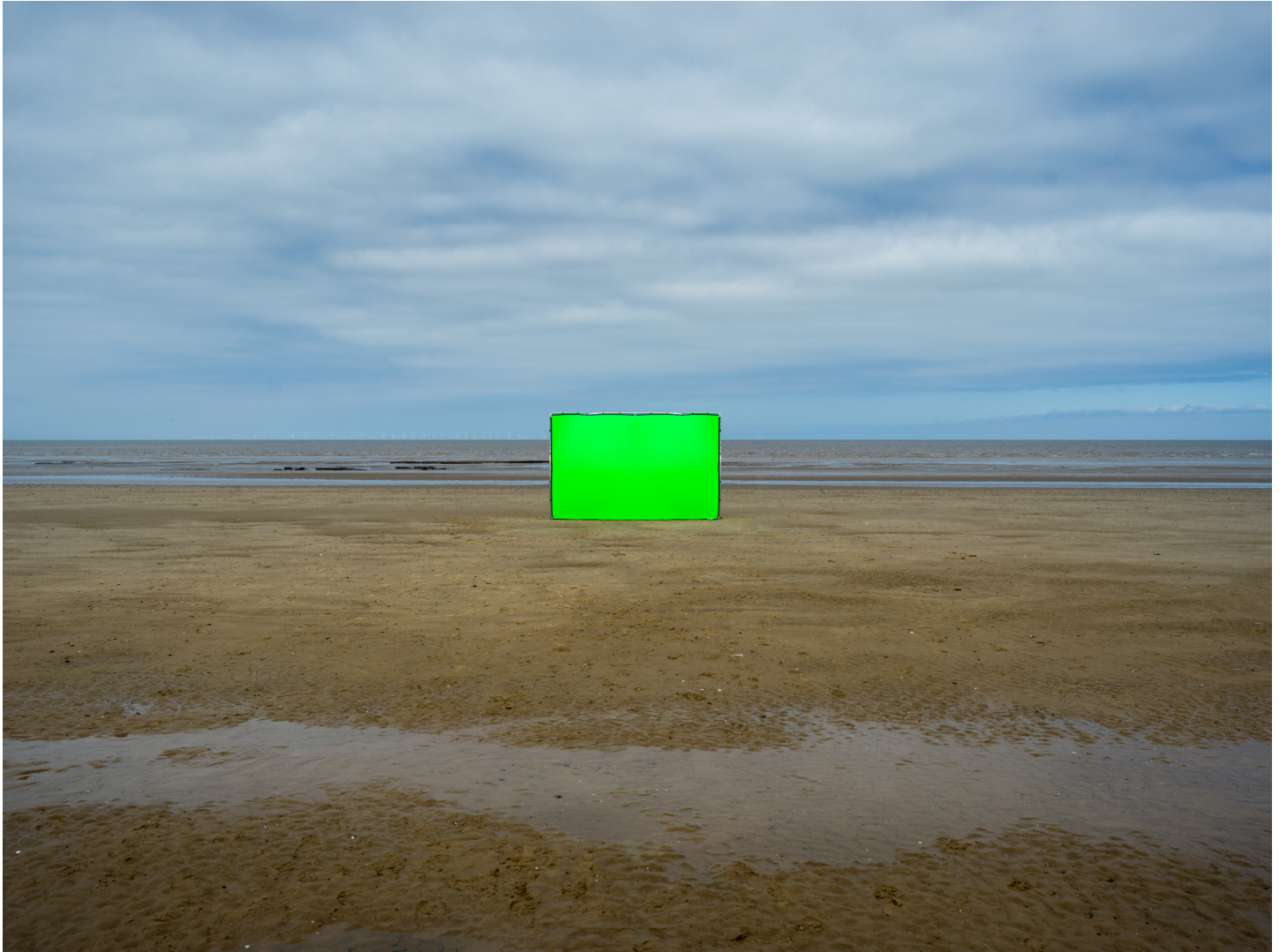
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