Strates

Matériaux pour la recherche en sciences sociales

13 | 2007

Paysage urbain: genèse, représentations, enjeux contemporains

The aerial view: notes for a cultural history

Mark Dorrian

Édition électronique

URL : <http://journals.openedition.org/strates/5573>

DOI : [10.4000/strates.5573](https://doi.org/10.4000/strates.5573)

ISSN : 1777-5442

Éditeur

Laboratoire Ladyss

Édition imprimée

Date de publication : 31 décembre 2007

ISSN : 0768-8067

Référence électronique

Mark Dorrian, « The aerial view: notes for a cultural history », *Strates* [En ligne], 13 | 2007, mis en ligne le 05 novembre 2008, consulté le 08 septembre 2020. URL : <http://journals.openedition.org/strates/5573> ; DOI : <https://doi.org/10.4000/strates.5573>

Ce document a été généré automatiquement le 8 septembre 2020.

Tous droits réservés

The aerial view: notes for a cultural history

Mark Dorrian

- 1 This paper is an initial attempt to sketch out what a cultural history of the aerial view might look like, and to establish some questions that could motivate and inform such a study. It presents only a partial itinerary for a research programme, an attempt to mark out and think about some of the points with which a wide-ranging account of the aerial view would have to deal. My interest in the topic stems from my feeling that the aerial view has gained a new centrality in recent years – as both an object of criticism and an interpretative tool – within the humanities, and that this new prominence has been accompanied by the establishment of a repetitive, normative account of the aerial view, one that interprets it as the characteristic technology and emblem of an acquisitive imperious and transcendent modern subjectivity. This, it seems to me, is overly schematic, yet at the same time there is no doubt that the idea of ascension and its associated visuality is a powerful thematic in Western thought that has strong intellectual linkages with epistemic models and ideas of truth, clear-seeing, transcendence, etc. The aerial view is of course also a cipher for social superiority: disdain is expressed in the figure of speech “to look down upon”, a phrase that conjures the historical figure of the aristocrat in his carriage peering at the peasant, or the squire upon horseback looking at his tenant.
- 2 Some initial questions, then, with which to begin. Firstly, what exactly is the aerial view, and how do we define it in relation to other visual modes, positions, etc.? What forms does it take and what are its limits: how high or how low might we be, for example, and still remain within its ambit? Within what discourses has the idea of the aerial view emerged and how has it been variously staged or conceptualised within them? What have been its discursive and ideological effects and its agencies? More precisely, in what representational forms has the aerial view been historically anticipated or mediated and how do we analyse the specific effects and utilities that these forms present? How are these representational documents then deployed: in what ways do they interact with other images and what kinds of knowledge and action

do they make possible, or alternatively, foreclose? And in particular – and this seems to me to be one of the major ‘productive’ tensions that structures uses of the aerial view in the 20th century – what happens when a visual mode that is historically strongly associated with serene transcendence and thus also with the diminution of time’s reach (if not its absolute cancellation), becomes linked to new time-based indexical representational modes such as photography and cinema?

What is the aerial view?

- 3 Considerations of the aerial view to date – at least of which I am aware – have not adequately questioned the constitutive limits of the concept. The answer to the question ‘What is the aerial view?’ has seemed self-evident, but the issue is complex. It is notable how, for example, in certain influential theorisations of the development of human vision, there comes to be a convergence between the elevated (aerial?) view and human vision per se, to the extent that the specifically human (in opposition to the animal) is seen to be founded precisely in the raising of the eye. This kind of account tends to be grounded in phylo-genetic developmental narratives that locate the human transition to a vertical posture as a critical moment, a classic example being Freud’s argument that “the momentous process of cultural evolution” emerged as a consequence of man’s raising himself from the ground, thus lifting his eyes and exposing his genitalia¹. Here the elevated view – in association with the new sense of disgust and shame it induces with regard to the bodily lower regions – is posed as the foundation of culture and, more generally, the human. The elevational, directional thrust in Freud’s account has widely spread parallels even if they do usually operate in more idealistic terms.
- 4 Although it may seem counter-intuitive, such examples do question in what way the concept of the aerial view can be detached from normative human vision, for is this not already to some degree aerial? This reconfiguration of scale then immediately prompts further speculation: how low would we be, for example, how close to a surface, before we cease to have an aerial view?
- 5 This in turn raises possibilities for thinking about the relation between the aerial view and phenomena such as microscopy. Certainly the connections are suggestive. The historical development of the telescope and microscope are often set alongside one another and the similarities are clear: but it should be stressed that they stage vision in quite different ways. With the telescope one looks – from below – through the instrument. The light that allows the registration of the image emanates (or is reflected) from the object of vision itself and this requires the suppression of terrestrial light. Ideal telescopic vision thus takes place from a world that has disappeared (hence the development of extra-planetary telescopes). And the set of concentric rings describing distances between sighted objects and the eye suggest a very different model of vision than does the microscope: it was, for example, his reflections on astronomy that led the philosopher Thomas Reid to posit his global, aperspectival model of vision in the mid-18th century².
- 6 In contrast to the telescope, the microscope requires that one gazes down in aerial fashion into the eye-piece. Rather than being directed toward a constellation of objects at variable distances from the eye, the microscope is instead directed toward a surface or screen, the flat slide within which the prepared object of study is held. With the microscope the light that permits scrutiny does not radiate from the object but rather (at least historically) from above (the position of the observer) albeit redirected to

illuminate the slide from behind by a mirror. This set-up reproduces the basic structure of the aerial view and it comes as no surprise to find early aviators analogising the view from an aeroplane to that through a microscope. Of his experiences as a war pilot Antoine de Saint-Exupéry wrote:

All I can see on the vertical are curios from another age, beneath clear, untrembling glass. I lean over crystal frames in a museum; I tower above a great sparkling pane, the great pane of my cockpit. Below are men – protozoa on a microscope slide ... I am a scientist, and for me their war is a laboratory experiment³.

- 7 Likewise, there is an extremely suggestive relationship between the microscope mechanisms with which the urbanist Patrick Geddes worked during his training and early career as a biologist, and the ‘Outlook Tower’ that he acquired high on Edinburgh’s Castle Hill. Visitors to Geddes’ building would ascend through a series of exhibitions of increasing specificity – starting with ‘the world’ – before reaching the ‘city’ at the top, which was then scrutinised through a *camera obscura*. The visitors sat around the edges of a small darkened room beneath the cupola with the camera apparatus, below which was a white concave table that received the image. It is notable that the guides who today demonstrate the mechanism for visiting tourists repeatedly enact a kind of pantomime that draws upon the indexical – even magical – potency of the moving photographic image and unconsciously dramatises the relationship of power associated with the aerial view. Tourists are invited to choose one of the tiny figures from the street far below who appear to be walking across the table before them. The guide takes a sheet of paper and places it on the table in front of the insect-like figure who unwittingly walks on to it. The sheet is then slowly lifted up, detaching the figure from the ground over which it had until now been passing and holding it up to view, as to the eyes of curious giants.
- 8 It seems possible to make a distinction between three forms that the aerial image takes (at least insofar as it is static – I’m not concerned here with representational forms that try to depict the kinaesthetic experience of flight; instead I am concerned with representations that take the ground– or things on it – as their object). These are the oblique image, the vertical image, and the diagram. The first two I suspect will not be contentious; the third I think may seem more problematic.

The oblique image

- 9 When the aerial view is instantiated in the oblique image the eye is directed both downwards and laterally. This is the view that is often described as the prospect – which the *Oxford English Dictionary* defines as “An extensive or commanding sight or view...”, the first usage in this way being in the earlier 16th century. It is typically identified with the high place: the hill-top, the castle, the tower, the belvedere. Etymologically implying ‘looking forward’, prospect also carries implications of the future, of what is to come. In the 17th century both ‘magic mirrors’ (mirrors that foretold the future) and field glasses, spy-glasses, and telescopes were called ‘prospective glasses’⁴.
- 10 This futurity in turn seems related to the military associations and functions of the oblique aerial view: the prospect is what the military general historically sought to command as it permitted the sighting of both the advance of enemy forces and a strategic overview from which the development of the battle could best be followed. Equally it allowed an assessment of the spatial differentials of the battleground (marsh, rock, etc.) and an appreciation of trajectories and firing lines in relation to the

topography of battle. Consequently there is a rich tradition of the deployment of the oblique aerial view by military surveyors and draftsmen, a striking example of which was the development of the landscape-panorama in the mid-18th century. These drawings – flat elongated topographic views – emerged, it has been argued, in the context of Hanoverian expansionism and geo-politics, of which they were an important instrument.⁵ Thomas Sandby's view of Edinburgh (figure 1), for example, was produced immediately after the suppression of the Jacobite rebellion in 1745 during which the city was taken and the invading prince, Charles Édouard Stuart, installed in the royal palace, clearly visible to the right of the drawing. In contrast to an approach that displays the city by enumerating and picturing its principal buildings this view is strategic: its attention is upon the texture of the total urban assemblage and its territory, and the military possibilities and consequences of these.

Figure 1. Thomas Sandby, Panorama of Edinburgh from Salisbury Crags, c. 1745 © Trustees of the National Galleries of Scotland.

- 11 But inevitably the oblique aerial view produces occluded or hidden zones within the representation. The spectator remains like the Duke of Wellington – a famous occupier of elevated positions – who remarked that he had spent his life trying to guess what was over the next hill. One of the most extraordinary early responses to the problems of obliquity (and the general deficiencies of the cartography of the time) were the *plans-reliefs* built from 1668 on the suggestion of the Marquis de Louvois, Louis XIV's Minister of War. These huge three-dimensional representations were constructed in order to picture, analyse and bring before the eye of the king the defensibility of France's newly conquered towns and fortifications in their relationship to their surrounding landscape. The *plans-reliefs* produce oblique aerial views, but they have become newly mobile.
- 12 The military utility of aerial obliquity is evident, but this mode has a far-reaching history in which other discourses – aesthetic and proprietorial, for example – are implicated. This complex is richly illustrated in a description of Ireland of 1620, written by Luke Gernon in the wake of the so-called Tudor reconquest. His text takes the form of a letter to a friend in England and its interest for us lies in the way in which, within a highly gendered colonial metaphors, it seems to rhetorically implicate two modalities of the aerial view. Although figured in relationship to obliquity, the concealment characteristic of this mode is swept away under the pressure of a visual insistence that is often associated with the planimetric⁶ but here becomes an anatomization as the gaze of the onlooker ranges over and into the body of the land. L. Gernon begins:
It was my chance once in a place, but I know not where, to see a map of Europe, and it was described in the lineaments of a naked woman and upon the surface was a map of the countreyes ... In such form will I represent our Ireland, and yet, if my cunning fail me not, I will depaynt her more lively and more sensible to your intelligence then if you had her in a table.
- 13 The sense of the prospect is strong, of the land extending prostrate before the observer, but so too is that of the anatomy table. Her skin is "smooth", L. Gernon

continues, and “of tender grasse ... Her flesh is of a soft and delicat mould of earthe, and her blew vaynes trayling through every part of her like ryvoletts.” The major river of the country is like a “master vayne ... which passeth quite through her, and if it were not for one knot (one mayne rock) it were navigable from head to foot. She hath three other vaynes ... which rising at one spring, trayle through her middle parts, and ioyned together in theyr going out”. Her bones are of polished marble; her breasts are “round hillocks of milk-yielding grass ... And betwixt her leggs (for Ireland is full of havens) she hath an open harbor, but not much frequented.” And so it goes on.⁷

Figure 2. The Captive Balloon and Ferris Wheel at the World's Columbian Exposition. Chicago, 1893. Photograph from Hubert Howe Bancroft, *The Book of the Fair* (Chicago, San Francisco, The Bancroft Company, 1893). Courtesy the Paul V Galvin Library, Illinois Institute of Technology, Chicago.

- 14 The role of the prospect in the rise of the 18th century pastoral landscape aesthetic has long been recognised. According to the influential account put forward by Denis Cosgrove, the precondition for the emergence of the fully fledged ‘landscape idea’ was the development of linear perspective which reinforced, as he puts it, ideas of individualism, the subjective control of an objective environment, and the separation of personal experience from the flux of collective historical experience.⁸ Linked to transformations in English society in the 18th century, the ‘landscape idea’ emerged as the privileged representational form of the new landowning class. Landscape imagery served an ideological function: it provided representations of land and nature that naturalised the claim and position of the new landholders. At the same time, it marked the estrangement of an observer who stood outside the landscape and looked in, this situation being necessary both for the establishment of landscape as an aesthetic object and as a zone of control spread out before a proprietorial gaze. In this reading, the prospect is figured as a view that is grounded in a possessive, expropriating mode of vision, and the ‘landscape idea’ emerges as a crucial ideological support to what was historically a kind of internal colonialism.
- 15 What questions does aerial obliquity pose then in relation to ‘urban landscape’, the theme of this collection? One challenge would be to closely examine – while acknowledging its full complexity – how the ‘prospect’ has interacted with and

informed discourses on the city and, in turn, 'urban landscape'. This would be an intricate history – in part a history of high places and of the aerial imagination in relation to the city – which would have to traverse technical developments in representational forms as well as intersect with mythologies of the city within modernism and aspects of the history of popular entertainments in mass society. It would involve a study of the ascensional devices of urban modernity such as outlooks and viewing towers of various kinds, but also apparatuses such as the fairground ferris wheel.⁹ (figure 2) The sense of removal and distance from the city – of being in a separate world – becomes the condition of possibility within mass society for the transformation of the visual field of the city into a popular entertainment. According to Walter Benjamin, with the 'haussmanization' of Paris its citizens became aware for the first time of the city's inhuman character.¹⁰ If so, then the ideologically recuperative effects of techniques of estrangement from the quotidian reality of the city and its transformation into an distanced object of visual consumption are clear: the violence of the urbanism 'on the ground' would be sublimated into the quasi-pastoral spectacle of the 'urban landscape'. The miniature or model, whose usefulness as urban planning's most potent tool of public persuasion endures through precisely such powers of sublimation, is as central to the study of the oblique aerial view as are graphic forms. Perhaps particularly interesting is the conversion of the former into the latter via photography and the consequent effects produced: striking in this regard are the images from *La ville radieuse* that show Le Corbusier's hand (always one) in relation to a model. (figure 3) The model allows the hand, dissociated from the body, to appear within the aerial view, staging it in a way that suggests that the elevated eye has gained a manual facility.

Figure 3. Le Corbusier, *La ville radieuse*, Paris, Editions Vincent, Fréal & Cie, 2nd ed., 1964, p. 135
© FLC/Adagp, Paris, 2007.

- ¹⁶ I want to conclude this section with a brief commentary on an influential but I feel problematic text that is implicated in aerial obliquity and which neatly demonstrates both the ascendancy of the schematic account of the aerial view as described at the start of this paper and its shortfall. This is the famous passage by Michel de Certeau on

the World Trade Center that opens his “Walking in the City” chapter in *The Practice of Everyday Life*. The twin towers are introduced in the service of a structural polarity that motivates de Certeau’s text: that of the commanding elevated, privileged optical point versus the space of the streets below where the devices and tactics of everyday life are deployed. M. de Certeau does not hesitate to characterise the towers as the “most monumental figure of Western urban development” yet at the same time he dissolves this figure within the status he accords them as a pure vantage point that represents the “atopia-utopia of optical knowledge”, a “lust to be a viewpoint and nothing more.”¹¹ Consequently it is exactly the figure of the towers, the material ‘something more’ that they irresistibly supplied, that turns out to be the blind spot in his account. What is not reckoned with is the strange material specularity of the two buildings, their identical doubling. For the towers, by virtue of this doubleness, in fact represented a radical disruption of the kind of aerial optical narrative through which M. de Certeau understood them precisely because they cancelled the possibility of any privileged viewing point: not only was every position in one tower structurally replicated in the other, but the synoptic view was made literally incomplete by the ‘blind spot’ produced by the intrusion of the other tower into the visual field. And intimately related to this was the way in which the towers, despite their immense height, offered something very different than the dream of ascension through which Roland Barthes, in his classic essay on Eiffel’s Tower, characterised the form. If anything the twin towers – resolutely abstract, aniconic, non-auratic objects – offered the opposite of Eiffel’s “lightning rod for signification”:¹² something at the same time massive and immaterial, a figure reduced to a graphism – to two vertical bars. Furthermore the doubling of the towers, their abstraction and reproduction in one another, the sense of an infinite specular oscillation set in play between identical twin poles, accelerated the depletion of any auratic presence. It was as if the object had become replaced by the interval, and it was onto this that fantasy now fastened. Consequently the dream of ascension fostered by the iconic, singular skyscraper was superseded and replaced by that of traversing the interval, of passing across the chasm between the two poles. Thus the familiar narratives of vertical ascent were re-orientated horizontally. The perfect enactment of this was the passage by the French tightrope walker Phillippe Petit not once, but eight times, between the tops of the towers in 1974.¹³ (figure 4) From the point of view of the argument here, this multiple crossing registers the endless specular oscillation between the two towers. There is no ‘other side’: one always departs and arrives at an empty ‘same’ which is filled out and given a value only by the presence of the position where one is not.

Figure 4. Philippe Petit crosses the twin towers on a tightrope. Courtesy PA Photos.

The vertical image

- 17 The elevation of the eye, with which we began, raises the possibility that it might be turned directly downward, and this introduces the second mode. The vertical aerial view was always to some extent historically possible with sheer-sided towers and vantage points, but it is much more closely associated with flight, with the departure from a ground condition upon which the representational apparatus is then turned. I say representational apparatus because, although human ‘flight’ in the West has been possible since the development of the hot air balloon by the Montgolfier brothers in the later 18th century, to my knowledge true vertical aerial representations were not produced until the strategic linkage of the camera with heavier-than-air aircraft in World War I. While it is true that ichnographic (so-called true ‘plan-view’) representations of cities, or parts thereof, had been produced for four and a half centuries before this, I want to provisionally separate the two phenomena because I am not at all clear to what extent one could claim that the development of ichnographic plan representation was contingent upon some kind of aerial imaginary (this despite Alberti’s adoption of the emblem of the winged eye). I shall insist, however, that the vertical aerial image arises historically as a form that is, in opposition to the valencies of the oblique view, non-aesthetic, non-auratic, instrumental, disenchanted, and technical – by virtue of its gaze directly downward onto the ground, by virtue of its historic relationship with photography, and because of the specific historical conditions of its emergence in World War I. With the vertical aerial view estrangement, which was always part of the logic of the prospect, is heightened to the point of abstraction.
- 18 The ethical implications of the aerial image must be a key issue in the cultural history of the aerial view. The thinning of the ethical relationship with distance is a thematic

with a venerable philosophical lineage¹⁴, but the question gains an extra dimension and complexity with the flattening, abstraction, and the suppression of the figural that is characteristic of the vertical aerial view. In his troubled novel *The War in the Air*, published in the tense first decade of the 20th century, Herbert George Wells envisioned a dystopian future of unending aerial global warfare in which the overexposed terrestrial surface was continually devastated by airships “dripping death”. As Richard Wohl points out, Well’s book argued that “killing from the air would be all too easy ... [as] ... people seen from the air lose all humanity. [The main character in his novel] finds comic the agitated movements of a man on the ground jumping to flee a falling bomb ...”.¹⁵ The ecstatic rhetoric of flight prevalent at the beginning of the century, with its keynote of the promethean liberation of man from the earth and his god-like ascendance into the heavens, frequently carried implications of a violence directed back toward the surface from whence the aviator had departed. This was a constant motif in futurist writings on the aeroplane, in which the pilot’s detachment was correlated with a contempt for those on the ground below: Mussolini’s son, who flew in the Abyssinian war, showed a fine futurist sensibility when he reported – “I still remember the effect I produced on a small group of Galla tribesmen massed around a man in black clothes. I dropped an aerial torpedo right in the center, and the group opened up just like a flowering rose. It was most entertaining.”¹⁶

28

29

30

Figure 5. Kasimir Malevich, *The Non-Objective World: the Manifesto of Suprematism*, Mineola, New York, Dover Publications, 2003, p. 24-25.

- 19 The development of vertical aerial photography occurred in the context of surveillance operations in World War I. It has been pointed out how the emergence of this form was intimately related to its object: an annihilated terrain that was no longer a landscape but a topography that had become almost cinematic in its constant reconfiguration under the pressure of heavy artillery – a new condition in which the procedures of industrialized warfare and the instability of an abstracted ground both required *and* offered new and accelerated modes of strategic representation. This was achieved through sequential photographs taken by aircraft flying at a fixed height, which could then be geometrically interlaced with one another to form composite images. Bernd Hüppauf has argued that these demonstrate a “new perception and experience of landscape hitherto unknown.”¹⁷ Initially indecipherable, they required new techniques of reading and interpretation to extract information from – information pertaining to the prosecution of the new modes of mechanized warfare. As B. Hüppauf characterises it, the war had annihilated the ‘natural’ landscape replacing it with “highly artificial and, within its own parameters, functional spatial arrangements”: to this the medium of the vertical aerial photograph then responded by establishing a “metalevel of artificiality” that permitted the reading of its object in terms of abstract patterns carrying strategic information.¹⁸ The vertically mounted airborne camera played an editorial and even diagnostic role that realised this abstraction, as details – including the presence of the human body – dissolved into broader patterns.
- 20 Abstraction is estrangement radicalised, and it seems important to stress the particular role of verticality in the nexus abstraction forms with the aerial view and photography. This connection is well illustrated by the discourse of suprematism as conveyed in Kasimir Malevich’s 1927 book *The Non-Objective World*. In this he compared the

development of abstraction to the view of the earth seen from an ascending aeroplane: “The familiar recedes ever further and further into the background ... The contours of the objective world fade more and more and so it goes, step by step, until finally the world – ‘everything we loved and by which we have lived’ – becomes lost to sight.”¹⁹ In the same book K. Malevich published three photographic sequences to illustrate the kinds of image-environments that stimulate firstly, the traditional artist; secondly, the futurist artist; and finally, the suprematist artist. The three sequences read as a transition from the figurative to the abstract, and the suprematist panel (*figure 5*) makes clear that the culmination – and indeed the agency of abstraction – is the aerial, the means whereby the earth is detached from itself.

The diagram

- 21 The third kind of image that I am claiming is part of the history of the aerial view – the diagram – is much more difficult to argue for, not least because it seems properly to be not a ‘view’ at all insofar as it dispenses with the presence of an eye or viewing point in relation to the thing that is pictured. I am using the term ‘diagram’ in the sense of Charles S. Peirce: that is, as a species of representation that relates to its referent through its display of sets of relationships that are embedded within the latter. By this definition the familiar ichnographic architectural plan is a diagram as it is constituted by measured, metric relationships inherent in the building; it displays these, rather than showing in any straightforward way something we can see.
- 22 But at the same time, a way of describing parallel projection – which is the form in which the plan-diagram is presented – is in terms of an eye that is located at infinity in relation to the picture plane, and it is this approximation of the vertical aerial image to the diagram that has resulted in modern cartography being almost entirely derived from the medium of aerial photography. This approximation also results in pictures that simultaneously combine the properties of the Peircean sign-types index, image and diagram: that is, signification through contiguity (as in the photograph, whereby an emission from the object of representation leaves its ‘footprint’ upon a representational surface); visual similitude (the representation looks like what see – or believe we see); and the display of metric relationships embedded in the object. Our contemporary satellite images give us something like this, predicated upon the interlinkage between the photographic apparatus, the vertical aerial view, and the extreme distance from the terrestrial surface.

La mort est le sacrement de la vie.
 Sans mort, la vie n'a pas de sens.
 La mort implique un délai, l'étape,
 le cycle, l'entier, l'œuvre.
 D'un coup tout disparaît.
 Pourquoi ne veut-on pas conduire au
 Père-Lachaise les œuvres humaines :
 les outils.
 les maisons.
 les villes.
 Fixer les délais, ne plus léguer son
 résidu, puisqu'on ne lègue pas son
 corps.

Figure 6. *La ville radieuse*, Paris, Editions Vincent, Fréal & Cie, 2nd ed., 1964, p. 203 © FLC/Adagp, Paris, 2007.

- 23 A consequence of the diagram's expulsion of the viewing point, and the consequent disappearance of 'humanist' space, is the rhetorical effect of placing the representation outwith time. This effect is further reinforced by the normative identification of elevation with transcendence. As we saw in the passage cited earlier from A. de Saint-Exupéry, the departure from the terrestrial surface can be understood to be also a departure from its historicity. It is from this complex, it seems to me, that Le Corbusier's famous montage of aerial photograph and plan drawing in *La ville radieuse* gains much of its rhetorical and ideological force. Le Corbusier writes the epitaph of the old city in his prose poem – as if on a tombstone – (figure 6) but he also writes it by his use of the aerial image. Where the new city is transcendent (it is, in a sense, 'in the air'), the old is arrested, frozen in the past by the medium of the photograph, which carries all the connotations of death that Barthes famously discerned in it. (figure 7) The montage-like deployment of the image, the fact that its edge does not conform to but slices across the street pattern, suggests the paper-like insubstantiality of the old city and ideologically prepares it for destruction. As Le Corbusier would aptly claim two years later in the epigraph to his book *Aircraft*, the view from the aeroplane "indicts".

Figure 6. *La ville radieuse*, Paris, Editions Vincent, Fréal & Cie, 2nd ed., 1964, p. 207 © FLC/Adagp, Paris, 2007.

- 24 Like the ichnographic plan, the axonometric is – in Peircean terms – also a diagram, being defined not by the eye but by measured relations along all its sides. And it is not by chance that axonometry's importance within modernism is closely linked to suprematist theory and its preoccupation with the aerial. As K. Malevich had put it, the axonometric image tears free of the ground, an effect predicated again upon an expulsion of the eye that paradoxically facilitated “aerial views” at another ‘level’. Thus, concluding his important 1981 essay on axonometry, Yves-Alain Bois wrote that its history “should include a chapter on aerial views and photogrammetry.”²⁰

A contemporary aerial sequence

Figure 8. Courtesy NASA/JPL-Caltech.

Figure 9. Courtesy NASA/JPL-Caltech.

- 25 While writing this seminar paper I was, at the same time, looking at a sequence of images that was just appearing from the NASA Mars probe, images that were in fact all aerial images in the senses I've tried to develop here. I would like to conclude with these. As they became available on the official website, it seemed to me that their sequence was replaying at high speed the history of aerial geo-iconography in reverse, the vertical aerial view (at first planetary) giving way by turns to the obliquity of the panorama. (figure 8, 9, 10 et 11) Whatever their utility, the images produced a powerfully territorializing sequence – in all senses of that word – that arrived at a point which was uncannily congruent with historical colonial representational forms. Striking too was the representational role played by the probe's microscope, which served as the ultimate, triumphant image in the aerial sequence.

Figure 10 et 11. Courtesy NASA/JPL-Caltech.

NOTES

1. S. Freud, *Civilisation and Its Discontents*, London, Hogarth Press, 1930, p. 66.
2. T. Reid, *An Inquiry into the Human Mind on the Principles of Common Sense* [1764], Edinburgh, Edinburgh University Press, 1997, p. 103-112 ("Of the geometry of the visibles"). I am grateful to S. Tropea for discussing her work on this with me: S. Tropea, "L'occhio al centro della sfera: la *Geometria dei visibili* di Thomas Reid, e l'Astronomy di David Gregory", in A. Santucci (ed.), *Filosofia e cultura nel settecento britannico*, vol. II, Bologna, Il Mulino, 2000.
3. A. de Saint-Exupéry, *Pilote de guerre*, Paris, Gallimard, 1942, cited in P. Virilio, *War and Cinema: the Logistics of Perception*, London, Verso, 1989, p. 71.
4. *Oxford English Dictionary*, 2nd Edition, vol. XII, Oxford, Clarendon Press, 1989, p. 668-669.
5. M. Charlesworth, "Thomas Sandby Climbs the Hooper Stand: the Politics of Panoramic Drawing in Eighteenth-Century Britain", *Art History*, 19 (2), June, 1996, p. 247-266 (263). See also A. Kennedy, "Representing the Three Kingdoms: Hanoverianism and the Virtuosi's Museum", in M. Dorrian, G. Rose (eds), *Deterritorialisations; Revisioning Landscapes and Politics*, London, Black Dog Publishing, 2003, p. 272-283.

6. See, for example, L. Marin's comments in *Utopics: Spatial Play*, London, Macmillan Press, 1984, p. 264-265.
7. L. Gernon, "A Discourse of Ireland, Anno 1620", in C. L. Falkiner, *Illustrations of Irish History and Topography, Mainly of the Seventeenth Century*, London, Longmans Greene and Co., 1904, p. 349-350. For more on this and its context see my essay, "On Some Spatial Aspects of the Colonial Discourse on Ireland", *Journal of Architecture*, 6, 2001, p. 27-51.
8. D. Cosgrove, *Social Formation and Symbolic Landscape*, London and Sydney, Croon Helm, 1984, p. 27.
9. On ferris wheels see my essays "Cityscape with Ferris Wheel: Chicago, 1893", in C. Lindner (ed.), *Urban Space and Cityscapes*, London and New York, Routledge, 2006, p. 17-37; and "The Way the World Sees London: Thoughts on a Millennial Urban Spectacle", in A. Vidler (ed.), *Architecture Between Spectacle and Use*, New Haven, Yale University Press, forthcoming, 2007.
10. W. Benjamin, *Charles Baudelaire: a Lyric Poet in the Era of High Capitalism*, London, New Left Books, 1973, p. 174.
11. M. de Certeau, *The Practice of Everyday Life*, Los Angeles and London, University of California Press, 1988, p. 92-93.
12. R. Barthes, "The Eiffel Tower", *The Eiffel Tower and Other Mythologies*, New York, Hill and Wang, 1984, p. 3-17 (5).
13. Recounted in P. Petit, *To Reach the Clouds: My High Wire Walk Between the Twin Towers*, London, Faber and Faber, 2002.
14. D. Diderot, "Letter on the Blind for the Use of Those Who See" [1749], in L. G. Crocker (ed.), *Diderot's Selected Writings*, New York and London, Macmillan, 1966, p. 14-30 (17). See also C. Ginzburg, "To Kill a Chinese Mandarin: the Moral Implications of Distance", in *Wooden Eyes: Nine Reflections on Distance*, London and New York, Verso, 2002, p. 157-172.
15. R. Wohl, *A Passion for Wings: Aviation and the Western Imagination, 1908-1918*, New Haven and London, Yale University Press, 1994, p. 74.
16. Cited in N. Steimatsky, "Regionalism to Modernism: Antonioni, 1939", in M. Dorrian, G. Rose (eds), *Deterritorialisations; Revisioning Landscapes and Politics*, p. 40-53 (47).
17. B. Hüppauf, "Modernism and the Photographic Representation of War and Destruction", in L. Devereaux, R. Hillman (eds), *Fields of Vision: Essays in Film Studies, Visual Anthropology and Photography*, Berkeley and London, University of California Press, 1995, p. 94-124 (105).
18. B. Hüppauf, *op. cit.*, p. 104.
19. K. Malevich, *The Non-Objective World: the Manifesto of Suprematism*, Mineola, New York, Dover Publications, 2003, p. 68.
20. Y.-A. Bois, "Metamorphosis of Axonometry", *Daidalos*, 1, 1981, p. 41-59 (57).

RÉSUMÉS

Mark Dorrian, *La vue aérienne : notes pour une histoire culturelle*

Cet article soutient qu'une histoire culturelle de la vue aérienne appropriée à la complexité du sujet reste à écrire. Il suggère que la définition même du sujet a fait l'objet d'une attention insuffisante jusqu'alors, ce qu'il illustre en convoquant les interprétations phylo-génétiques du développement de la vision humaine *per se* ainsi que les technologies comme la microscopie. L'article tente d'esquisser une autre voie pour une histoire de la vue aérienne et propose trois catégories d'analyse : l'image oblique, verticale et le diagramme. Il plaide pour une attention renouvelée aux spécificités des différents genres de vues aériennes historiques, par opposition aux considérations générales schématiques, ce qui donne lieu à une brève critique du propos influent de Michel de Certeau dans *L'invention du quotidien* sur le World Trade Center. L'article conclut en étudiant le curieux cas du diagramme, une forme de représentation qui semble donner l'impression d'une image aérienne alors qu'en même temps, il disqualifie tout point de vue singulier.

This paper argues that a cultural history of the aerial view that is adequate to the complexities of the topic has yet to be written. It suggests that insufficient attention has hitherto been given to how the topic has been defined, and illustrates this in relation to phylo-genetic accounts of the development of human vision *per se* and to technologies such as microscopy. The paper attempts to indicate what an alternative itinerary for a history of the aerial view might look like, and puts forward three analytical categories: the oblique image; the vertical image; and the diagram. It argues for a renewed attention to the specific modalities of different kinds of historical aerial vision, in opposition to schematic overarching accounts, and this is illustrated by a brief critique of Michel de Certeau's influential discussion of the World Trade Center in *The Practice of Everyday Life*. The essay concludes by examining the curious case of the diagram, a form of representation that appears to give us an aerial image while at the same time disqualifying any singular viewpoint.

INDEX

Mots-clés : photographie, paysage urbain, vol, sémiotique

Keywords : photography, urban landscape, vision, perspective, flight, semiotics

AUTEUR

MARK DORRIAN

Reader in Architecture School of Arts, Culture and Environment University of
Edinburgh 20 Chambers Street Edinburgh, EH1 1JZ, UK, mark.dorrian@ed.ac.uk