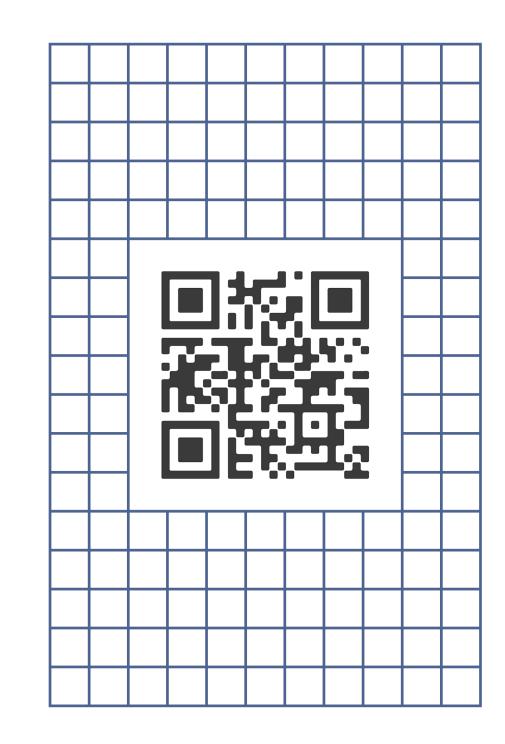
# **ASSETS**



### **ASSETS**

"Objects should not touch because they are not alive. You use them, put them back in place, you live among them: they are useful, nothing more. But they touch me, it is unbearable."

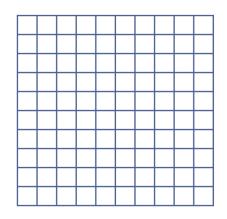
-Jean-Paul Sartre

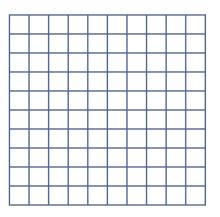
In May 2020 I began a research residency with Trinity College Dublin, and supported by Science Gallery Dublin, with the intention of examining ways in which the human hand interfaces with digital technologies. Working with scientists and engineers at Trinity College, the initial focus was to explore haptic robotics and object recognition as a way of discussing manual labour in the Dublin city, to access an app context of future labour and automation. As the pandemic evolved to affect every corner of our lives, the embodied hand the Grand Canal Dock area of became central to the research. the city. Artists Ellie Niblock What we touch and how we connect with the things that surround us became a continual enquiry in our daily lives. Hard surfaces, cold objects, warm bodies. Touch points.

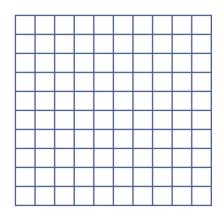
ASSETS is a project that attempts to examine the complex exhibition BIAS in October and network of hybrid, non-physical November. interactions we now experience as a society and potentially the Further details on all aspects biological effects this may have of the project can be found on through bio-mimicry. Spanning multiple physical, virtual

and online platforms, there are a number of ways to connect with the project. Within the pages of this publication, Laurence Counihan discusses the materiality of computer vision and Róisín Power Hackett highlights the inherent algorithmic bias that shape our online experiences. You can use the OR code in this publication, or available at various sites across that will guide you towards exploring augmented reality objects at seven locations in and Cillian Finnerty have been commissioned to produce new artwork that is available online and as a fold-out poster at the centre of this publication. And finally, an installation of physical objects will be presented at the Science Callery during the

www.david-beattie.net/assets.







Laurence Counihan

## AN INSTANCE OF THE **AUGMENTATION AND AUTOMATION OF THE BODY BY MACHINIC PROCEDURE**

### "A designer is a cunning plotter laying his traps."

The proposition of the machine-body brings to mind the concepts of mechanisation and transmutability. To mechanise a process is to automate it via the utilisation of a machine. As machines always-already tend to gesture towards the automation of some procedure (whether that be technical, social or theoretical), the clear diagnostic is to assert that the essence human? Is the mind taken to of both machines and mechanisation resides in their orientation towards distinct and purposeful action; that is to say, they are discretely functional. Although almost a universally accepted common sense, which plexity, the proposition of the is partially a result of their historical origin, this type of thinking in relation to machines oretical to a practical problem. is fraught with problematics and contradictions that limit

the potentialities of human interactions with technology (what would the discrete function of an art-machine be?). whilst simultaneously occluding the ideology of machine design. This issue comes to the fore when we begin to theorise the machine-as-body; for what specific functions do we ascribe to the body? How do we demarcate between the vast array of movements and perceptual experiences of the be distinct from the body, or is the entire system understood as an integrated whole?

As our machines ascend to ever-greater degrees of commachine-as-body is being transformed from a purely the-If attributes of the body are to be mapped to discrete func-

tions, then by what means are these to be successfully transmuted into machinic systems and processes?

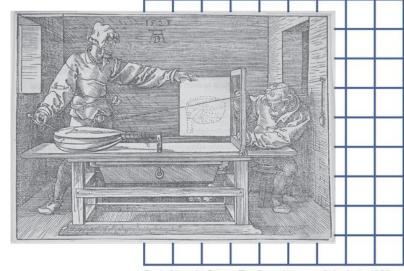


Fig 1: Albrecht Dürer, The Draughtsman of the Lute, 1525.

How can we locate and traverse not only the techno-scientific conditions, but also the ideological terrain that prefigures this dismemberment and recomposition of human form? As these problems are still emergent ones, to which no singular method (scientific, philosophical, historical, artistic or otherwise) can provide a satisfactory solution, I will structure my response to such queries as a series of loosely connected ruminations on the nature of the human relationship to technology, beginning by tracing a brief history of the automation of the hand through the augmentation of the eve.

In 1525 Albrecht Dürer produced one of the earliest known images of what is called a 'perspective machine'. The Draughtsman of the Lute [Fig.1] depicts the optical device that was used to aid the artist's hand in the representation of a scene that accords with the spatial logic of linear perspective. Machines such as this one were mechanical instantiations of the theoretical-machines on perspective that had already been explicated for over a century by the likes of Filippo Brunelleschi and Leon Battista Alberti. Through its grounding in mathematics, fixed-point perspective was able to successfully align itself with the

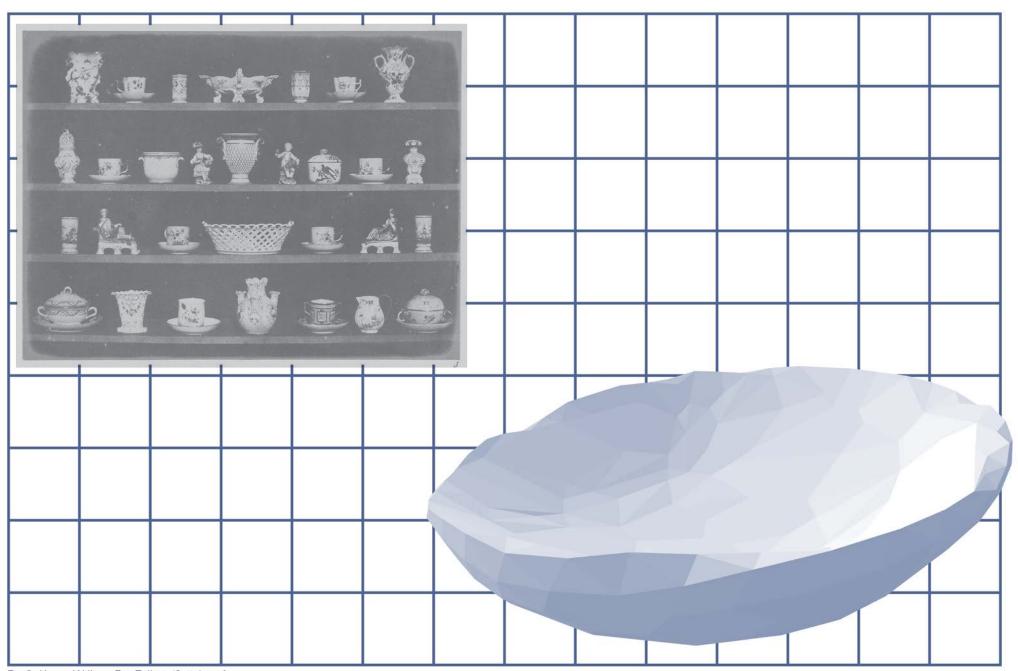


Fig 2: Henry William Fox Talbot, 'Articles of China', reproduced in The Pencil of Nature, 1844

empiricism of scientific thought draws itself, objectively. Mech-- whose mantra would go on to become one of the leading pipelines of authority in the proceeding centuries. Herein, what is significant about the perspective machine, even through its second-hand appearance in Dürer's woodcut engraving, relates to its symbolic stature as that which signals the (objectively determined) mechanisation of reality - a reality of the eye that was reproduced by the hand.

Catalytic reverberations from this vestigial point map a trajectory that burrows and establishes this particular imagistic representation of space as one suffused with the scientific objectivity of a machine. With the invention of various photographic technologies in the nineteenth century, the ideology of linear perspective as a system of cunning rationality reaches maturity. In the supposed severing of the human hand from the means of production, one of photography's earliest inventors, William Henry Fox Talbot, bombastically announced: 'it is not the artist who makes the picture. but the picture makes ITSELF'2. The title of Talbot's landmark publication of 1844, The Pencil of Nature, echoed this sentiment of a non-human agency presenting the objective conditions of its own material reality [Fig.2]. The object speaks, or

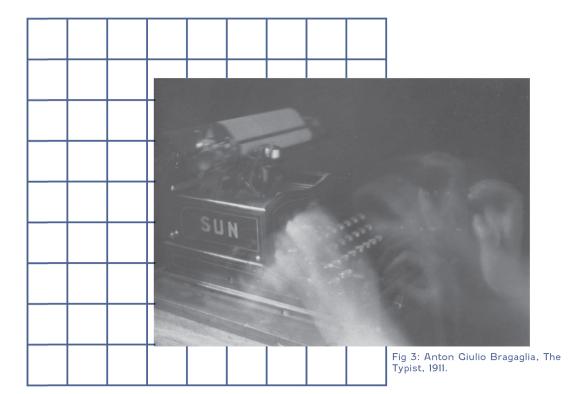
anistic imaging technologies rapidly adopted the cloak of austere scientism, becoming not only a means of perceiving reality through a more rationally detached lens, but also a framework by which human operations could be pushed to levels of more ruthless efficiency.

In the 1910s, Frank and Lillian Gilbreth, under the spectre of Taylorist principles of scientific management, embarked upon a series of experiments intended to reduce the inefficiency of bricklaying workers. What was unique about the Cilbreth's project was their utilisation of photographic technologies to aid their process. Conducting a number of so-called time-motion studies, workers were instructed to repetitively perform the task of picking up and placing an object<sup>3</sup>. The movements were recorded in a manner similar to Étienne-Jules Marey's chronophotography, as well as Anton Ciulio Bragaglia's Futurist forays into photodynamism [Fig.3], wherein an elongated exposure time facilitated the navigational plot of the human arm to be rendered in a static scene. However, whilst Bragaglia's images were an end unto themselves, which desired to aesthetically evoke philosopher Henri Bergson's theory of time as an infinitely unfolding continuum (in contrast to a

series of discrete events), the Gilbreth's 'cyclegraphs' [Fig.4] merely functioned as source material in the construction of three-dimensional wire models that were to be used as tools for educating workers in 'the One Best Way'.

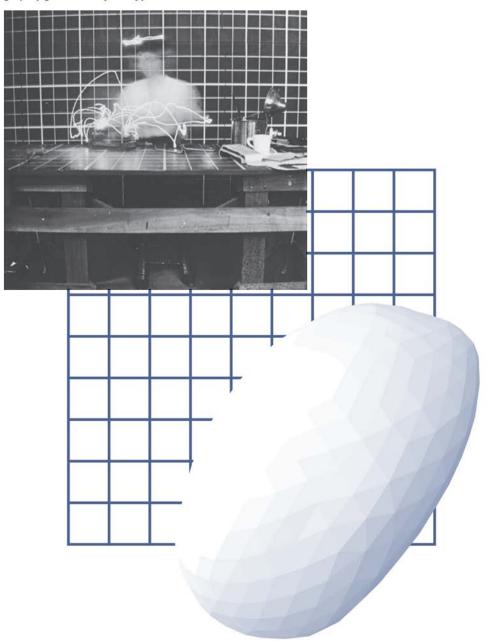
The Gilbreth's experiment envisioned a fundamental split that sought to isolate and extract labour processes discretely from the phenomenological

body. Thus, labour itself was reimagined as a science fiction of liquid movement that suppressed the lived experiences and particularities of individual human agents. However, whilst coated in a layer of empiricism and pragmatism, its lustre was more ritualistic than scientific, whose lofted proposition was that of the human as an incredibly rigid form of machine, engineered meticulously for one singular purpose. Fortunately,



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Fig 4: Frank and Lillian Gilbreth's untitled cyclegraph (light assembly study), c.1913-14.



the educational aspirations of the models were a failure, as the instructive procedure was impossible to decipher in the spatial whirl of the final sculptural forms.4 In the transitions from the haptic movement of the human body to flat image, to three-dimensional model, too graphic image) is relatively easy vast a distortion took place as to make their didactic function unintelligible. There is a lesson in this historical arc charting the augmentation and automation of the eye and hand. It lies at the intersection between this fundamental fact, computhe amalgamation of human sensory devices (sight, sound, smell, taste and touch) and the seismic rupture occasioned in the Cilbreth's work, which preemptively performed a proto-digital act in the attempt to codify information as data. In their practice the image ceases that most nonvisual and to be a mimetic representation, nontransparent device - has transforming instead into a dataset for the reconstitution of machinic processes.

Returning to our own contemporary moment, we experience the echoes of the Gilbreth's endeavours in the abstraction of form through computational methods. Our machines, unlike Dürer's perspective machine or Talbot's analog camera, are computers run by software, a fact that implicates a gulf in causality that seems, for most, impossible to bridge. The algorithmic systems that increasingly govern our lives

and dictate our realities appear as impenetrable black boxes, whose inner workings exist as a type of occult knowledge. Unlike the supposed indexicality of the photographic image, whose cause (the photographed object) and effect (the phototo grasp by intuition, computers and their operations, to restate such esteemed media theorists as Friedrich Kittler and Alexander Calloway, are inherently nonvisual.<sup>5</sup> Yet, despite tation, in both popular culture as well as much contemporary media theory, still predominately trades in visual metaphors and symbols. This long-running situation led Wendy Hui Kyong Chun to comment, almost two decades ago: 'The computer paradoxically fostered "visual culture" and "transparency."6

The crux of Chun's argument is that there has been purported a false demarcation between software and hardware, as it is generally accepted that operations of the former transparently function upon the latter. The main problematic with such an approach is that it tacitly works to engender a veneer of objectivism into the concept of software (wherein its ideological design becomes hidden), a position that is bolstered by the widespread classifica-

tion of algorithmic systems as somehow immaterial. Such a perspective performs an erasure on the labour of the body (human or otherwise), enacting the delirium of infinite production. However, as Kittler, and others, have forcefully stated, 'there is no software at all'7, as computation itself is always reducible to material properties (differences in voltage). Accordingly, computers (hardware +software) never transparently or objectively display (that is visualise or image) information, and instead their operations would be more accurately classified as a type of symbolic transcoding. Consequently, developments in fields such as machine vision represent not a generic reconstruction of the foundational capacities of human sight but rather a particular ideological interpretation of how this sense perception works, and for what functional ends they should most adequately suit.

This idea of computers as symbolic form is also present in philosopher of communication Vilém Flusser's writings on the mechanical repetitions the concept of apparatus. His taxonomy distinguishes the apparatus, of which the camera fully digital automation. is taken to be a prototype, from tools and machines, as these latter two historically worked by eliciting change on concrete attributes in the material world. (For example, a lever that lifts

a heavy object.) Contra to this, for the apparatus: 'Their intention is not to change the world but to change the meaning of the world. Their intention is symbolic.'8 Whilst this distinction would ostensibly suggest that Flusser endorses a more traditional segregation of software (apparatus) from hardware (machine), it would be more precise to state that his concept of apparatus is one that encompasses the machine as a functionary subcategory. Ergo, for Flusser, the combination of software+hardware is defined as an apparatus. And although he aligns with Chun on the status of computation as principally symbolic, what distinguishes Flusser's idiosyncratic model of the apparatus is his view that its contemporary manifestation is fundamentally automatic and contingent. In Flusser, modern apparatuses, although founded upon ideological positions, cease to neatly follow or endorse such practices once they attain a certain degree of complexity. This event horizon occurs as algorithms outrun that were historically enacted by flesh and steel, in favour of

Computation becomes almost entirely abstractive of an unwieldy possibility space, or to say it another way, it begins to more concretely embody, dis-

play and perform emergence9. This is not to say that modern computers are artificially intelligent in the vein of science-fic- into functionaries." tion imaginings, but it is to propose that they do become autonomous in the manner by which they automatically pursue routines and subroutines in accordance with contingent protocols. Apparatuses may be 'mindless' husks and pathways brute forcing their way through an endless sea of 'chance combinations'10, yet their ability to operate at speeds that penetrate temporal depths that From cumbersome desktops are imperceptible to the human necessarily enforces the classification of their behaviours as emergent; the ability to denote discrete outcomes from any set of predefined variables becomes dizzyingly abstracted from sense. In Flusser's theory of photography, he states that the camera-apparatus has initiated one such procedure. as it has begun to produce its own autonomous universe of technical images. As human behaviours and actions become more intertwined with such a universe, our operations gradually succumb to its programmatic logic:

The photographic universe is a means of programming society - with absolute necessity but in each individual case by chance (i.e. automatically) - to act as a magic feedback mechanism for the benefit of a combina-

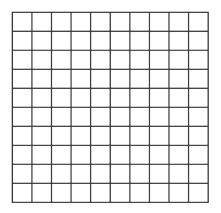
tion game, and of the automatic reprogramming of society into dice, into pieces in the game,

Flusser's philosophy of photography and its apparatus is based upon an understanding of them as producers of conceptual images (images of concepts)12 rather than mimetic representations, and, as such, his writings on the universe of technical images in the 1980s transitions elegantly into our era of ubiquitous computing. with cathode-ray tube monitors to the now nostalgic beeps and clicks of the handshake protocol that characterised dial-up internet access, and on into the era of Zoom calls and smartwatches as taken-for-granted aspects of everyday life, our relationship to advanced apparatuses continues to exponentially accelerate. And with this acceleration comes new degrees of augmentation and automation that write themselves upon the body of human experience. For many, the integration with computerised systems has reached such a level that they cease to operate solely as symbolic transcoders that drive our (cognitive) interpretations of reality, instead becoming the very material residue of the world itself that we ceaselessly grasp onto and wade through. Ergo, in the same fashion by

which the perspective machine in Dürer represents not only an augmentation of the eye but also an automation of the hand, it may be proposed that the computers of today, whilst draped in a regime of visuality derived from mathematical symbols, act upon not only discrete attributes of the human (for example, sight or cognition), but the entire body taken as a holistic system of gestures and experiences.

Modern computer systems cease to simply survey the human, rendering it as the curious subject of thought and vision, and instead manifest a cacophony of programs that contort the body of experience into new arrangements of delight and horror. Following Flusser, I would propose that in our contemporary moment these advanced systems represent a novel form of non-human digital agency, wherein the autonomy enacted in the dialectical dyad between human and machine is accelerating rapidly towards the latter pole. This text is not a polemic against the benefits or liabilities of computation in and of itself, but only a brief tract on the pitfalls of accepting algorithmic and machinic systems as somehow objective, transparent or even naturalised. As I have tried to argue above, the augmentation and automation of and through

machines always involves a transmutation of form (from eye to hand, from concept to material, from image to body, from dataset to experience). This process can never be a seamless transition producing a perfect copy, as countless attributes must be subtracted or modulated, with new ones introduced into the equations so as to maintain functional operations. Machines, apparatuses and computers are invariably designed in a collaborative cauldron that boils them, as inert matter that becomes enlivened. with the human. Such a scenario means that the task of allocating discrete functions to the machine, preor post-production, is bound to failure, as the true unit of analysis (performed on by theorists or artists) must reside in the emergent contingencies that spring forth from the interactions we perform with and on our mechanical kin.



<sup>1</sup> Vilém Flusser, The Shape of Things: A Philosophy of Design, 1999, 17

<sup>&</sup>lt;sup>2</sup> Henry Fox Talbot, letter to The Literary Gazette, 1839, cited in Vered Maimon, 'On the Singularity of Early Photography: William Henry Fox Talbot's Botanical Images', in Art History, 34(5), 2011, 960.

<sup>&</sup>lt;sup>3</sup> Sharon Corwin, 'Picturing Efficiency: Precisionism, Scientific Management, and the Effacement of Labor', in Representations, 84, 2003.

<sup>&</sup>lt;sub>4</sub>To paraphrase Corwin on the function of the Gilbreth's models, they existed more as ideological props than didactic tools. Ergo, their success was predicated primarily on their existence as visualisations of efficiency.

<sup>&</sup>lt;sub>5</sub> See: Friedrich Kittler, 'Chapter 4: Computers', in Optical Media: Berlin Lectures 1999, Polity, 2010, and; Alexander Galloway, 'Introduction: The Computer as a Mode of Mediation', in6The Interface Effect, Polity, 2012.

 $_{\rm 6}$  Wendy Hui Kyong Chun, 'On Software, or the Persistence of Visual Knowledge', in Grey Room, 18, 2005, 27.

Friedrich Kittler, 'There is No Software', in otheory, 1997.

Vilém Flusser, Towards a Philosophy of Photography, Reaktion Books, 2000, 25.

For more on the history of the algorithm, and its transition from the automation of discrete mathematical functions to the status of digital emergence, see: Matteo Pasquinelli,

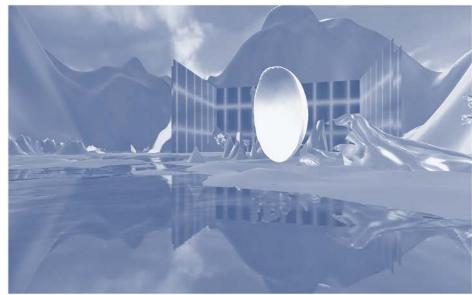
<sup>&#</sup>x27;Three Thousand Years of Algorithmic Rituals: The Emergence of Al from the Computation of Space', in e-flux Journal, #101, 2019.

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m 10}$  Vilém Flusser, Towards a Philosophy of Photography, Reaktion Books, 2000, 69.  $_{
m 10}$  lbid, 70.

<sup>&</sup>quot;they [technical images] are metacodes of texts which, as is yet to be shown, signify texts, not the world out there. The imagination that produces them involves the ability to transcode concepts from texts into images; when we observe them, we see concepts – encoded in a new way – of the world out there', in Ibid, 15.



Ellie Niblock Multimemory (stills) Interactive animated 3D environment 2021



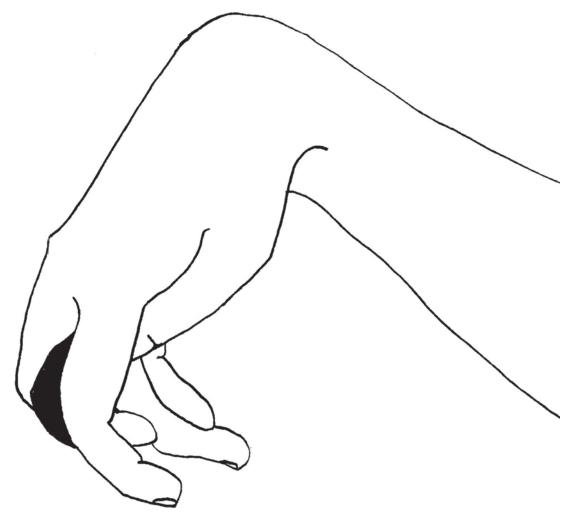
## A PRONATION OF THE FOREARM AND A FLEXED WRIST

When I was born. I had reduced oxygen to my brain. This smartphone has been designed resulted in mild right-sided hemiplegia cerebral palsy. On my right side I have a pronation of the forearm and a flexed standardised hands, and how wrist. This is one of the typical cerebral palsy hand types. It is a visual marker of my disability. datasets and technologies are

Assets is a project by artist David Beattie that focuses on the role of the human hand in our digital world, how we engage with digital technologies and how we might receive haptic feedback from virtual objects and experiences. Handheld devices and the touch of our fingertips are intrinsic to everyday life. The fine motor skills of our hands and fingers are a prerequisite to interacting with our world. When we do not possess these prerequisites, we are excluded. Technologies recognise the 'normal' human hand and its movements in their designs. The handheld, hard, shiny, slim, incredibly ableist.

rectangular sleekness of the for standardised human hands. Furthermore, technology is programmed with datasets of these hands might hold objects. It is no surprise that these biased towards non-disabled bodies and hands. My body has been erased from our new artificial world because I am disabled. In the new world of AI my body doesn't exist.

Why does my body not exist in the world of AI? When examining disability through the lens of phenomenology, I found one of many possible answers. Phenomenology is a method of thinking about our experiences through our bodies, so it is interesting in terms of disability. However, one of the seminal texts about phenomenology, Phenomenology of Perception by Maurice Merleau-Ponty, is



Merleau-Ponty studies and objectifies disabled people, imagining our experience of the world through his perception of us. The text illustrates the prejudices that arise from phenomenological thinking if you neglect to include other ways of being in the world, ways of experiencing the world, that are different from your own. Merleau-Ponty refers to the unpublished writings of another phenomenologist, Husserl, which states, 'Consciousness is not a matter of "I think that" but of "I can". Consciousness of who we perceive ourselves to be, and of who society perceives us to be, is not to do with what we think, but rather with our ability to move and act, the possibilities we have for being in the world. It is a case of 'I can, therefore I am' or 'I can't, therefore I am not'. Under capitalism, our worth as people is often linked to our ability to perform certain tasks. goes on to say that an algo-One of these tasks is the ability rithm is only able to provide 'a to use technology. If we cannot good enough solution for effecuse technology, we don't exist. tive, economical, human use in

About 15% of the world's population has some form of disability.2 That's 1 billion people. A good chunk of that 1 billion have disabilities that limit how we can use technology, and thus we are not represented in the datasets or algorithms. One of the central concerns of Beattie's project is, how can we generate algorithms

that don't reaffirm these biases that exclude people like me? An algorithm, most simply put, is a set of rules followed to solve a problem. In relation to our information technology age, I would like to ask, what are the sets of rules? What are the problems we are trying to solve? Luke Munn, in Ferocious Logics: Unmaking the Algorithm, discusses how the inherent politics of these rules are formed. These rules 'actively support particular practices and specific forms of life while suppressing or discouraging others<sup>3</sup>. According to Robert Elliott Smith, in Rage Inside the Machine, algorithms follow rules that reduce and simplify human experience. Smith writes that 'it's a simplification that nicely fits the capacities and technical peculiarities of the algorithms, while satisfying practical computational needs of the problem at hand'. He the real world'.4 Humanity and the world cannot be simplified and reduced simply to suit Al. Good enough solutions to problems are not good enough for minority groups who experience the world differently and who are not reflected online. And what are the problems to be solved? The problems and solutions change and fluctuate depending on how a person

navigates the online space. The data, user preferences and activities generated by our engagement with platforms like Google, YouTube and TikTok create a digital version of us. This version of us is subsequently used to sell us products, lifestyles and information that works within the data model. The problem is also, how does the algorithm identify or classify a person who uses these search engines? Or even, can they identify or classify a person? I'm not sure if most algorithms could identify my right hand. Nobody can be completely identified, completely understood, but the smartphone for Google Maps algorithm is doing its best. The pronation of my forearm and my flexed wrist cannot yet be identified by the algorithm, and I kind of think this is a good thing. Perhaps my body not existing on the internet has a silver lining, but with developments over time I'm sure, eventually, it will exist.

The art project Assets requires the public to use an app on their smartphone to fully experience the artwork. Use of smartphones worldwide reached 6 billion in 2020.5 I avoided buying a smartphone for as long as I could, only acquiring one in late 2018, as they are not designed for people like me. I can only use my smartphone with my left hand. I cannot use it with two

hands like most people do, as my right hand does not have that movement of rotating the wrist, outstretching the thumb and fingers and exposing the palm skyward. It is easy for me to use my smartphone on a flat surface like a table, but using it on the go can be awkward, and certainly is not user-friendly. The screen is large, and I need to stretch my thumb across it to reach the right side of the screen. This movement lacks easy elegance. As a result, I handle my phone less frequently than other people do, and I still prefer to use my laptop. I miss my Nokia, but I need a CPS, as I have dyspraxia, a co-ordination learning disability, which means I have a disastrous sense of direction. High-quality smartphones have bigger and bigger screens. As the screen sizes grow, they become less and less and less accessible.

So, even if I want to, I cannot use high-quality smartphones. My choice is limited. I need to use the cheap ones with poor specifications because the cheap ones are smaller. There are some smartphones with one-handed modes, but not all phones offer this access tool. This mode is still not really a design for me. I want smartphone designers to stretch their imaginations. I dream of a soft, bendable phone with

a keypad as well as a touch screen. I dream of smaller touchscreen phones that can easily fit in one hand. I dream of raised, rubbery keypads. The tactility of those old raised keyboards is far more reassuring and user-friendly than the touchscreen ones. I'm not sure why I prefer them exactly, though it may be their tactility and the fact that I don't need my eyes to be riveted to the screen to type. Not needing my eyes to type frees them up so I can co-ordinate my body in space and walk through a crowded street without bumping into somebody. Bumping into people and things, losing one's balance, tripping and falling are regular occurrences for cerebral palsied and dyspraxic individuals. So I need my eyes for co-ordinating, not for typing on a screen.

responding to an artwork that I may not be able to experience as intended. It seems that two hands may be a requirement to fully experience it. I will hold my phone with my left hand. I will hold my right hand out and attempt to grasp the virtual object before me on the screen. What type of hand will I see on the screen? Will it resemble my right hand? Will I be able to grasp the object? How would you feel if you had to ask yourself these questions every time you interacted with the world?

This may all sound like a long list of complaints. It may sound like I am a Luddite, but I am not. I just demand more from technology than what it currently gives me. I demand that my body be acknowledged. I demand that technology companies such as Google and Apple employ disabled people on their design teams and reconsider the hard, rectangular form of phones and develop better software solutions.

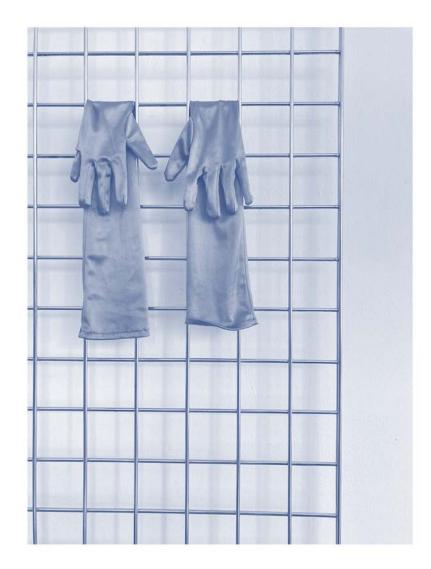
I was invited to respond to Assets, but it feels as if I am

<sup>1</sup> Merleau-Ponty, Maurice, (2005), Phenomenology of Perception, Routledge Classics, London & New York, p.159
<sup>2</sup> According to a World Health Organization report from 2011, about 15% of the world's

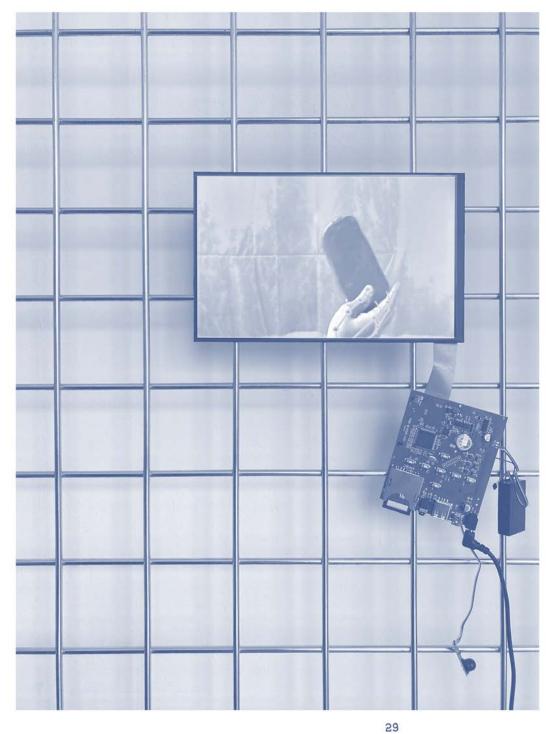
report from 2011, about 15% of the world's population has some form of disability: https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/world-report-on-disability

Munn, Luke, (2018), Ferocious Logics: Unmaking the Algorithm, Meson Press, p.13 Elliott Smith, Robert, (2019), Rage Inside the Machine: The Prejudice of Algorithms, and How to Stop the Internet Making Bigots of Us All, Bloomsbury, p.27

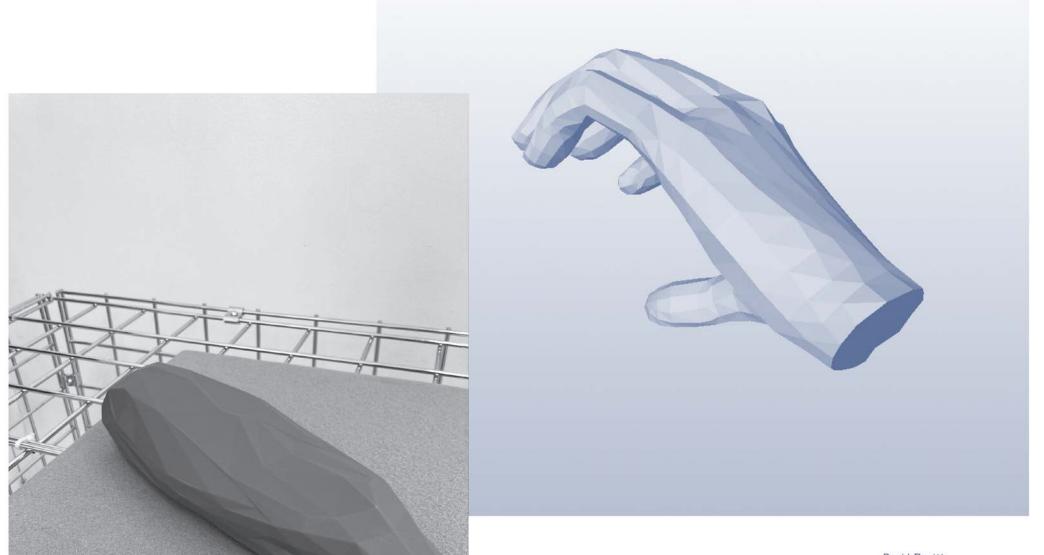
5 O'Dea, S., 'Number of Smartphone Users from 2016 to 2021', Statista [on-line], 2021, Available at: https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/



David Beattie
Assets (detail)
3D SLA printed objects, TFT screens, computer, digital
animated video, satin gloves, hand tracking algorithm, polyester
felt, gridwall display system



David Beattie
Assets (detail)
3D SLA printed objects, TFT screens, computer, digital animated video, satin gloves, hand tracking algorithm, polyester felt, gridwall display system
2021



David Beattie
Assets (detail)
3D SLA printed objects, TFT screens, computer, digital
animated video, satin gloves, hand tracking algorithm, polyester
felt, gridwall display system
2021

### **BIOGRAPHIES**

Cillian Finnerty is a London-based artist working primarily in digitally-produced printed matter, using found text and imagery alongside original materials to explore relationships between information, materiality, and obsolescence. He graduated in 2016 from the National College of Art and Design, Dublin, has recently produced publications for Brass Neck Press (Dublin/Amsterdam) and Wendy's Subway (New York City), and has previously exhibited work at the NCAD Gallery, Dublin and Catalyst Arts, Belfast.

Róisín Power Hackett is a visual artist, writer, and curator. Róisín graduated with a BA in History of Art & Fine Art Paint (2012) and an MA in Art in the Contemporary World (2013) both from NCAD. In 2021 she graduated from the ARC LAB Curatorial Scholarship, IADT. Róisín's research includes inclusion in and access to the arts for disabled people (disability theory, disability cultural policy and disability access tools). Since graduating she has curated 'A Consideration of All Bodies' at the LAB Gallery and worked on research projects with Dublin City Arts Office and Cork County Council.

Laurence Counihan is an Irish-Filipino writer and critic based in Co. Kerry. Currently a teaching assistant and PhD student in the History of Art Department at University College Cork, his research is located at the intersection of art history, media archaeology, and continental aesthetics. His essays have been published in Circa Art Magazine, Paper Visual Art, Enclave Review, Visual Artist' News Sheet, Mirror Lamp Press, Hz Journal, and Yearbook of Moving Image Studies.

David Beattie is an artist and lecturer based in Dublin, Ireland. Beattie's sculptural practice explores the material world through experiential, physical engagements with objects and non-objects. He was a recipient of the Hennessy Art Fund for IMMA collection in 2016 and his work was recently acquired by the Arts Council for the National Art Collection in 2021. His work has been exhibited nationally and internationally including Void Offsite Commissions, Derry, The Glucksman, Berlin Opticians, TULCA Art Festival, Galway, CCA Derry-Londonderry, Irish Museum of Modern Art, The Mattress Factory Art Museum, Pittsburgh, and Douglas Hyde Gallery, Dublin.

Ellie Niblock is a multidisciplinary artist from Northern Ireland living and working in London. She graduated from MA Fine Art at Central Saint Martins in 2020 and holds a BA (Hons) in Textile Art. Ellie has participated in solo and group shows internationally, working with venues such as The Mark Rothko Centre and Tate Exchange. She features on Sky Arts new programme 'Landmark' where she was commissioned to create a public artwork. Ellie's work is part of The Arts Council of Northern Ireland's permanent collection, and she will be undertaking a residency at Yorkshire Sculpture Park this November.

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