







Terminal Assemblage Terminal Assemblage



"It is important to note that code/spaces of air travel have accreted over time to no set master plan, with technological advances, a changed political and legislative and economic landscape, to create an interlocking assemblage. The components of this assemblage have a diverse range of owners, maintainers, and licensing, accompanied by a labyrinth of contracts, leasing, and service-level agreements. Further, a raft of national and international bodies and industry organisations are responsible for the setting and vetting of standards for systems where software is vital. As a result, the assemblage emerges as a constellation of many, sometimes competing, interests."

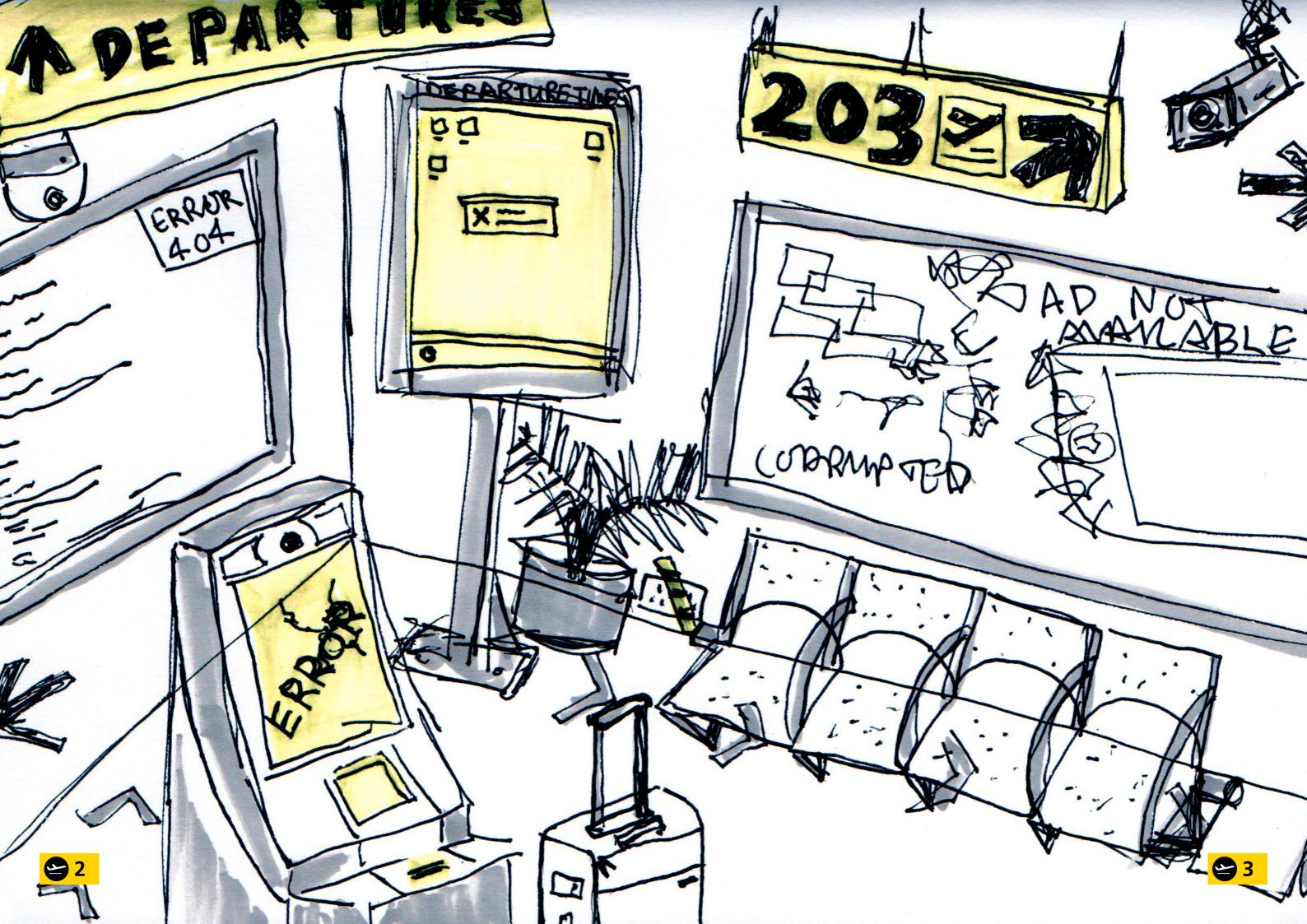
- Rob Kitchin and Martin Dodge Code/Space : software and everyday life I am a multidisciplinary artist and designer, my work explores bias acquisition in the development of computational algorithmic systems, the nebulous political discourse of social media and our increasing dependence on modern technologies. I use satire, reappropriation and interactivity to comment on and provoke discussion about how we think about these societal topics. In 2019 I graduated from UWE Bristol, with a first class degree in Creative Media Design. The course focused on creative digital media production for online, networked and mobile platforms. As part of the programme, I explored the playful use of digital media whilst also challenging the media artistically, technically and intellectually. As a result, I developed a proficiency in traditional art and design practice, allied with an understanding of current web development processes.

We have built systems that have been exclusively trained on data sets from the past, we give them power and authority. These algorithmic systems play a critical role in producing and curating our communications and shared culture. They determine the relevancy of the questions in which we seek answers to, what advertisements we see, who we should date and what we should watch. We have built 'code spaces' throughout our towns and cities, consequently many of our shared environments fail to function in the absence of code or an internet connection. I am interested in our faith in these new artificial systems and the flaws, bugs and biases that can be found within them.

We naturally perceive computational systems to be impartial and unbiased towards everyone in society. It is easy to forget that these seemingly innocuous systems are created by individuals with their own set of values and beliefs, which consequently find their way into the fabric of the system. These technologies are commonly developed within the Silicon Valley ecosystem which is often not diverse or representative of the wider community of individuals who use their products and services. Currently, these companies operate in a landscape with outdated legislation, allowing them to remain largely unregulated. They have power and influence over governments and can control and shape new legislation to regulate themselves.

Many computational systems use unsupervised machine learning algorithms, which is a form of learning where the algorithm interprets and organises data sets into a logical structure through clustering and association. However, developers can not know for certain the precise logic behind the decision making, as a result, they can quickly inherent bias. Previously I have created work challenging viewers understanding of machine learning and facial detection algorithms, as well as highlighting the inherent biases and the questionable training methods associated with developing them. I intend the work to function as a springboard for open conversations about these topics, which I think is important considering their pervasiveness in modern society.

Introduction





Terminal Assemblage



'Terminal Assemblage' is a site-specific immersive installation that transforms the interior of arebyte gallery into an airport terminal like environment. Airport terminals are the embodiment of a 'Code Space', a space where computation is a crucial component, to the point where an environment or experience ceases to function in the absence of code. As Kitchen and Dodge point out in their book of the same name, air travel has become increasingly reliant on software engineering and networked computing, never more so than post 9/11, with an emphasis on rearing a system that amasses large amounts of data about the people that pass through the assemblage in order to render it safe and secure. Ironically, while code is used to make air travel more transparent to authorities, how it is deployed is increasingly routined and backgrounded, and many aspects remain invisible or unexplained to passengers and most employees.

The construction methodology of the space is inspired by artist Mike Nelson and the process he uses to create his immersive installations, which involves reappropriating found materials and objects he has collected and repurposing them to create theatrical and atmospheric environments. I experienced Mike Nelson's 'Coral Reef' installation first hand at Tate Brittan in 2010 and the work had a very visceral reaction on me. Like Nelson, my space will be made up of a collection of reclaimed readymade objects to create an assemblage that resembles an airport terminal environment. This practice of collating preexisting objects to create the terminal subtly references a common process in programming. This process involves finding relevant snippets of working code made by other developers, often shared on forums and online development repositories, and then integrating them with their own project to produce the desired end product. Thus creating an assemblage of disparate parts which once brought together in the same context, creates a shared relationship tying them together.

Whilst researching the local surroundings of arebyte gallery in east London, I was intrigued to discover its proximity to a code space, London City Airport, which is located two miles away from arebyte gallery, and as result means the gallery is directly in the airport's flight path. Another point of interest in terms of the gallery's location was London City Island. Set against the backdrop of Canary Wharf, London City Island is a major new development in east London which has been described as 'London's new island metropolis, an ultra-connected destination of extraordinary culture and contemporary living'. The island is still undergoing development and the feeling of construction and transition is very present when visiting the location. On my visit, I was struck by the set like construction of the apartment blocks, cranes suspending large panel like building exteriors with brick effect and double glazed windows already inset, being secured to the side of great steel structures. It brought to mind the aesthetic

quality of film sets and how the polished exterior of a building can give off a sense of believability and completeness. It also reminded me of Cornelia Parker's Psycho Barn work, a piece that invites the viewer to see behind the exterior facade and intentionally breaks the illusion it creates for the viewer, by exposing the scaffolding supports of the structure. Much like Nelson, Parker repurposed materials to create the Psycho House, specifically red barns which are commonly found across the United States. The temperamentality of the environment of London City Island, combined with the immersive work of Mike Nelson and Cornelia parkers Psycho Barn inspired me to construct a temporary environment inside arebyte, I believe it's location makes it the perfect place for a temporary constructed environment, because of the continually evolving surroundings of London City Island.

Visitors will enter the gallery through the rarely used side entrance, in an attempt to throw them off balance, intentionally disorientate them and alter their expectations before they have entered the space. This is especially important for individuals who have visited the gallery previously and are familiar with entering at the front of the building. I am interested in subverting people's expectations of the materialism of emerging media art that arebyte specialises in. Regular arebyte visitors could be accustomed to seeing screen-based, VR or AR environments, the physicality and realism of 'Terminal Assemblage', will be uncomparable with screen-based immersive VR and environments. It is my belief that computer-generated environments, still lack a high level of realism. However, as a result of the increase in popularity of VR, I think many individuals are accustomed to applying a level of believability to immersive settings, and are more receptive to the theatrical elements of manufactured environments than they may have been in years past. I think this works in my favour in terms of visitors willing to believe the theatric nature of the installation.

I am hoping that visitors experiencing 'Terminal Assemblage' are encouraged to consider the pervasiveness of code in public spaces, the prevalence of mass surveillance and the impact that has on us as a society. In addition to whether surveillance, biometrics and mass data gathering is necessary for public security, and where the ethical line is between public safety and a lack of privacy. The potential true motives behind surveillance and gathering of individuals data and whether many of our tech-driven public spaces are theatrical smokescreens for capitalist ideologies. I especially hope 'Terminal Assemblage' highlights the large amount a replicable theatre that occurs in Airports and acknowledges a potential future where individuals are sidelined and replaced with generative lines of code, that continue to seep into every aspect of our daily lives.





Flight Path





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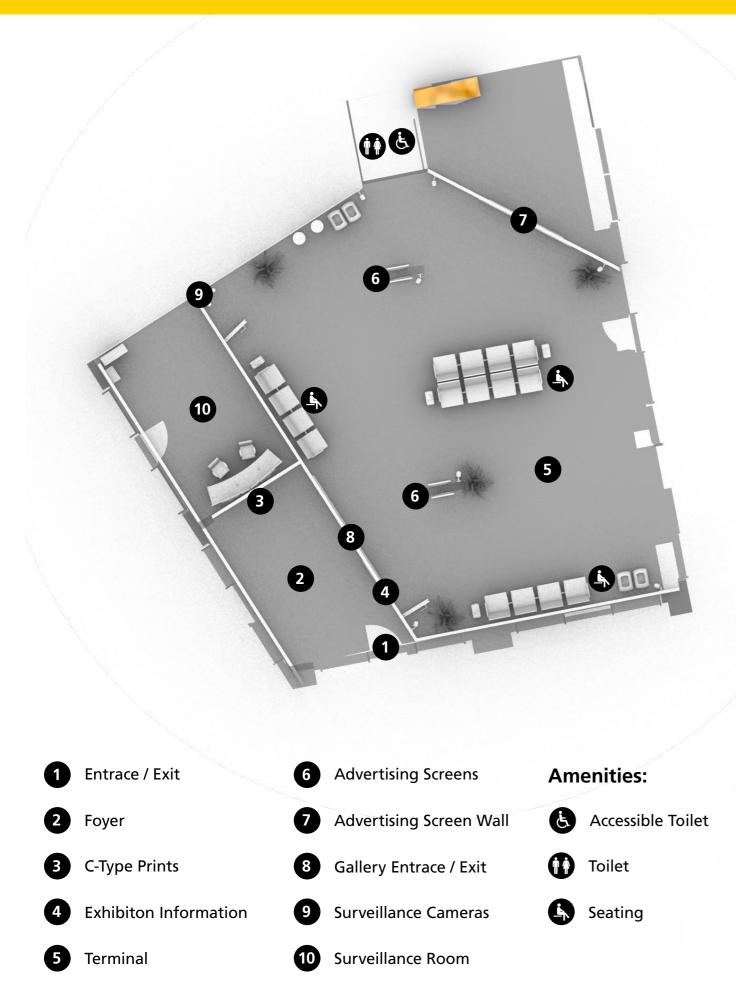


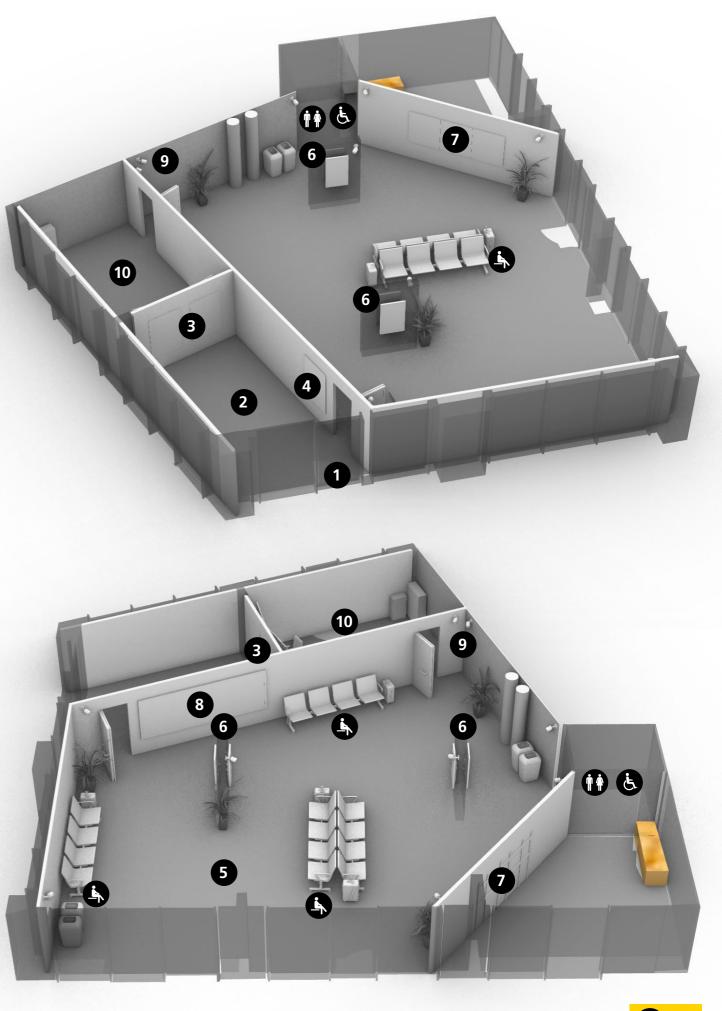
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🗲 🔦 Surveillance Room

The empty surveillance room is a metaphor for the lack of human interference in modern computational surveillance systems. It comprises of eight monitors displaying a live feed from the CCTV surveilling the entirety of the terminal section of the installation. The human is no longer a critical factor of threat detection in advanced mass surveillance, algorithms use face-tracking technology to highlight potential threats to a security controller, however, such systems have been found to be ethically questionable. Much like 'Algorithmic Adverts' which feature in 'Terminal Assemblage', the empty surveillance room and a complete lack of human interference, is a potential reality in the computationally driven future in which we are nearing.

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S Advertisements

The advertisements displayed on screens in the gallery space will be a collaborative work between myself and a machine learning technician. The aim is to produce a series of digital images that resemble advertisements but are created by a computational algorithm. We will train a machine learning algorithm on a data set of images, depicting the kind of adverts you see in airports for example; cheap flights to holiday destinations, luxury watches, designer clothes and fragrances. We will then use the algorithm to generate new images, which will hopefully highlight what the network perceives the fundamental elements of this kind of visual marketing to be, as well as how machines perceive the notion of capitalist ideologies and marketing material. The tentative title for the body of work is 'Algorithmic Adverts'.

I think this work is important because in the post Cambridge Analytica era in which we exist, many of the adverts we see on the web today are refined, hyper-personalised and micro-targeted to each individual user using personal search history, internet browsing data and A, B testing to sell products. Often creativity is backgrounded and design, colours and copy are generated on the fly to appeal to specific users. 'Algorithmic Adverts' give all of the control to the machine, to determine the finished outcome of the graphic image, this process could foreshadow a future where all visual marketing material is computationally generated.

Two 'Algorithmic Advert' images will be selected and will be used to produce C-Type prints, which will be hung in the area marked foyer in the new gallery layout for Terminal Assemblage. Selecting the C-Type or Chromogenic printing process was very intentional, C-Type prints are made from a digital file and uses RGB lasers as opposed to CMYK inks. Therefore, this means the print is an exact representation of the image and the colours that are being generated by a computer screen.

Please note that the images used to illustrate this section have not been created using machine learning, they are mock-up's created to help visualise how the finished generated images could look.









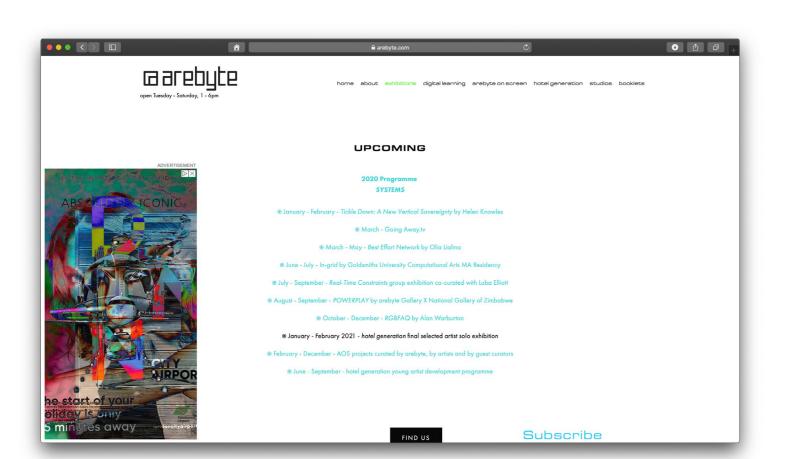


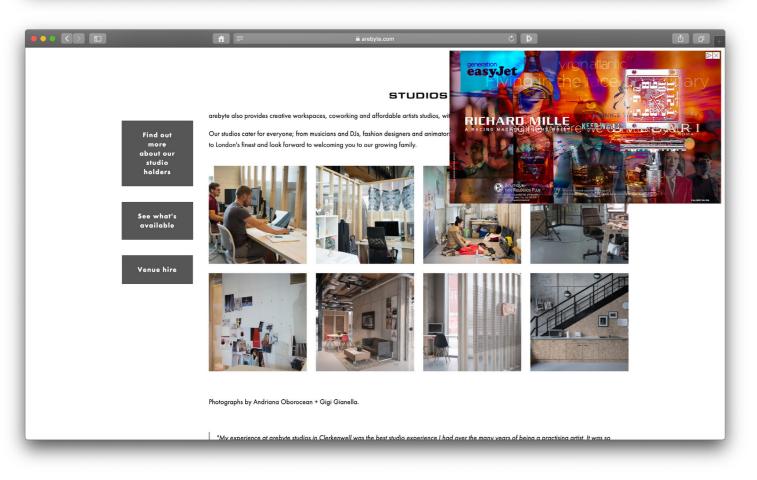




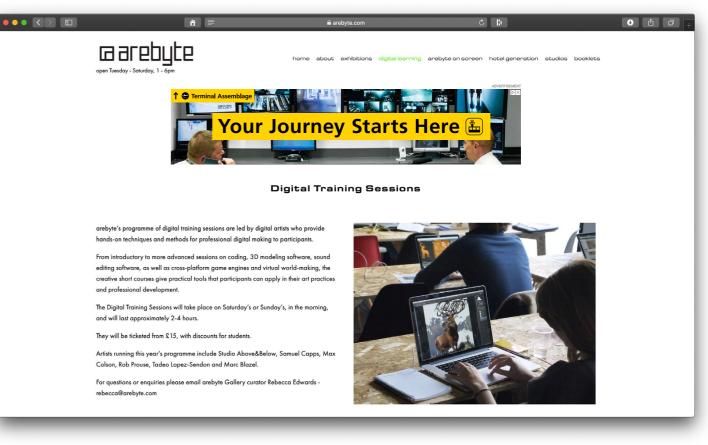
Online Presence







ML genarted advertisment collaboration displayed as a pop-up ad on arebyte.com website



Terminal Assemblage banner ad on arebyte website, advert linked to terminalassemblage.com

arebyte Website Intervention:

For the duration of the exhibition, I plan to intervene arebyte's website, more specifically I want to spam it with pop up ads of the 'Algorithmic Adverts' that will feature in the gallery. I like the ambiguity of these images out of context, I think they will intrigue visitors due to their incongruity, the ad's when clicked will take users to the current exhibitions page. This continuation of the work online also reinforces the idea of the pervasiveness of modern marketing in today's society, which proliferates all mediums both digital and physical. Individuals are accustomed to seeing the same advertisements and marketing materials in different forms and places on and offline, often in the same day. We have become familiar with this type of bombardment of advertising and marketing brainwashing, through repeated exposure and internet behavioural tracking.

I will also develop a bespoke website for Terminal Assemblage (terminal assemblage. com), the website will function as a continuation of the metaphor and believability of the gallery exhibition experience. Visitors to the site will be able to learn more about the exhibition, see exclusive content and browse live flights.



1 Terminal Assemblage

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Your Next Holiday Destination Awaits

An Airport Terminal Environment Like Any Other

→ Browse Flights











To further the metaphor of airport terminal environment in the gallery space, I have designed t-shirts for arebyte gallery invigilators to wear when they are in the gallery. The design aesthetic for the t-shirts continues the theme of adopting the design language commonly used by airports on their wayfinding signage, I have reappropriated this design for the entirety of the exhibition material. I have also created design mock-ups for limited edition tote bags depicting an airport luggage tag, modified to display information about the exhibition. Please note that these items are speculative and therefore not budgeted for.

Tote Bags: 1 AREBYTE TERMIINAL RADLEY COOK ASSEMBLAGE ト記题 **.**

T-Shirts:



Front







Back









Alongside the exhibition, I'd like to host a series of talks and/or panel discussions in the 'Terminal Assemblage' installation, from artists, academics and technologists who explore the impact of technology on society, specifically the pervasiveness of algorithms and code in public spaces.

Individuals such as James Bridle (Artist and Writer), James has written about Code Spaces and the impacts of algorithms on cross-sections of society. Rod Dickinson (Artist and Lecturer), Bill Posters (Artist) and Libby Heaney (Artist). Please note that speakers do not necessarily have to attend the gallery in person. They could conduct their talk and participate in the discussion via a Zoom call, which could be displayed on one of the many monitors in the installation.

A small group of attendees can gather in the space, but I will live stream these events, to ensure the talks are accessible to individuals around the world who are not able to attend the gallery in person. For the live stream video input, I will utilise the feed from the CCTV in the space, so live stream viewers feel like mass surveillance controllers spying on the talk. The live stream will then live on arebyte's YouTube channel after the event for people to watch back at their leisure.



Expenditure	Unit (
Artistic Fees	
Artist Fee	
Production costs	
Bench Studio Labour	
Bench Studio Materials	
C-Type Printing	
Van to Transport Furnishings	
Puilding Materials	
Building Materials	
Door Hinges Wall Paint (Matt White Emulsion)	
Equipment	
Samsung UT-B Series 46"	
LG 49UJ635-ZF 49"	
Monitor 21"	
Yale Digital Video Recorder H4B- HD (CCTV system)	
Zmodo ZMD-DD-SBN4(CCTV sys-	
tem)	
Reclaimed Furnishings	(Ap
Waiting Bench	
Bins	
Plants	
Barriers	
Doors	
Desk Office Chairs	
Collaborator Fee	
ML Technician	
Total Expenditure	

Exhibtion Budget

Cost	Quantity	Cost
		£1,500
1500	1	£1,500
		£3,110
440 770	5	£2,200
145	1	£770 140
1-1-5	1	In Kind
		£50
2.5	4	£10
20	2	£40
		60
	6	f0
	4	arebyte Inventory arebyte Inventory
	6	In Kind
	1	arebyte Inventory
	1	arebyte Inventory
pprox)		£640
100	4	£400
24	5	£120 £40
10 20	4	£40 £80
20	· ·	In Kind
		In Kind
		In Kind
		£200
200	1	£200
		£5,500



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