## Log

SPRING/SUMMER 2008 Observations on architecture and the contemporary city

51° 24' N, 2° 31' W

Hadspen, Castle Cary (Somerset), UK

What could be more "picturesque" than an ensemble of huts that once served as harrier kennels on a rural English estate? Nonchalantly inching down a slope flanking the Parabola Garden, these simple, 18th-century vernacular structures were fitted with racks for storing apples after the harriers were gone, then fell into disuse and, finally, ruin - only to pique the interest of Cedric Price, who studied the site in 2001 while developing a master plan for Hadspen. Price argued that the kennels needn't serve a particular function, and that it would suffice to renovate them as a space in which to "wonder what to do in it," adding that "it would be a nice place to read; a few architectural books might give one some ideas." So, defying the demand for a set purpose and under the radar of local planners, the kennels were slated for a building experiment: no survey, no plans, no rules, save one – that the client would instruct local builders weekly, and then accept the consequences. Setting the tone for future developments at Hadspen, the books were moved in: a tiny Book Palace, just as Price imagined, "preserving both magic and sanctuary."

12

\$10.00



## Transcoded Indexicality

How might we think about the relationship between image and trust today? It is a question that immediately puts us in a very different place than we would be if we were dealing with - say - image and truth. Whereas the latter would situate us squarely in metaphysics, with image and trust we are involved with something that looks more like a sociology or anthropology of images, that is, we are involved with thinking about structures of belief and forms of cultural investment in images. Image and trust is what image and truth turns into once it has been relativized. Consequently, the question of trust brings the issue of representational modes or forms to the fore and, more specifically, that of how and why we invest more trust in some types of pictures than in others. When, in her classic 1977 collection On Photography, Susan Sontag suggested that we would happily forgo even the most fully achieved painted portrait of Shakespeare for a single faded photograph, she was highlighting not just the belief in the verisimilitude of the photograph, but also the commitment to its uncanny consubstantiality with what it pictures.1 As is well known, the specific qualities that the photograph has presented us with (historically, at least), and to some extent the uses to which it has consequently been put, have been theorized in relation to C.S. Peirce's account of indexical signification. Here the photograph appears as the imprint of the referent - something "directly stencilled off the real," Sontag says, "like a footprint or a death mask" - whose existence and presence at the moment of image-capture it then enduringly witnesses.<sup>2</sup>

And yet, it is likely that to some my opening question will seem unviable and even oxymoronic. The question appears to presuppose that some conjunction of image and trust is at least possible today, but is this the case? Is it not more likely that the possibility of trusting images has become entirely dissolved by the rise of digital imaging technologies and the manipulations they enable, as well as the widespread contemporary recognition of the necessarily partial and constructed character of any image? Indeed, some have seen these two developments as inevitably interconnected.

William J. Mitchell, for example, writing in relation to photography, characterizes "the emergence of digital imaging as

1. "Having a photograph of Shakespeare would be like having a nail from the True Cross." Susan Sontag, On Photography (Harmondsworth: Penguin, 1979), 154.
2. Ibid.

3. William J. Mitchell, The Reconfigured Eye: Visual Truth in the Post-Photographic Era (Cambridge: MIT Press, 1992), 8.

4. Hal Foster, "Design and Crime," in Design and Crime and Other Diatribes (London: Verso, 2003), 13–26, 24.

5. "Seemed to be," because it is clear that the presentation was at best about legitimation, and had little consequence for operational decisions.

a welcome opportunity to expose the aporias in photography's construction of the visual world, to deconstruct the very ideas of photographic objectivity and closure, and to resist what has become an increasingly sclerotic pictorial tradition."3 In the 30 years that have passed since the publication of Sontag's book, then, has not her "image world" been revolutionized by digitization, resulting in - as Hal Foster puts it a "loosening of old referential ties"? Foster not entirely unironically goes on to suggest, perhaps "the development of Photoshop will one day be seen as a world-historical event."4 Certainly there is much to this argument, but it is also important to recognize that its familiar correlate - the presumption that no one trusts images anymore - belies the complexity of the contemporary situation. Today, a generalized skepticism toward images coexists with a deep and intensifying commitment to them that is itself, in part, a reaction to new powerful imaging technologies. What I find especially striking is that digitization, which seems in one regard to erode trust in the image, is at the same time the precondition for a new intensity of trust that is extended to it, the balance of responses shifting in relation to differing institutional and discursive contexts and the understanding of interests embedded in them. So, images used in commercial situations elicit routine suspicion, while juries convict on "visually enhanced" video evidence, loss adjustors record automobile wrecks using digital photography, and patients submit to surgery on the basis of CAT scans.

This paper began as a contribution to a seminar on Image and Trust?, and in its earliest iteration was titled "The Failure of the Rhetoric of the Image: A Case Study in Trust." The subject of the "case study" is the presentation given to the United Nations Security Council on February 5, 2003, by former US Secretary of State Colin Powell. The background to Powell's presentation to the UN is well known: this was to be the denouement of the pre-invasion case for war on Iraq the moment when it was anticipated the US would unveil evidence of Iraqi duplicity regarding weapons of mass destruction. Powell's presentation was largely, though not completely, image-based. Images were presented as evidence, and observers were asked to trust them. It is difficult to think of a recent episode in the relations between images and trust when the stakes were, or at least seemed to be, so high.5 We know how events unfolded after this meeting, but my purpose here is not to indict Powell or the administration he served of misrepresentation. Rather, I want to consider the strategies of presentation whereby images were staged to

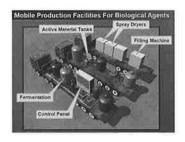
6. "The discontinuous connotators are connected, actualized, 'spoken,' through the syntagm of the denotation, the discontinuous world of the symbols plunges into the story of the denoted scene as though into a lustral bath of innocence." Roland Barthes, "Rhetoric of the Image," in Image, Music, Text, trans. Stephen Heath (Glasgow: Fontana/Collins, 1977), 32–51, 49.

elicit trust and the complications that ensued. The other part of the title - the failure of the rhetoric of the image - is of course a nod to Roland Barthes's classic essay in which he characterized the photograph as a "message without a code." Its status as such, as a seemingly "innocent" denotative image, allows the photograph, he argued, to play a persuasive naturalizing role in support of ideologically governed connotative meanings that thereby find themselves purified and substantiated (for his purposes Barthes defined rhetoric as "the signifying aspect of ideology").6 The use of the term failure, then, was intended to register not just Powell's failure to convince the Security Council of the veracity of his argument, but more particularly the persuasive shortcomings of the images themselves and the difficulty they found in attaining evidential status. Symptomatically, the aerial surveillance photographs Powell showed, very different in kind from the particular replete and immediate photographic image around which Barthes structured his discussion, were in his presentation often almost literally hidden under annotation, the "evidence," as it were, being covered up by a graphic screen.

The key photographs Powell showed were aerial images taken from satellites, and it is upon these that I want to reflect. Recently I visited an exhibition by Ron Mueck - the UK-based Australian sculptor whose hyper-real renderings of human bodies of expanded or diminished size have become well-known - with a philosopher friend who talked about scale in relation to the artwork. One of the things he pointed out was the relationship between scale (specifically large-scale) and epistemology: it is difficult to imagine, he suggested, making things smaller in order to get to know them better. In a way, though, this is exactly what aerial imagery does: it is the very epitome of distanced vision, limited, perhaps, by ascensional technologies but no longer by the vagaries of topography. The synoptic image conveys relationships between objects, and as such has always represented strategic vision. Today this is mediated through the strange interplay of extreme, extraterrestrial distance, with the relative closeness that contemporary imaging technologies allow.

One of the curiosities surrounding Powell's presentation, and in particular his presentation of images, was the hiding of another kind of image in the days leading up to the event. Since 1985, a large tapestry reproduction of Picasso's *Guernica*, donated by Nelson A. Rockefeller, has hung outside the UN Security Council chamber. The tapestry provides a backdrop for the press conferences that normally take place

7. Maureen Dowd, "Powell without Picasso," *New York Times*, 5 February 2003, sec. A, 27. there. It appeared thus on January 27, 2003, when Hans Blix, the chief weapons inspector, delivered his interim report. Later the same day, it was covered over with a blue curtain and the flags of the Council's member countries. UN officials suggested it was to provide a more effective backdrop for TV cameras, but almost everyone else seemed suspicious. Maureen Dowd, writing in the New York Times, commented that "Mr. Powell can't very well seduce the world into bombing Iraq surrounded on camera by shrieking and mutilated women, men, children, bulls and horses," and suggested, "Maybe the UN was inspired by John Ashcroft's throwing a blue cover over the 'Spirit of Justice' statue last year, after her naked marble breast hovered over his head during a televised terrorism briefing."7 But if the latter was a moment of pure deflationary burlesque, the "Guernica affair" presented something more challenging, a dispute over what might be described as the complications of proximity, which seemed structurally to reproduce what was ongoing at the time between the US administration and the weapons inspectors. Powell's presentation against the "background" (associatively, if not literally) of the covered Guernica emerged as a kind of contest of images in which the detached, dispassionate, and cool aerial register of satellite images was intended to displace the famous historical "on-the-ground" depiction of aerial bombardment and the cultural memory, and indeed call to conscience, it evoked. At issue was the anticipated performance of the different images in the specific context of Powell's presentation and the various ways it would be reported. Guernica, an object of suspicion for the advocates of the invasion, was a "background" image that could not be relied upon to remain so, without it advancing forward to compromise the televisual message. Mirroring this anxiety over a background image that was too strong, and that consequently had to be effaced, were apparent concerns regarding the performative weakness of the images that would be promoted in the Security Council Chamber, and specifically their persuasive ability to elicit trust. In the days leading up to the presentation, the US administration downplayed expectations that, in their words, a "smoking gun" would be produced, but still there was speculation that there would be what was described as an "Adlai Stevenson moment," after the US ambassador to the UN who dramatically unveiled aerial photographs of Soviet rockets before a live television audience during the 1962 Cuban missile crisis. The covering over of the Guernica tapestry may have hidden the image to those in the interior of the UN building, but it notably had



US DEPARTMENT OF STATE, MOBILE PRODUCTION FACILITIES FOR BIOLOGICAL AGENTS. FROM POWELL'S POWERPOINT PRESENTATION TO THE UN, 2003.

8. This and subsequent quotations are from the transcript, which can be found, along with the PowerPoint images, at http://www.whitehouse.gov/news/releases/2003/02/20030205-1.html#

the effect of multiplying it outside in the form of the reproductions that protestors could be seen waving during Powell's presentation.

Powell begins his talk by referring to the much discussed UN Security Council Resolution 1441, which had been passed the previous November. He cites the "serious consequences" threatened in the resolution if there was noncompliance with its terms and argues that "no council member present in voting on that day had any allusions [sic] about the nature and intent of the resolution or what serious consequences meant if Iraq did not comply."8 (The Web-published transcript of Powell's presentation ominously renders "illusions" as "allusions.") He then goes on to gloss over the material that he will present, describing it as "an accumulation of facts and disturbing patterns of behavior" that demonstrates that "Saddam Hussein and his regime have made no effort – no effort - to disarm." The first documentation presented is the recording of an intercepted conversation between, Powell says, an Iraqi colonel and a brigadier general. As it is played, edited and translated passages are projected on a screen. After the tape stops, there is an extended section in which Powell reprises the material, not so much analyzing it as using it to elaborate a series of speculations. This is the pattern throughout the presentation. Sequences of questions hang in the air: "Who took the hard drives? Where did they go? What's being hidden? Why?" Sometimes material put forward as evidence is interspersed with hypothetical imagery intended to picture what things might look like, which then plays a consolidating role. The speculative drawings, for example, that Powell shows of mobile chemical weapons factories in rail carriages and trucks - "diagrammed," as he puts it, from verbal reports by sources – significantly adopt a lowlevel aerial point of view. This permits them to be read as a continuation (at greater resolution) of the satellite photographs that preceded them in the presentation. Something of the photographs' implications of factual "hardness" and authority is thereby bestowed upon the drawings, which in turn can then, by virtue of the detail they offer, reciprocally act back upon the high-level image register in order to substantiate it. At the start of the presentation, when Powell first introduces aerial photographs – the material that might be expected to provide the firmest evidence - there seem to be anxieties regarding their ability to convince the audience he was addressing. Consequently, he begins with a formulation that implies that persuasive agency is to be located less in the photographic documents themselves (the artifacts that were, after all, being submitted as evidence) than in the way they have been interpreted by experts:

Let me say a word about satellite images before I show you a couple. The photos that I am about to show you are sometimes hard for the average person to interpret, hard for me. The painstaking work of photo analysis takes experts with years and years of experience, pouring for hours and hours over light tables. But as I show you these images, I will try to capture and explain what they mean, what they indicate to our imagery specialists.

It is, of course, entirely expected that photographs should be presented as evidential. In semiotic terms, they are as I have already noted – commonly considered indexical signs, and there is a long history of their use as evidence in court, as there is indeed of other signs of this type (fingerprints, bloodstains on clothes, the shoe of the accused found in the flowerbed, etc.). Indeed, there is an argument that our very idea of evidence is closely tied, even grounded upon, indexical signification as the epitome of trustworthy signification. By index, I mean the condition that Peirce describes as being characterized by the linkage of the signifying material to its referent through contiguity, whereby the former is, as Peirce puts it, "really affected" or modified by the latter (as, say, in the case of something receiving the impression of something else by physical contact). A good example is the one that Carlo Ginzburg cites in his celebrated essay, "Clues: Roots of an Evidential Paradigm": the animal hoofprint on the soil at which the hunter, kneeling on the ground, stares.<sup>10</sup> The imprint sits in an indexical relationship to the animal and, through his ability to read it, the hunter can tell what kind of animal it is, the direction it travelled, how fast it was going, how long ago it passed, and so on. Perhaps the importance for the question of trust is the index's binding to - or grounding of the signifier upon – its referent. In their redescription of Peircian semiotics, Gilles Deleuze and Félix Guattari describe indexes as "territorial signs," which nicely captures this grounding effect.11 The index is Thomas putting his fingers in Christ's wound (trust overcoming doubt in the process); it is the footprint that Robinson Crusoe sees on the sand; it is the fingerprint, the signature, and the knock on the door. Peirce states that everything that startles us within signification is indexical, and I take this to be linked to the strangely strident presence of the absent object within the signifying material of the index.12 The indexicality of the photograph is most literally seen in the photogram, in which an object sits upon a sensitized surface, leaving its imprint. But this idea has been generalized and seen as fundamental

9. Charles Hartshorne and Paul Weiss, eds., Collected Papers of Charles Sanders Peirce, Vols. 1 and 2 (Cambridge: Belknap Press, 1965), 2.248 (143). 10. Carlo Ginzburg, "Clues: Roots of an Evidential Paradigm," in Myths, Emblems, Clues (London: Hutchinson Radius, 1990), 96-125. 11. Gilles Deleuze and Félix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, trans. Brian Massumi (London: Athlone Press, 1996), 65. 12. "Anything which focuses the attention is an index. Anything which startles us is an index, insofar as it marks the junction between two portions of experience." Hartshorne and Weiss, eds., Collected Papers, 2.285 (161).

13. Roland Barthes, Camera Lucida: Reflections on Photography, trans. Richard Howard (London: Vintage, 1993), 5. 14. Umberto Eco, A Theory of Semiotics (Bloomington: Indiana University Press, 1976), 7.

to the photographic process as a whole, notwithstanding the complex transformations of the image that photographic techniques can produce.

The key point is the status of the photograph as the imprint of the emanation of the object and its consequent presumption (and constant "return") of that object. Hence Barthes's famous characterization, "It is as if the Photograph always carries its referent with itself."13 The degree of cultural investment in indexical representation leads to the stakes in it being unusually high, higher perhaps than any manifestation of the other sign types – the icon and the symbol – identified by Peirce. It is no surprise that, until recently at least, the two authenticating signs in a passport were the signature and photograph (the latter being subject to specific rules intended to limit "procedural distortions"). At the same time, it is the very commitment to the trustworthiness of the index that leads to it being a particular object of suspicion, due to the extent of the rights accorded to it and to its referent or carrier via its agency as an identity authenticator. In his book  $\emph{A}$ Theory of Semiotics, Umberto Eco characterizes semiotics as "in principle the discipline studying everything which can be used to lie. . . . I think," he goes on, "a 'theory of the lie' should be taken as a pretty comprehensive program for a general semiotics."14 As I far as I know, Eco did not go on to speculate which sign type is the most powerful to lie with, but I think it is clear that it is the index.

Back to Powell. What is striking about the use of aerial photographs as evidence in Powell's presentation is the question of the degree to which they actually have evidential status. Yes, something is there, but what is it exactly? What are we seeing through, or within, the photographic medium? There is a problem of legibility, and without this, without being readable by their audience, the images must remain resolutely nonevidential, at least in any useful way. The anxiety over this problem and the effort to transmute the images into evidence, making them legible and trustworthy, results in a strategy whereby a complex graphic overlay is applied to the images; in a kind of overwriting, the interpretation of the imagery specialists to which Powell had referred spills over the image surface. The intention may be to clarify, to extract conditions immanent within the image, but I would suggest that the effect is more one of burying the evidential object (the photographic document), covering it over, and almost effacing it with a supplementary graphic and textual discourse. In an ideal sense discourse is supposed to stop at evidence, evidence being the point where description is over-



US DEPARTMENT OF STATE, AL-MUSAYYIB CHEMICAL COMPLEX WITH GRAPHIC OVERLAY. FROM POWELL'S POWERPOINT PRESENTATION TO THE UN, 2003.

15. Julian Borger, "Powell raises the banner for war but the world remains divided," *The Guardian*, 6 February 2003. http://www.guardian.co.uk/international/story/0,,889809,00.html.
16. Staff and agencies, "What the international papers say," *Guardian Unlimited*, 6 February 2003.

taken by demonstration or showing. Etymologically linked to videre, the concept of evidence is in important ways framed in relation to vision: defining evident, for example, the Oxford English Dictionary lists "distinctly visible, conspicuous . . . indubitable, certain, conclusive." Evidence is expected to display an evident-ness: that is, ideally, evidence should be self-evident. If it is not, and it requires some textual or discursive supplement to compensate for what it lacks and hence activates as evidence, then it seems compromised. This is because the textual description or interpretation of an object presented as evidence can never have the "evidential" status of the primary object. Powell's images dramatize this dilemma in a particularly clear way: under the imperative to make the reticent image trustworthy, it is made less so by covering it over with a surface of interpretation that cannot itself be evidential, and which is notably nonindexical.

What were the responses to Powell's presentation? Did it convince? Was there an Adlai Stevenson moment? Not exactly. Predictably, it made little difference to positions that had by then hardened. Unsurprisingly, immediately after the presentation, British Foreign Secretary Jack Straw called it a most "powerful and authoritative" case. Is It is salutary to recall the responses from the international press. The Washington Post wrote that "Mr. Powell's evidence, including satellite photographs, audio recordings, and reports from detainees and other informants, was overwhelming," while in France Le Figaro commented that "for 80 minutes Colin Powell talked, using scary words, pointing the finger at the loutish regime in Baghdad, showing illegible slides, playing inaudible recordings, and trying to demonstrate that war was inevitable." 16

I have argued above that there is an etymological and conceptual link between evidence and visibility, and have made the suggestion that ideally, evidence is the point where discourse stops. What this formulation inevitably represses, however, is the degree to which evidence is in fact always borne upon discursive support and, indeed, a structure of trust. When a jury looks at evidence in a courtroom, for example, it has to be told what it is. Evidential objects are collected, curated, presented, and discursively drawn into a network of relations with each other. Only through this process do they become evidential. For the jury to see a gun with the fingerprints of the accused upon it as evidence in a criminal case, they have to accept the way the object has been narrated within the case ("it was found under his bed the day after the murder"), as well as the accuracy of forensic

procedures, and this entails a structure of trust. This structure is the condition of possibility for the recognition of the object as evidence. Significantly, contemporary forms of "hard" evidence – DNA analysis being the hardest we've got – require that the structure of trust be more absolute and dense, because the evidential object (the DNA material itself) is more removed from the senses of the individual and its analysis placed more firmly in the domain of experts and computational technologies.

I have already registered my skepticism regarding the claim that digitization and associated image manipulation software and technologies such as Photoshop have resulted in, or at least accelerated, a wholesale culture of mistrust of images. What does seem crucial, however, is the broader background against which the development of programs like Photoshop are situated: that of the technological transformations or mutations of indexicality. I am thinking of things like fax machines, digital video devices, and DNA analysis. How does Peircean contiguity survive when images are dissolved into digital codes and then reconstructed through playback apparatuses (computers, video machines, etc.)? In an important way, the image on a video screen has a different relation to its object than does the image on cinematic celluloid. It is true that we have what appears to be an indexical image, but its contractual congruity with the referent has been broken, and instead we have something like a transcoded indexicality.

What does this mean for trust? One of the consequences of the processes of this transcoded indexicality is that images come apart and break down in more complex ways than they ever have before. Today what seems to be trusted, especially when it comes to security, is complexity, and transcoded indexicality is one of the agents of this. Trust is placed in things that are hard to reproduce. This has always been the case (banknotes, etc.) but under contemporary technological conditions the "difficulty" has to be constantly accelerated, and that requires increasingly complex technological mediation and installations. I am thinking of the new kinds of indexical identity authenticators that have taken over signatures and photographs - iris scans, biometric information, DNA analysis, and so on. This seems to shift the trust and image question in a decisive way: what is trusted is no longer so much the image as the complexity or fineness of the informational content that can be extracted from it, for it is upon this that both the difficulty of its reproduction and its effectiveness as an identity indicator are based. More particularly, what is crucial here is that the digital underpinning of transcoded indexicality makes images immediately and always already analyses: that is, "identity analysis" has already occurred by virtue of – and in the very moment of – image capture. Through its technological conditions the transcoded indexical image has an a priori relationship to the computational assemblage of the state security apparatus (it is intrinsically and immediately searchable, comparable, transferable, etc.). As you go through the immigration channels of the 21st century, officials will not scrutinize your face but will check the informational breakdown of your iris scan against their records. They might not even look at you.

In 2004, after Giorgio Agamben refused to subject himself to the US's new border security measures, and thus to enter the country, he wrote a short commentary for Le Monde in which he said, "What is at stake here is nothing less than the new 'normal' bio-political relationship between citizens and state [that] concerns the enrolment and filing away of the most private and incommunicable aspect of subjectivity: I mean the body's biological life." Agamben wrote under the title "No to Bio-political Tattooing," and compared the new security practices to the tattooing of internees at Auschwitz. Yet I feel that there is a distinction to be made here, against which the bio-political dimensions of transcoded indexicality stand out in full relief. Where the tattoo of the internee in Auschwitz was a symbolic and instrumental supplement applied to the body by an external agency, an application that conferred identity through its mark, in the case of transcoded indexicality, the body, as it were, produces the mark out of itself, thereby giving itself up from within. Rather than being a substratum to which a code is added, the body through, as Agamben says, its very "biological life" - becomes newly voluble and compliant.

But in the end perhaps what links the iris scan to the aerial images in Powell's presentation is not so much a specific technique of analysis as the way in which they bear witness to the contemporary tendency of the evidential object to disappear from view, to subside beneath its interpretation, a tendency that is part and parcel of the increasing location of evidence in what is – contrary to the visual implications of the term – beyond, or excessive to, sight. The fineness of analysis enabled by computational technologies is, in a sense, won through the disappearance of the object to nonspecialist scrutiny, and this represents a specific political problematic. Consequently, interpretation, rather than the object itself, is delivered up as evidence: but this is an interpretation increasingly claimed (and trusted) to be purged

17. Le Monde, January 10, 2004. Translation available at http://www.truthout.org/cgibin/artman/exec/view.cgi/4/3249.

MA:

ARC

PRO

EDI

URB

JON

Fra (Ro

TOR

of all but minimal contingency. In effect, transcoded indexicality produces a kind of acceleration of the identity relation that has historically characterized the index: informationally, the analysis assumes a near identicality with the object itself (the DNA sample, the iris image), allowing it to effectively supercede the object while determining its referent (the individual person) with a new forcefulness. In view of this, what Powell's slides dramatize is this condition of interpretation as evidence, although - strikingly - operating in a situation in which, far from being banished, contingency seems to arise everywhere; from uncertainties over the status and interpretation of the objects discerned in the photographs; from the ongoing dispute, current at the time of Powell's presentation, with the weapons inspectors on the ground; and from, not least, the complications that ensue from "imaging" the absence of objects (the alleged concealment of the weapons), rather than the things themselves.

MARK DORRIAN IS A READER IN ARCHITECTURE AND DIRECTOR OF THE MASTER OF ARCHITECTURE PROGRAM AT THE UNIVERSITY OF EDINBURGH, AND CODIRECTOR OF THE ART, ARCHITECTURE, AND URBANISM ATELIER METIS. HIS MOST RECENT BOOK (WITH JANE RENDELL, JONATHAN HILL, AND MURRAY FRASER) IS CRITICAL ARCHITECTURE (ROUTLEDGE, 2007). CURRENTLY HE IS WORKING ON THE CULTURAL HISTORY OF THE AERIAL VIEW.