

## Visual Culture Studies and Cultural Sociology: Extractive Seeing Janet Stewart

In 1996, the leading modern and contemporary art periodical, *October*, published the results of its 'Visual Culture Questionnaire' (Alpers et al., 1996), which was to become a landmark publication in the construction of visual culture as a field of study. Many of the individual responses to the questionnaire reflect on the boundary line between visual culture and art history, as, more recently, does Whitney Davis (2011) in his comprehensive *General Theory of Visual Culture*. The construction of 'visual culture' as an object of study involves a number of moves, in which visual culture studies seeks to distinguish itself from the range of existing disciplines that engage with visual objects – including Anthropology, Architectural History, English, Film Studies, Geography, History, History of Art, Modern Languages, Sociology. Visual culture studies steers a sometimes uneasy course of rapprochement with these disciplines, to which, in part at least, it also sets itself up in resistance. A number of programmatic early contributions to the *Journal of Visual Culture* (which was established in 2002) focused on the nature of boundaries between visual culture and other fields of study, discussing the desirability of policing and/or permeating such boundaries and reflecting on disciplinarity, interdisciplinarity and even 'indisciplinarity' (Bal, 2003; Elkins, 2002; Jay, 2002; Mitchell, 2002a; 2002b).

The persistence of such debates notwithstanding, visual culture studies is now an established field, the emergence of which is connected to a series of distinctive shifts in the humanities and social sciences, including the 'linguistic turn', the 'cultural turn' and, finally, the 'pictorial turn' (Mitchell, 1995). There are numerous university programmes in visual culture worldwide, supported by a range of readers (including Evans and Hall, 1999; Mirzoeff, 1998; Schwarz and Pryzbilski, 2004) and textbooks (such as Mirzoeff, 1999; Sturken and Cartwright, 2009; Walker and Chaplin, 1997). As well as the *Journal of Visual Culture*, a number of other dedicated journals have been established, including *Visual Studies*, *Visual Culture in Britain* and *Early Popular Visual Culture*, and a proliferation of scholarly monographs in visual culture have appeared. Visual culture studies, in its contemporary form, is a broad field, encompassing: first, research into the nature of vision; second, the study of visuality, which takes up the question of how images, image-making technologies and 'looking practices' construct social realities; and third, the attentive analysis of visual objects of all kinds, from artworks to scientific images, from vernacular photography to spectacular architecture.

Research into the nature of vision encompasses biology, physics, neuroscience and psychology, as well as drawing upon the study of perception in philosophy. Visual culture studies is a site in which these different fields can combine, as seen, for example, in Donna Haraway's (1997) reflections on 'The Persistence of Vision', in which she draws upon phenomenology and poststructuralism to argue for the importance of a humanities perspective to the study of vision. Poststructuralist thought and, in particular, the work of Michel Foucault also informs the study of visuality, which represents the core of contemporary visual culture studies. This is evident, for example, in Nicholas Mirzoeff's (2011) definition of visuality in terms of 'the right to look' and 'the right to assemble a visualization'. The study of 'visuality' involves thinking about 'looking relations', drawing upon theories of the gaze, that bring together existentialism (Sartre, 2012 [1943])

phenomenology (Merleau-Ponty, 1962 [1945]), psychoanalysis (Lacan, 1978 [1964]) and others. It also involves investigating the role of technologies of seeing in the formation of subjects and subjectivities (Berger, 1972; Crary, 1990), engaging with the idea of 'attention' (Crary, 2001) and reflecting on the production, consumption and circulation of visual objects of all kinds (such as Beller, 2006). The study of visuality offers rigorous critical analysis of the role of visual culture in constructing particular ways of seeing, framed in terms of key categories such as race and ethnicity (Jay and Ramaswamy, 2014; Shohat and Stam, 1994) or gender (Burfoot, 2015), or grouped around themes of many different kinds, from violence to environmentalism, from religion to science and technology.

Visual culture studies also draws upon the attentive study of visual objects of different types, recognizing that diverse visual objects demand specific methods of analysis, drawing upon a particular body of work, such as photography theory or film theory, to adequately account for the object under investigation. While visual culture studies has been criticized for its 'presentism' (Starkey, 2005), the field is increasingly witnessing a turn to a longer historical timeframe (Jay, 1994; Kromm and Bakewell, 2010; Mirzoeff, 2011; Starkey, 2005), countering, by doing, the perception that the proper object of visual culture studies is advertising or the internet. The field's increasing awareness of medium specificity and historical specificity is connected to an anthropological perspective that insists on the necessity of studying visual cultures in the plural (Shohat and Stam, 1994). This is tempered, however, by work that draws upon Mitchell's (1995) reflections on the nature of the 'pictorial' to posit a universal theory of the image (Belting, 2011 [2001]; Wiesing, 2014 [2005]). The tension between the particular and the universal underlies recent work that insists on attending to the material nature of the visual objects (and their agency) (Latour, 1999 and others), while also recognizing the importance of the non-representative in focusing on the 'immediacy' or 'presence' of an object (Gumbrecht, 2003).

Janet Wolff (2010; 2012), who has consistently charted connections amongst sociology and art history, and, later, cultural sociology and visual culture studies, identifies the 'turn to immediacy', as the most significant point of divergence between visual culture studies and cultural sociology today. She insists that cultural sociology needs to retain critical distance from visual culture's recent focus on immediacy and materiality. This is an interesting point of departure for her, as much of her previous writing has reflected upon what sociology has to learn from art history and/or visual culture studies. In her continuing insistence that sociology needs a theory of the aesthetic (Wolff, 1983; 1999; 2010; 2012), she has kept a line of sociological thinking alive that extends back to Georg Simmel, includes Walter Benjamin (whose innovative sociological work draws on the work of early art historians such as Alois Riegl), Herbert Marcuse, T.W. Adorno and others, and is taken up in the contemporary sociology of art (de la Fuente, 2007; Stewart, 2005; 2013; Tanner, 2010). Wolff (1999: n.p.) has written persuasively on what is missing from much sociological work when it turns to think about the social construction of reality – the 'radical rethinking mandated by poststructuralist and psychoanalytic theory, which exposes the constitutive role of culture and representation in the social world'. She has, however, also always been clear about the influence of the sociological imagination on art history and visual culture studies, which, she maintains, enables these disciplines to offer a rigorous critical analysis of institutions and social relations.

Wolff's (2010) recent critical account of the relationship between cultural sociology and visual culture studies is the point of departure for this chapter's exploration of the nature of the relationship between the two disciplines. In order to trace the interweaving and differentiation of the two fields, the chapter offers a case study of one particular 'boundary object' – the permanent 'Energy Exploration' exhibition, which opened in March 2013 in Aberdeen's Maritime Museum. 'Museology', Janet Wolff (2010: 6) writes, 'is one example of a new area ... which has produced subtle and illuminating studies of the interplay of art object, institution, and social and political processes'. And indeed, museums are objects of interest both to visual culture studies (for example, see Bennett, 1988; Hooper-Greenhill, 2000) and to cultural sociology (for example, see Fyfe, 2006; Marontate, 2005). In line with 'boundary object' theory (Star and Griesemer, 1989), the 'Energy Exploration' exhibition, and the objects around which it is constructed, can be conceived as entities that have different meanings in each discipline, but which are common enough to be recognizable in each. This is the case, both with the form of the museum and with the theme of the particular exhibition under investigation in this chapter, as energy is also a theme taken up recently by both visual culture studies (Bozak, 2011; Jolivette, 2014; LeMenager, 2014; O'Brian, 2015; Veder, 2015) and sociology (McKinnon, 2007; Stewart, 2014; Tyfield and Urry, 2014; Urry, 2013). As Boyer and Szeman (2014: n.p.) argue in a programmatic statement on the 'Rise of the Energy Humanities':

Neither technology nor policy can offer a silver-bullet solution to the environmental effects of an energy-hungry, rapidly modernizing and growing global population. ... our energy and environmental dilemmas are fundamentally problems of ethics, habits, values, institutions, beliefs and power – all areas of expertise of the humanities and humanistic social sciences.

Part of the work of the energy humanities is to investigate the narrative strategies and desires that underpin our commitment to fossil fuel and frame our inability to think past this source of energy. Museums, as Latour and Weibel (2005) claim, are important sites for 'making things public'. This being the case, critical analysis of energy exhibitions yields significant insights into the construction of narratives about energy transition. This chapter explores the ways in which visual culture studies and cultural sociology can contribute to this task through engaging in critical analysis of the 'Energy Exploration' exhibition from both disciplinary perspectives. The discussion reveals differences and structural similarities between the two disciplines, and concludes by offering a critical account of these similarities that counters Wolff's critique of the 'turn to immediacy' with a re-evaluation of the concept of 'presence'.

The 'Energy Exploration' exhibition in Aberdeen's Maritime Museum provides the main display space for the history of the North Sea Oil and Gas industry in the UK.<sup>1</sup> The exhibition occupies the central section of the Maritime Museum, a building that overlooks Aberdeen's busy commercial harbour, with its constant turnover of supply boats and other vessels essential to the offshore oil industry. The display, then, is located in one of the areas of the city in which the visual and material culture of oil and gas is clearly visible, in the shape of objects such as ships, shipping containers, storage tanks, logos and company offices. The exhibition draws explicit attention to its location, making use of the museum's architecture and, in particular, its large picture windows, to connect the assembled museum artefacts to

the activities of the harbour area and so, by extension, to the lived experience of the oil industry and its extensive social, political and economic influence in the city and its environs. Aberdeen's Maritime Museum might not boast an exhibit equivalent to the Norwegian Petroleum Museum's oversized digital display, which makes an arresting claim about the contribution of the industry to the Norwegian economy by showing in real time the value of the country's Oil Fund; however, the dominant narrative of the 'Energy Exploration' exhibition, like its Norwegian counterpart, focuses on the positive changes brought to the region after the opening up of the North Sea to oil exploration in the 1970s.

From the perspectives of visual culture studies and cultural sociology, two sets of questions arise in the context of analysing the exhibition's central narrative, the first pertaining to social relations, and the second, relating to the formal presentation of the narrative. Focusing on social relations raises the issue of power and the display of narrative, investigating the ongoing process of the discursive construction of meaning through dialogue amongst museum professionals, external stakeholders, visitors and others. Attending to form, meanwhile, relates to how the exhibition's narrative is presented, taking up questions about practices of display and practices of collecting, and demanding an investigation of the visual processes through which the narrative is constructed and communicated.

The exhibition's central narrative relates the history of North Sea oil exploration as a success story focusing on man's triumph over adversity.<sup>2</sup> In so doing, it follows the logic underlying many accounts of the North Sea oil story, from memoirs such as Brian Page's *Boy's Own Offshore Adventure* (2007) and *Boy's Own Oily Adventure* (2009) to standard histories such as Alex Kemp's *Official History of North Sea Oil and Gas* (2011) and valedictory accounts such as Bill Mackie's *The Oilmen: The North Sea Tigers* (2004). This narrative emphasises the achievements of the oil industry and of the 'ordinary men and women' who were involved in oil exploration. This very particular and limited understanding of social relations in the industry prefigures a particular energy future through the recurrent trope of 'techno-utopianism' that underlies it (Szeman, 2007). That such a narrative line dominates in this exhibition is hardly surprising, given the list of its sponsors, who were drawn almost exclusively from the oil industry.<sup>3</sup> From the perspective of a critical encounter with social relations, both cultural sociology and visual culture studies offer reflection on corporate cultural sponsorship (Bourdieu and Haacke, 1995; Marontate, 2005; Scholette, 2010), showing, for example, how museums are under increasing pressure to tailor exhibitions to the requirements of external funders (Alexander, 1996; 1999; Rectanus, 2002). The particular instance of oil companies engaging in cultural sponsorship is a topic that has been highlighted and investigated in its own right. Mel Evans' (2015) *Artwash*, the publication of which is supported by the NGO Platform London,<sup>4</sup> offers a critical account of oil company sponsorship of the arts, while also showing how activist artists, including Hans Haacke and groups such as BP or not BP, have sought to eliminate corporate sponsorship of the arts by fossil fuel companies, thereby removing one pillar of the industry's 'social licence to operate', a key element of thinking on 'corporate social responsibility'.

While analysis of the dominant narrative and sponsorship arrangements of the permanent exhibition in the Maritime Museum allow us to demonstrate that the 'Energy Exploration' exhibition supports the oil industry's 'social licence to operate', a more detailed

engagement with social relations in the museum serves to complicate the picture somewhat. Decisions made by the museum's curatorial team, for example, can offer a counter-narrative within the space of the museum. In 2014, the museum hosted a temporary exhibition of works created as part of an educational project on 'Power Politics'. Supported by the Living Earth Foundation, the project worked with school pupils in Aberdeen City and Shire and Port Harcourt, Nigeria, to encourage them to explore critically questions relating to oil, energy and development in two parts of the world where the dominant industry is oil and gas. The logic of the Power Politics show, located in a small gallery accessed via the central 'Energy Exploration' display, stood in direct contrast to the permanent exhibition. Two video screens showed documentary films discussing aspects of everyday life in Scotland and Nigeria, while a set of wall panels contained a number of large-scale comic strips encouraging critical reflection on the way in which the story of oil is conventionally narrated. The critique of representation offered in the show was extended explicitly to the Maritime Museum itself, and, in particular, to one of the central attractions in the Energy Exploration exhibition: a 3-D cinema showing a corporate documentary film created and donated by TAQA, the Abu Dhabi National Energy Company, which operates in the North Sea as a fully integrated exploration and production company. The achievement of the Power Politics project was to place in question the authority of the story of oil and gas told in the museum. The show made a compelling case for the power of substituting the belief in one authoritative version of the North Sea oil and gas story with the imperative to tell multiple stories, which attend both to local and to global concerns.

This example of the potential for undermining the museum's dominant narrative is a reminder of the importance of taking into account both the intricacy of social relations and the full complexity of the discursive construction of museum meanings in critical encounters with the museum as institution (Fyfe, 2006; Rectanus, 2002). The 'sociology of translation' offers a useful model for thinking through this process. This relational approach, developed by Michel Callon and Bruno Latour, in response to Michel Serres' reflections on the translation of concepts between disciplines, takes as its object the loose structure or 'network' of associations between ideas, things, people and resources around which and through which translation processes are enacted (Callon, 1986; Callon et al., 1986; Latour, 1993). It facilitates an understanding of the creation of narrative and the ongoing production of the museum experience as the result of a network of associations amongst different social actors (as well as sponsors and curators, we might consider visitors in multiple categories, experts of different kinds, and others), different ideas (for example, conceptualizations of the museum as institution or thinking about energy transition) and different things (such as the objects on display and in the collection).

One of the strengths of an approach informed by the 'sociology of translation' is that it brings objects themselves into play, through its insistence on the agency of matter. This approach offers a way of thinking through the agency of collecting and display (Kirshenblatt-Gimblett, 1998), of examining what happens as these images, objects and practices find their way into the space of the museum display. Rubio and Silva have recently employed such an approach in their study of artworks as physical objects in the field of contemporary art, emphasizing the importance for their work of combining 'materiality in field theory' with an 'object-oriented methodology in field analysis' (2013: 161). As a means of exemplifying the potential of such an approach, this chapter turns now to trace the place

and function of photographs and photographic images in the Energy Exploration exhibition, considering the different forms of analysis or encounter demanded by this category of object.

Photography is one of the key visual technologies of the 20th century and as such, has a special place in ways of seeing throughout that century and into the 21st century. It can be regarded as a 'boundary object' in its own right, with different meanings and aspirations accorded to it in a variety of disciplinary contexts. In the field of visual sociology, photography figures as a key visual research method, the efficacy of which is due largely to its apparent indexicality. At the same time, as Bourdieu (1991) discusses in his 'Sociology of Photography', it is valued as a form of image-making that is open to many. Visual culture similarly encounters photography in multiple ways, from analysis of art practices through to reflection on the possibilities of documentary and critique of scientific imaging techniques. Recently, the role of photographs in museums has been the subject of a project led by the anthropologist and photography theorist, Elizabeth Edwards, which focuses on photographs and the colonial legacy in European museums (<http://photoclec.dmu.ac.uk/content/home>). Edwards' work draws on a seminal article by Gaby Porter (1989) on the use of photography in museums, in which Porter drew attention to the use of photographs as part of an overall design solution in the context of the museum. This can be seen clearly in the 'look' of the Maritime Museum's oil and gas display, which utilizes an aesthetic entirely familiar to those who inhabit the corporate world of the oil industry. Entering the display is not unlike entering a small-scale version of an oil and gas trade fair such as Aberdeen's biannual Offshore Europe, or Houston's annual Oil Technology Conference.<sup>5</sup> That this aesthetic draws heavily on commercial photography is not in itself surprising, when we consider the huge number of photographic images produced by the oil and gas industry. In a presentation given at the 2012 meeting of the European Oil and Gas Archives Network, it was revealed, for example, that the Norwegian Petroleum Museum, has a collection of c. 3.5 million photographic images, of which 60,000 are of corporate provenance.

While photography plays a major role in the archive of the European Oil and Gas industry, this is in stark contrast to its place in museum displays in general. Photographs, as Porter (1989) points out, are often seen as second-class objects in museums, relegated to a contextualizing function that is associated with their presumed indexicality and transparency, their evidentiary power (Tagg, 2009). They might be used, for example, to provide the 'look of the past', to 'authenticate other objects', or to 'fix' their meaning (Edwards, 2001: 186; Edwards and Mead, 2013). In the Energy Exploration exhibition in Aberdeen's Maritime Museum a series of photographic images are reproduced as part of a text panel that describes the way in which the city of Aberdeen changed with the advent of oil extraction in the North Sea. The photographer is named as Fay Godwin, but no further information is provided as to the photographs' provenance. The images are pressed into service in a manner that relies upon their taken-for-granted indexicality, allowing them to be presented as unproblematic evidence of past social change. In neglecting the specificity of these images, the exhibition flattens out their potential to be read critically, both in terms of the conditions of their production and in terms of their aesthetic value. Although no credits are provided for the images, it is likely that they have been taken from a photographic book, *The Oil Rush*, (Jones and Godwin, 1976). This is a work of reportage, in which Godwin, a celebrated landscape photographer, reproduced photographs taken in

Aberdeen and Peterhead, as well as on the North Sea oilrigs themselves in the early years of the North Sea boom. Thinking in terms of the conditions of their production, these images provide the possibility of an interesting counterpoint to the dominant masculine narrative of the exhibition. In a prefatory note in the book, Godwin reflects: 'Several times, I was refused permission to make trips to rigs, platforms, pipe-laying barges and other facilities, because I am a woman' (Jones and Godwin, 1976: 5). In the exhibition itself, however, this gendered perspective is absent, as is the critical context of Godwin's important contribution to environmental art, which would have allowed the images to be interpreted differently. The museum's project of 'rendering the visible legible' (Preziosi, 2006), we might argue, is incomplete without the additional work of the visual and sociological imaginations, which open up and historicize particular visual objects, recognizing the aesthetic and rendering it both discursive and socially grounded (Wolff, 2010: 7).

It might be countered that precisely because of their merely illustrative function, the Godwin photographs cannot properly be classed as museum objects. The same point, however, holds when the photograph in question is exhibited as an object in its own right. In the 'Energy Exploration' exhibition, only one photograph is encountered in this way. It is to be found in the section devoted to the Piper Alpha disaster, the oilrig blowout of 1988, in which 169 men lost their lives.<sup>6</sup> The curator of the exhibition, Meredith Greiling, suggested in conversation with me in the summer of 2013 that only with the latest refurbishment of the 'Energy Exploration' display, had it been possible to take up the subject matter in the museum – a quarter of a century after the tragedy. Before the new display opened, the only public memorial to the Piper Alpha disaster was to be found in Hazlehead Park, on the outskirts of Aberdeen, in the form of a commemorative sculpture largely funded by public money, as the oil companies were reluctant to contribute.<sup>7</sup> The sculpture was produced by the artist Sue Jane Taylor, who worked extensively in the oil industry before and after the tragedy, having been brought in originally by the Stirling Shipping Company to document the company's work in the North Sea. Like Godwin before her, Taylor was allowed access to oilrigs to document life at sea; her research included a period of time on the Piper Alpha the year before the explosion (Taylor, 2005).

The solitary photograph on display as photograph in the exhibition is not one of Taylor's works, however, but an object donated by her. Indeed, it is not an original artwork at all, but a commercial postcard: an 'ephemeral object' that, like the museum itself, demands analysis that attends both to the aesthetic and to social relations (Geary and Webb, 1998; Prochaska and Mendelson, 2010; Rogan, 2005; Simpson, 2012). In the context of the Energy Exploration exhibition, this postcard, bearing a photograph of the Piper Alpha taken before the rig assumed its particular historical significance, takes on a secondary commemorative function, the ramifications of which can be explored with recourse to memory studies, an interdisciplinary field that, like museum studies, represents a point of connection between cultural sociology and visual culture studies. Presented in terms of the expected affective response of the viewer, this postcard functions almost as a relic, transported by circumstance from the realm of the profane to that of the sacred, to offer a Durkheimian analysis. Yet the postcard's appearance as museum object masks a host of other questions relating to the status of the object – questions relating to communication and exchange value, to aesthetics and to materiality.

The process of the postcard's translation from commercial photograph to consecrated museum object is captured in its label, which hints at its 'social biography' (Edwards, 2001), inviting reflection upon its journey through multiple communicative networks:

Postcard of Piper Alpha sent to the medics onboard Piper 'A' by Gareth Watkinson.

Artist Sue Jane Taylor donated this postcard. 'It was given to me by the medic on Piper A during my stay on the platform. He had it displayed on the front check-in desk.'

This text raises two sets of questions: the first relates to the singular journey of this postcard, asking who Gareth Watkinson was and why he sent a postcard of the Piper Alpha to the medics onboard. The second is connected to the general history of the postcard, asking about its place in postcard culture: Where was the postcard produced? Who was the photographer? Which company sold them? In what numbers were they sold? None of this information is provided in the exhibition.

These questions as to the postcard's provenance lead to another set of questions pertaining to the photograph reproduced on the card; postcards also demand iconographic analysis, as Mark Simpson (2012: 170–1) argues. Alongside these questions about the object's 'social biography', aesthetic questions are also raised about the photograph's status as a representation of oil exploration. The postcard shows an image of an oilrig on a calm North Sea taken at sunset. In terms of its 'look', it is typical of the hyper-vivid glossy postcard prints of the era, which Ben Highmore (2007), in his foreword to a collection of John Hinde popular postcards, memorably describes as 'technicolor daydreams'. Similarly, the motif is ubiquitous; in corporate publications, postcards, advertisements and fine art prints, the calm seascape featuring an oilrig at sunset is a recurrent trope.<sup>8</sup> Like so many images that form the canon of stock images in the photography of exploration (Ryan 2013), this aerial shot signifies the idea of human endurance and perseverance to triumph over a hostile environment. It is an image that does so by drawing upon the 'technological sublime', which David Nye (1996 23) glosses as an 'amalgamation of natural, technological, classical and religious elements into a single aesthetic'.<sup>9</sup> Nye here is writing of a uniquely American form of the sublime. In images of North Sea platforms such as the Piper Alpha, we see the natural, in the shape of the seascape, and the technological, but the classical and religious are superseded by the Futurist and utopian, which Justin Beale shows to be typical of the architecture of the North Sea oil industry (2006).

Visual culture studies of postcard imagery often focus on its importance in constructing and consolidating social power (Simpson, 2012: 171). Writing about views of Paris reproduced in early postcards, Naomi Schor (1992: 216) draws upon a Foucauldian framework to argue that: 'the ontology of the postcard is totalizing'. While her concern is with the troubling stereotypes characteristic of early Parisian postcard culture, her claim is pertinent for the Piper Alpha postcard under consideration here. The image constructs a particular narrative of control, familiar in imagery of the oil industry – even if that control is, as Beale (2006) argues, always tempered by the possibility of impending disaster. This narrative is produced not only through the image's reliance on the 'technological sublime', but also in the very process of its production, for this is an image that was expensive to produce. To take the aerial shot of the oilrig at sunset required significant investment in technology, both in image-making technology and in transport technology. Postcards depend upon the ability to reproduce images cheaply, and yet in this case, the condition of production of the image, both in terms of technology (the camera, the helicopter) and of nature (the sunset, the calm



sea), is not easily reproducible. It is the kind of imagery with which canonical oilscape photographers such as Edward Burtynsky (2009) are associated.<sup>10</sup> His practice, it might be argued, draws not only upon the technological sublime, but also on the 'reification of the visible', which the photography theorist, Ariella Azoulay, argues: 'is carried out either as a result of reliance on the photographer as someone with the authority to manage the photographic act or as the result of the instrument's apparent neutrality, which assumes an absence of human involvement' (Azoulay, 2008: 328).

In the case of Burtynsky's photographs, these elements merge in the assumed authority of the photographer and the studied neutrality of his detached view. In other unattributed stock photographs of the oilscape, it is the apparent neutrality of the camera that provides the images with their force. The trope of the oilrig at sunset is part of a particular 'scopic regime' that is predicated on the reification of the visible, which, Azoulay (2008: 328) claims, functions to absolve the spectator of responsibility for the visible and for the 'commitment to the civil contract of photography' (by which she means a new form of deterritorialized citizenship that emerges in the encounter between the photographed person, the photographer and the spectator (2008: 24–5)). The photographic process of making visible North Sea oil exploration, which also lies at the heart of the Energy Exploration exhibition in Aberdeen's Maritime Museum,<sup>11</sup> serves to normalize extractive activities, rendering critique unnecessary by absolving the visitor of the responsibility of forming a critical response to issues relating to fossil fuel production and consumption.

The process that underpins the Energy Exploration exhibition – of making the invisible visible through strategies that rely upon the 'reification of the visible' – is also part of the central logic of the oil industry itself. Seen in this light, the postcard is one of a series of visual technologies on display in the museum that support the process of oil exploration, extraction, production and consumption. Other examples of technologized ways of seeing on show include geological diagrams donated by Marathon Oil. As Latour (1986: 14) has argued, drawing on Martin Rudwick's (1976) ground-breaking work in the History of Science, the significance of geological imagery lies in its presumed 'optical consistency'. This aspect contributes to the 'reification of the visible' in its reliance on the apparent neutrality of the image-making technology employed to survey and map the earth, and on the authority of the geologist as someone with the authority to manage the photographic act. Yet such maps are not neutral, as critical geography reminds us. Geological maps serve to imagine the seabed as the site of extractive spaces that provide access to the mineral resources that lie beneath it. Mapping such spaces provides the basis for their capitalization (Harvey, 2001), the results of which are represented, amongst other places, in the sector maps that show the location of oil and gas concessions in the North Sea.<sup>12</sup> As well as the visual appropriation of space, geological image-making practices also provide the basis for a visual appropriation of time as the drill bit (and camera) navigates, collects and maps the layers of sediment and rock that bear material testament to different geological eras. The Energy Exploration exhibition seeks to make sense of these technical images by juxtaposing them with reproductions of photographs of the subsea environment and with images and material examples of the forms of technology (from diving suits to unmanned submarines) that enabled such images to be captured. These images and visual technologies are further contextualized in the architecture of the exhibition, which is dominated by a three-storey tall scale model of the Murchison oil platform. The spatial order of the exhibition is arranged around the principle of drilling down from the surface into the seabed, and the model

serves to render the photographic images and visual technologies on display legible as part of an argument that values and supports the logic of the oil industry. Visual technologies, in other words, enable particular technological practices and construct the particular ways of seeing that support such practices.

More than merely supporting the logic of the oil industry, photographic images and technologies are also material objects dependent on fossil fuels and oil derivatives in terms of both production and consumption. The photographs in the museum (no matter whether they are presented as contextual material or as objects in their own right) are not, then, merely abstractions that function as representations of oil sites, technologies and infrastructure, but are also physical objects that form part of the complex that we might call the 'oil assemblage' (Stewart, 2013). As Nadia Bozak (2011: 8) argues in respect both of analogue and of digital photography, 'images, however intangible or immaterial they might ... appear to be, come bearing a physical and biophysical make-up'. It is a relatively simple matter to show how the history of photography is entwined with the history of the oil and gas industry: the first permanent photographic print was made by the French inventor Joseph Nicéphore Niépce on a pewter plate covered with bitumen of Judea (a petroleum derivative), while George Eastman of Kodak popularized photography by developing photographic film made from the petrochemical ethylene. While the apparent immateriality of digital images might appear to signal a shift away from fossil fuel dependency, they do of course require fuel to provide the energy upon which their production, transmission, storage and consumption is predicated. Moreover, they depend on the extractive industries more broadly for the production of essential minerals such as coltan (Bozak, 2011: 59), while plastic is a significant component in the production of the hardware that enables digital photography. All this goes to show that not only does visual technology play a central role in the day-to-day operations of the oil industry, but the industry is also essential for the production of the visual technology upon which the industry relies and upon which the displays in the petroleum museum depend.

Investigating the use of photography in the petroleum museum, then, reveals the central role that photographic image-making technologies play in knowledge-making practices around the excavation of fossil fuels. This enables us to understand that oil fuels the dominant scopic regime upon which the Energy Exploration exhibition depends, a regime that inscribes a narrative of control over the natural environment and supports the extraction of value from 'natural resources' through processes of visualization, while removing from spectators any responsibility for offering a critical response to these ideas. In terms of exhibition form, of practices of display and collecting, and in terms of social relations, these insights have been obtained through engaging with a range of theoretical sources, spanning visual culture studies and cultural sociology to investigate the interplay amongst social relations, aesthetics and materiality. The results of this encounter with the petroleum museum, however, also have wider ramifications for the way in which we understand these disciplines themselves.

The architecture of the Energy Exploration exhibition, as we have seen, is predicated upon the idea of 'drilling down' from the surface to the subsea level and into the Earth's crust. This design choice functions both literally, as a way of modelling the process of oil extraction in the North Sea, and metaphorically, standing in for the process of 'drilling down' in pursuit

of knowledge. The latter is not merely the central structuring device for the 'Energy Exploration' exhibition at Aberdeen's Maritime Museum; it also accurately describes the epistemological stance of cultural sociology and visual culture studies, both of which, as David Inglis (2007: 116) argues in relation to cultural sociology and cultural studies, 'are derivations of a quintessentially "social scientific" interpretation of Kantian philosophy'. Inglis advances his argument by showing how these disciplines are connected through their belief in the social construction of reality that underpins the argument that "'culture" is made almost synonymous with power' (2007: 117). I argue that it is possible to identify a further point of connection between the two disciplines, which lies in their mutual belief in the fundamental importance of setting out to render visible the invisible. This belief underpins both visual research methods and the documentary form. It is also the fundamental methodological assumption that lies at the heart of textual and visual analysis in the humanities, which seeks to employ close reading to reveal that which remains hidden in the text or visual object. This form of thinking can be found in the post-Kantian writings of classical sociologists – in Marx's (2002 [1848]: xxii) memorable description of ideology in terms of the 'sentimental veil' being 'torn away from the family' by the bourgeoisie, for instance, or in Simmel's use of the metaphor of dropping a 'plumb line' from surface-level manifestations of all kinds to reveal their underlying metaphysical realities, which he does in his much-cited essay 'The Metropolis and Mental Life' (Simmel, 1997 [1903]: 177) and again in the preface to his later study of Rembrandt (Simmel, 2005 [1916]: 3). In relation to this project of making visible the invisible, both cultural sociology and visual culture studies often have recourse to the metaphor of 'drilling down' to access the 'deep knowledge' that exists beneath the surface of the object under investigation. What we might call 'extractive seeing' is the dominant logic upon which both disciplines are predicated.

If fossil fuel culture is implicated in the belief in the value of 'making visible' that lies at the core of both visual culture studies and cultural sociology, is there any way of eluding this way of seeing? To answer this question, I would like to return to Janet Wolff's critique of the 'turn to immediacy', in which she expresses her anxiety about the denigration of the sociological imagination in 'the turn to affect, the return to phenomenology, the discussion of "presence" in aesthetic experience, new theories of materiality and of the agency of objects and ... the emergence of neuroaesthetics' (2010: 3). The 'turn to immediacy', as she describes it, 'by-passes, or even rejects, critical theory' (2010: 3). I would like to suggest here a different reading of the 'turn to immediacy', one that proposes the critical potential of the idea of 'presence', in particular. In the *Future of the Image*, Jacques Ranciere (2007: 121) seeks to differentiate art from other forms of discourse by claiming that critical art 'does not make visible; it imposes presence'.<sup>13</sup> Ranciere's implied critique of the project of 'making visible' is akin to the critical account of the logic of 'extractive seeing' offered in this article, the indexical relationship between object and image upon which both cultural sociology and visual culture studies are predicated. To 'impose presence' is a rather more ambivalent undertaking. On the one hand, it indicates a process of appropriation or objectification which sociology would seek to criticize. On the other hand, however, for Ranciere, the act of 'imposing presence' also allows the preservation of illegibility that allows a subject to avoid objectification by resisting the imperative to be fully knowable, to be fully visible. Despite Ranciere's (2003: 165–202) dismissive account of sociology in general, and his polemical critique of Bourdieu and the sociology of art in particular, and despite Wolff's misgivings about the 'turn to immediacy', thinking about 'presence' in this

way is not fundamentally anti-sociological. Indeed, the concept has already found its way into sociological thought. It plays, for example, a key role in Saskia Sassen's (2006; 2008) critical analysis of globalization. Meanwhile, the contemporary 'turn to immediacy' identified by Wolff has its sociological precursors. In his *Aesthetic Theory*, Adorno (1999 [1972]) posits a primacy of experience that exists before discursive language, drawing on Walter Benjamin's (1979 [1916]; 1991 [1935]) insistence on understanding the mimetic dimension of language, the primordial sensuous source of language (Wolin, 1994: 245). In his writing on language, Benjamin makes a similar connection between 'immediacy' and 'materialism' to that which lies at the core of Wolff's diagnosis of early 21st-century cultural theory. What is at stake when sociologists such as Adorno, Benjamin and Sassen insist on the importance of retaining the illegible, the unknowable at the centre of their thinking and demand that attention is paid to that which eludes discursive language, which is pre-cognitive and unmediated? They set out to question the dominance of the scientific worldview and the particular understanding of social relations upon which it is predicated. This worldview, as has been argued in this article, is underpinned by a logic of 'extractive seeing'. Since 'extractive seeing' is tied to the promise of 'making visible', then the only way to counter it is to challenge that promise. Given their common focus on understanding the power of seeing and being seen, and the mechanisms that underpin this power, cultural sociology and visual culture studies need to draw upon and develop theoretical language that encompasses not only the visible, but also that which eludes visibility. This insight, in turn, yields new challenges for museums, to think their remit not only in terms of making visible and then making the visible legible (Preziosi, 2006), but also in terms of challenging that logic by retaining a central illegibility as a way of countering the totalization of 'extractive seeing'. This is a vitally important project, given the dominance of 'extractive seeing' and the urgent injunctive, in the face of compelling evidence of destructive climate change, to offer alternatives to this way of seeing.

## NOTES

1. However, there are a number of museums in the UK devoted to aspects of the history of the oil and gas industry (such as the Scottish Shale Oil Museum in Livingstone and the Dukes Wood Oil Museum in Nottinghamshire) or with significant holdings in this area (notably the Science Museum in London). The Science Museum's Petroleum Exhibition was in existence from 1983 until the early 1990s. It was replaced, according to its curator, Robert Bud, when London 'lost its interest in industry'. The Museum holds a large collection of materials relating to the industry in storage. There are also a number of projects under way to collect and archive materials pertaining to the history of the offshore oil and gas industry in the UK, such as 'Lives in the Oil Industry' and 'Capturing the Energy'.
2. I use 'man' here advisedly. Although there are attempts in the exhibition to provide space for other perspectives, the dominant narrative is that of the adventure story, a genre that serves to construct a particular form of masculinity.
3. A full list of sponsors is listed in an Aberdeen City Council press release of 21/12/2012: Talisman Energy (UK); Marathon International Petroleum (GB); Serica Energy (UK); BP Exploration Operating Company; ConocoPhillips (UK); AMEC Group; TOTAL E&P UK; Chevron Upstream Europe; AGR Petroleum Services; Nexen Petroleum UK; Schlumberger Oilfield UK; Centrica Energy; Statoil (UK); Offshore Design Engineering; GDF SUEZ EandP UK; PSN; Apache North Sea; BG Group; Subsea

- 7 (UK Service Company); Shell UK; Suncor Energy; KCA DEUTAG Drilling; Wood Group Management Services; Peterson SBS; Petrofac  
([http://www.aberdeencity.gov.uk/CouncilNews/ci\\_cns/pr\\_maritimeupgrade\\_211212.asp](http://www.aberdeencity.gov.uk/CouncilNews/ci_cns/pr_maritimeupgrade_211212.asp))
4. For details, see <http://platformlondon.org/about-us/>
  5. It is remarkable that cultural sociology has devoted itself so little to an analysis of the trade exhibition, particularly as Georg Simmel (1997 [1896]) devoted an essay to the form, which has been taken up extensively in cultural history and also visual culture studies in relation to trade exhibitions. For a critical encounter with Houston's Oil Technology Conference, see the following blog post:  
<http://culturesofenergy.com/deeper-water-a-report-from-houstons-offshore-technology-conference/>
  6. For a journalistic account of the tragedy, see McGinty (2009). For a sociological account of the consequences of the event, see Woolfson, Foster and Beck (2013).
  7. For discussion of the controversy around the erection of a memorial to those lost in the Piper Alpha tragedy, see O'Byrne (2011).
  8. In 2005, Peter Scholle gave a paper at a conference on 'Oil Industry History' in which he argued that today images of oil infrastructure are seldom found on postcards. When they are, he maintained, then they are 'stylized, miniaturized or shown in the colors of flaming sunsets'.
  9. It should be noted that Nye is attempting to define a specifically American version of the 'technological sublime'.
  10. Burtynsky's oil photography can also be viewed on his website:  
[http://www.edwardburtynsky.com/site\\_contents/Photographs/Oil.html](http://www.edwardburtynsky.com/site_contents/Photographs/Oil.html)
  11. Typical of reactions to the new display is this comment by Malcolm Webb taken from a press release relating to the exhibition, in which he emphasized the importance of the exhibition in making visible the largely invisible activities in the North Sea: 'Oil and gas is a fascinating, high-tech industry which has impacts on all our lives to a greater or lesser degree. I'm very pleased to see Aberdeen now has a museum which tells the story of oil and gas and will allow visitors a 'hands on' experience of an offshore life which, to many, would seem remote and difficult to imagine or understand'  
([http://www.aberdeencity.gov.uk/CouncilNews/ci\\_cns/pr\\_maritimeupgrade\\_270313.asp](http://www.aberdeencity.gov.uk/CouncilNews/ci_cns/pr_maritimeupgrade_270313.asp)).
  12. For further details of relations amongst space, oil and capital, see Labban (2008).
  13. Perhaps surprisingly, Wolff does not mention Ranciere in her discussion of the 'turn to immediacy'.

## REFERENCES

- Adorno, T.W. (1999 [1972]) *Aesthetic Theory*, trans. R. Hullot-Kentor. London: Continuum.
- Alexander, V.D. (1996) 'Pictures at an Exhibition: Conflicting Pressures in Museums and the Display of Art', *American Journal of Sociology*, 101(4): 797–839.
- Alexander, V.D. (1999) 'A Delicate Balance: Museums and the Market-place', *Museum International*, 51(2): 29–34.
- Alpers, S. et al. (1996) 'Visual Culture Questionnaire', *October*, 77: 25–70.
- Azoulay, A. (2008) *The Civil Contract of Photography*. Cambridge, MA: MIT Press.

- Bal, M. (2003) 'Visual Essentialism and the Object of Visual Culture', *Journal of Visual Culture*, 2: 5–32.
- Beale, J. (2006) 'Oil and Water: Offshore Architecture', in R. Kronenburg and F. Klassen (eds), *Transportable Environments 3*. London: Taylor and Francis. pp. 30–9.
- Beller, J. (2006) *The Cinematic Mode of Production*. Dartmouth: Dartmouth College Press.
- Belting, H. (2011 [2001]) *An Anthropology of Images: Picture, Medium, Body*, trans. T. Dunlap. Princeton, NJ: Princeton University Press.
- Benjamin, W. (1979 [1916]) 'On Language as Such and on the Language of Man', in *One-Way Street, and Other Writings*, trans. E. Jephcott. London: NLB. pp. 107–23.
- Benjamin, W. (1991 [1935]) 'Probleme der Sprachsoziologie', in H. Tiedemann-Bartels (ed.), *Walter Benjamin. Gesammelte Schriften*, Vol. III. Frankfurt a.M.: Suhrkamp. pp. 452–79.
- Bennett, T. (1988) 'The Exhibitionary Complex', *New Formations*, 4: 73–102.
- Berger, J. (1972) *Ways of Seeing*. London: Penguin.
- Bourdieu, P. (1991) 'Towards a Sociology of Photography', *Visual Anthropology Review*, 7(1): 129–33.
- Bourdieu, P. and Haacke, H. (1995) *Free Exchange*. Redwood, CA: Stanford University Press.
- Boyer, D. and Szeman, I. (2014) 'The Rise of the Energy Humanities', *University Affairs*, 12 February. Available at: <http://www.universityaffairs.ca/opinion/in-my-opinion/the-rise-of-energy-humanities/> (accessed 20 April 2015).
- Bozak, N. (2011) *The Cinematic Footprint*. New Brunswick, NJ: Rutgers University Press.
- Burfoot, A. (ed.) (2015) *Visual Culture and Gender*. London: Routledge.
- Burtynsky, E. (2009) *Oil*. Göttingen: Steidl.
- Callon, M. (1986) 'Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay', in J. Law (ed), *Power, Action and Belief: A New Sociology of Knowledge?*. London, New York: Routledge, 196–233.
- Callon, M., Law, J., & Rip, A. (eds.). (1986) *Mapping the Dynamics of Science and Technology*. London: Macmillan.
- Crary, J. (1990) *Techniques of the Observer*. Cambridge, MA: MIT Press.
- Crary, J. (2001) *Suspensions of Perception*. Cambridge, MA: MIT Press.
- Davis, W. (2011) *A General Theory of Visual Culture*. Princeton, NJ: Princeton University Press.
- de la Fuente, E. (2007) 'The "New Sociology of Art": Putting Art Back into Social Science Approaches to the Arts', *Cultural Sociology*, 1: 409–25.
- Edwards, E. (2001) *Raw Histories: Anthropology, Photography and Museums*. Oxford: Berg.
- Edwards, E. and Mead, M. (2013) 'Absent Histories and Absent Images: Photographs, Images and the Colonial Past', *Museum Studies*, 11(1): 19–37.
- Elkins, J. (2002) 'Preface to the Book A Skeptical Introduction to Visual Culture', *Journal of Visual Culture*, 1: 93–9.
- Evans, J. and Hall, S. (eds) (1999) *Visual Culture: The Reader*. London: Sage.
- Evans, M. (2015) *Artwash: Big Oil and the Arts*. London: Pluto.
- Fyfe, G. (2006) 'Sociology and the Social Aspects of Museums', in S. MacDonald (ed.), *A Companion to Museum Studies*. Oxford: Blackwell.
- Geary, C. and Webb, V-L. (eds) (1998) *Delivering Views: Distant Cultures in Early Postcards*. Washington DC: Smithsonian Institution Scholarly Press.
- Gumbrecht, H.U. (2003) *Production of Presence: What Meaning Cannot Convey*. Redwood, CA: Stanford University Press.

- Haraway, D. (1997) 'The Persistence of Vision', in K. Conboy, N. Medina and S. Stanbury (eds), *Writing on the Body: Female Embodiment and Feminist Theory*. New York: Columbia University Press. pp. 283–95.
- Harvey, D. (2001) *Spaces of Capital: Towards a Critical Geography*. Edinburgh: Edinburgh University Press.
- Highmore, B. (2007) 'Foreword', in M. Abadie and S. Beale (eds), *Nothing to Write Home About*. The Friday Project Limited. Available at: [http://www.johnhindecollection.com/contact\\_benhighmore.html](http://www.johnhindecollection.com/contact_benhighmore.html) (accessed 1 January 2015).
- Hooper-Greenhill, E. (2000) *Museums and the Interpretation of Visual Culture*. London: Routledge.
- Inglis, D. (2007) 'The Warring Twins: Sociology, Cultural Studies, Alterity and Sameness', *History of the Human Sciences*, 20: 99–122.
- Jay, M. (1994) *Downcast Eyes: The Denigration of Vision in French Thought*. Berkeley: University of California Press.
- Jay, M. (2002) 'Cultural Relativism and the Visual Turn', *Journal of Visual Culture*, 1: 267–78.
- Jay, M. and Ramaswamy, S. (eds) (2014) *Empires of Vision: A Reader*. Durham, NC: Duke University Press.
- Jolivet, C. (ed.) (2014) *British Art in the Nuclear Age*. Farnham: Ashgate.
- Jones, M. and Godwin, F. (1976) *The Oil Rush*. London: Quartet Books.
- Kemp, A. (2011) *Official History of North Sea Oil and Gas*. London: Routledge.
- Kirshenblatt-Gimblett, B. (1998) *Destination Culture: Tourism, Museums and Heritage*. Berkeley: University of California Press.
- Krauss, R. (1979) 'Sculpture in the Expanded Field', *October*, 8: 30–44.
- Krom, J. and Bakewell, S.B. (2009) *A History of Visual Culture: Western Civilization from the 18th to the 21st Century*. London: Berg.
- Labban, M. (2008) *Space, Oil and Capital*. London: Routledge.
- Lacan, J. (1978 [1964]) 'The Split between the Eye and the Gaze', in *The Four Fundamental Concepts of Psychoanalysis*, trans. A. Sheridan. New York: Norton. pp. 67–78.
- Latour, B. (1986) 'Visualisation and Cognition: Drawing Things Together', in H. Kuklick (ed.), *Knowledge and Society: Studies in the Sociology of Culture Past and Present*. London: Jai Press. pp. 1–40.
- Latour, B. (1999) *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge: Harvard University Press.
- Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford: OUP.
- Latour, B. and Weibel, P. (eds) (2005) *Making Things Public: Atmospheres of Democracy*. Cambridge, MA: MIT Press.
- LeMenager, S. (2014) *Living Oil*. Oxford: Oxford University Press.
- MacDonald, S. (2008) 'Museum Europe: Negotiating Heritage', *Anthropological Journal of European Cultures*, 17: 47–65.
- Mackie, B. (2004) *The Oilmen: The North Sea Tigers*. Edinburgh: Birlinn.
- Marontate, J. (2005) 'Museums and the Constitution of Culture', in M. Jacobs and N.W. Hanrahan (eds), *The Blackwell Companion to the Sociology of Culture*. Oxford: Blackwell. pp. 286–301.
- Marx, K. (2002 [1848]) *The Communist Manifesto*. London: Penguin.
- McGinty, S. (2009) *Fire in the Night: The Piper Alpha Disaster*. London: Pan.

- McKinnon, A. (2007) 'For an "Energetic" Sociology, or Why Coal, Gas and Electricity Should Matter for Sociological Theory', *Critical Sociology*, 33: 345–56.
- Merleau-Ponty, M. (1962 [1945]) *Phenomenology of Perception*, trans. C. Smith. New York: Humanities Press.
- Mirzoeff, N. (ed.) (1998) *The Visual Culture Reader*. London: Routledge.
- Mirzoeff, N. (1999) *An Introduction to Visual Culture*. London: Routledge.
- Mirzoeff, N. (2011) *The Right to Look: A Counter-History of Visuality*. Durham, NC: Duke University Press.
- Mitchell, W.J.T. (1995) *Picture Theory*. Chicago: University of Chicago Press.
- Mitchell, W.J.T. (2002a) 'Showing Seeing: a Critique of Visual Culture', *Journal of Visual Culture*, 1: 165–81.
- Mitchell, W.J.T. (2002b) 'That Visual Turn', *Journal of Visual Culture*, 1: 87–92.
- Nye, D. (1996) *The American Technological Sublime*. Cambridge, MA: MIT Press.
- O'Brian, J. (ed.) (2015) *Camera Atomica*. London: Black Dog Publishing.
- O'Byrne (2011) 'Remembering the Piper Alpha Disaster', *Historical Reflections* 37/2: 90-104.
- Page, B. (2007) *A Boy's Own Offshore Adventure*. Friockheim: SplashMill Press.
- Page, B. (2009) *A Boy's Own Oily Adventure*. Friockheim: SplashMill Press.
- Porter, G. (1989) 'The Economy of Truth: Photography in the Museum', *Ten-8*, 34: 20–33.
- Preziosi, D. (2006) 'Art History and Museology: Rendering the Visible Legible', in S. Macdonald (ed.), *A Companion to Museum Studies*. Malden, MA: Wiley-Blackwell. pp. 50–63
- Prochaska, C. and Mendelson, J. (eds) (2010) *Postcards: Ephemeral Histories of Modernity*. University Park: Penn State University Press.
- Ranciere, J. (2003) *The Philosopher and his Poor*, trans. J. Drury, C. Oster and A. Parker, ed. A. Parker, Durham, NC and London: Duke University Press.
- Ranciere, J. (2007) *The Future of the Image*, trans. G. Elliot. London: Verso.
- Rectanus, M. (2002) *Culture Incorporated: Museums, Artists and Corporate Sponsorships*. Minneapolis: University of Minnesota Press.
- Rogan, B. (2005) 'An Entangled Object: The Picture Postcard as Souvenir and Collectible, Exchange and Ritual Communication', *Cultural Analysis*, 4: 1–27.
- Rubio, F.D. and Silva, E.B. (2013) 'Materials in the Field: Object-trajectories and Object-positions in the Field of Contemporary Art', *Cultural Sociology*, 7(2): 161–78.
- Rudwick, M. (1976) 'The Emergence of a Visual Language for Geological Science, 1760–1940', *History of Science*, 14: 148–95.
- Ryan, J. (2013) *Photography and Exploration*. London: Reaktion.
- Sartre, J.P. (2012 [1943]) *Being and Nothingness*. New York: Open Road Media.
- Sassen, S. (2006) *Territory, Authority, Rights: From Medieval to Global Assemblages*. Princeton: Princeton University Press.
- Sassen, S. (2008) 'Narrating Unsettlement', *Ctrl+P Journal of Contemporary Art*, 11: 10–12.
- Scholette, G. (2010) *Dark Matter: Art and Politics in the Age of Enterprise Culture*. London: Pluto.
- Scholle, P. (2005) 'The Changing Image of the Oil Industry as Reflected in Postcards of the 19th and 20th Centuries', in Aston, K.C, John, P. J. and Woodfork, L. (eds), *Abstracts of International Symposium on Oil Industry History*. Available at: [http://archives.datapages.com/data/phi/v6\\_2005/scholle.html](http://archives.datapages.com/data/phi/v6_2005/scholle.html) (accessed 17 March 2015).
- Schor, N. (1992) "'Cartes Postales": Representing Paris 1900', *Critical Inquiry*, 18(2): 188–244.



- Schwarz, V. and Pryzbilski, J. (eds) (2004) *The Nineteenth-Century Visual Culture Reader*. New York: Routledge.
- Shohat, E. and Stam, R. (1994) *Unthinking Eurocentrism: Multiculturalism and the Media*. London: Routledge.
- Simmel, G. (1997 [1896]) 'The Berlin Trade Exhibition', in D. Frisby and M. Featherstone (eds), *Simmel on Culture*. London: Sage. pp. 255–8.
- Simmel, G. (1997 [1903]) 'The Metropolis and Mental Life', in D. Frisby and M. Featherstone (eds), *Simmel on Culture*. London: Sage. pp. 174–86.
- Simmel, G. (2005 [1916]) *Rembrandt: An Essay in the Philosophy of Art*, trans. A. Scott and H. Staubmann. London: Routledge.
- Simpson, M. (2012) 'Postcard Culture in America: The Traffic in Traffic', in C. Bold (ed.), *US Popular Print Culture, 1860–1920*. Oxford and New York: Oxford University Press. pp. 169–89.
- Star, S.L. and Griesemer, J. (1989) 'Institutional Ecology, "Translations" and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39', *Social Studies of Science*, 19(3): 387–420.
- Starkey, K. (2005) *Visual Culture and the German Middle Ages*. Basingstoke: Palgrave Macmillan.
- Stewart, J. (2005) 'Reconstructing the Centre: Sociological Approaches to the Rebuilding of Berlin', in D. Inglis and J. Hughson (eds), *The Sociology of Art: Ways of Seeing*. Basingstoke: Palgrave Macmillan. pp. 183–95.
- Stewart, J. (2013) 'Making Globalization Visible? The Oil Assemblage, the Work of Sociology and the Work of Art', *Cultural Sociology*, 7: 368–84.
- Stewart, J. (2014) 'Sociology, Culture and Energy: The Case of Wilhelm Ostwald's "Sociological Energetics" – A Translation and Exposition of a Classic Text', *Cultural Sociology*, 8: 333–50.
- Sturken, M. and Cartwright, L. (2009) *Practices of Looking: An Introduction to Visual Culture*, 2nd edn. Oxford: Oxford University Press.
- Szeman, I. (2007) 'System Failure: Oil, Futurity and the Anticipation of Disaster', *South Atlantic Quarterly*, 106(4): 805–23.
- Tagg, J. (2009) *The Disciplinary Frame: Photographic Truths and the Capture of Meaning*. Minneapolis: University of Minnesota Press.
- Tanner, J. (2010) 'Karl Mannheim and Alois Riegl: From Art History to the Sociology of Culture', in D. Arnold (ed.), *Art History: Contemporary Perspectives on Method*, Oxford: Wiley Blackwell. pp. 99–128.
- Taylor, S.J. (2005) *Oilwork: North Sea Diaries*. Edinburgh: Birlinn.
- Tyfield, D. and Urry, J. (eds) (2014) *Special Issue: Energy & Society. Theory, Culture and Society* 31/5.
- Urry, J. (2013) *Societies Beyond Oil: Oil Dregs and Social Futures*. London: Zed Books.
- Veder, R. (2015) *The Living Line: Modern Art and the Economy of Energy*. Dartmouth: Dartmouth College Press.
- Walker, J. and Chaplin, S. (1997) *Visual Culture: An Introduction*. Manchester: Manchester University Press.
- Wiesing, L. (2014 [2005]) *Artificial Presence: Philosophical Studies in Image Theory*, trans. N.F. Shott, Redwood, CA: Stanford University Press.
- Wolff, J. (1983) *Aesthetics and the Sociology of Art*. London: George Allen and Unwin.

- Wolff, J. (1999) 'Cultural Studies and the Sociology of Culture', *In[]Visible Culture*, 1. Available at: [https://www.rochester.edu/in\\_visible\\_culture/issue1/wolff/wolff.html](https://www.rochester.edu/in_visible_culture/issue1/wolff/wolff.html) (accessed 20 April 2015).
- Wolff, J. (2010) 'In Defence of Sociology: Aesthetics in the Age of Uncertainty', in O. Dadejick and J. Stejskal (eds), *The Aesthetic Dimension of Visual Culture*. Newcastle: Cambridge Scholars Publishing. pp. 2–16.
- Wolff, J. (2012) 'After Cultural Theory: The Power of Images, the Lure of Immediacy', *Journal of Visual Culture*, 11(1): 3–19.
- Wolin, R. (1994) *Walter Benjamin: An Aesthetic of Redemption*. Berkeley: University of California Press.
- Woolfson, C., Foster, J. and Beck, M. (2013) *Paying for the Piper: Capital and Labour in Britain's Offshore Oil Industry*. Oxford: Routledge.

