Visualizing the Street

Naeff, Judith, Dibazar, Pedram

Published by Amsterdam University Press

Naeff, Judith and Pedram Dibazar.  
Visualizing the Street: New Practices of Documenting, Navigating and Imagining the City. 
Amsterdam University Press, 2018. 
Project MUSE. muse.jhu.edu/book/66672.

For additional information about this book
https://muse.jhu.edu/book/66672
8. **Street Smarts for Smart Streets**

*Rob Coley*

**Abstract**
In the technological imaginary of the ‘smart city’, new practices of visualizing protect against a multiplicity of forces that threaten to destabilize urban life. Computational urbanism promises access to a privileged and commanding perspective on the dynamics of the city. Critical responses to this speculative ideal tend to focus on how the exploitation of such a perspective might compromise the uniquely human character of urban relations. There is, however, a more radical implication of urban smartness, namely a situation in which living more intimately with nonhuman objects and processes reveals the humanist vision of the city to be both highly partial and dangerously occluded. Taking the smartness of the city seriously means confronting a threat to the dominance of human agency and autonomy itself. It also means newly investigating the weird reality of city life, which this chapter does by examining practices of urban detection in recent examples of speculative fiction.

**Keywords:** smart city; detection; nonhuman; *Person of Interest*; Jeff VanderMeer; *Finch*; Anthropocene

**The Speculative City**

In the first decade of the 21st century, the human officially became a majority urban species, with the number of people that live in cities surpassing, for the first time, the number that live in rural areas. Against a turbulent backdrop of cascading environmental, economic and political crises, this is a century marked by accelerating migration to cities. Indeed, it is now predicted that, by 2050, two thirds of the total human population will live in them, a ratio that will have doubled in just 100 years (United Nations, 2014). This trajectory of rapid urban growth is increasingly recognized as a manifestation of
what geologists and climate scientists have come to call the Anthropocene (Crutzen, 2002), a new geo-historical era in which material traces of human technoculture have become permanently and catastrophically inscribed into planetary ecology. In the age of the human, urbanization is a particular target of moral outrage. It stimulates an environmentalist renewal of criticism aimed at the totalizing systems of modernity, wherein the rise of the modern city was founded on an exploitative relation to the material world, a technologically mediated relation in which the nonhuman is viewed simply as ‘standing-reserve’ (Heidegger, 1977). In discourses on environmentalism, cities take on a traumatic role as markers of anthropogenic destabilization, future monuments to a species that has unwittingly ushered in its own extinction by disrupting a pre-existing state of apparently natural harmony.

Much of this outrage is well-founded, particularly insofar that it provides the critical basis for visualizing the contemporary city as a consequence of both imperialism and the rise of modern capitalism. Yet, instead of recognizing human activity as the catalyst for an intensification of existing ecological volatility, the peculiarly neoliberal sensibility of mainstream environmentalism endows the human with a power to disturb what it conceives as the invisible hand of nature. Accordingly, as a tragic tale of what John Dryzek (2012) calls ‘Prometheanism’, the environmental vision of the city remains overly anthropocentric, overly keen to maintain a neat separation between the autonomous agency of the human and the inert material world threatened by human activity. To confront the material reality of the contemporary city in merely human terms – as a human space – is not only to preserve the Promethean power of the human, but to magnify it. The result is that such criticism tends simply to advocate a ‘smarter’, more sustainable kind of Prometheanism, subscribing to the myth that, although resources may not be as abundant as we first assumed, our command of technology will nonetheless enable an efficient sustainable control, an ability to stabilize and reintroduce balance to the world. So if the extinction narrative of the Anthropocene threatens to close down the future, then the overt narcissism of this narrative also produces reactionary attempts to reinvent and reengineer the future. Perversely, in the 21st century, there is a last gasp of humanist optimism for world-building.

This optimism is writ large in the current vogue for popular urbanism in which, quite apart from any trauma, it is emphasized that cities are ‘good for us’ (Hollis, 2013); that good cities can and should be joyful, happy spaces (Montgomery, 2013); that collective activity in such spaces generates ‘miracles of human creativity’ (Glaeser, 2011: 19); and that, for this reason, the contemporary metropolis is the pinnacle of human invention, the apogee
of human progress. Much of the argument here rests on the idea that we have failed, in the past, to visualize the city in positive terms – we have failed to affirm the humanist character of the city as strongly as we should – and that this failure has in turn led to serious errors in both planning and governance. As Edward Glaeser (2011: 15) puts it, ‘we must free ourselves from our tendency to see cities as their buildings, and remember that the real city is made of flesh, not concrete’. The implication is that to genuinely actualize the collective potential of our urban endeavours, it is necessary to visualize the ostensibly dumb flesh of the city in a way that reveals the organizational complexities of its interactions, that maps a particularly urban form of intelligence. This is, at least in part, the positive vision of the ‘smart city’, where ubiquitous digital infrastructure promises to both uncover and enhance an immanent urban intelligence, and, in the process, generate circumstances beneficial to ecological stability.

This chapter responds to Antoine Picon’s call to take the smartness of the smart city, its intelligence, ‘much more literally than is usually the case’ (Picon, 2015: 12). In doing so, it is necessary to circumvent the inhibiting logic of positiv- ity that maintains a humanist impasse in even the most critical accounts of the smart city. What is needed here is a darker, more pessimistic glimpse of cities of the Anthropocene era. This does not mean that it is necessary to fall back on apocalyptic narratives of extinction (narratives that are in fact familiar to the whole of human history), rather, it demands a new kind of scrutiny of ‘the human’ itself. Indeed, in the context of a ‘nonhuman turn’ (Grusin, 2015) in what might now be more accurately called the ‘post-humanities’ (Wolfe, 2010), any encounter with the contemporary city must take account of a crisis that is as metaphysical as it is ecological. It is to this crisis that I attend here, a crisis in humanist modes of visualizing (typically conducted on a dualistic basis and premised on realizing privileged access to the world in its totality) triggered by multimodal encounters with an urban reality that cannot be disentangled into neatly organized subject-object relations. Beyond good and evil, then, this chapter considers the technological imaginary of the smart city as a kind of speculative aesthetics through which it might be possible to encounter a rather different reality to urban life, one that eludes anthropocentric visions and practices, one that negates the very basis of human exceptionalism.

In what follows, I will contend that we should recognize particular modes of visualizing as encounters with an urban reality that is not simply ‘the correlate of human thought’ (Bryant, Srnicek and Harman, 2011: 2-3). To put it in more familiar terms, I will argue that certain practices of visualizing express an ongoing transformation in the way that human encounters with urban reality are mediated, a process that demands, as Nicholas Mirzoeff
insists, ‘restat[ing] the terms on which reality is to be understood’ (2011: 28). In contrast to Mirzoeff, though, I want to emphasize that there is nothing consciously ‘tactical’ about the most radical form of such practices, and that, quite apart from the typically grand designs of the smart city, there is nothing planned about such encounters, which are instead accidental consequences of living more intimately with nonhuman objects and processes. After all, in their ideal form, smart cities are explicitly designed as media ecologies (Fuller, 2005), meaning that smartness is premised on the analysis of dynamic relations between fleshy human processes and a multiplicity of sensor objects embedded in the infrastructure of the city: its architecture, its transport, its street furniture, the pockets and wrists of citizens themselves.

It is of course important to acknowledge that this vision of the smart city, the form imagined by technologists and urban regeneration gurus, has yet to be actualized. With the exception of a few now familiar examples (particularly Songdo in South Korea and Masdar City in Abu Dhabi, both of which remain partly constructed but largely unpopulated), visions of smartness ex nihilo currently remain mere renderings. These projections, ‘prototypes’ (Halpern, 2014: 6), or ‘design fictions’ (Bratton, 2015: 249), do, however, have a certain vitality – they are performative in that they evoke certain possibilities for urban life and transform the way that such possibilities circulate within global visual culture. The speculative futurism upon which the smart city is founded is a force that generates ‘self-fulfilling fictions’ (Picon, 2015: 30). This is at least one diagnosis of the current fervour, across Europe and elsewhere, for the ‘smartening’ of existing urban experience, namely, the efforts of municipal powers to optimize and tame the unplanned meshworks of preexisting cities by digitally retrofitting the urban environment. Here, I would like to dwell on the fictional in order to confront something dark and weird about the smart city, something that, in mainstream critical accounts, usually remains undetected. With Steven Shaviro (2016: 9), I turn to the counterintuitive scenarios of speculative fiction not because they prove or ground specific assertions, but because they ‘work through the weirdest and most extreme ramifications of these scenarios, and […] imagine what it would be like if they were true’. There is, then, an aesthetics of speculation through which it is possible to probe and test the reality of urban culture in the digital, and in so doing produce an encounter with something beyond limited humanist assumptions about what smartness might involve.

This occurs with varying degrees of success in the two examples from popular culture to which I will now turn: the American science-fiction series Person of Interest (CBS, 2011-2016) and Jeff VanderMeer’s weird crime novel
Finch (2011). Both attempt to visualize different and oppositional forms of urban smartness, and both are highly reflexive in that they explicitly address a crisis in the anthropocentric conventions that undergird such practices. The fact that they are also both, in one way or another, detective stories, means that visualizing, a practice of ‘making the inhuman [...] relatable to the human being’ (Halpern, 2014: 22), is here also a practice of detection, a way to investigate the patterns and material dynamics of urban life. Ever since the modern origins of the genre, detection has been portrayed as a cultural as much as a juridical process, with the Holmesian gentleman detective endowed with the ability to resolve increasing urban complexity by exploiting an emergent technological infrastructure itself deemed responsible for generating that complexity (Moretti, 2005: 143). After the genre’s hardboiled turn, the detective’s ability to rationalize the infrastructural assemblage of the city can no longer be assured, and typically the detective is instead an exemplary ‘urban specialist’ (Blom Hansen and Verdaik, 2009: 16), wherein powers of detection are grounded in ‘street smarts’, in a unique knowledge of and feel for the city (Turnbull, 2014: 25-27; McCann, 2010: 46). It is, however, my contention that, in exposure to a city so radically at odds with any possibility of commanding such power, the 21st-century detective experiences a destabilizing and disturbing transformation in their role as urban specialist. Quite apart from any attempt to render the inhuman in human terms, these speculative detectives instead probe ways that we might encounter the city ‘after’ the human.

The City as Machine

In the vision of smartness conjured by IBM, Cisco and Siemens, the smartening of cities is directly associated with sustainability, with the efficient management and regulation of various flows. This is a vision in which core systems of urban governance face all manner of ‘challenges and threats to sustainability’ (IBM, 2011: 7), a situation so perilous that the city is designated both experimental laboratory and theatre of operations in the crusade for a ‘Smarter Planet’. Here, though, any ‘planetary’ pursuit should be understood in terms of a Heideggerian world, which is to say that what is sustained, by the project of sustainability, is a ‘world’ that remains knowable and generally predictable to its human inhabitants, both in terms of its expanding

---

1 Thus, the smartening project adheres to the doxa of ‘sustainable development’, as influentially outlined by the United Nations in the late 1980s (Walker and Starosielski, 2016: 5-6).
complexity and in the degree to which the stability of this expansion can be secured (Morton, 2013: 108-116). Unsurprisingly, the power to visualize this world is distributed far from equally, so, although much of the official rhetoric evokes a utopian ideal, critical responses to the smart city highlight numerous threats to citizen autonomy.

This tension provides the basis for the CBS crime drama Person of Interest, set in a fictional New York City subject to post-9/11 smartening. Here, in a science-fictional extrapolation of the ‘big data’ turn in urban governance (Kitchin, 2014), smartness is a technological panacea for a multiplicity of forces that threaten to destabilize city life, and none more so than terrorism. After all, the ability to subject large data sets to sophisticated analysis promises to correct an apparent failure of foresight, described in the 9/11 Commission Report as an inability to ‘connect the dots’, a failure to identify virtual dangers immanent to material already gathered by the intelligence services (Kean et al., 2004: 408). In Person of Interest (referred to in citations as POI), this promise is realized in the form of ‘the Machine’, a complex system that secretly harvests data from throughout the city, not only by monitoring telephone and surveillance camera networks, but also by exploiting a multiplicity of smart devices through which urban infrastructure is overlaid with the Internet of Things. The Machine is not an identifiable object, a ‘computer’ in the banal sense, rather, as its programmer contends, the city is the machine, ‘the Machine is everywhere’ (POI, 1:1). This ubiquitous operation extends to its temporality too, which is to say that, by integrating a totalizing capacity for data collection with advanced powers of pattern recognition, the Machine can visualize emergent and future crimes.

There is, however, a glitch: the Machine works too well. Though initially designed as a tool to be deployed in the war on terror, the Machine’s capacity to visualize the future is not limited to potential attacks on New York City – its analysis generates a daily list of citizens who will be caught up in numerous other impending crimes. Deemed irrelevant by the authorities, this information instead becomes the focus of an eclectic group of detectives who must solve the crimes before they occur. In contrast, then, to the more recognizable conventions of American crime fiction, it is not the detectives’ own ‘routine and life pattern’ (Jameson, 2016: 7) that synthesizes an otherwise fragmented urban reality, it is instead by virtue of privileged access to the way in which all routines and patterns of urban life are mediated

---

2 All quotations from Person of Interest follow this format – Season:Episode.
3 This group is comprised of NYPD officers, a former CIA agent, a billionaire software engineer, a hacker and a sociopathic assassin.
that these detectives endeavour to visualize the city in its becoming. As the series develops, much of the narrative concerns the moral implications of accessing this preemptive perspective, manifested particularly in the detectives’ struggle against its totalitarian exploitation.

The technological premise of *Person of Interest* is not entirely fictional. Indeed, the smart city is explicitly marketed as a machine for preemptively mediating the activity of urban populations (Halpern, 2014: 2-3), and various technology companies already provide off-the-shelf systems for smart management. A common example is IBM’s Intelligent Operations Centre, typically marketed with reference to its 2012 installation in Rio de Janeiro, complete with ‘the largest screen in Latin America’ (Townsend, 2014: 67). In promotional images that knowingly evoke a multiplicity of cinematic control rooms and command centres, this giant screen is subdivided into a grid on which maps, textual information and live-feed video are displayed simultaneously (Fig. 8.1). The arrangement of this data, gathered from civic

---

4 These evocations are hardly incidental. Publicity images of Rio’s Intelligent Operations Centre are inseparable from what Cormac Deane describes as the ‘co-constitutive, shared materiality and history’ of both actual and fictional control rooms, the organization of which ‘has been taking shape over the course of more than a century of mechanization and automation’ (Deane, 2015: 2).
agencies and private companies alike, offers what IBM service engineers call ‘integrated insight’, a quality based on its capacity to provide a ‘real time operational picture’ of the city (IBM, 2013a). The mayor of Rio commissioned IBM to provide a centralized disaster management system that would not only improve administrative response to emergencies, but visualize their occurrence ahead of time so as to prevent major disruption to urban life. As the project developed, what IBM delivered to Rio’s governors was a system built around a perspective, a perspective that exploits a series of superficially participatory processes in order to coordinate and continually adjust the ‘behaviour of the city and its citizens’ (Greenfield, 2013).

The commanding perspective apparently offered by the control room plays an important role in Person of Interest. The series is, however, not entirely successful in the way that it explores different attempts to gain access to such a perspective. The audience, for example, is granted immediate access: we see much of the action from the Machine’s perspective and the series employs a mode of ‘computer vision’ that erroneously recuperates complex nonrepresentational procedure in the simplified form of heads-up-display-style representation. This means that prediction algorithms are depicted graphically and in the form of decision trees, which is to say that software processes are rendered visible for human viewers. This is writ large during an episode in which the Machine visualizes a series of iterative futures, apparently selected from hundreds of thousands of such futures it processes within a fraction of second, but which unfold individually for us (the viewing audience) over the course of the episode (POI, 4:11). In short, the temporality remains utterly human, meaning that the city in Person of Interest remains a human city, a world ‘for us’, a space of ‘human cultures, governed by human values’ (Thacker, 2011: 4). Indeed, the Machine’s processes of visualization are seemingly powerless without human interpretation, without being ascribed meaning. Early episodes follow the group of detectives analysing and exploring data generated by the Machine, often representing this information via the archetypal medium of the crime board. In spite of their collective ability to hack databases, hijack smart devices and probe the dark net, it seems that nothing can beat a selection of printed photographs and news reports taped to a board and annotated with marker pen.

Where the series does get interesting is in the detectives’ frustration over a lack of clarity to this information: ‘I can’t see the whole picture’ one of them complains in the pilot episode (POI, 1:1), setting the tone for what follows. In Person of Interest, human access to the city-as-Machine is partial, often occluded, and the detectives are deprived of a single interface through which
the totality of the city, and its various relations, might be clearly rendered. Their process of detection therefore adheres to what Fredric Jameson (1991: 54) has called ‘[a]n aesthetic of cognitive mapping’, a process rooted in urban experience, in which the detectives’ struggle to visualize the multiplicity of relations immanent to urban society – and to understand their own place within this system of relations – becomes politically neutralizing. In this instance, the struggle is further complicated by a sense that these relations are not simply human. As a result, episodic crimes become ciphers for a more complex investigation into the Machine itself, into ‘nonhuman forms of reasoning and even of consciousness’ (Picon, 2015: 12), into the smart infrastructure of a mediated city that no longer operates invisibly and in the background. Such an investigation confronts humanist assumptions about the city in a number of ways.

Firstly, unlike in the traditions of the genre, where techniques of visualizing support the detective’s epistemological struggle to render the world knowable and solvable (McHale, 1987: 9), in *Person of Interest* the power of such techniques is thrown into doubt. Specifically, the detectives’ street smarts conventionally draw on a ‘neglected perception’ of the city, based on a specialist encounter with the periphery of urban life denied to others citizens who instead experience such life instrumentally (Jameson, 2016: 4). *Person of Interest* speculates on how existence in a smart city might demand a more radically neglected mode of perception, a mode that escapes the detectives’ control, and in which they can never be wholly adept. Importantly, this is a mode of detection that promises to probe beyond the epistemological crises Jameson identifies with postmodern experience. It is a mode that not only admits to the disintegration of the formerly reliable reality of urban life, but also hints at the possibility of accessing another kind of city, an urban reality that exists beyond the human, beyond human habits of cognition and perception. After all, in the smart city, human orientation toward an apparently inert material world is forced to encounter the ‘strange autonomy and vitality’ (Shaviro, 2014: 48) of a space typically dismissed as a passive network of objects and tools. As Benjamin Bratton (2015: 203) points out, ‘it’s easy to forget that the Internet of Things is also an Internet for Things’, and that the majority of digital traffic is ‘machine-to-machine, or at least machine generated’, meaning that the tendency to prioritize the human user in this scenario, and to assume such processes are correlated by ‘the cognitive dispositions or instrumental intentions’ of such users, is simply wrong. The detectives grasp some sense of this by paying attention to the infrastructural background of city life: to its cameras, its cabling and, most importantly, its code. In focusing their investigation on the power of the algorithm, on GPS
tracking histories, on fibre-optic cables and on various other media objects and processes, the detectives begin to recognize how human behaviour is integrated with the technical environment of the city, and realize the extent to which pervasive urban smartness mediates citizen activity ‘below the threshold of conscious awareness’ (Hayles, 2006: 140). All of this implies that a global smartening of cities does not simply enable technology companies, and other non-state actors, to operate ‘with the force of a state’ (Bratton, 2015: 10), it also suggests, more radically, that computational urbanism tears open a gateway, a portal, to an ‘alien political geography’ (Bratton, 2015: 11), to city streets where preexisting boundaries between human and nonhuman worlds are dissolved and where the inherited politics of such streets are enfeebled.

Secondly, it is in this context that the detectives’ investigation into the Machine also moves us beyond mainstream critical responses to the smart city, responses that collectively repeat a liberal humanist call for newly smart citizens and evoke a romantic vision of authentic, unmediated street life (Hill, 2013; Hemment and Townsend, 2014). For example, Adam Greenfield’s pamphlet, Against the Smart City (2013), expresses a fear that smart approaches to urban governance subordinate the human to the technical infrastructure itself, meaning that any politics of smartness must be more explicitly human-centred. Greenfield condemns several prominent smart city schemes, including Rio’s Intelligent Operations Centre, as sites of ‘bleak stability’, visions of enclosed urban life that derive from ‘a discomfort with unpredictability, a positive terror of the unforeseen and emergent – in short, a palpable nervousness about the urban itself’ (Greenfield, 2013).

In this account, the political logic of the smart city simply reiterates the authoritarian ambitions of 20th-century modernism, in which urban planning is understood as a tool to devise and administer machine-like societies. Its form tends to be characterized by reference to that zealot of the machine age, Le Corbusier, who insisted that cities must be imposed on their environment: ‘Change the environment, construct a new one’ (Corbusier, 1964: 181). For Greenfield, the top-down smartening of cities imposes an inhibiting stability on urban experience – a ‘differentiated human ecology’ is subordinated to the universal equivalent of information, to ‘a very

---

5 The Radiant City, Corbusier’s magnum opus of the 1920s, is infamously dedicated to ‘AUTHORITY’, an authority that takes the form of a rational, doctrinal, capitalized, Plan. This plan is drawn up ‘well away from the frenzy’ of society (Scott, 1998, p. 112), resulting in a performatively grand vision that renders cities as sculptural forms, abstracted from their social conditions, and designed to be seen from a distance, usually from an aeroplane (Scott, 1998: 104).
particular kind of homeostasis’ (Greenfield, 2013). Indeed, such accounts highlight the present moment as one of ‘cybernetics redux’ (Townsend, 2013: 82), whereby a renewed political vision of the city-as-machine is linked to a naïve revival – by IBM and others – of the debunked sciences of ‘urban dynamics’ and system modelling.

Yet quite apart from preserving a closed disciplinary network susceptible to the threat of stagnation, the operating logic of the smart city in fact safeguards a sustainable future by activating and exploiting the dynamic potential of complex urban assemblages. In the language of cybernetics, smart governance does not simply reduce the city to a homeostatic system that can be managed from ‘outside’ – power in the smart city instead acknowledges and utilizes the fact that ‘there is no outside to these systems, that the observer is always included in them, that systems are their own environment and that their evolutionary trajectories are inherently open and unpredictable’ (Krivý, 2016: 9-10). Smart governance does not operate according to normative mechanisms but responds to the normalization of change as a shared condition, seeking instead to optimize difference by mediating the tendencies and orientations of the environment to which social and political activity is immanent. The ‘environment’ of the smart city is neither simply a space subject to technological domination, nor merely a background against which human citizenship unfolds, rather it is fundamentally inseparable from, and interconnected with, the human and nonhuman agencies that comprise the city (Gabrys, 2016: 242). Smart governance centres on the continual mediation of these relations, it is a software-enabled procedure of priming and modulating existing environmental forces rather than imposing something entirely new.

This leaves the fantasy of IBM’s Intelligent Operations Centre – a fantasy of human-controlled smartness enabled by a God’s eye view of city life – on shaky ground. As Orit Halpern (2014: 31-32) puts it, ‘[t]he reality is that the humans who watch these screens are often passive observers. For the most part, these systems run themselves [...] One might even ask why, under such conditions, build so many interfaces and visualize at all?’ Needless to say, the mendacity and hubris of smart city boosters does nothing to dispel the genuine political threat of preemptive environmental power. Responses to this threat must, though, resist the tendency to retreat toward practices of cognitive mapping that remain defined by their opposition to ‘big picture’ views and computational ‘topsight’ (Townsend, 2013: 70). As Jameson himself emphasizes, this desire for total access cannot compete with the totality of the system itself. Indeed, in spite of a positive urbanism,
sold to both city managers and smart citizens alike, one that promotes an ‘unbridled optimism for connection’ in order to reinforce myths about human agency and subjectivity (Culp, 2016: 7), the smart city can in fact only be encountered as a layer in what Benjamin Bratton (2015: xviii) calls the ‘accidental megastructure’ of planetary scale computation, a complex ‘stack’ that simply cannot be grasped as a whole.

*Person of Interest* science-fictionally extrapolates this crisis, reflecting upon and ultimately falling foul of its challenge to humanist values. As the series progresses, the narrative focus on the Machine develops into a conflict between two opposing systems of Artificial Intelligence. A rival system to the Machine enables the rise of a shadow municipal authority, a deep state superficially commanded by a rogue intelligence agent. Here though, regardless of scenes in which a giant screen again offers to grant ‘total access’, it is made clear that members of the new regime are human ‘assets’ to the system itself. Equally, in a move that runs counter to any established appeal for smart citizens, the detective protagonists often cede their investigative agency to the intelligence of the Machine, following its instructions, interacting with various objects and spaces as directed, and all the while remaining perplexed as to the purpose of these actions, or how they might add up. This is a cyborgian vision of urban smartness, where ‘some mechanisms for learning, understanding and reasoning [...] become intrinsic to the city itself, instead of residing in the mind of the humans who live in it’ (Picon, 2015: 29). Accordingly, the real threat of ‘total access’ is not simply a matter of how such a perspective might be exploited in nefarious ways, it is a threat to the dominance of human agency and autonomy itself. In *Person of Interest*, visualization is post-Singularity, and the relative authority of the human observer is no longer assured.6

These conditions are perhaps ideally disposed to instigate a speculative and non-anthropocentric account of smart citizenship, one that involves the relegation of established political powers derived from ‘agent-centered’ practices of visualizing, one that instead cultivates an ‘environmental sensibility’ in which it might become possible to confront aesthetic and relational entanglements that remain out of conscious reach (Hansen, 2015: 5). However, *Person of Interest* betrays the speculative power of its premise. In setting out to challenge our all-too-human expectations of the

---

6 According to techno-futurists, the ‘singularity’ is an as yet unrealized moment in human history at which the power of supposedly natural human intelligence is surpassed by the computational power of artificially intelligent machines. In many of the most excitable accounts, this moment precipitates a rapturous transcension of bodily limitation, a posthuman immortality.
city, the series alludes to the city’s immanent outside, to a world that is not ‘for us’. In the end, though, *Person of Interest* recuperates the weirdness of such a world as something recognizable, as something that submits to translation, to the dualistic certainty of subject-object relations, and thereby demonstrates how difficult it is to encounter such a world without simply visualizing it according to our usual procedures and practices. While the series acknowledges that a city governed by the Machine is not necessarily one organized ‘in our best interests’ (*POI*, 4:10), the implications of this are reduced to questions concerning the moral values at the basis of the Machine’s decision-making. The opposing AI systems come to represent a Manichean conflict between paternalistic and despotic iterations of computational reason. Hence, in response to his frustration at the apparent downgrading of their investigative powers, one of the detectives is told to ‘trust the process’ by another member of this team (*POI*, 4:22). Here, the belief in a big picture, a God’s eye view, remains powerful, even if it is one that cannot be accessed.7

The conditions of the Anthropocene demand that we reject the apparent annexation of all urban relations by a topological machine. These conditions demand that we no longer uphold the network as the only realistic form through which urban life can be visualized. Indeed, the more radical consequence of adopting a non-anthropocentric view of the smart city – and in fact any city – is that it is impossible to encounter such spaces on our own terms. In the case of the city presented in *Person of Interest*, this is because computational systems do not correlate to human intentions. As Shaviro (2016: 51) points out, ‘should computers ever actually come to think – they will do so in ways that are quite different from our own modes of thought’. Ultimately, then, speculation on a ‘smart’ city forces us to confront the fact that no urban space is the correlate of our visualization, and that we share urban spaces with a weird ecology of agencies that both exceeds our perceptual reach and is wholly indifferent to us (Shaviro, 2016: 68). What is truly threatening about this kind of smartness is that it comes from a ‘world-without-us’ (Thacker, 2011: 5), a world that can perhaps still be visualized but not in any way that remains recognizable.

---

7 This belief initially derives from an emotional bond that apparently develops between the Machine and its human assets. It is implied that the Machine comes to ‘care’ about the team of detectives, maybe even to ‘love’ them (*POI*, 4:21). The anthropomorphization of the two AI systems is conducted literally, particularly in scenes where the systems converse via ‘analogue interfaces’, namely human emissaries (*POI*, 4:10).
The Fungal City

How might we encounter a city that is not made in our image, a city that cannot coexist with a merely human city and what form might this encounter take? How might the practice of visualizing urban reality be displaced by ‘the subtraction of the human from the world’ (Thacker, 2011: 5), and how might the dissolution of the human citizen as Cartesian subject demand a negative mode of visualizing? To take these speculative questions seriously, let us turn to another detective: the eponymous Finch of Jeff VanderMeer’s 2011 novel. *Finch* is set in the fictional and fantastical city of Ambergris, but it also exploits the genre tropes of crime, detective and mystery novels. It is written in a pulpy style intentionally recalling the hardboiled fiction of Raymond Chandler, but it deals with the strange events surrounding the colonization of Ambergris city by a terrifying fungal species known as the ‘gray caps’. Human residents are subjugated by this occupying force, who, in order to institute a superficial level of civic control, coerce a group of collaborators to assume the role of detectives, thus forming a quasi-police force. The protagonist, John Finch, is a detective accidentally, forced to practice a certain mode of detection for the purposes of survival, as the only means to visualize an increasingly disturbing city that he no longer recognizes. As befits survival in any state of colonization, this is partly tactical, meaning that it involves a cognitive repression, where following initial exposure to something new and strange, Detective Finch may seek to ensure this strangeness is forced into the background, that it is ‘never looked at […] directly again’ (VanderMeer, 2011: 96). More significant, though, are the processes of detection that occur ecologically, meaning in relation (or even in unwitting collaboration) with the world Finch ostensibly attempts to solve (Shaviro, 2016: 12). This is a less than tactical process, one that no longer investigates a world on the presumption that, once visualized, it can be cognitively contained. Instead, it is a process that admits or accepts nonhuman modes of visualizing, modes that exceed and unsettle human habit, even as they remain intrinsic to its organization. All of which makes Detective Finch the perfect guide to an urban reality specific to the Anthropocene era.

This is partly due to the ‘Weird’ sensibility of the book, here understood in terms of an impulse or movement within speculative fiction; VanderMeer is very much associated with the contemporary form of this movement. Rather than a discrete genre, Weird fiction is interstitial, best identified in the uneasy sensation and feeling of dread generated by ‘the pursuit of some indefinable and perhaps maddeningly unreachable understanding of the world beyond the mundane’ (VanderMeer and VanderMeer, 2011: xv). It is in a
state of disquiet common to Weird fiction – a state induced by a suspension of apparently natural law, and with it the grounds for human rationality – that something transformative occurs, a ‘dark reverie’ experienced as ‘a kind of understanding even when something cannot be understood’ (VanderMeer and VanderMeer, 2011: xv). These fictional encounters are weird because they endeavour to articulate how certain phenomena and circumstances inadvertently trigger contact with a threshold, with the limit point of the human. Importantly, in the 21st century, weirdness has also contaminated critical thinking, wherein movement in various new directions is often impelled by the speculative energies of Weird fiction. Such movements diagnose the Anthropocene, the so-called age of the human, as an era in fact defined by a crisis in the human and in the formerly consensual certainties surrounding it. In a newly weird reality, the city is the central arena of this crisis, and VanderMeer’s city of Ambergris probes its ecological extremes.

Since the appearance of the gray caps, Ambergris has become a putrefying city. It is infected with something that causes it to mould, to sweat – its architecture is transforming into various kinds of fruiting bodies. Simply to get to the front door of his apartment, Finch must ‘negotiate a hothouse wetness’, to make his way along halls from which ‘[t]endrils and caps of red-and-green fungus’ sprout (VanderMeer, 2011: 41). In Ambergris, tools are no longer ‘useful’ in the conventional sense – the gun Finch has been issued is organic, squelchy; holding it is nauseating, and he wonders if he ‘should [...] have been feeding it’ (VanderMeer, 2011: 17). He is equally unsure whether the writhing, viscous infrastructure that enables communication with his gray cap superiors merely gives the appearance of life or is in fact actually alive. Even the boats Finch uses to traverse the city are marked by a basic ‘wrongness’, a ‘soft, fleshy’ look and feel (VanderMeer, 2011: 110). In short, the city of Ambergris is more than just a setting for human narratives: Finch involuntarily develops a perception of the city’s ‘vital materiality’ (Bennett, 2010: i), its tendencies and propensities, and the forces that it can exert. He comes to realize that urban life is simply not reducible to a comfortable set of relations between human subjects and nonhuman objects, but is instead a material conglomerate of ungraspable things, a ‘porous’ assemblage (Bennett, 2010: 36), the power of which is distributed at vastly different

---

8 I am, of course, thinking primarily of ‘speculative realism’ and its influence on the post-humanities. For theorists associated with this movement, the weird writings of H.P. Lovecraft are often a touchstone, and while I recognize the important philosophical distinctions between an object-oriented and a processual form of speculation, here I treat the aesthetics of such weirdness as a phenomenon that overcomes territorial disputes.
scales and thus unsettles such comfort. In dealing with the consequences of living in a city where stabilizing dualistic certainties moulder away, the novel seeks to re-familiarize us with the weirdness of urban experience. It recognizes the present moment as one at which, in Timothy Morton’s words, ‘[t]he background ceases to be a background’ (Morton, 2013: 102), a destabilizing, perhaps terrifying moment at which various relations and entanglements – long in existence but rarely acknowledged – begin to interrupt the way we visualize cities.

Morton sets out his own theory of this interruption in reference to the ‘hyperobject’, a concept to describe phenomena ‘that are massively distributed in time and space relative to humans’ (2013: 1). His account centres on global warming, arguing that our floundering investigations into the broader phenomenon of climate ‘unground the human by forcing it back onto the ground’ (2013: 18), which is to say that such investigations elicit a new kind of material and ecological awareness. Among other factors, this is an issue of scale and proximity, an ecological collision between the quantum and the relative; hyperobjects are nonhuman entities that define our distant future, a future that presses intimately on the present. For Morton, the Anthropocene is characterized by this paradoxical encounter with reality: an ecological phenomenon like climate is never objectively present, it remains ‘withdrawn from humans’ (2013: 12), and yet its presence is felt in even the most mundane of daily practices, it remains ‘too vast to be ignored’ (2013: 145). Far from the optimism and positivity of green capitalism, this is then a matter of ‘dark ecology’ (Morton, 2010: 17), a weird condition in which the palpable immediacy of nonhuman agencies remains nonetheless murky, a condition that repudiates any desire for transparency: ‘There is no metaposition from which we can make ecological pronouncements.’

*Finch* treats the city itself as a kind of hyperobject, doing so by revealing how detective Finch’s techniques of visualizing are far from autonomous, and by exploring how these techniques remain inseparably entangled with the agentic forces of the material world. After all, for Morton, the noir-ish detective is the exemplary explorer of dark ecology: ‘The noir narrator begins investigating a supposedly external situation, from a supposedly neutral point of view, only to discover that she or he is implicated in it’ (Morton, 2010: 16-17). VanderMeer deftly cultivates these weirder tendencies of the genre’s conventional territory. In an apparent nod to what Jameson describes as ‘the most characteristic leitmotif’ of Raymond Chandler’s detective fiction, Finch lives in a former hotel, chosen because he can survey the whole city from the roof of the building, ‘looking out of one world, peering vaguely or attentively across into another’ (Jameson, 2016: 11). Or, in Chandleresque
staccato, from the roof of the hotel Finch can ‘see it all from on high. See it clean and remote’ (VanderMeer, 2011: 146). Initially, this perspective helps him map Ambergris, literally redrawing a map that was produced before colonization so as to record the city’s outgrowths and mutations. The physical map is, though, largely symbolic. Like any hardboiled detective, Finch holds a map of the city in his mind’s eye, he convinces himself that he ‘[k]nows every inch of Ambergris. Even the parts he hasn’t yet visited. Even the parts still changing’ (VanderMeer, 2011: 75). Nonetheless, his dogged trust in this totalizing knowledge, premised as it is on visualizing from a position of disembodied distance, soon dissolves as he comes to realize that any attempt to map a human city – symbolically or cognitively – occludes as much as it reveals. Instead, he finds himself entangled in ‘something that his map could not encompass’ (VanderMeer, 2011: 331). This is partly because the gray caps exert their power at scales utterly unrecognizable to Finch: the human residents of Ambergris are surveilled by ‘spore cameras’ (VanderMeer, 2011: 101), by clouds of microscopic particles that record ‘trillions of images from all over the city’ (VanderMeer, 2011: 5). But the crisis in cognitive mapping is also a mechanism through which the novel can speculatively explore ‘an aesthetic of affective mapping’ to use Shaviro’s term for his reworking of Jameson’s concept (Shaviro, 2010: 6). In Finch, the detective's street smarts are explicitly conditioned by dark ecology – detection is a practice that involves mapping the affective weirdness of urban life, its ontogenetic entanglements, wherein the capacity for knowing is inseparable from the materiality of the investigation, from its spaces and times.

In Ambergris, for example, colonization occurs on the level of the body. Exposed to all manner of spores, every human resident is changing, altering, becoming other. Finch’s partner, Wyte, experiences the extreme of this fungal transformation, monstrously colonized beyond ‘the point of no return’ (VanderMeer, 2011: 187). At the other end of the spectrum, and in an echo of the benign selflessness characteristic of the rhetoric surrounding the smart city (wherein we give ourselves up to automated processes that mediate how we perceive and move through urban spaces), a group of citizens known as ‘partials’ affirm infection as augmentation, as a posthuman enhancement that enables, for instance, ‘heightened powers of sight’ (VanderMeer, 2011: 10). Like his hardboiled forbears, Finch aims to shrewdly navigate such circumstances, refusing to renounce his humanity entirely, but willing to exploit its new penetrability, its precariousness. To survive the ‘kind of hell’ (VanderMeer, 2011: 267) that is the city after the human, it is necessary to ‘adapt just enough’ (2011: 299), to visualize the city differently without entirely relinquishing the basis on which such visualization might
be understood. In this weird city, investigative technique includes seeding the corpse of a murder victim with spores that cultivate the growth of a ‘memory bulb’. Once ripe, Finch can eat the bulb and, in so doing, harvest the memories of the victim. The visceral images he experiences as a result accelerate an ontological transformation. His perception of the city is no longer his own, the reality of his urban experience is in some way possessed: ‘Each time he ate a memory bulb, he became someone else. Different when he returned’ (VanderMeer, 2011: 45).

Accordingly, any claim to autonomy, any allusion to the wily street smarts of Chandleresque detection, is little more than subterfuge, little more than cover for Finch’s actual terror at the situation. This terror is rooted not simply in the loss of separation that undergirds human identity (we later discover that ‘Finch’ is not, in fact, his real name, and that the identities of almost everyone he is close to are inventions), it is a horror that derives from the loss of any real separation between human and nonhuman, from a realization that humans are always already partial, always ‘confederations of tools, microbes, minerals, sounds, and other “foreign” materialities’ (Bennett, 2010: 36). In short, the particular sensibility of Ambergris forces Finch to confront ‘the impossibility of the human’ (Kember and Zylinska, 2012: 17), that there is nothing to return to, and that ‘our’ experience of urban life always occurs beyond itself. His investigation thus confronts the emergent, processual nature of urban agency, an agency that ‘cannot be designated as an attribute of subjects or objects’ (Barad, 2007: 178), and indeed cannot be visualized cybernetically, neither as a transparent system of connection, nor as a set of inter-actions between an apparently invariable division of human and nonhuman entities. On the contrary, as Karen Barad contends, ‘separately determinate entities do not preexist their “intra-action”’ (2007: 178, my emphasis), which is to say that the citizen-subject cannot visualize an object-world in its totality precisely because human and nonhuman bodies are mutually constitutive – differential materializations of a city that is iteratively actualized through the open-ended dynamics of such relations (Barad, 2007: 175-240). What Finch’s experience demonstrates is that to visualize such entanglements is to become unraveled as a subject. The transcendent dream of total connection, total illumination, is, in the act of becoming spore-like, displaced by a weird immanence, a ‘negative immanence’ (Thacker, 2014: 127) in which being ‘everywhere and nowhere at once’ (VanderMeer, 2011: 200) means being entangled with smart, agentic, vital things that are not for us, that remain withdrawn, inaccessible, in darkness.

In its exposure to the peculiar temporality of the Anthropocene city, Finch’s investigation performs a traumatic survey of this abyss. His inquiries
come into focus at the end of the novel, where, inverting our idea of coloniza-
tion, we learn that the gray caps in fact occupied the space on which the
city is founded long before it was settled by humans and came to be called
Ambergris.\(^9\) Hence, where in *Person of Interest* smartness threatens to
foreclose the future, here it provokes an encounter with deep time, with a
weird history that is not simply human history. On one level, this means that,
in spite of the current preoccupation with digital smartness, it is important
to recognize the extent to which the ‘morphological evolution of our cities’
(Mattern, 2015: 6) has always been technologically mediated, together with
the fact that these processes began long before the era of modern media
that tends to remain the focus of critical inquiry. The wider implication of
this archaeology is that viewing science-fictional technologies of urban
smartness in the context of ‘more primordial relationships with territory’
(Bratton, 2015: 147-148), forces us to problematize the assumption that there
is anything uniquely contemporary about an urban experience mediated by
affective forces that cannot be visualized, that cannot be known. Crucially,
this also demands that we acknowledge the weird intersection of different
temporalities, and that, in the Anthropocene, the human timescale of urban
development endures destabilizing humility in exposure to the geological
timescale of planetary change. In VanderMeer’s other tales of Ambergris,
the disjunctive synthesis of this temporarily plays out underground, in the
gray caps’ subterranean refuge, where time passes differently than it does
on the surface (VanderMeer, 2004: 180). But, for Finch, too, the formerly
natural space-time of the city is shattered: ‘Suddenly, the city was several
cities. Time was several times’ (VanderMeer, 2011: 193). So if, in *Person of
Interest*, visualizing the city remains basically procedural and, in some
sense, grounded, here Finch is a detective entirely adrift in the abyssal
darkness of his investigation.

Conclusion

In lieu of a conclusion that seeks to optimistically reclaim the weirdness
of this scenario, or to neatly bracket out its paradoxes, I would instead

---

\(^9\) In the self-contained narrative of *Finch*, this occurs as something of a reveal, but VanderMeer
explores the same issue in a series of novels and short stories about Ambergris. Spanning different
moments in its history, these glimpses collectively assemble a fabulated and highly reflexive
account of the ancient city-state, an account mediated by incomplete government records,
diaries of dubious provenance, academic disputes, inherited myths, and speculative hunches.
In its nonlinear dispersal and decomposition, the history of Ambergris is itself fungal.
like to end by restating what the seemingly paralyzing detections of dark urban ecology might contribute to an urbanism for the Anthropocene era. It should now be clear that the ‘ecological reason’ (Bratton, 2015: 181) that dominates plans for the smartening of cities, whereby cities are visualized as closed systems that can be sustainably managed, is pitifully limited in its grasp of urban life, wretchedly dependent on an image of the city that is itself subordinated to our knowledge of it. The multiple crises of the Anthropocene compel us to visualize an exteriority to urban experience that is not owned by us, to encounter cities on a geo-material and even cosmic scale. This is crystallized in the current fascination with urban smartness, which unwittingly probes a form of smartness that not only differs from the restricted anthropocentric idea that smartness is innately ‘human’, but also challenges long established presumptions concerning the discrete, uncontaminated nature of this smartness. I have, then, suggested that, to visualize the 21st century street, we must first recognize the actually existing weirdness of a situation in which humanist powers of ‘positive knowledge’ (Shaviro, 2014: 136) prove finite and inadequate. In their place, we might cultivate a more speculative relation with urban spaces and times, one that involves mapping what it feels like to live in a period of rapid urbanization, and in ever more intimate contact with the thingly inaccessibility of contemporary media. In other words, any form of critical urbanism must foster an affective and aesthetic relation more suited to the city’s noncognitive entanglements and becoming. As Shaviro (2014: 156) points out, aesthetic feeling is ‘the primordial form of all experience’, and immanent to all relations, all cognitive perception. It does not follow, however, that aesthetic encounters necessarily involve illuminating and thereby rationalizing these entanglements. On the contrary, and as borne out by Detective Finch’s investigation, such encounters involve confronting the fundamental impossibility of rendering the inaccessible accessible and that, instead of striving to do so, we must submit to a strange vitality that might ‘reveal inaccessibility in and of itself’, in the form of urban experiences which ‘make accessible the inaccessible – in its inaccessibility’ (Thacker, 2014: 96). In the paradoxical entanglement of dark and weird ecologies, the speculative and aesthetic role of detection is to ‘probe this darkness, so that we may immerse ourselves within it, without denaturing it by lighting it up’ (Shaviro, 2016: 44). Here, at the limits of our powers to visualize, in a visualization of impossibility, we might detect radically different cities, both new and old. Terrifying as this might be, it may also stimulate the speculative urban relations a ‘smarter planet’ so urgently demands.
Bibliography


About the author

**Rob Coley** is a senior lecturer at the School of Film and Media, University of Lincoln, UK. He is the author (with Dean Lockwood) of *Cloud Time: The Inception of the Future* (Zero Books, 2012), *Photography in the Middle: Dispatches on Media Ecologies and Aesthetics* (Punctum Books, 2016) and coeditor of a special ‘drone culture’ issue of the journal *Culture Machine* (2015).