

Fast Forward

The Future(s) of the Cinematic Arts

Holly Willis



WALLFLOWER PRESS
LONDON & NEW YORK

A Wallflower Press Book
Published by
Columbia University Press
Publishers Since 1893
New York Chichester, West Sussex
cup.columbia.edu

Copyright © 2016 Columbia University Press
All rights reserved
Wallflower Press® is a registered trademark of Columbia University Press

A complete CIP record is available from the Library of Congress

ISBN 978-0-231-17892-1 (cloth : alk. paper)
ISBN 978-0-231-17893-8 (pbk. : alk. paper)
ISBN 978-0-231-85097-1 (e-book)



Columbia University Press books are printed on permanent
and durable acid-free paper.
Printed in the United States of America

c 10 9 8 7 6 5 4 3 2 1
p 10 9 8 7 6 5 4 3 2 1

Cover design by Elsa Mathern

Chapter 1

Past, Present, Future: Situating Post-Cinema

In this volume, the post-cinematic designates the art and practice of bringing experiences of story, information and knowledge into attunement with contemporary culture. This definition includes ‘art’, and it includes ‘practice’, here meant to echo the definition put forward by Raymond Williams in the context of technological determinism. Williams explains in an essay titled ‘From Medium to Social Practice’ (1977) that a medium is neither abstract nor autonomous but always social; it is a practice.¹ However, within the context of the posthuman and the post-cinematic, practice proliferates, blurring the boundary between amateur and professional, artist and audience, public and private. Further, practice gains a new valence within a culture best characterised as neoliberal, a culture within which all aspects of life are construed through financial terms, from creativity to learning, from notions of the self and identity to those of governance. Practice in this context is instrumentalised just as often as it catalyses joyful expression.

This is also a culture characterised by the financial turbulence wrought by neoliberalism, and the acceleration of technological change that yields a woozy sense of the new and the old, the current and the obsolete. Here, too, practice shifts; in this context, it requires constant updating, renewal, ‘professional development’. Without attention, practice can become an ongoing process of just keeping up.

Finally, we inhabit a culture that Gilles Deleuze has designated as one of control. In ‘Postscript on the Societies of Control’ published in English in 1992 in the journal *October*, Deleuze makes a distinction between societies of discipline and a new regime, the society of control. He notes that while discipline rules through enclosures and physical walls, control rules through ever-changing modulations, ‘like a sieve whose mesh will transmute from point to point’ (1992: 4). A society of control is dominated by information, and this has specific ramifications for how we understand individuals. The body in a control society is known not through its physiology or materiality as

in a disciplinary society, but rather through its records, its presence within databases and through the increasingly prevalent biometrics designed to further measure and quantify it. Once again, practice in this context shifts to figure the ways in which we are 'practiced', our data enumerating our every action. This book argues that these cultural shifts are registered through post-cinematic artworks in which, as with earlier moments of transformation, the cinematic engages with and renders new engagements with time and space, feeling and knowing, being and experience.

The 'post' in 'post-cinematic' is significant, too, not in positing a break within an intractable progression, but in designating continuities and entanglements. Piotr Woycicki argues that post-cinema tends to 'interrogate and challenge our perceptions of dominant cinematic conventions', most often through a form of intermedia practice that integrates differing media forms. However, in describing the 'post' of 'post-cinema', he articulates two meanings: 'One view is simply that as with most "post" terms it represents a historic shift that comes after the cultural dominance of cinema has ended' (2014: 15). He goes on, however, to suggest another meaning of the term. 'The other perspective ... is to articulate post-cinema as a cultural trend that is a reaction to cinema's ongoing culture of dominance' (ibid.). Citing Lyotard's notion of the post-modern as a reaction to modernity, with its ensuing incredulity toward master narratives, he suggests that so too is post-cinema a reaction to cinema, writing that it is an "incredulity" towards the great narratives of classical realist film, but also as stretching that incredulity to cinematic conventions and forms through which the narratives were constructed, forms that are increasingly dominant in our contemporary culture' (2014: 16). While many examples of post-cinematic artworks may indeed refute the dominance of cinema and embody that refutation formally, the 'post' in post-cinematic is also indicative of an intermeshing that defies a teleological perspective. Indeed, it is telling that I cite a definition of the post-cinematic from a book about theatre and performance: the intermedial nature of so much contemporary media practice suggests that is not productive to imagine a linear continuity stretching toward the 'post'. Instead, we need to welcome the divergences and intersections, the crossing paths and discontinuities.² In this sense, then, 'post' can recognise that the boundaries that distinguish an earlier cinema, a current cinema and post-cinema are decidedly blurry, and that each moment morphs into and informs the others.

Indeed, a post-cinema remains deeply, even obsessively, tied to its past. As Wendy Brown has written, "Post" indicates a very particular condition of afterness in which what is past is not left behind, but, on the contrary, relentlessly conditions, even dominates, a present that nevertheless also breaks in some way with this past' (2010: 21). Although she is describing the state of post-Marxism, Brown captures the complex imbrication of past, present and future within cinema as well as at the juncture of analogue and digital. She continues, 'In other words, we use the term "post" only for a present whose past continues to capture and structure it' (ibid.). Similarly, Florian Cramer, in dissecting the 'post-digital', places it within the context of movements such as post-punk, post-communism and post-feminism, wherein the line between eras

blurs. These terms 'describe more subtle cultural shifts and ongoing mutations', he writes (2015: 15). In this sense then, post-cinema is present cinema conditioned by the past, a so-called new cinema obsessed by the old. It is a cinema whose enactments and experiments often reference and restage moments from the past while simultaneously striving to do justice to what it means to be human now and in the near future.

Laura Mulvey asserts that the bifurcation of cinema between past and present has a particular genesis. 'It was during this watershed period, marked aesthetically by Postmodernism and politically/economically by neo-liberalism, that cinema fell back into a "then" of a past based on celluloid recording and projection, in opposition to the "now" of a present media proliferation into complex relations with other technologies' (2011: 72). Mulvey here references not simply the increasing mutability of visual storytelling forms thanks to the affordances of the digital, but the consolidation of power within media industries into a handful of conglomerates.

Mulvey goes on to highlight the political significance of 'old' and 'new' at a moment when 'conservative politics embrace the "new" and the "old" left has to try to keep the utopian aspirations of the past alive' (ibid.). There has been a reversal within a neoliberal context, such that conservatives, historically aligned with tradition, instead tout the future, and radicals, generally understood to be forward looking, seek to keep hold of the past. Mulvey acknowledges the various factors that contribute to an entrenched binary between old and new, citing developments such as globalisation, post-Communism, post-Fordism and religious fundamentalism, as well as the array of new technologies that affect filmmaking, distribution and viewership practices. Indeed, as Mulvey has explored extensively in *Death 24x a Second: Stillness and the Moving Image* (2006), the shifts in viewership afforded by VHS and DVD viewing practices alone prompt an array of activities that differ from those of the past when viewers had no access to the film itself. 'A pause, or a stop, in the flow of a story may also enable a return to narrative within a different perceptual framework and awareness of its formal structures and aesthetic properties' (2011: 75). She adds, 'Out of the interaction between celluloid and new technologies, as the concealing mask of narrative falls away, the presence of the past inscribed onto film is enhanced' (2011: 76).

For Mulvey, then, there is a homology between the techniques that allow us to return to the stilled moments within a narrative to scrutinise the intersections of past and present and a historical shift in which traditional political perspectives become reversed. Stuart Klawans, in his essay 'Traces of Light: Reflections on the Future of Film, or: How a Dying Medium Has Come Back to Life', published in 2015 in the 150th anniversary issue of *The Nation*, echoes Mulvey and her sense that the political trajectories of the left and right have switched direction. He writes: 'The very language of progress has atrophied. The best-publicized adversaries of neoliberalism no longer speak of marching into the glorious socialist future; instead, they spiral backward, seeking to recover the purity of a vanished and largely imaginary caliphate' (2015: 196).

Similarly, James Schamus queries past, present and future in a speech presented to the German Film Academy in November 2014 entitled '23 Fragments on the Future

of Cinema', later published on the *Filmmaker Magazine* website, in January 2015. Citing Louis Lumière's 1895 remark that cinema 'is an invention without a future', Schamus argues, 'Cinema congeals around its individual heroes and heroines precisely this obvious refusal of the idea of a collective, co-created future' (2015: np). Schamus reminds us that cinema participates in the ideological positioning of audiences and, in its traditional narrative structure, endlessly rehearses its endings. In this sense, then, cinema has no future. Its temporality has always already been known. Schamus goes on to offer a chilling image of the cinematic in the era of information:

Value is created not in the exchange of time and attention for entertainment, but in the production, manipulation and control of the consumer-data generated when the subject lives within this world of immediate data points. In this world, all money and power flows through those with the algorithms: our job as producers is simply to feed enough operationally viable fantasy points into the infrastructure so it can sustain itself as the source of fantasy and identity for its subjects. (Ibid.)

Schamus references the ways in which the algorithms that transform our quotidian interactions online become fodder in the production of predictions precisely of future desires and behaviours:

With regards to the future of the cinema, my point is that everything now converges on the refinement of these technologies of the future and of consumer-baby behaviour prediction, while the definition of the 'future' becomes increasingly shrunk down to a micro-order of milliseconds of decisions about what to click, view, sign, vote for or purchase. (Ibid.)

Schamus points to the use of consumer data to create algorithms that contribute to the creation of new series. Specifically, in 2013, Netflix relied on data gathered over many years to create the hit television series *House of Cards* (2013), and subsequent articles in the press revealed the tremendous attention the company pays to data in conceptualising, creating and marketing its in-house productions.

This scenario – of films generated by data – along with the rapidity with which film has become nearly obsolete, has provoked a wistfulness for film, made manifest in a series of projects that chart the transition from the era of film to the era of the digital. Lisa Purse elaborates on this point in *Digital Imaging in Popular Cinema* (2013) looking at the context of Hollywood filmmaking. She writes, 'The prospect of end-to-end digital film production has prompted a nostalgic return to cinema's celluloid history, most explicitly through homage' (2013: 3). She goes on to highlight *The Aviator* (2004), *Sky Captain and the World of Tomorrow* (2004), *King Kong* (2005), *Sin City* (2005) and several other films to demonstrate the paradoxical use of digital tools to simulate earlier, cinematic aesthetics.

Garrett Stewart echoes Purse's observation in *Framed Time: Toward a Postfilmic Cinema* (2007), which addresses 'not what can be done with the digital, but what the digital has already done to cinema. And more than this, how cinema has seen fit to picture its own transition' (2007: 1). Stewart's expansive study examines a long list of European and American movies, focusing specifically on the ways in which the shift from analogue to digital filmmaking is figured narratively through the treatment of the temporal.³

In this study, I argue that post-cinematic artworks, in their rearrangements of industrial cinema's conventions of time and space; in their evocations of new forms of identification, engagement and problem-solving; and in their conjuring of the self not necessarily as subject but as interface; enact – sometimes elegantly and sometimes clumsily – the paradigmatic transition between the culture of discipline and that of control, between the culture of representation and that of information. The sense of acceleration referenced previously designates the ontological and epistemological turmoil we experience through a process of decentring emblematic of the post-human and the fact that we are facing the loss of the distinction that previously celebrated cognition as a uniquely human attribute; it is the dizziness that attends a sense of spatial and temporal reimagining, in which the linear is displaced not by something as prosaic as the nonlinear but by the networked, and, as such, in the words of David Berry, a highlighting of 'synchronic dispersal over the diachronic unfolding' (2008: 366).

This sense of turmoil is decidedly not new or unique, nor are the experiments that characterise the post-cinematic. Andrew V. Uroskie charts a similar series of disruptions in *Between the Black Box and the White Cube: Expanded Cinema and Postwar Art* (2014), writing specifically about the attempts by diverse artists in the 1960s to imagine alternative sites, configurations and purposes for cinema:

At the very historical moment in which cinema's specificity and autonomy as a modern art had finally been unambiguously legitimated, the expanded cinema sought to throw everything back into question. Not content to restrict cinema to an autonomous and isolated purity, these artists sought to harness and exploit cinema's historical and conceptual multiplicity in order to intervene within a diverse new range of situations and contexts. (2014: 52)

Many theorists and historians have chronicled previous moments of tumult.⁴ For this context, however, Fred Turner's *Democratic Surround: Multimedia and American Liberalism From World War II to the Psychedelic Sixties* (2013) is particularly useful. Turner uses the term 'democratic surround' to designate 'a new, multi source, environmental kind of media' deployed as a way 'to call for a society in which individual diversity might become the foundation of collective life' (2013: 9). However, rather than writing about contemporary media, he is writing about media in the 1940s, starting with the work of the Bauhaus and moving steadily through the 1960s in order to chronicle the

creation of a body of work dedicated to using media to promote democratic identity. The democratic surround, then, 'was not only a way of organizing images and sounds; it was a way of thinking about organizing society' (ibid.). Turner does not focus on representation in his analysis; instead, he is interested in the ways in which these media forms solicited attention. 'To listen to the radio, watch a movie, or wander among a roomful of sounds and pictures was to rehearse the perceptual skills on which political life – fascist or democratic – depended' (2013: 10). The goal of the multimedia artworks that Turner describes was to promote a form of democratic unity based on a sense of individuality. Describing the artists and social scientists dedicated to this movement, he writes,

They imagined an environmental mode of media making that would promote the development of that individuality, and which would offer Americans opportunities to practice it together. In museum exhibitions and classrooms, in stuffy meeting halls and grandly airy national pavilions, Americans built media surrounds in which the democratic character theorized by psychologists and anthropologists could become the basis of a more egalitarian, more tolerant, more open society. (2013: 291)

The progressive imaginary conjured by the 'democratic surround', however, has given way to the 'surround', to a mode of existence in which attention, rather than being solicited through an egalitarian proliferation prompting choice is instead fractured and fragmented, with 'choice' reduced to 'likes'. So, yes, there are prior examples of cinema's rearrangement, but they were prompted by a differing historical moment, economic agenda and cultural imaginary.

To more carefully trace the paradigmatic transition we are witnessing now, I turn to the work of five artists in order to engage a series of questions and concerns in the post-cinematic/posthuman present, namely:

- i) What is the role of 'medium' within contemporary discourse? How does it relate to practice in the context proffered by Raymond Williams? This is a question asked by perhaps the most vocal and insistent artist dedicated to film as specifically a medium, namely Tacita Dean.
- ii) How do we conceptualise alternative categories for thinking about what it means to be human within the posthuman context? If we are embedded in an assemblage that integrates the natural, cultural and technological, how do we understand notions of the self and subject, of agency and intentionality? David Gatten's work offers an opportunity to consider the implications of spectatorship within this context.
- iii) What does the fusion of formerly opposed entities look like? As organic merges with inorganic, human with animal, what do we have? David O'Reilly's animations and Davide Quayola's visualisations explore this terrain through the creation of fusional hybrids.

iv) What are the implications of our media as they become environments rather than representations? Marco Brambilla's spectacular 3D collages engage with this question, presenting opportunities to consider the environmental shift.

These questions inform the rest of this book too, but at a moment of wonderfully diverse permutations of the cinematic, these five artists hover at key boundaries, and therefore offer compelling limit cases for considering our transitional moment.

Delays and Revolutions: Tacita Dean

In August 2003, wandering through the vast expanse of the Venice Biennale, visitors may have experienced *Mario Merz* (2002), Tacita Dean's exquisite eight-minute portrait of the 77-year-old Italian artist. The film was situated in the Italian Pavilion, just around the corner from one of Andy Warhol's screen tests featuring the gentle face of another elderly artist, Marcel Duchamp. Work by Richard Prince, Matthew Barney and Dan Graham were also in the mix, all of it part of a section of the Biennale titled 'Delays and Revolutions', showcasing work by more than forty international artists with the explicit goal of eschewing a linear history in favour of detours, delays and returns.

In the deceptively simple and quiet film, the light gently shifts, birds sing, bells chime. The artist sits. He contemplates a pinecone, and eventually gets up and walks away from the camera. Across just a few minutes, Merz's face shows bemusement, impatience, resolve, serenity, keen interest and confusion, and in the dense flurry of 16mm grain, we can almost feel the texture of the wispy trees behind the white fluff of his hair, the angular line of his nose, the swoop of eyebrows, the scowl. And we know that this is a portrait of time, loss, beauty and death, which is to say that it is a film that embodies the ineffable and the serendipitous. This is also film as sculpture, as soundscape, as meditation and encounter. And it is film as only film can be.

These fundamental and unique qualities of film as a medium have now become Tacita Dean's primary concern. The Berlin-based British artist was born in 1965, studied painting, and since the early 1990s has worked in multiple forms, including photography, sound and, in some of her most intriguing work, chalk. She began making and exhibiting her films in museums and galleries in 1992 and has made more than thirty conceptually intriguing films to date. Many of these films are dedicated to temporality and contemplation. *Fernsehturm* (2001), for example, is a 44-minute film that captures the slow rotation of a restaurant located at the top of a tower in Berlin as the sun sets. The film points to cycles, repetitions and returns as the restaurant's gradual revolution suggests both historical time and the shifting perceptual capacities available as the light changes and the windows, translucent during the day, become opaque, reflecting the interior space as the daylight fades to dark. Similarly, *The Green Ray* (2001), a two-and-a-half-minute looping 16mm film, chronicles the setting of the sun over the ocean. Dean was anxious to capture the fabled 'green ray' supposedly

evident when certain conditions – light, atmosphere, weather – align properly. She shot the film in Madagascar, and while she claims that the green ray cannot be seen in any single frame of the 16mm footage if you examine the footage, it is evident – at least to some – when viewed with the film running through the projector at 24 frames per second. *The Green Ray* is often set up in a gallery space, the projector with the film threaded through it poised on a pedestal; for the show titled *The Dying of the Light: Film as Medium and Metaphor* at MASS MoCA (29 March 2014 – 1 February 2015), the piece was staged in its own small gallery enclave, with a button to start the projector if it had stopped. What is significant about *The Green Ray* is not so much the ray itself but the sense of wonder and anticipation evoked as you watch, both of which are fundamental to cinema as a medium. We witness the passage of time, evident in the gradual slipping away of the sun beyond the horizon, as well as the more expansive sense of time palpable in the wear and tear visible as we see the 16mm film itself looping repeatedly through the clanking projector. As in many of Dean's films, one becomes acutely aware of the temporal passage from past to present, and a querying of the elusiveness of the 'now'.

As digital video has increasingly eclipsed celluloid as the format – most often of necessity, but also of choice – for both moviemakers and artists, Dean has become one of the most vocal and passionate advocates for film as an irreplaceable and precious medium. She began her advocacy campaign in 2006 due to the closure of the lab in Chalon-sur-Saône from which she was accustomed to purchasing black-and-white 16mm film stock. Appalled by the impending closing, Dean decided to document the plant's last days using precisely the increasingly obsolete medium it had produced for decades. Titled *Kodak* (2006), the film captures the entire production process, starting with the application of the bluish ester base as it was stretched thin to create film emulsion.

In 2011, Dean was trying to complete a series of films at the Soho Film Lab in London for an exhibition, only to discover that the lab's new owner, Deluxe, had decided to stop printing 16mm. In a letter in *The Guardian* which was published under the title 'Save Celluloid, for Art's Sake', Dean wrote,

Many of us are exhausted from grieving over the dismantling of analogue technologies. Digital is not better than analogue, but different. What we are asking for is co-existence: that analogue film might be allowed to remain an option for those who want it, and for the ascendancy of one not to have to mean the extinguishing of the other. (2011: np)

Dean's consternation about the seemingly imminent demise of film gave impetus to her next project when she was invited in 2012 to create a piece in London for Tate Modern's Turbine Hall. The project was inspired in part by a 1944 novel by French writer René Daumal titled *Mount Analogue*, which stops mid-sentence because the writer died before he completed it. Dean considered the book to be 'an analogy of

the impossible' (2014: np). She was inspired both by the book's ability to imagine an elsewhere, as well as the tall, vertical mountain that is its subject. The mountain was translated into the vertical shape of the installation Dean created in the Turbine Hall titled *FILM* (2012). The piece appears to be a giant filmstrip suspended within the hundred-foot-tall space. Dean created the film using film, and refused to do any post-production, preferring to return to the techniques of early cinema, when the art form was new and artists experimented with innumerable techniques in-camera. Dean's own experiments focused on aperture gate masking, a process that involves placing variously sized mattes in the aperture gate to block out parts of the frame, shooting some footage, rewinding the film camera roll, removing or repositioning the matte and shooting again, thereby creating a collage of time and space within the frame. The process is labour-intensive and relies extensively on chance. Many of the images in *FILM* were passed through the gate a dozen or more times, and the result is a dense collage of imagery. Dean touted the serendipity inherent in aperture masking, and what she dubbed the 'blindness and the faith' of the process which in turn 'courts disaster but also miracles, and these are some of the things I love about film' (ibid.).

The resulting project is an eleven-minute loop that was projected in the Turbine Hall that includes images of sprocket holes, giving the film the appearance of a giant filmstrip suspended in the towering hall. The project took full advantage of scale within the space to produce a sense of awe. *FILM* was accompanied by a book that includes over 75 brief essays on the significance of analogue film by stakeholders as varied as Peter Hutton, Amy Taubin, Jonas Mekas, Bruce Sterling and Sharon Lockhart.

Dean continued to explore aperture masking in her next film *JG* (2013), which brings together the artist's fascination with Robert Smithson's earthwork *Spiral Jetty* (1970) and J. G. Ballard's story 'The Voices of Time' (1960). Both artworks explore time as a theme, and indeed, Smithson may himself have been inspired by the story, which is, in Dean's words, 'about a man running out of time' and includes a character who creates a mandala out of cement in the basin of a lake (ibid.). Using the cheerfully enigmatic directions left by Smithson to find his artwork, Dean had tried unsuccessfully to find the *Spiral Jetty* in 1997 (and created an audio piece about this experience titled *Trying to Find the Spiral Jetty* that same year). Dean had also sought permission from Ballard several times to create an adaptation of his story. He repeatedly refused, but finally relented in 2007, writing a letter to Dean that encouraged her to treat the *Spiral Jetty* as a mystery that her film would solve.

That provocation launched the making of *JG*, a 26-minute film shot in central California and Utah that scrutinises myriad forms of time, from the epochal time evident in the materiality of the landscape – its textured rocks, layers of crusty salt, expanses of sand – to the temporal juxtapositions produced through the stencilling and layering of aperture masking. The masking technique achieves a form of temporal montage as Dean sets moments captured at different times side-by-side, one temporal sequence next to, below or layered with another temporal sequence.

While she has been repeatedly encouraged to use digital techniques to far more easily obtain the multiple images within a single collaged frame, Dean has been adamant about the unique qualities of film as they relate to time, space and materiality, and she remains committed to serendipity's role in the art-making process. Her practice highlights the consciousness of time that film conjures, with each roll of film stock allowing only a certain length of time for shooting. She also relishes a very physical form of editing and 'the physical resistance of the material' (ibid.).

Dean's campaign to preserve film has included petitioning and lobbying UNESCO to designate film as a protected medium, an effort that continues on the *savefilm.org* website, which features a manifesto, a list of supporters, and news on projects specifically related to film, filmmaking and cinema. In her own work, Dean has begun to explore the melding of film and live performance; her piece *Event for a Stage* (2014) combines the performance of an actor, Stephen Dillane, sound gathered from everyone within the space of the performance and live filming.

Clearly, what Dean harbours in her cultivation of the medium of film is the set of practices analogue filmmaking engenders: the specificity of film stock, film processing and filmmaking with the physical layering of spaces and times. In this way, Dean represents one side of a spectrum within the cinematic arts dedicated to its analogue materiality, the indexical relation of the image to its referent and to film and its unique capacities. As we experience the shift between paradigms, as we acquiesce to the structuring premises of the digital, we are still drawn to the analogue and the material, as well as to Dean's advocacy and filmmaking that resist what feels inevitable. As such, her work sustains a set of practices and questions that illuminate the boundaries between information and film, between data and images, between a photo-chemical process and real-time processing and capture. In refusing to accept the digital for her own practice, Dean's work sustains what might otherwise be occluded as the digital displaces film; her work stubbornly refuses to forget cinema's past, a past that in itself retains a particular notion of history.

Returning to *Mario Merz*, with this lovely film, we experience what epitomises so much of what we understand to be the cinematic: representation; spatial and temporal coherence; the document with its direct link to the world; and a singular perspective. This is not a project related in any way to simulation, transmission or processing, to name only a few of the terms associated with the logic of information. Instead it is the indexical document of a human *being*, replete with the traces, textures and all but imperceptible nuances that as yet elude the capacity of computer-generated imagery to simulate. It is the cinematic. It is film as only film can be.

Extravagant Shadows: David Gatten

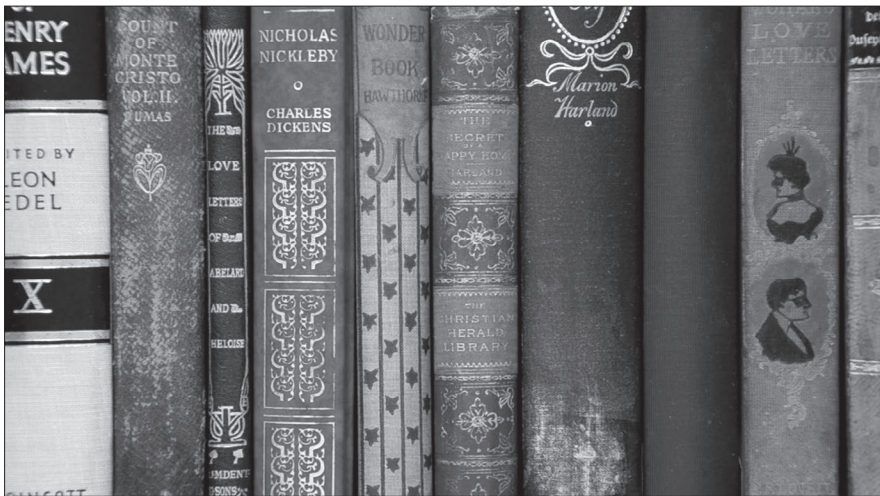
In 2012, Chris Stults of the Wexner Center for the Arts curated a three-part show of films by experimental filmmaker David Gatten. Titled 'Texts of Light', the retrospective also included Gatten's recently completed digital feature film, *The Extravagant Shadows*

(2012). The fourteen-film showcase travelled across the United States throughout the year and presented the work of a filmmaker deeply concerned with the materiality of both the cinematic and the digital, and curious about the more unusual affordances of each. In these films, Gatten shows us his fascination with words and things, with language and meaning, and with knowing and being, and he makes us aware of time and space in new ways. Stults reflects on this aspect of Gatten's work on the first page of the catalogue accompanying the show, writing, 'It stands to reason that in the midst of a moment described as a "post-medium" age, David Gatten's work seems to come from another era' (2011: 3).

Gatten's films are decidedly, lovingly and essentially cinematic, created with attention to emulsion and sprocket holes, and presented in a darkened theatre space for communities of viewers who gather to share a cinematic experience. The video, however, is something else altogether. It continues some of the concerns of the earlier films, but it is adamantly and lovingly digital, attending to the qualities of the digital medium and appreciating its particular attributes. In this way, the show offered an opportunity to trace an artist's transition between modes.

Gatten earned his MFA at the School of the Art Institute of Chicago and has served as a lecturing fellow and artist in residence at Duke University's Arts of the Moving Image programme for several years while also spending time in an old mining cabin in Colorado's Four Mile Canyon where he makes his movies and presents screenings for the community as part of the Four Mile Film Society. Since 1999, the filmmaker has been intrigued by a series of texts written by William Byrd II, a historical figure in colonial America known for his very large collection of books. The result of Gatten's fascination with Byrd's work is a nine-part film cycle. In one of the films in the project, Gatten builds on two pieces of writing by Byrd. The first is *The History of the Dividing Line Betwixt Virginia and North Carolina*, which details Byrd's journey as he surveyed the boundary between North Carolina and Virginia in 1728. The second text is an account of that trip titled *The Secret History of the Dividing Line*, which satirises the journey. The two aligned texts afforded Gatten a unique opportunity to consider the nature of words, texts, histories and boundary lines, and these elements become the material for a twenty-minute film titled *Secret History of the Dividing Line* (2002). In the film, a black screen is criss-crossed by stark, white lines while a timeline noting a series of dates suggests the passing of time. The lines that dissect the screen are so striking that they create an after-image effect, and viewers begin to see lines that are not actually present. As the film progresses, viewers also begin to see the texture of the lines, which expand into rifts and fissures akin to a jagged landscape. The film also includes words, but they pass by often too quickly to fully read or comprehend, blending instead into the visual and topographical landscape. The film becomes an almost tactile evocation of boundaries, and a celebration of the evanescence of language and history.

In other films, Gatten has explored the use of everything from cellophane tape and dust (for the 1996 film *Hardwood Process*) to the scraper on his cement splicer for making ragged lines (as in the serrated landscapes in *Secret History of the Dividing*



The Extravagant Shadows (2012) by David Gatten

Line) to water (for the series titled *What the Water Said* (1998–2007)). These handmade works, very much rooted in the physicality of film as a medium, serve to historicise our current state of transition through reflections on earlier moments of radical change. They also, in their conflation of materials, suggest trajectories of continuity rather than a radical break between past and present.

Gatten's first digital project, *The Extravagant Shadows*, was begun in 1998, building on his early interest in computers. Gatten was initially compelled to use video because he wanted to explore extremely long takes and slow fades, and between 1998 and 2012, as he researched diverse approaches, he watched multiple video formats come and go. In 2012, Gatten finally reconceived the entire project and chose to reshoot it using a Nikon DSLR.

A song by Merrilee Rush opens *The Extravagant Shadows*, the singer's haunting voice achieving a wistful grace in the darkness and establishing a subtle yearning that will permeate the remainder of the three-hour film. We listen to the entire song in the dark, setting the stage for the orchestration of the senses that Gatten so nimbly achieves. Once the song has ended, a row of books appears, their spines each a stately shade of red, blue or green and their titles mostly recognisable: *The Count of Monte Cristo*, *Nicholas Nickleby*, *The Love Letters of Abelard and Heloise*... A wisp of something wipes across the frame, and the image goes a bit soft. A figure begins to take shape, an ephemeral apparition, the torso of the filmmaker himself, who appears to be just a little way off in the distance, standing to face the audience. Then, amazingly, from what appears to be the front of the screen, on the same side as the audience, a paintbrush appears grasped in a hand, very close up; swiping from top to bottom, the hand spreads a wash of light yellow paint across the image. Gradually, the paint dries, the shade of yellow gently shifting tone as it transitions from wet to dry. When it looks as if it is

fully dry, the hand reappears, this time wielding blue paint, and applies the thick, wet pigment across the surface of the image. The paint dries. And so it goes, and will go, for many more minutes.

While this description, rife with repetition, may suggest a tedious display – indeed, it is hard not to imagine the filmmaker responding with humour, perhaps to an overheard comment, about watching paint dry – the sequence is anything but dull. To be sure, the film encourages a contemplative engagement and attention to detail. But it also satisfies that conscientious consideration; when words begin to appear, fading into view and then away again, it is as if the film has suddenly become almost too rich to bear. The first lines read, ‘The idea is one of contingency. Everybody must feel that something has been missed, because electing one course of life precludes any other. But what in my case has been missed?’ What indeed?

The ensuing panels of text are long, and feature philosophical musing and snippets of stories of love and loss created in dialogue with the work of Henry James, Maurice Blanchot, Stefan Zweig and Wallace Stevens. James’s ‘The Birthplace’, for example, tells the story of a young couple who discern some sort of spirit in the house where they are living, while ‘The Jolly Corner’ portrays a man as he considers the decisions he has made, and what his life might have been had he chosen otherwise. These tales resonate through the texts of *The Extravagant Shadows*.

The Extravagant Shadows, or more precisely the experience of viewing *The Extravagant Shadows*, serves as an emblem for thinking about both the ontological and phenomenological questions at the heart of the future – which is also to say of course, the past and present – of media. The film brilliantly layers a deep awareness of what is happening off-screen with what we are seeing onscreen and with what we imagine to be the digital manipulation of the image with the addition of the text. We manoeuvre among these differing registers, putting together the pieces, seeing the filmic and profilic in relation to each other. In an interview with Aaron Cutler, Gatten commented on his desire to prompt this sort of active engagement: ‘I want the chief activity to be that of the viewer approaching the screen, and for the meaning of the work not to be inherent, but rather to be a product of someone’s engagement with it’ (Cutler 2013: np). In this way, the film represents a concatenation of disparate spaces and times, both physical and virtual, and it requires that we remain cognisant of the differing spaces and practices of production, an awareness enacted immediately through the ways in which Gatten plays with our perception of space along the z-axis of the screen. The fluid negotiation of these different registers of experience embodies what it means to inhabit a digital culture, but rather than inviting the distraction and browsing that so often characterise the digital interface, the video provokes a profound experience of presence. We are called forth as subjects, and as beings uniquely able to make connections, to understand relations, and to produce meaning. We are no longer spectators, witnesses, viewers, readers or users. We become entirely present, and in so becoming, are thrust into awareness of all the times – outside the theatre, outside the spaces of the film – when we are not.

This experience is core to understanding the transformation from earlier forms of cinematic experience, and the futures that are possible. The project grapples with the acts of storytelling, writing, authoring and representation, calling each into question. It shows us that we are moving from a representational culture constituted primarily through narrative, discourse and the image, all of which were encountered by readers or viewers, toward a differently constituted culture, one in which cultural objects are technologies, and the reader or viewer is more a participant, co-constituting the work, often in collaboration with others. In these works, then, we are reconfigured, and we may be called forth as a more engaged and active agent of understanding and reception.

You Are Being Generated: David O'Reilly

If Gatten crafts lushly large-scale and lavishly beautiful images, LA-based Irish animator David O'Reilly does the opposite. His metier is whole-heartedly the digital, and his aesthetic is suitably garish, glitchy and chaotic. His characters are ungainly, with big, hollow eyes and unbalanced bodies, and the infernal worlds they inhabit resemble nothing less than some sort of video game junkyard or late-night, televisual channel-hopping hell. His stories tackle very human themes of despair and grief, in bold strokes and short-form, and all of this hallucinatory bombast functions quite well at the diminutive scale of the mobile device or desktop screen.

What I am trying to say is that David O'Reilly inimitably conjures the contemporary, and the seeming chasm between gaudy pandemonium and sublime recognition is gracefully bridged. He queries both signal and noise, refuting the presumptive clarity of the information age with depictions of the noisy static of entropy and disorder that more adequately characterise a networked realm. The result of his investigation is a series of short pieces that are both deeply recognisable and yet often quite shocking.

Born in 1985 in Ireland, O'Reilly worked with the London-based design collective Shynola, where, in collaboration with the small team, he began to develop his own visual style and unique approach to animation. The artist moved to Berlin in 2007, and subsequently to Los Angeles. While he has worked on a number of prominent music videos, his most high profile project to date was Spike Jonze's film *Her* (2013), for which O'Reilly designed the animated sequences featuring the swearing, plump holographic video game character.

O'Reilly's works in 3D animation, but instead of the sheen and high polish of Hollywood 3D, O'Reilly's work is pared back and stripped down. In place of gleaming perfection, O'Reilly offers glitchy mayhem. At the same time, though, he seems to boast an almost contradictory desire for story and its attendant emotional arc and power. To better explain this breadth, he includes among his references comic book artist Chris Ware and French filmmaker Robert Bresson.

WOFL 2106 (2008), one of O'Reilly's early works, features a small creature bounding through a graphically compelling black-and-white forest. The creature discovers his mother's bloody body in the snow, and is suitably horrified. What makes the piece so

powerful is that it suspends the viewer between a sense of empathy and bewilderment as the story continues to grow increasingly strange. Somehow, O'Reilly is able to productively juxtapose absurdity and emotional connection.

'This place is weird,' says the main character in O'Reilly's twelve-minute *RGB XYZ* (2007); the short piece traces the boy's journey away from home to the big city. The urban world is pure graphic pandemonium, with chaotic colours, sharp lines and jarring angles, a city that might have been imagined by Piet Mondrian on acid. The characters speak with computer voices, and the sound design overall emerges from the junkyard of a corrupted hard drive. However, despite the mayhem, there are moments of calm and quiet as the boy travels beyond the city. The short piece's final scenes featuring the city in grey-scale are mesmerising.

If these two pieces are about the ennui of being alone, *Please Say Something* (2008) shifts gears to tell the story of a relationship, in this case between a cat and a mouse. The city is featured once again in this piece, drawn in sweeping lines and odd angles, with the camera prowling through the space unhinged from any constraint. However, the animation's brilliance is in putting emotional weight next to visual chaos. The story slows at various points, and the couple shares moments of intimacy, despair, love and defeat. Halfway through the piece, for example, the cat and mouse lie in bed. Gazing up at the ceiling, the cat asks, 'Do you think it will always be like this?' and we can feel her despair viscerally. With his crude, gawky characters and garish colours, O'Reilly still manages to balance a vision of our networked world and the attempts to connect emotionally despite all that gets in the way.

Writing about *Please Say Something* in an article called 'Basic Animation Aesthetics', O'Reilly says, 'My central idea in constructing the world of the film was to prove that something totally artificial and unreal could still communicate emotion and hold cinematic truth' (nd: 2). The animator goes on to argue that coherence and harmony are worthwhile values, but the brilliance in his own work is found in stretching the line between coherence and incoherence, between synthesised worlds and a sense of emotional reality.

In his 2011 short *The External World*, O'Reilly seems to have tested himself, introducing as much noise as he possibly could in order to disrupt the emotional signal of the central story. Composed of episodic vignettes that cycle in and out of the main storyline, we nevertheless return repeatedly to a grim boy haplessly playing the piano while his stern father disciplines him with slaps across the back of the head. The various other scenes travel in diverse and often hilarious directions, but we return over and over to the boy and his father, right up to the end when the boy performs his sombre piano solo on a stage, and the oddball characters gathered in the audience weep. It is yet another riveting example of O'Reilly's acumen, mining such emotional intensity from seemingly so little.

In 2013, O'Reilly turned his attention to creating what he called an 'ambient game'. Titled *Mountain*, the game is dedicated more to exploring emotional landscapes than levelling up and begins with a series of prompts that takes the participant through states

of sadness, beauty, love and patience. Then a text reads, 'You are now being generated'. What is being generated is at once a mountain, but also 'you', a participant serene enough to pause, wait and watch. Someone content to witness creation, to hear notes of music and to watch the fading light. *Mountain* prompts a kind of meditative stance, a stance highly unusual both within the genre of video games and the ways in which we engage with our mobile devices. Once again, O'Reilly deftly engages in an aspect of contemporary culture with which we are all deeply familiar, but then does something entirely different. In this case, in a world of amped up graphics and cut-scenes, O'Reilly shows just how powerful even the most low-fi, anarchic experiences can be.

O'Reilly appears to be extending the premises of *Mountain* in a new game titled *Everything*, which as of this writing has not been released. Describing the game, O'Reilly writes, 'In *Everything*, every single thing is a playable character; if you can see it, you can be it.' He continues: 'The game lets you see the entire universe from the point of view of the thousands of things in it. In other words, there is no distinction between you and the world, or between a level and a character. All these things experience and interact with the world differently.' Here, O'Reilly engages with the qualities of the posthuman, exploring alternative experiences and perspectives of being by moving away from the expectations of traditional player expectation and decentering the human. Like Gatten's work, O'Reilly's pieces illuminate another facet of contemporary culture, especially in underscoring the fact that it is less that we generate media and more apt to say that we are being generated *by* media. This has perhaps never been more true.

Speculative Spaces: Marco Brambilla

Entering a gallery space, donning 3D glasses, and standing before an immense, moving image tableau, you see Dirty Harry striding purposefully across one corner of the image as rockets catapult overhead, and dozens of characters from dozens of movies – *Star Wars* (1977), *Apocalypse Now* (1979), *Salo* (1975) and so on – writhe in a huge landscape, with Prokofiev's 'Romeo and Juliet' providing the soundtrack. This is Marco Brambilla's *Evolution (Megaplex)* (2010), a side-scrolling, baroque landscape composed of movie clips collaged together in a dense tapestry that invites repeated viewing in order to glean the florid detail present in the piece.

Brambilla, a Milan-born, New York-based media artist, has created a body of work that explores some of the fundamental techniques characteristic of the post-cinematic, in particular working with the temporal and spatial foundations of cinema, and using notions of appropriation, remix and the database to consider new expressions and experiences of subjectivity in a world increasingly mediated by electronic networks. He has also adopted stereoscopic 3D as one of his tools, but rather than striving for the verisimilitude of so much of the film industry's use of stereo, Brambilla has gone in a different direction altogether. Brambilla's work participates in a genre of avant-garde media that crafts compelling meta-commentaries on the state of cinema. His work also demonstrates a shift from the linear to the simultaneous that is representative of



Creation (Megaplex) (2012) by Marco Brambilla; courtesy of Michael Fuchs Galerie

contemporary culture. Taken together, the projects prompt a movement from spectacle to speculation, and to the creation of what I dubbed ‘speculative space’ in the previous chapter.

While stereoscopy pre-dates even the birth of cinema, it has had only limited impact in the history of art films. Brambilla’s *Megaplex* series, composed of three large-scale video collages, suggests an arguably non-cinematic direction for stereoscopic 3D art and design, in which the objective is more about a new language of moving image art designed to take viewers inside a spectacular, almost hallucinogenic space.

The series begins with *Civilization (Megaplex)* (2008), a multi-layered tapestry of interconnecting images that scroll upward to create a journey that seems to move from hell to heaven. The three-minute video contains more than three hundred different looped videos arrayed on a slowly moving landscape. In this piece, Brambilla tackles nothing less than heaven and hell in a dazzling vertical video tapestry reminiscent of the worlds rendered by painter Hieronymus Bosch.

The second work in the series is *Evolution (Megaplex)*, a stereoscopic three-minute loop, which attempts to present the entirety of human evolution on a huge, side-scrolling mural. Like its predecessor, *Evolution* samples the history of Hollywood’s most bombastic moments in a hyper-remix project with each mini-sequence either drawing you into some vertiginous spiral or popping out at you in 3D space. Stereo 3D in this context adds spectacle to spectacle, and the result is simply dazzling.

Creation (Megaplex), from 2012, expands on the first two projects to create the most dense and stereographically complex project in the series. The piece features 1,500 stereoscopic video elements arrayed along a swirling vortex that describes both creation and destruction. While the project makes use of existing cinematic imagery, it distances itself from the conventions of remix video. Where remix aesthetics have

historically thrived on the cut, Brambilla is, in these projects, dedicated to exploring the aesthetics of looping and simultaneity.

Brambilla's three pieces participate in a form of cinematic meta-commentary that has a rich history in the context of avant-garde cinema. The projects stage a return to cinema, rifling through its history to appropriate specific instances. This is not unique – Christian Marclay's *The Clock* (2010), to cite just one example among dozens, also combs through the history of cinema to find references to time in order to create a 24-hour ode to cinema and temporality. Similarly, the genre of internet video known as super cuts, in which a fan aggregates formally similar scenes through an exhaustive search of a body of work (every POV shot in *Breaking Bad*; every cocktail in *Mad Men*, etc), is also part of this movement. However, the realms of video art and art cinema over the last fifteen years have produced an abundance of works that return to existing cinematic imagery in order to scrutinise, explore, examine and interrogate both the image itself and the apparatus that produces it.

For Brambilla, the return to cinema is constituted through the juxtaposition of moving image loops, and these loops are situated within larger loops, and so on. The viewers of Brambilla's work are not the pensive spectators described by Laura Mulvey, musing over a single image; we are instead agents of perception and association, recalling the disparate contexts from which the loops have been taken; we are considering the placements of these loops and the ramifications of their spatial arrangements; and we are considering all of this in relation to a larger narrative and moving image tableau. In short, we are called on to be reflective and to participate in a reading of the images, but to do so specifically in motion, through time and repetition.

Brambilla's three works in the *Megaplex* series also shift from the linear sequence to a spatialised simultaneity that is more akin to information architecture and a sense of visual immediacy than to cinematic storytelling. As such, the projects reflect the intersection of the interface with cinema, where the interface emphasises the immediate and the present, co-presence and co-occurrence, with spatial montage serving as the primary mode of visual organisation. In this way, the projects challenge the standard linear grammar of time-based work, suggesting metonymy and agency as the keys to insight about the cinematic form. The result is a distinct form of pleasure in crossing boundaries and inhabiting a new kind of space that is only tentatively and temporarily delimited. These are images in a perpetual state of becoming, within spaces that are speculative.

Why is this attention to spatial montage significant? Given the bombast of Brambilla's visual style, it would be easy to dismiss these projects as mere spectacle. However, as we watch these pieces, we seem to enjoy a disembodied gaze, a dematerialised world and a seductive experience of pleasure and affect. And these are the things that we often complain about when we talk about – and dismiss – the digital. However, this kind of dismissal does not allow for a critical response engendered by the work, one that underscores our sense of the relationship between embodiment and information. Wearing the 3D glasses necessary for the full impact of the final two projects, we do

not succumb to an informatic space, but instead, experience a different arrangement of the body in relation to technology, the virtual and the epistemological. Meaning is produced at the interstices of the technologies both onscreen and worn on the body, but only via the mediation of the body within a complex system of relations.

We need to expand our own understandings of emerging media; these forms are not just changing or augmenting existing forms; they are altering the epistemological foundations and paradigms that we use to understand the world and our place in it. The viewer of Brambilla's work is not merely a viewer; he or she becomes an element within the larger assemblage, and meaning occurs through an awareness of this complex machine. To view Brambilla's work as mere spectacle rather than as a space for speculation too easily cedes our power of critical reflection to a dominant, but inaccurate, paradigm of media.

Davide Quayola

Trees on a hillside sway gently in the wind, their branches and leaves moving back and forth in graceful arcs. Gradually, the images begin to blur, the colours swirl together, and the edges lose their lines. Everything sharp becomes soft, everything distinct merges, everything deep becomes flat; colours coalesce into painterly abstraction. Cut to the same scene, the wind still provoking motion, and the movements this time come to resemble thick brush-strokes and the frame contains now a painting, one that is making itself before our eyes. Cut to the same scene, reduced to grey-scale with small blips, jots of colour like glitches dotting the landscape. These are some of the moments in the Italian artist Davide Quayola's *Pleasant Places* (2015), a large-scale video projection piece in which the London-based artist uses computational techniques to consider the work of Vincent Van Gogh, using images from the landscape of Provence.

To create *Pleasant Places*, Quayola foregoes both the precision of image analysis and the clarity of cinematography in order to engage the tension between representation and abstraction, figure and ground, signal and noise. If clarity and precision are the typical domain of the digital, Quayola gives us fuzziness and ambiguity, toggling between clarity and obfuscation not only to demonstrate emergence and dematerialisation but to enact a central trope of everyday life in the networked regime: everything dissolves into bits; the material world transmogrifies, yielding to an algorithmic reordering. The medium Quayola employs is thus an active medium, one, in the words of Alexander Galloway 'whose very materiality moves and restructures itself' (2006: 3). *Pleasant Places* is certainly not a game, but its materiality does move and restructure itself, inviting us to parse the pleasures of the landscape, the moving image and the algorithm, in tension and together.

With a series called *Forms* (2012), Quayola collaborated with media artist Memo Akten to investigate the motion of the human body. Claiming the inspiration of Eadweard Muybridge, Harold Edgerton and Étienne-Jules Marey, the artists make the generally invisible forces and directions of energy visible, tracing trajectories of



Pleasant Places (2015) by Davide Quayola

somatic power through the movement of abstract shapes. Although the images remain entirely non-figural, the motion of the human body is immediately apparent; it is as if the body has disappeared and what remains are rendered traces of its energy in motion.

If O'Reilly and Brambilla salute a sense of digital excess, Quayola brings us full circle, returning to the contemplative engagements with one's medium that we saw in Dean and Gatten. His moving image pieces inspire a distinct visceral pleasure; with *Pleasant Places*, the shift from representation to abstraction is felt in the chest, as if the release from representation does indeed open up opportunities for alternative languages, not entirely of the visual.

Each of the artists explored here straddles the digital/analogue divide in some way; Tacita Dean, in her passionate advocacy for film, powerfully illuminates what will be lost if we cede all moving image practice to the digital; David Gatten demonstrates the ways in which the digital affords a set of aesthetic constraints and possibilities which, when explored with unabashed curiosity, renders a sensibility counter to all that the digital and the networked connotes; David O'Reilly fully inhabits the digital, rapaciously scratching and scraping its surfaces to find hints of lyricism; Marco Brambilla traffics in the hyperbole and excess of a visual culture in which images are made and remade, mixed and remixed in an incessant maelstrom. And Davide Quayola surveys the calm after the storm, finding beauty and contemplation in the computational.

This somewhat prismatic framing of the past, present and future of the cinematic suggests vectors of analysis and contemplation that weave through the rest of this book, even as we lurch far beyond time based media and back again. The paths of exploration begun by the artists in the chapter hint at the shape of the ever-widening spiral we will traverse, but they also provide a centre of gravity and a reminder of what is to be lost and gained. It is neither the breathless hyperbole of the 'new' that drives us, nor nostalgia for a probably imaginary past, but a vision of the cinematic form whose roots tangle together the past, present and future of media, art and practice.

- 9 I should note that my conjunction of posthumanism and cinema here differs from the characterisation of posthuman cinema as a genre concerned with the loss of identity within narrative cinema as seen in Scott Loren's 'Posthumanist Panic Cinema: Defining a Genre' (2012).
- 10 See Randall Bass's 'Disrupting Ourselves: The Problem of Learning in Higher Education' (2012) for more information on the power of informal learning in undergraduate education.
- 11 Ken Eklund, *World Without Oil*, Alternate Reality Game, 2007; <http://worldwithoutoil.org/>
- 12 Institute for the Future, *Superstruct*, Alternate Reality Game, 2008; <http://www.iftf.org/our-work/people-technology/games/superstruct/>
- 13 Read an interview conducted by Henry Jenkins with the game's core design team, Jeff Watson, Simon Wiscombe and Tracy Fullerton, available at: henryjenkins.org/2011/10/a_virtual_bulldoze_how_the_usc_1.html

Chapter One: Past-Present-Future: Situating Post-Cinema

- 1 My reference to Williams here also echoes another reference, namely the framing offered by Michael Renov and Erika Suderburg for their collection of essays, *Resolutions: Contemporary Video Practices* (1995).
- 2 This direction is also advocated by Mark Williams in an essay titled 'Rewiring Media History: Intermedial Borders' (2009).
- 3 See Kristen Whissel's *Spectacular Digital Effects: CGI and Contemporary Cinema* for further elaboration of the ways in which contemporary cinema figures these changes. She adopts the term 'effects emblem', writing 'I define the "effects emblem" as a cinematic visual effect that operates as a site of intense signification and gives stunning (and sometimes) allegorical expression to a film's key themes, anxieties and conceptual obsessions – even as it provokes feelings of astonishment and wonder' (2014: 6; emphasis in original).
- 4 See, in particular, in this context Scott Bukatman, *Matters of Gravity: Special Effects and Supermen in the 20th Century* (2003).

Chapter Two: New Practices / New Paradigms

- 1 See 'Storyboarding in the Digital Age' in *Storyboarding: A Critical History*, Chris Pallant and Steven Price (2015).
- 2 Game designers, who are interested in understanding how stories might be generated, are very interested in this question, and are busy exploring topics such as pattern recognition and the tension between player agency and game control.
- 3 Philosopher Nelson Goodman wrote extensively about aesthetics and the potential for art to aid our understanding of reality for many years during the last century. However, he also wrote specifically about the role of art in construing the world. In *Ways of World-*