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# Devices and the Designs on Us: Of Dust and Gadgets

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*This parallel presentation of dust and devices, as they have appeared in recent history, attempts to illuminate our reliance on technical devices, such as smartphones, tablets, and the like, in the context of wars and shifts in political and economic ideologies. Devices—and their software—get old and require updating (think of iPhone generations). They are eventually consigned to the dustbin. What does the commitment to upgrading reveal about contemporary understandings of history and historical movement? What is progress in the shadow of the device and in the face of environmental disaster at the particulate level? Sites and moments for critical excavation here include Thatcherism and desert wars, the fall of the Berlin Wall, digital imaging systems, the invention of the Cloud and the Internet of Things, the alignment of coffee shops and 24/7 working, and the utopian potential of space hardware.*

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## **Dust of History**

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What happens at the end of time? Dust falls on it. Everything gets covered in a layer of dust. Outlines are seen, but not the substance of what is. Around dust there is silence, a muffling. Dust falls in the archive, that is, in the archive of history and on our lives as an archive of ourselves. The past piles up, our pasts. Dust settles. Dust settles on things, until it is whipped up into a whirl. Dust is evidence that scores are settled (which means decided) or unsettled (historical cases reopened). The collapse of states in the Eastern Bloc led for a short period to many declarations of the “end of history” and the inauguration of a “new

world order.” The fall of the Berlin Wall became synonymous with the end of one epoch and the opening of another. The wall fell, it was said. This was not quite true. Its concrete slabs crumbled to dust, under the force of a thousand little hammers, the wall peckers, bashing, chipping, and grinding away at the structure, for their little bit of history to take home and put on display. The old Eastern Bloc regimes were now nothing more than dust, of the past. As the wall’s fragments fell on the dry mud around its base, some dust no doubt swooshed up into the air. Concrete dust meets dry mud. The granules of sand, that dust of rocks, which made the concrete of the wall, might have split apart and spilled, had they not been chemically transformed, and so irretrievable.

In the early days of the fall of the wall, the events of November 1989 in Berlin were widely conceived, for those who were not there, as a media event, a televisual spectacle of triumphant wall breakers, making metaphorical images of the crumbling authority of dictators. This disintegration of a historical period, embodied in its regime, was also projected in the removal of statues. These images of a system crumbling into dust returned again and again, ever rebroadcast to replace—or stand in for—historical process. This was evidence of the end of history, the end of division, of opposition. It was the victory of a single political and economic system. It was the end of ideology. It was the end of history, at least history in the form of contradiction and struggle—that history named in the first line of *The Communist Manifesto* (1848) by Marx and Engels: “the history of all hitherto existing society is the history of class struggle.”

But soon, dust fell on the “end of history” idea. For almost immediately, history reasserted itself, war began, empires clashed and fought, and there was much bloodshed. Battlefields were dusty, for they were not fields of mud, like battlefields had been before, in the First and Second World War and earlier, but deserts, deserts of sand, in which storms occurred. Sandstorms and dust storms clogged the lungs of soldiers and blinded the enemy. Dust, sand: a matter, a stuff present, determining, constitutive, significant in two events—the fall of the wall and the epoch of desert wars. Both of these might be seen to inaugurate an epoch, a rebeginning of history. But if this is history, it is a history detached from ideas of progress. History moves, but it does not seem to go forward. The wall falls, not in the name of something new but in order to be assimilated into the old. The wars begin, never to end, only to be imprecise, muddied in their motivations and causes. History is a useless or a fatal struggle in dust.

In 2014, the world’s biggest steelmaker, ArcelorMittal, dismantled a monument to Vladimir Lenin outside one of its steel plants in Kryvyi Rih, Ukraine (fig 1).<sup>1</sup> The country’s president had been forced to flee. Protestors were destroying statues and symbols of the one-party rule. In a pre-emptive act, the company arranged for the statue’s dismantling. The reason given by ArcelorMittal was to ensure the safety of employees and protect the company’s buildings. The statue of Lenin outside the steelworks in Ukraine was not a realization of Lenin’s own 1918 plan for monumental but temporary propaganda,<sup>2</sup> but rather its negation—the negation that Stalin saw through. There is much that can be said about the erection and dismantling of statues. Much can be observed on how the memorial substitutes for memory, becomes a kind of blind spot of history, freezes history

**Fig. 1**  
Statue of Lenin falling  
in Khmelnytskyi park,  
Ukraine, February 21,  
2014. Photo by Volodymyr  
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as power, freezes into history, and stands through the ages as the dominating presence of domination. The ArcelorMittal removal of the monument had a particular quality as event. Unlike the dismantling as part of street upheaval, this was an act of power stepping in to interrupt the discursivity, including violent discursivity, of the streets, in the name of protecting property relations as they exist. What wild turns is history subject to? The putting up of this particular statue is just the same as the taking down of it. This is a reversible history. That is to say, running forward or backward it amounts to the same: power building up, power taking down. Neither direction touches on what it would mean to make history, to make history forcefully, to make a revolution, something that spins, feeds back into itself, and changes itself and everything in it in a whirl, something breathing, its centrifugal forces productive of life and thought.

Walter Benjamin argues that history detached itself from any idea of genuine progress concomitantly with the rise of the domination by capital. Reporting on fantasies expressed in nineteenth-century France, parsed through his vantage point of the 1930s in Europe, he notes the presence of dust. Benjamin mentions Maxime du Camp's biographer, who observes how this well-travelled figure saw only decrepitude in his Parisian home, the "mute and weary wastes where the sand consists of dust of the dead" blowing in from the East.<sup>3</sup> The very ground on which Paris is founded, a limestone bed, crumbles to dust, remarks Benjamin, in a reference to a German traveller's 1805 account. This limestone makes all the houses it builds look bleached and grey.<sup>4</sup> This dust takes on symbolic significance. Dust is a layer that settles on a ruling class that is arrested in time. It is a class that wishes to hold up all the forces of change and revolution, for it to be the last class, the culmination of history.<sup>5</sup> Evidence of this dusty decline appears in the objects of the environment: the upholstered furniture,

fully padded sofas and the like, prevalent in France after 1840, with their dust-attracting coverings. For Benjamin, dust is what gathers in the bourgeois parlour, such as the one he grew up in, in the 1890s, a sign of lifelessness: “Plush as dust collector. Mystery of dust motes playing in the sunlight. Dust and the ‘best room.’”<sup>6</sup> Dust relates to a “stifled perspective.” Indeed, the “stifled perspective is plush for the eyes.”<sup>7</sup> Eyes are dusty. They cannot see futures. If those old dusts may be signs of an occluded future, a clouded sense of what is to come, are they akin to the new dusts of the desert and of the cities, the falling wall, the storms of war?

An artist of recent years provided images of dust and sand, of these particulate substances clogging and blinding the lungs and eyes of life forms. His is dust and sand that ends things, portentous clouds that kill. It is not ahistorical dust and sand, but granules that float across different historical epochs, linking them together through military and economic quests. John Gerrard makes images of an ever-return of historical catastrophe, which is now conceptualized as a war on environment and people. Trickily, in a series of what he terms “animated scenes,” he brought into being videos of composited clouds of dust that represent or evoke the inaugurating clouds of an epoch of wars in the oil-rich Middle East. Two of the first of such scenes showed clouds of dust. *Dust Storm (Dalhart, Texas)* and *Dust Storm (Manter, Kansas)* from 2007 combined an archival photograph of a dust cloud in the American dust bowl of the 1930s with photographs and films of contemporary areas of landscape in Texas and Kansas alongside satellite and topographical data (figs. 2–3). What appears to be a film or a video, with a slow pan traversing the scene as a dust cloud swells over a landscape, is a simulated world animated into being, developed out of real-time computer graphics, as used by the military and the gaming industry. The cloud of brown dust, static, of course, in the archival photograph, is animated by Gerrard into a whirling storm cloud, using digital tools. A description states: “In ‘Dust Storm’ (Manter, Kansas), a dry desert environment is subjected to a randomly unfolding virtual storm, a perpetual dark, dust-laden tempest.”<sup>8</sup> The storm cloud’s patterns of swirl are based on the churns of dust, or desert storms, caught on video and posted online by an American soldier in the First Gulf War.<sup>9</sup> In those days, soldiers used the newly available technologies of representation to convey back home what they saw and experienced in these history-less wars after the end of history. They imaged these wars that were to deliver the last ideology, liberal capitalism, if it had to come through the barrel of a gun, or by a cruise missile. Oil was the prize. The First Gulf War had two phases named Operation Desert Shield and Operation Desert Storm; the latter lasted one hundred days, a military operation to eject occupying Iraqi forces from Kuwait in 1991 and the prelude to more desert wars.

A link is made by Gerrard between two environmental disasters. The massive oil fields in the Southern states and petroleum-fuelled mechanized agriculture produced an environmental disaster in the 1930s. A hundred million acres of land was farmed by oil-powered machinery within a twenty-year period, and this produced a desertification of the landscape. The pursuit of oil in late twentieth-century military adventures produced another disaster. In his animated scenes, dust clouds eddy amid their composite northern Texas and

Fig. 2

John Gerrard. Dust Storm (Dalhart, Texas) 2007, Still from work. Image courtesy of the artist, Thomas Dane Gallery, London and Simon Preston Gallery, New York.



Fig. 3

John Gerrard. Dust Storm (Manter, Kansas) 2007, Still from work. Image courtesy of the artist, Thomas Dane Gallery, London and Simon Preston Gallery, New York.



Kansas scenery under the diurnal conditions of real-time Dalhart and Manter, emerging into view in a 360-degree pan that takes eight minutes, before the camera passes back to the blank horizon, again and again, following the day, the night, the months, the years. It is, in part, a simulation of some moments which took place on Sunday, April 14, 1935, when the dust clouds were at their worst. They were 1,500 miles wide and half a mile high. On that bleak day, under the thickest cloud, cattle were choked and blinded. People were driven away from their homes and farms, suffering dust pneumonia and suffocation. These moments are made by Gerrard's animated scene into a day when the world is not as it should be. The cloud is on the ground. The cloud has been brought down to Earth, and is of earth, of topsoil loosened and made airy dry by the ripping out of native grasses for the massive farming of wheat. This dust cloud is a threatening cloud that looms in a sublimely devastating way. In its manufactured nature, though, it resembles a once-new cloud, a cloud that comes about historically, as defined in John Ruskin's "Storm Cloud of the

Nineteenth Century.<sup>10</sup> This cloud from the dust bowl transmutes into a cloud of war, or a landscape whipped up into weapon in the tussles of war. In Operation Desert Storm, the words are ambiguous—the desert is to be stormed, subjected to the storms of soldiers. The desert is a storm of sand, a landscape that can be stirred to wound and blind, a landscape whose particularity needs to be managed and captured.

Sand is the stuff of the desert, the dust of rocks, and in the modern epoch, a shifting landscape for war. Sand has been much more, and it has been captured and transformed. It has found its way not just into the walls that mark out borders, but also into buildings, in the form of concrete, a mixture of sand, gravel, and rocks glued together by cement paste made of water and cement powder. Sand was essential to the post-war buildings that emblemize capitalist modernity. This universal architecture, an international form that imagined it could be the form of buildings to be found at the end of history, in every space, in an international environment that is nowhere and everywhere at once, is made of sand.<sup>11</sup> There is sand in the glass of its windows. There is sand caught in its concrete. Sand made the Berlin Wall, which was from one perspective a prison wall and from another a so-called anti-fascist protection barrier. Sand made the United Nations Secretariat Building, too.

Concrete architecture accompanied an era of social welfare in the West and communism in the East. Each side championed its universal rights and liberation in functionalist buildings made of concrete and glass. It was also the material of more banal and more exclusive, private corporatist developments. It still is, and in the post-Cold War epoch, technologists make efforts to find a way to make concrete on the moon, in conditions of low gravity, in preparation for permanent human settlement there. And yet, sand, which has built up our modern worlds, is now scarce.<sup>12</sup> It is an emblem—and a victim—of a process of extractivism and the overexploitation of a natural resource, amid rampant building for private interests, including the construction of new territories and artificial islands. Sand and gravel are now the most extracted materials in the world. Sand is a globalized commodity, whose trade value has increased six fold in the last twenty-five years. Its mining has altered coastlines and the course of rivers. It has produced vulnerability to floods, storm surges and erosion, and still pools of water defenceless against the proliferation of disease, with the attendant effects on habitats. Construction sand, emblematic of progress, is now in short supply.<sup>13</sup> Progress is halted. Or can be carried on only at a massive cost to the environment, and so is nothing like progress or is the wrong sort of progress.

The fall of the wall and the breaking of the statues, the inauguration of more wars, the assault on the environment, and the start and end of welfare states: our times. John Gerrard makes visible, in his diagnosis of the recurrent and destructive past in the present, how one material—oil—is the organizer or the motive for historical actions, but another matter—granules of dust or sand—literally clouds the scene, obscures and wrecks in various ways. This thesis, of a connection between materials and between historical epochs, is made visible by Gerrard on the basis of a set of technologies that emerged after the desert wars and the fall of the wall, technical affordances that swept in and over us like a

cloud, for this artwork is reliant on computing capacity, which we now encounter under the name of cloud. These computing technologies are grounded on grains of sand become dust become glass become screen. All that swirling dust, those mineral quests, came together in digital capitalism and its devices. Dust, sand granules, are gathered together, subjected to heat, and hardened into glass, a glass that is not to be seen, but through which is seen the compelling spectacle of contemporary life, while through it, in the other direction, we are seen, known, and tracked, like blowing grains of dust, a mass of particles acting or not.

## **Eventually Dust: On the Particulars of the Present as Seen through Its Devices**

Sand is at our fingertips all the time, in the form of silicon, in the form of glass, or touchscreens. We know the feel of those screens better than we know the contours of our lovers' bodies, most likely. We spend so long not only looking at our screens but touching them, too. We keep the dust off them, and the grease. We care for them. And they, like everything else, envelop us in a turbulent atmosphere, in which there is a kind of dust, but it is invisible to us, and we call it fog. It is a fog of data streams, the results of communications between everything that is unwired into our Internet of things. These streams are not streams, but atmospheres, foggy environments which convey data. Some call this "digital dust," these fallings off, these traces, these little bits and pixels of past work, thought, actions.

We all, in our excursions through cities, mingle with the turbulent activity of particles in a cloud. We are the cloud. We carry it with us. We communicate with it, even when we do not know we are. We make digital dust. We are digital dust. We are the crowd, a crowd of particles, human dust whirled up. Our clouds of puffed up thoughts and opinions float around, come to land, and whirl up again across the networks of social media. These clouds of dust form crowds of thought. They spread across environments, like toxic gases and particulate-bearing winds and fogs. These thoughts expressed make atmosphere. They change atmospheres, making sometimes stifling ones.

Digital photography, or "digital information systems," as the artist Jeff Wall noted in his early, premature reflections on the shift from analogue to digital photography, in 1984, engages and disengages with matter in the world in particular ways.<sup>14</sup> Digital photography aims to redouble the efforts of chemical photography to overcome wetness, to keep the camera and its processes dry, to hold water far from the production process, in some distant and indiscernible electricity plants that cameras rely on to charge. Through this, the photography that is now a product for the liquid crystal screen becomes dehydrated, drier than dust. As science finds ways to map, measure, and optically diagrammatize the paths of swirling dust in turbulence patterns or the gentle sweep of arcs in compound curvatures, it posits a relation—if only as another type of reminiscence—to the fragility or transience of the phenomena it apprehends. Digital image-making is drawn to the dust, the particulate. The



**Fig. 4**  
Air flows over mountain peaks on Heard Island causing clouds to eddy in von Kármán Vortices. NASA image archive.

increased processing power of computers, and their enmeshment with digital animation systems, has allowed for more and more detailed modelling of dust, dirt, granules, moss, and scattered fragments. Digital representation, in its analytical mode, is busy finding ways to make detectable evanescence, such as the stress factors on a curve, the agitation of the air, clouds, the wind, and turn it into outputs, into measurement, as in the von Kármán vortex streets made by NASA's Multi-angle Imaging SpectroRadiometer (fig. 4). Dust's movements can be tracked in digital mapping programs, visualized and analyzed. The turbid dust of a polluted region, or sand on the move, is mapped and tracked digitally, its future moves predicted, in the quest for intelligence about environments, as particulate marries with pixels and digital visualization pairs with analysis. The dispersion of the virtually imperceptible, its behaviors over time, its pixelated parades can be brought to light. The digital age draws in dust, as it makes every effort to repel it. Dust has always been one of the plagues of photography: dust on negatives, on lenses, inside cameras. It is even more irritating in the digital photographic world: the electrical charges within cameras draw dust particles in like a magnet, and these will appear in every image thereafter. And, in addition, digital photography is especially susceptible to backscatter, or retro-reflection of light off dust or other particles in air or water, which appear in images as floating orbs of transparent, white, or rainbow circles. Dust has its uses, too. It becomes data—Facebook builds knowledge of social relationships, and

has been known to make its lucrative “People You May Know” suggestions by correlating the dust on photographs, which indicates that various images were taken by the same camera. But dust remains a problem in digital surveillance capitalism, at least in metaphorical terms: “If you take the deep learning out of Facebook today, Facebook’s dust,” Yann LeCun, Facebook’s chief AI scientist, recently told CNN Business. “It’s entirely built around it now.”<sup>15</sup>

The matter phase of the digital age appears to be an attraction to an atmosphere rich with dust, which is measurable—those sands on the move, those tiny particulates of pollution balling in our cities, those specks of toxicity that bunch at the poles of the world. Digital devices track those dusty whirls of tiny movements and make them useful to science and measurement. The auratic that was present at photography’s birth, as Walter Benjamin identified it his 1931 “Short History of Photography,”<sup>16</sup> emanates on photographic papers as a fuzzy halo around the face of the beloved, caught by slow and imprecise lenses and modeled on the softness of painting. Thus aura returns otherwise. This new aura is not, as Benjamin observed of the former one, the mist of an imperialism happy to be named such and through which subjects peer mistily. Rather, it signals the clouded air of industrial farming’s dirt tracks, the loss of topsoil from irresponsible changes in land use. There is an air thick with pollution. It is also thick with sensors, barely visible ones. The signals of communicating devices constitute a fog, which is called fog-computing, the name for communicating, connected digital objects in the Internet of things. Somewhere between invention and fantasy there is also intelligent dust, which the military calls smartdust, collected together as a swirl of tiny matter that is designed to be electronic spies, pixelish wads of power, sensors, computing and communications electronics, low-cost and plentiful enough to scatter like dust, sense the environment, communicate with each other, and gather and process data.

## **Our Own Devices**

The digital epoch changes a lot, just as it also changes nothing in terms of the basic format of relations. We are asked to imagine the redundancy of humans in the face of digital machines and robots. This redundancy is likely to be less a making invisible and more a making visible: humans as underactive fleshiness, as problems, as recipients of phony universal basic incomes, as consumers at any cost because that is the rationale of the system. Those new machines can make anything. They use their digital clays to mold anything that can be imagined and things that have never been. New developments make it possible to model even viscous, semisoft things. This is slow, as slow as craft ever was; those digital plastics build up layer upon layers, through wobbling nozzles leaking thin and tiny blobs. This is a new craft, one crafty enough by itself to seem not to need humans. But perhaps what is created, because the human will not go away, is a *Kraftfeld*, as the German call it, a force field, a relational electrical field, or a magnetic or gravitational one. This force field is a region of space around a body—or around the machine—which, as with a charged particle, exerts a force on other bodies not in contact with it. So the digital machines, the devices, exude a force across the whole of society. Sometimes we touch them, but even

when we are not touching, our worlds are still being reshaped and remade for us, because many devices are not at our fingertips or right there, but they are, at that point, perhaps no longer for us first and foremost.

A device is divisive, in etymological terms. The word comes from the late thirteenth-century Old French, derived from the Latin *divisus*, for “that which has been divided.” When goods were being divided between people, a mark, known as a device, which took the form of an emblem, was put on each item to show whose was whose. A device is something that belongs to someone as an act of division. A device is not just a mark of possession. It may also be literary, such as those devices a rhetorician or an author might employ to gain best effect, or an advantage. Devices are things that separate, divide, and mark out. The contemporary machinic device poses a contradiction. Our gestures must be common enough to be read by the machine. But the machine is our device, our own one. We possess it, and it possesses us. It is there to divide us into our own bubbles of social labor. We are also to be divided against ourselves. Our gestures are not ours. They belong to the machinery. Liquid crystals facilitate them, their gestures corralled into simple flickings of switches: on/off.

Liquid crystals inhabit our devices, devices which proliferate, even if this is not always in plain sight. The device is everywhere, and it does more and more, for us and without us. We have accommodated ourselves to the device, or to devices, especially to those that require our gestures, our touches. Devices need us, as much as we need them in some sense. Our bodies complete their circuits. Touch is what the device needs in order to function in a technical sense. Most touchscreens are either analogue, using electrical resistance to sense touches, or, alternatively, digital, using electrical capacitance. A circuit based on capacitance has been most effective to date, with the human working as a conductor. When the finger falls on a touchscreen, which is composed of a grid of electrodes, a capacitive contact is formed, and the AC current of the device elicits from the user a corresponding current—within levels for natural charge conduction in bodies—to complete a circuit. We work for the machine in touching it. It flows. There are flows. The device captures gestures through its microsensors. One press and the screen starts up, after a few moments’ delay, if it has been “sleeping,” in that device mode that is actually more like a state between sleep and wakefulness. Then it responds to the fingertip, to the knuckle, to the tap, the flick, and the swipe. Its surface is smooth and primed to reply. In turn, the fingertips and other parts of the fingers become sensitized in new ways, developing gestures not previously performed, such as the thumb and two finger gesture of expansion. Our touch corrals liquid crystals into certain pathways to make things happen, to trigger events. They orient themselves according to inputs. We and they learn a new gestural vocabulary.

These gestures that we make toward our device make connections, between us and between the events that are triggered on and through the screen. They connect. But our devices divide us, too. A device is a gadget, a vaguely defined technical thing that does something, usually by mechanical or electrical power. Some devices are known as suspect, devices made as bombs, cobbled together from parts with a trigger and sent to spread terror. There was one designed to

**Fig. 5**  
The Grand Hotel in  
Brighton, following the  
IRA Bombing, October 12,  
1984. Public Domain.



rip through the air and brick at the Grand Hotel in Brighton in 1984, nearly killing Margaret Thatcher (fig. 5). This device shattered what was around it, as if the crystal of life that held together could be broken into so many parts. Its trigger was detonated by a long-delay timer made from videocassette recorder components and a parking meter reminder signal called a Memo Park Timer device. Nowadays phones are the triggers for remote-controlled improvised explosive devices, in this gestural politics of terrorism.

## **The Unspeakable Freedom Device**

Jennet Thomas's 2016 film *The Unspeakable Freedom Device* is filmed and set in Blackpool, sometime home of UK party conferences (fig. 6). It is also a place of day-trippers, promising for revelers a certain kind of freedom: freedom from work, under the old schemas, for two weeks of the year when the mills closed down and the Bolton Worktowners, as Mass Observation investigators termed them in the 1930s, set out en masse. For Mass Observationist Tom Harrison, the whole point of Blackpool was that it provided "liberation from normal restraints and levels, the opportunity to be luxurious and extravagant."<sup>17</sup>

Blackpool was a kind of device, and still is today, perhaps, when men and women on pre-wedding stag and hen nights indulge in their so-called last night of freedom, under the iron bars of a baby Eiffel Tower, with their storming the Winter Gardens instead of the tsars' Winter Palace. The device that is Blackpool is powered by pleasure and excess, until the rules kick in and the lid that might otherwise have blown is replaced. The city is a freedom device, modulating, rationing, monitoring. The landscape architect Thomas H. Mawson, who designed Blackpool's Stanley Park in 1922, or perhaps a Lancashire businessman in conversation with him, once reputedly said: "Blackpool stands between us and revolution."<sup>18</sup> The neon lights sustain life by embellishing it; the



Fig. 6  
Jennet Thomas,  
*The Unspeakable  
Freedom Device*,  
2015. Still from work.

illuminations dance in the environs of the ancient and baptismal force of the peaty, dark waters that gave Blackpool its name in its earliest days. Blackpool, the City of Lights, rivaling Paris, conjured up a delirious lighting of festivity. The pools of lights embroider the blackness, and they are also meant to chase out the daily grayness.

*The Unspeakable Freedom Device* is described as a “dystopian folkloric work.”<sup>19</sup> The image of Margaret Thatcher, former Conservative prime minister of the United Kingdom, has burned into the collective memory of a savage and cultic culture, in which there are those who dress in her familiar garb and those who are peasants, on a pilgrimage to get benefaction from the cultic Thatcher. The landscape is blue, red, and green. The people who populate it are blue, red, and green. All roads lead to a Blackpool renamed Blupool, in honor of the Conservative colors. On the way and in the Winter Gardens are devices that need to be incorporated somehow, enigmatically, into lives. The prologue of the book (which is the screenplay of the film) states: “This is your new device. The purpose of this device has been re-defined, but this was gradual, so you did not notice. This device likes you. It excites with simplicity, it cuts, lifts and separates, then hollows out the centre, making ready for the enrichment mechanisms to enter.”

This device is a jumble of adspeak, of uncertain promises, and of immense claims, including on your person and your mood. The unspeakable truth Jennet Thomas’s artwork speaks is this: Margaret Thatcher was the device, this entity that avails itself so easily to exaggeration and to imitation. What came afterward in the United Kingdom was as much Thatcherite as what came before.<sup>20</sup> The narrator in Blackpool-born Patrick Keiller’s film *Robinson in Space* observes: “Robinson says that Blackpool holds the key to his Utopia.”<sup>21</sup> *The Unspeakable Freedom Device* holds the key to Thatcher’s utopia, which became a reality. The devices are many. There are the devices of technological surveillance for the security state; those of technological ingenuity to ease the transactions of the free market; technological solutions to monitor privatized

activity, such as laboring in one's own time, on one's own devices; the device of individualistic hedonism and antisocial behavior, shattering and replenishing at once. There are also the rhetorical devices of speaking while rendering unspeakable, cordoning and policing the parameters of acceptable speech and acceptable thought—as the Conservatives insist on “our” values, “our” way of life, which translates in actuality into the ruination of communities and modes of life, in order to make of us all pilgrims in fear, peasants hoping for enough entertainment to mitigate the long day and to receive enough individual salvation, display enough well-demonstrated faith in what exists, that we do not stand out, that we are not green when we must be blue or red or purple. In Blackpool there is a branch of the global leisure chain Ripley's Believe It or Not! Odditorium. It is a freak show in wax, which settled in Blackpool, where the weekend players cavort freakishly and freedom is the liberty to drown your sorrows and to laugh at those even worse off than you for a few days. Here a blue man or a green baby, like those represented in Thomas's film, might make a living for someone for a while. Here in the freak show, we might console ourselves with the seductive but incorrect thought that the freak show of the annual party conference, which it mirrors in red, green, and blue, to be transmitted by the RGB switched on and off in liquid-crystal screen devices, is meant to be as inoffensive a gathering.

Freedom is rationed. It can be taken away, not least in Blackpool. After the Brighton bombing during the Conservative Party conference, security became policy. Politics became distant spectacle behind rings of reinforcement. Cordons, tracking, monitoring, a ring of steel around the Blackpool conference center, further distanced democracy from the people. Of course, the event was evoked in Thatcher's speech to the conference the following year inside the Blackpool Winter Gardens: “There are many here today who still bear the scars of injury and bereavement inflicted last year by terrorists when they struck in the hours of darkness. It reminds us of the risks we all take and will continue to take for freedom.”<sup>22</sup>

And the speech outlined the victories in the name of freedom, which were predominantly to do with breaking working-class power in the industrial unions and adopting policies that forwarded an economic regime of neoliberalism, organized around choice, denationalization, and the dismantling of the welfare state.<sup>23</sup> The Conservatives celebrated their unspeakable victories in the very place where their policies smashed and shattered, in the north, close to the death of shipbuilding in Sunderland, the contraction of the steel mills in Sheffield, or the enfeeblement of the British coal industry, including the misery unleashed in the Lancashire coalfield.

What about economic freedom? Especially in the context of Blackpool, where it was worked out and hammered through, in part; where deindustrialization became strategy and financialization reality. In Blackpool Thatcher created a legacy. It was a financial one—neoliberalism, the freeing up of markets. We know about new financial instruments that neoliberalism brought into being: tradable assets, algorithmic spasms. But what about their context? Such as the so-called black pools, or dark pools, of financial traders, their private

fora away from the public exchanges such as NASDAQ or the London Stock Exchange, with their constant LED displays conveying spills of bright numbers in perpetual motion, communicated from the New York Stock Exchange, the Dow, the Shanghai Stock Exchange, or wherever onto the trading floor and then beyond to TV stations or directly into the streets on vast screens, to bathe the mystified passersby. In the black pools the dark liquidities of financial institutions are secretive and, for the most part, privately accessed. The obscure trade takes place without revealing identities or size of trade before the trade is filled with prices that are fixed in the dark and not disclosed, not revealed. The mysteries of the market are further compounded. There is darkness at the very enigmatic heart of the commodity system. It is unseen and unspoken.

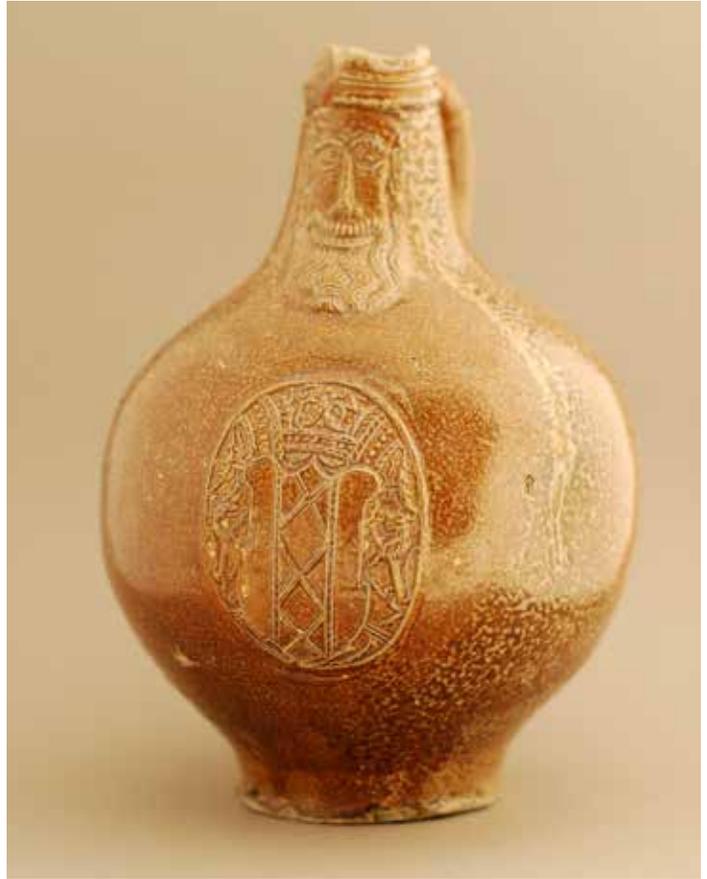
But there is much thrilling light, too, the endlessly attractive lure of screens, which extract value as naturally as anything, through the clicking of a button, through the tracking of an eye or the logging of a preference. The endless resource of data produced by devices includes emotional data, the logging of likes, loves, the sharing and caring online, which lends its outputs to robots and software so that they might develop emotional intelligence. This is not seen as work, and yet it produces profits, is as excavatable and capturable as any element. The device makes work always potentially accessible, too, in making the human resource always potentially accessible, always close to the sensitive spots on screens, the liquid-crystal array.

## **The Matter**

In evoking dust, sand, liquid crystal, and gases, matter is here foregrounded—the liquids, the crystals, the gases of digital capitalism and the age of the device. Matter has its moment. It has history. How quaint some old matter such as clay might seem in an age that has been given over to plastics, which will never be over. Clay is of the past, though it is also of the moment and does not go away either. It remains as an admonishment or a promise. Ernst Bloch in his treatise *Spirit of Utopia* from 1918 begins with reflections on “a simple pitcher” that bears the face of a wild, bearded man on its neck (fig. 7).<sup>24</sup> It is clumsy and brown, and it is unlike those more expensive imitations: “expensive ‘bearded man’ pitchers, beautifully preserved, deliberately sculpted and elaborately fluted, with narrow necks, a neatly coifed head on the neck and a heraldic shield on the belly, and they overshadow the simple pitcher.”<sup>25</sup> He muses on where these pitchers come from, an area of the Rhineland, drawing on Roman clay, coarsened by Nordic sensibilities. They find their way into taverns and carry beer in their bellies. They fall out of fashion in time, “as everything hand-crafted” must.<sup>26</sup> Bloch’s thoughts turn to the tavern of the afterlife in folklore; here such jugs may be exiled. These jugs are magical. He imagines what it looks like inside its “dark, spacious belly” and speculates on how, in looking at such a vessel, one takes on its color and form.

Not every puddle I step in makes me grey; not every railroad track  
bends me round a corner. But I could probably be formed like  
the pitcher, see myself as something brown, something peculiarly

**Fig. 7**  
Bartmannkrug (bearded man jug), Frechen, Germany, Mid 17th Century. Photo by D. Herdemerten and published under a Creative Commons Attribution 4.0 International license.



organic—some Nordic amphora, and not just mimetically or simply empathetically, but so that I thus become for my part richer, more present, cultivated further toward myself by this artefact that participates in me. That is true of all things that have grown, and here, in drinking pitchers, the people laboured to express their pleasure and their deeper sense of contentment, to affix themselves to these implements of the household and the public house. Everything that was ever made in this way, out of love and necessity, leads a life of its own, leads into a strange, new territory, and returns with us formed as we could not be in life, adorned with a certain, however weak, sign, the seal of our self.<sup>27</sup>

This jug is a product of labor. It takes its place within a culture of use. It plays its role within myth and fantasy. Selves are expressed through it, the maker's self, the user's self. Yet, it leads a life of its own—it leads us—but we are made with it in this journey. We are, Bloch thinks, made through and of that clay, a mud composed of weathered granite rock, of decomposed feldspar, drawing water into its crystal structure. We are like golems. He could be the jug. Can we be the device?

There are new clays that are a by-product of contemporary production. In China exist huge lakes of a slow-flowing sludge of a radioactive clay. These are tailings, substances left behind once ore has had its economically valuable parts stripped out. It arrives there as waste from the rare-earth mineral refining factories, and what is leftover settles in mud and is held there, so that it does not disperse on the wind into populated areas. This thick pond hosts the remainder from the chemicals that provide the underside of the liquid-crystal touchscreen, the coating that monitors changes in electric state on the screen. Some photographs of these lakes have teased a glistening glow from the murky quagmire which mirrors its relation, its *raison-d'être*, the smartphone and its sheeny plastic casing. A podcast from the Smithsonian notes the following: “Oil is the blood; steel is the body; but rare earth elements are the vitamins of a modern society.”<sup>28</sup> Somehow these stuffs—neodymium, dysprosium, praseodymium, terbium, gadolinium and lanthanum—which make our digital society flow and glow, are enhanced, are the very stuff of life, essential to our metabolism, but need to be continually deployed, ever augmented, optimized, bought, and supplemented. For those who do not take their vitamins, who have not bought into them, there will be reduced capacity, self-inflicted ailments, a general inability to function in modern society.

But the rare earth metals, like any processed material, just as in the production of steel, escape and, in the form of dusts, find their way into water, groundwater, soil, cities, the food chain, and bodies.<sup>29</sup>

## **Dust in Particular**

Dust is turbulent particles in air. Our air is turbulent with many things—with pollutants, with smoke particles, with pollen dust. Dust layers our ground. The production of steel makes dust, as does much industrial processing. It is a dirty business. ArcelorMittal makes so much dust. Near one site, in Italy, huge stockpiles, some twenty meters high, cover an area the size of fifty-six football pitches. Cancer rates among children there are elevated. As one newspaper report puts it: “Red and black dust from parks of iron-ore and coal have long covered balconies and playgrounds in the nearby Tamburi and Paulo VI neighbourhoods, and locals shut themselves in and schools close when the wind blows their way.”<sup>30</sup> What winds of history are these bearing dust? What else can be seen in the dust? Dust makes our historical ground and can be forensically examined.<sup>31</sup> The dust, our ground, is an archive of contamination, of violence, of repeated inequities that occur on the surface: chemical seepages, ecological distresses. The ground and its dust communicate this. Located deep within the earth is also that which is older than can be imagined—elements melted and stretched at the beginning of time. Extracted from the earth are these same elements with ever greater rapacity. Their and our future suggests that they may be used up, rare earth elements melded into smartphones, gases such as helium puffed away in a billion MRI scans or floating off-world in a cavalcade of balloons. What made the stars will not outlive them. Sand is an archive, too, that is, of stones that have been ground up. Much sand, this ancient ground-up stone, is now bound into concrete, distributed across the urban zones of the globe, and irretrievable.

## **Glass Flaws**

Sand makes glass, of course. And glass twinkles from those great buildings of modernity, or wobbles in old cottages, or simply sits there waiting, smoothly, all around us, in our glasses, spectacles, cases and cabinets, screens and windscreens, touchscreens, and LCD screens. Glass has a complex history. It is transparent, an image of optical clarity, of something given straightforwardly, pointing perhaps to something through it which is framed or held safe. It has been so perspicacious; it has allowed seeing into the future. Crystal balls predict. The glass scries. But it also has possessed the capacities for distortion—through the looking glass, the distorting looking-glass mirror that lies—much as the glass of the social media selfie screen is now a lying, or deep-faking, or at least modulating surface. In its lies, it tells us something about ourselves. So observes Theodor Adorno, when he states in his cranky post-Second World War study, *Minima Moralia*: “The splinter in your eye is the best magnifying glass.”<sup>32</sup> Adorno distrusts the invented mechanisms of vision, these new devices for seeing, those glassy lenses that intensify, illuminate, and expand vision and provide the image maker with ever more sophisticated tools for replicating the real, in a trajectory that stems from the Enlightenment onward, with its promise of exposure to light as a means to truth. The enlargement achieved by a standard magnifying glass brings back an increased quantity of information. It enlarges details. It makes visible that which has not been seen by the human eye before, or not in that way. It provides a certain knowledge, but it provides, presumably, if the enigmatic metaphor in Adorno’s phrase is unpicked, a knowledge that is no knowledge at all in any meaningful sense. What is seen remains an externality to which the spectator may remain impervious. The splinter in your eye, on the other hand, is a fragment of glass, a broken shard of lens that does not simply look outward into the world, seeing objectively, viewing objectivity, bringing to sight the world through and behind a lens. This splinter of which Adorno speaks does not give a view, as through as a window, onto a stable world out there, and transmit this back into the viewing eye. Rather this splinter cuts into the eye that sees, and it juts out into the world that is seen. The splinter must cause pain, when it cuts into the eyeball, and in eliciting suffering, renders the viewer an involved spectator—or something much more than a spectator—of the scene. The viewer is a casualty of the visioned scene. In fact, the eye with the splinter in it cannot see, in the usual sense. In Adorno’s aphorism, the flaw in vision becomes the means to vision. The magnifying glass that metaphorically cuts into the eye enlarges the error that is the world, which is always present but unseen in usual mechanisms of imagery. Only when directly interpolated—pronged—in the mechanism of vision by the mode of visioning, can we speak of authentic seeing. Sight, then, is insight, turning inward into the self, but it is also insight into the conditions of seeing, into mediation. For Adorno, no sight can be accepted as true if there is no flaw included—a flaw in vision, a flaw in the machine, a flaw in what is seen in a world in which all is flawed. Glass is a material to concentrate seeing. To see into and through. But not to be trusted implicitly.

And might this flaw be beautifully modelled by glass itself, which has the capacity to be sick or to have glass illness or glass disease. This glass, this sickly glass, degrading, can weep, from its glassy eyes that must be windows to its glass

soul. This sickly glass may contain, in the manner of flaws, a subtle but stunning beauty in its instabilities, its crizzling, its spalling, its cracking, all dependent on the particularities of its chemical composition, its types and proportions of silica, alkalis, and so on. Indeed, in the byways of the internet, I read of glass surfaces on the Solar Probe Plus spacecraft, as it undertook a seven-year orbit with a perihelion distance of less than ten solar radii. It was exposed to interplanetary dust-particle hypervelocity impacts, or micrometeoroid flux, which led to surface spalling, which undermined the science return from the mission because of reflected light losses. Here are communications of another type, of dust to sand to glass, which we cannot always control, and might that be so bad? If there is hope, a hope in history, a hope in matter, it might be a particular one, and not necessarily one for us.

■

### Esther Leslie

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