## MODERN TIMES: DREAMS REWIRED

BY DAVID FRESKO

In 1937, the American author Delmore Schwartz published the short story 'In Dreams Begin Responsibilities,' a terrifying scenario of existential eradication. In it, an unnamed protagonist recounts a dream where he finds himself in a cinema watching a film that depicts his youthful parents coming together as a couple. Owing to his foreknowledge of this union's disastrous results, he hollers at the screen to protest the film's unfolding and thus forestall the traumas to be, a disquieting act of self-annihilation. 'What are you doing? Don't you know that you can't do whatever you want to do?' castigates the theatre usher as he drags the dreamer into the 'cold light' of wakefulness on a 'bleak winter morning.' For Irving Howe, the protagonist's objections evince not a critique of the mistakes inevitable in any life, but 'a protest against life itself.' With its dizzying shifts in perspective and schizophrenic collapse of the real and the fantastic, the cinema, Schwartz's story suggests, profoundly mediates such 'life.' It provides a structure of vision that conditions not only how we perceive external reality, but also fundamentally transforms the experience of our most intimate unconscious fears and desires. In dreams begin responsibilities, because the machinery of modernity - not just the cinema, but also the radio, telephone, television, and other technological accoutrements of the era – penetrates the individual in body and mind.

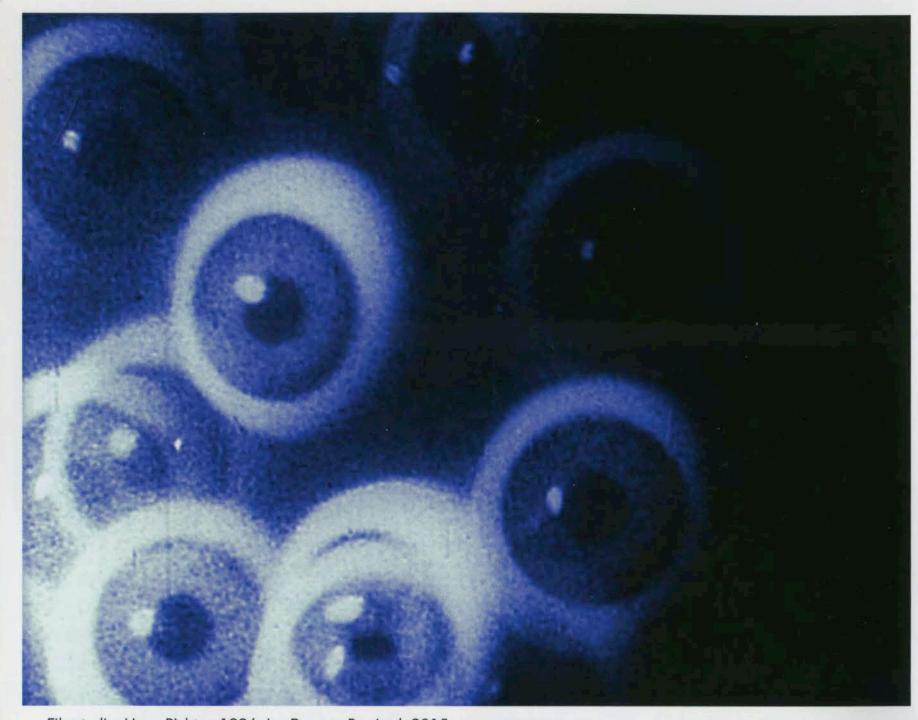
I begin with a recitation of Schwartz's story because it condenses in a single character the wonder and terror at the heart of modern technological development, a theme explored at length by *Dreams Rewired*. Witty, engaging, and often exhilarating, this work edits together footage from over 200 films produced between the 1880s and 1930s to claim that today's hyper-connected media ecologies were anticipated more than a century ago, when the telephone, radio, cinema, and television propelled the modern world into electronic existence. At that time, such technologies were invested with utopian aspirations of total connectivity capable of eradicating borders and promoting world peace. Alongside such idealism were well-founded fears that these very technologies would be used to increase the efficiency of the market economy, regulate the laboring body, invade privacy, and advance the war machine. Add to this connectivity's inescapability, and you are left with one of the film's more profound claims: 'To be is to be connected. The network will seek out everyone.'



Dreams Rewired: Animation of Cineorama.

While Swinton's narration carries Dreams Rewired's most thought-provoking arguments, the film's motor is its intricate montage, which weaves together classics like Chaplin's Modern Times (1936) and Eisenstein's Battleship Potemkin (1925) with rarely seen entries from the cinema's history. Intercut into the assemblage are digital recreations of long-lost spectacles, such as the Cinéorama, which synchronized ten 70mm film projectors in order to produce a 360-degree simulation of a hot-air ballroom ride over Paris. Hardly any of this footage is identified (though one can read through a list of sources published online), allowing the filmmakers to assemble it with seamless unity across cinematic space, time, and history. As the film opens, for example, audiences are shown the masses disembarking a ferry in Charles Sheeler and Paul Strand's Manhatta (1920), the perspective of a train hurtling past telephone poles in Walter Ruttmann's Berlin - Symphony of a City (1927), newsreel footage of cables being laid below ground and underwater, maps demonstrating the 'electric intimacy' that binds people together across Europe, the United States, and the Soviet Union, and an assortment of images from sources as different as Hans Richter's Rhythmus 21 (1921) and Filmstudie (1926), Harold Lloyd's Number Please (1920) and Dziga Vertov's Man with a Movie Camera (1929).

The effect of *Dreams Rewired*'s montage is double. On the one hand, it demonstrates how fascination with urban modernity links the historic avant-garde as part of a transnational axis from Moscow to Manhattan. One notes, for example, how the seemingly chaotic yet strangely synchronized movement of the masses rhymes with Richter's animated grids, which likewise mime the lattice-network of Berlin's telegraph poles. On the other hand, the footage is judiciously chosen to show how cinema mediated the very technologies that were transforming social life.



Filmstudie, Hans Richter, 1926. In: Dreams Rewired, 2015.

Richter's emphasis on eyes in *Filmstudie* paves the way for technologies' probing of privacy. Meanwhile, the use of the telephone as a crucial narrative device is illustrated through films by Griffith, such *An Unseen Enemy* (1912) and *The Lonely Villa* (1909), as well as Lois Weber's underseen though aesthetically fascinating *Suspense* (1913), which features a telephone call rendered as a triangular, three-way split-screen. This constitutes yet another compelling coming together of diverse filmmakers operating in different territories producing a global vision of technological change. Coupled with Swinton's commentary, which often parodies in contemporary argot what may be heard over the phone, these old films are thus wrenched from their archival (and often academic) destinies and thrust into the present, the better to make us consider how our own technological sophistication participates in the same fantasies and fears that characterized modernity.

More playful than polemical, *Dreams Rewired* nonetheless has a politics. And it is upon this question of politics that the film's chief aesthetic device – montage and the seamless assembly of source-materials – arguably founders, revealing the complicated and complicating contradictions that animate technological development and our attempts to understand it. Montage, as is well known, was pioneered by many of the filmmakers on display here, above all by Vertov and Eisenstein, both of whom connected it to an outright political imperative (the es-



Suspense, Lois Weber, 1913. In: Dreams Rewired, 2015.

tablishment of Soviet communism and critique of capitalist ideology). At the risk of excessive historicization, it bears mentioning that there exists an ideological abyss between, for example, Ruttmann and Vertov's cinematic visions of urban modernity. No one should ever mistake the pseudo-morphological likeness Berlin – Symphony of a City shares with Man with a Movie Camera as evidence of equivalence – an equivalence that Dreams Rewired unwittingly solicits because of its decision to not identify its sources. Such identification, admittedly, would have resulted in a screen-image crowded by distracting, ungainly citations. Still, Vertov's totalizing vision of man remade through cinematic revolution is as radically out of step with his German counterpart as it is with Sheeler and Strand's cinematic ode to New York City. Such elisions carry over to the shape of Dreams Rewired's broader design – the bridging of distance between then and now, seeking seedlings of the present technological order in the relatively recent past. And through this, the filmmakers expose a contradictory tension between the film's overall shape, and the more robust notion that our contemporary predicament is exceptional.

In an interview that accompanies the film's press materials, Luksch does not shy from claiming film as a tool for fomenting social awareness about technology's political significance. 'The ultimate ambition of this film is to revitalize... debates about the ubiquitous computing and media by providing the missing historical



Introspection, Sarah Kathryn Arledge 1941. In: Dreams Rewired, 2015.

context – particularly, early electric utopias in the public imagination, and ongoing struggles for openness. Today, the media – and the data landscape – is "up for grabs" just as it was in the late 19th Century. But if we don't safeguard this landscape for the larger community, it will be grabbed up and divided up as entire continents once were.'

One can challenge Luksch's claim that media ecologies were ever 'up for grabs,' as if the development of the radio, the telephone, the cinema, or television could be divorced from economic and political imperatives, as thinkers such as Paul Virilio have stressed, and as *Dreams Rewired* itself demonstrates. Moreover, social media's political virtues, which are venerated by so-called cyberactivists, repeat many of the ideologies of democracy and openness that greeted the Internet upon its arrival. Today they seem as dubious as ever, given not only the commercialism that defines the web, but also the 'failure' of movements such as Occupy or the Arab Spring.

But by pulling focus on the contradictory relationship that the past shares with the present, Dreams Rewired puts forth a question whose answer is anything but obvious: given the potentially irruptive transformations wrought by new technologies, how do we account for the intersecting historical genealogies that shape such

developments – then, now, and into the future? Are we to frame such changes as the unfolding of continuous progress, or as mutually exclusive ruptures? This is more than a point of historiographical contention; it shapes technological socialization. 'What is this progress? What is the good of all this progress onward and onward?' ask Cedric Hardwicke's Theotocopulus in William Cameron Menzies' adaptation of H.G. Wells' Things to Come (1936) towards the end of Dreams Rewired. As if speaking for the filmmakers, he continues, 'Progress is not living. It should only be the preparation for living. Is man never to rest? Never to be free? Make an end to this progress now!'

The progress encapsulated by our hyper-connected realities undoubtedly resembles a globalization dreamt of at the twentieth century's dawn, a futureworld depicted with frightening and astonishing acuity by Menzies. Yet today's intensified colonization of everyday life is enough to make Max Horkheimer and Theodor Adorno blush. Such an order asks whether an outside, an escape, can ever truly exist. Indeed, if we are 'never to rest,' then the question of dreams returns ever more pressingly.

Dreams allow the imaginary to process desire; they are subjective visual phenomena that evade empirical measure, obviate rational thought, and open the mind's eye to contemplate seemingly unrealizable visions for new collective experience. As Jonathan Crary writes, '[dreams] may well be the vehicles of wishes, but the wishes at stake are the insatiable human desires to exceed the isolating and privatizing confines of the self.' Modernity may have struggled to reduce people to numbers, but it also drew with it the nineteenth-century dream of emancipation from exploitive labor, colonial subjugation, racial oppression, and gender disparity. These were the very struggles that animated the twentieth century through the 1970s, until the information economy's counter-revolution depoliticized such hopes in favor of the alienated narcissism that digital connectivity promises - a poor substitute for the face-to-face collective that real, existing social movements achieved, however fleetingly. Dreams Rewired beautifully notes, 'we ride, on electric pavements, into the future,' only to ask 'but if we could see what is in store for us, could we refuse it?' In fact, technologies do not map their own destinies; social practice does. If dreams are responsibility's host, then the real question is: in a global culture that strives to transform individuals into statistics, political actants into inventive consumers, and sleepers into potential workers, where, in the end, do we dream?

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## DREAMS REWIRED: DISEMBODYING DATA AND REMATERIALISING TECHNOLOGY

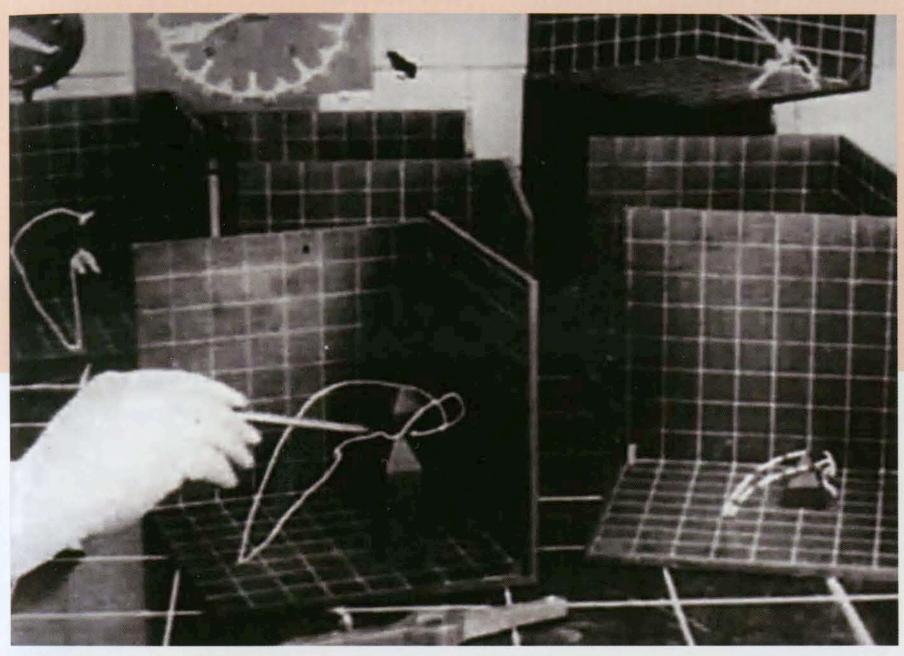
BY BODIL MARIE STAVNING THOMSEN

Throughout its extended meditation on media, desire, and futurity, *Dreams Rewired* transparently uses a double exposure of past (archive footage) and present (contemporary voiceover) to bring historical context to current dilemmas. To be precise, the exposure is multiple. Many of the films quoted project beyond the prevailing social and technological milieu – their fictions astonishingly prescient, their experiments and methods underpinning today's data science – and so the (past's) future is also invoked. The recursive timelines of *Dreams Rewired* trace a body that is present all at once – allowing the viewer to forsake precise chronology and explore thematic confluences. This body is given voice by Tilda Swinton's narration – rarely univocal, she tempers her words with knowing inflection, alluding to further meanings. Of the many lines of enquiry that weave through this multivalent structure, two significant traversals are briefly drawn below – one through the transformation of bodies into data, and the other through the material and political preconditions of information technologies.

## FROM BODY DATA TO THE DATA BODY

The first path begins, as *Dreams Rewired* itself does, with the body – masses on the move, anatomy revealed, locomotion recorded, dissected, and measured – the latter illustrated by the pioneering work of Étienne-Jules Marey. Often contextualised in the pre-history of cinema, Marey's investigations properly belong to the pre-history of the computer. Rather than re-presenting the already visible, Marey developed techniques to exceed natural perception, to reveal the hidden – in order to analyse and optimise. By linking the human body's inner physical data (blood circulation, pulse, respiration) to his collection of exterior movement data, he was able to build compelling models with predictive power. And predicting the future was a prime motivator then – as it is now.

Through the work of Lillian Moller Gilbreth, these time and motion studies were further developed and applied to domestic and industrial contexts, contributing to the development of ergonomics (to workers' benefit), and also modern scientific management systems. 'An unnecessary movement is money lost forever' – thus



Original Films of Frank B. Gilbreth Courtesy of Purdue University Libraries, Karnes Archives and Special Collections, 1968.

the measurement of motion in its relation to time and money took as its first hostage, the body. And with the body transformed into an engine of productivity, other social activities too became subject to economic evaluation and regulation.

Rather than characterising the new information media as mere 'extensions of man' (as McLuhan did in the 1960s), Dreams Rewired traces their complicated entanglements with new forms of productivity that progressively replaced the body entity with its distributed functions. Beyond the new industrial practices, changes were engendered in personal habits, social behaviour and customs, culture, migration and employment patterns - defining a conception of modernity. And as technologies were granted access to what was once intimate, and the boundaries of the public, private, and personal disrupted, so the next unwitting target of colonisation was delineated - the perceiving, desiring, judging person, as data body. From the recording, analysis, optimisation, and prediction of the physical body, the focus of economic activity has now decisively shifted to the far more instrumental, and machine-readable, disembodied data shadow. This shift mirrors the concomitant superseding of material capital with intellectual capital – a shift which reaches beyond the species. Early in Dreams Rewired, a pigeon is presented as subject of a mechanical study - how does it fly? Towards the end of the film, it is the bird's perceptual and cognitive faculties that are being mined, as it is deployed to pilot a flying machine – a missile, in fact.

In his 1936 essay 'The Work of Art in the Age of Mechanical Reproduction,' Walter Benjamin envisioned that the procedures of filmmaking (tactile impressions, cuts and montage) and its distribution could both parallel and politically challenge modern societies' alterations of the human sensory apparatus. But he could not have foreseen the massive impact of contemporary data gathering, in which the capture of movement in time has paved the way for the management and measurement of images of motion as money gained or lost. Today's Big Data-bases no longer require human agents for analysis; in fact, their size and complexity demand machine-algorithmic assistance, and are matched in scale only by their claims of predictive power. 'We finally hold the future in our hands – the flight of rockets, the fall of stocks... what to do this evening. We cannot rely on luck,' asserts Swinton towards the end of the film – echoing 19th century concerns, while simultaneously justifying today's data deluge.

## **RETRACING TECHNOLOGIES**

The dematerialisation of the body described above did not occur in the absence of a material and political basis, however – and this is what the second important traversal through the archive directs us to. This has a familiar aspect for end-users – namely,



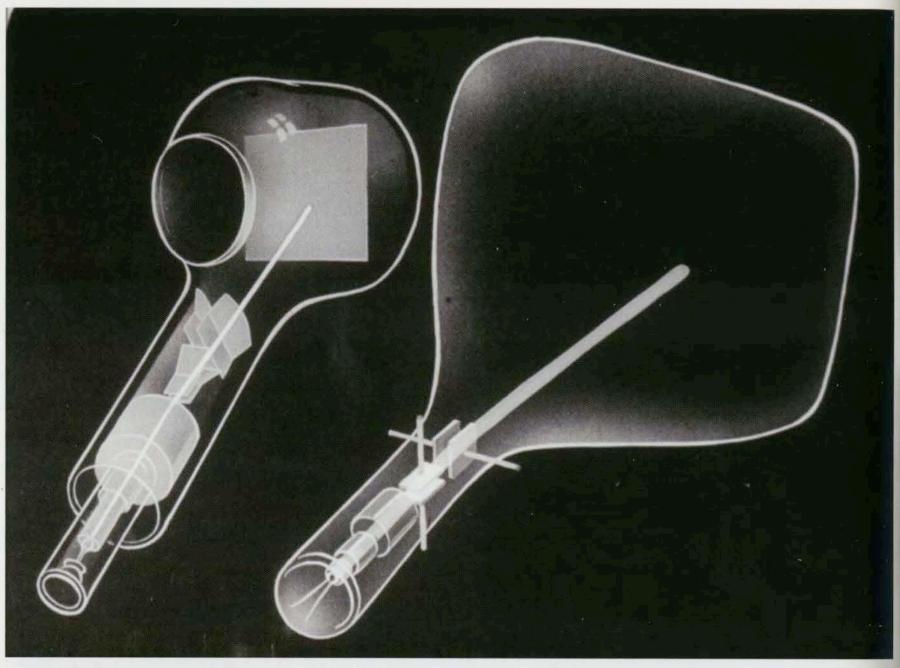
Weltumspannende Funkwellen, Bernhard Huth, 1934. Bundesarchiv / Transit Film GmbH.



Filmes d'Exposition Ethnographique de L'Afrique occidentale au Champe-de-Mars á Paris, 1898. Félix Regnault, Charles Comte, Etienne-Jules Marey. La Cinémathèque française.

the cultivation of consumer desire necessary for maintaining industrial cycles. 'Everyone's going to want one of these,' they said about the television set – and the TV did rise to become the 20th century's object of desire par excellence, a signifier of a modern household. And then, 'what do others buy after viewing this item?'

But Dreams Rewired also reveals the overlooked aspect, at the production end - with its violence hidden from sight and banished from mind, along with economic 'externalities.' Having charted the electric wonders of the 1900 World Exposition in Paris, the film proceeds on a tour of another attraction of the fair - a set of reconstructed villages, peopled with 'Africans,' 'Indians,' and 'Eskimos.' A few of these representatives were themselves Parisians, normally employed in the city's restaurants; but many others were simply captives, snatched from their homes for display in what was, in effect, a human zoo. What function did such exhibits serve in the context of a technology fair, or as the subject of the original film? What other, than to confirm how far we have come from our 'primitive beginnings'? In the present context, however, the images point simultaneously back to the colonial expropriation of land, mineral wealth and labour (as material precondition for technological development), and to its continuation in, for example, contemporary mining (of coltan for electronic components in the Democratic Republic of Congo, say). Dreams Rewired suggests that, just as the propagation of cultural 'superiority' demanded that the 'other' be depicted thus, so progress for some is predicated on the the servitude of others. Over images of a white European being carried in a sedan chair by 'tribesmen', the voiceover asks, 'and who will lift them up?' - mimicking the locution of the missionaries charged with stripping their flocks of indigenous beliefs and elevating them to Christianity. Utopia for all? - not for those charged with digging the raw materials from the earth, or returning the spent carcasses of yesterday's computers to it; nor for those simply caught up in the associated territorial conflicts. As if to underscore the 'Heart of Darkness' it posits at the core of modernity, the film's stock runs raw and black, demonstrating its materiality, its traces of becoming - or rather, of its limits of becoming.



Weltumspannende Funkwellen, Bernhard Huth, 1934. Bundesarchiv / Transit Film GmbH.

As the first traversal through the film passes from physical body to data shadow, so this one passes from the concrete to the abstracted, from the naive to the calculated, to emerge in 1930s Berlin. The city is in full preparation for the Olympics, colonised by cables and swept of 'undesirable elements'. Unlike Paris, here the technologies have achieved a practical manifestation that is clearly impressive – there is no need to contrast them with a 'primitive' past. But, as in Paris, where the depiction of the 'other' was harnessed to glorify the West, so in Berlin, a celebration of athleticism is co-opted to glorify the state, and establish its monopoly of the new mass media. The Olympic torch relay, a Nazi fiction invented specifically for the television cameras, heralds the establishment of TV as a broadcast (as opposed to a peer-to-peer) medium – and as a potent tool of propaganda. As the closing shots of the empty stadium give way to static, and the accompanying roars from the crowd dissolve into white noise, so we are again left with the material traces of absence and nullity, a space in which to continue the film's questioning, in the moment of its viewing.

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