Envisioning Posthuman Legal Futures Through Code and Space

Book review: Jannice Käll, *Posthuman Property and Law: Commodification and Control Through Information, Smart Spaces and Artificial Intelligence, Routledge* 2022, pp. 248

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Abstract: *This book review emphasises Käll's exploration of law beyond conventional 'legal texts', infiltrating private homes, urban spaces, human and non-human bodies within advanced capitalism. Käll advocates for a future posthuman, transcending anthropocentrism, jurisprudence, rooted in deeply relational ethics in an increasingly data-driven society. Synthesizing my spatio-legal perspectives with Käll's theoretical approach, the review scrutinises key ideas, such as the implications of code/space in urban settings, its influence on demarcating private and public realms, and its trajectory towards a posthuman urban information ethics. It dissects intra-actions between bodies, technology, and space, emphasizing the agentic role and affective qualities of information in shaping law, property, and urban environments.*

Keywords: code/space, posthuman, smart cities, property law, information ethics, affect

1. Introduction

Algorithmic technologies bring forward challenges to law, requiring exploration of novel ontologies and epistemologies transcending human and non-human long-established Western dichotomies (Tedeschi & Viljanen 2023). This encompasses the growing prevalence of data-driven smart urban environments ('code/space';

Kitchin & Dodge 2011) and homes, along with the commodification of affect (or pre-conscious bodily responses) and information in the digital age. This rapidly evolving context necessitates scholars to radically reimagine law's role and explore innovative socio-spatio-legal prospects. Nevertheless, there remains a scarcity of works specifically addressing the challenging convergence and intersection of law, code/technology, and space, attempting to lay the foundation for innovative legal future scenarios. Jannice Käll's book rises to this challenge and aids the reader in envisioning alternative futures by innovatively reframing law and property in a posthuman perspective. In the book she illustrates how e.g. law manifests affectively and materialises itself in 'many ways other than "legal

texts"' (Käll 2022: 55), for example permeating private property homes as well as human and non-human bodies, gradually evolving into bio-political regimes of control of bodies and urban spaces in advanced capitalism. To counter this, Käll advocates for a posthuman jurisprudence rooted into 'a deeply relational ethics' (ibid.: 56) that encompasses 'human and non-human bodies … as opposed to an ethics based on human superiority and inviolability' (ibid.: 9).

This book review proposes a reading of Käll's original work, simultaneously integrating my own spatio-legal theoretical perspectives. While this approach cannot fully encapsulate the wide array of themes and theories ambitiously covered in Käll's book, it will focus specifically on a key aspect of Käll's work, exploring the potential for shaping socio-spatio-legal futures from a posthuman perspective. It delves into how code/space unfolds in urban settings, affectively influences distinctions between private homes, urban spaces, and persons and things (subject/object), and ultimately propels towards a posthuman urban information ethics.

2. Law, Code, and Space
Code/space, as defined by Käll drawing upon Kitchin & Dodge's book *Code/space: Software and everyday life* (2011), refers to

> spaces that are intrinsically co-dependent of software to perform their role as spaces. As they [Kitchin & Dodge] argue, coded spaces may be perceived as spaces in which software makes a difference to space, for example, if the check-in area at an airport does not function, people cannot check in and the airport therefore prevents travel. If the code in the cashier function stops working at the checkout a supermarket, the supermarket also loses its sales function and may therefore be perceived as a warehouse and not a store. (Käll 2022: 103–104)

As Käll reminds us in other sections of the book, space is not merely a fixed, passive entity ('something that can be predicted, engineered and optimized' (Käll 2022: 107)) or an object separate from the human, agentic subject,[1] but rather an active matter 'intra-acting'[2] with human and non-human bodies, ontologically so from the outset. In an increasingly datafied and urbanised society, alternative posthuman ontologies of the urban and uncertainties about how society may be regulated emerge as Artificial Intelligence (AI) and technology (what I shortly call 'code') carve their way into human bodies and the urban space itself (Tedeschi 2022).[3] Casilli, for example, notes how 'ubiquitous computing pervades reality by saturating the actual space of the cities and by infusing physical bodies' (Casilli 2010: 2).[4]

Understanding how law should navigate the challenges of increasingly datafied societies necessitates delving into this ontology of the urban, which I believe is presupposed in Käll's text. Here, human bodies, technologies, and spaces intra-act and (per)form agential cuts[5] within urban environments. Mackenzie (2002), for example, elaborates on the ontology behind the entanglement between e.g. digital objects (coded bodies) and space, and refers to bordering, touching, and a contamination that occurs between such different entities.[6] How do coded bodies actualize and materialise? How do they express their latent potentialities? And how do these potentialities overflow and impact other objects and, ultimately, human bodies and

1. See the scholarly works of e.g. Massey (2008); Philippopoulos-Mihalopoulos (2015); Pavoni (2018).
2. The concept of intra-action is here repurposed from Barad (2007).
3. See Keating's (2023) technology's ontogenesis.
4. See Greenfield (2006, 2017).
5. This is again repurposed from Barad (2007). See also footnote 2.
6. In this text, I am using entities and bodies interchangeably.

(urban) space? Information is the material element crossing boundaries between (human and non-human) bodies. We, ourselves, are informational entities.[7] Information is thus the agentic element entangled with and overflowing from bodies, bridging them materially, even moulding them through affect. Affect is what emerges out of intra-actions (Barad 2007) between bodies, where bodies imprint forces on each other.[8]

How does this translate into law, property, and future socio-spatio-legal prospects? I perceive (at least) two intertwined effects, both examined in Käll's text. The first effect suggests that if, as outlined earlier, in the ontology of the urban, coded bodies' information 'overflows', then the smart, AI-driven devices increasingly infiltrating our homes do not remain merely confined within private-property spaces and objects, but rather extend into other city spaces. As Käll articulates: 'The phenomena that integrate the smart home with the city also include services that render the home into a market space' (Käll 2022: 104). If so, we find ourselves compelled to reconsider what the urban environment represents: not just a 'smart city', but rather a shift towards a post-urban era, where the clear, distinct separation between private property homes and other spatialities may no longer hold. How would this reframing of the urban impact socio-spatio-legal landscapes? Drawing on Braidotti (2013), among others, Käll envisions a future scenario employing posthuman cartographies as alternative tools unveiling invisible maps of power (such as the role of advanced capitalism and property control

mechanisms)[9] embedded in (smart) cities, as well as all the senses, affectivities, and everyday environments and personal experiences ('lifeworlds') (Käll 2022: 109) currently overlooked due to increasingly digitised urban spaces.

The translation of this urban ontology into law and property generates another effect: the increased dematerialisation and commodification of information within cities, shaping an 'information-centred modelling of the city' (Käll 2022: 108), whereby the urban environment becomes 'a complex system that can be controlled, corrected, and secured, if the right (computer) analysis is applied to it' (Tedeschi 2019: 154). How does this happen? As Käll explains, under advanced capitalism, information extracted from e.g. the (urban) bodies and spaces it belongs to becomes dematerialised and commodified. Thus, information evolves into 'posthuman property' (Käll 2022: 60), surpassing traditional distinctions between subjects and objects, persons and spaces, and private and public divide: 'Property goes to places and spaces where capital wants it to go, even if this is unthinkable in the general legal tradition of property' (ibid.: 115), where a legal subject would possess and entirely control a (passive) object.

In short, elements like knowledge, information, and data are disconnected from their 'sites of production, transformation, and distribution' (Käll 2022: 60), i.e., from the actual bodies and geographies to which they belong. They are dematerialized, commodified, thus transitioning into posthuman property. Simultaneously, from a biopolitical perspective, bodies and spaces increasingly fall under surveillance and control.[10] In other words, the overflowing information is rematerialized and affectively (re)channelled into biopolitical control over bodies and spaces. It takes the form of e.g. invisible yet material

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7. Here see Canguilhem, (1991 [1966]), whom Simondon (2020 [2005]) drew from; and Floridi's (2014) infosphere.

8. 'Since affect precedes the constitution of the human, it can be considered as pertaining to a nonhuman or inhuman domain' (Bueno & Schettini 2022: 123). The non-human character of affect is emphasised by e.g. Deleuze (1988). See also Ash (2015).

9. As Käll explained, property firmly remains a form of spatial control in the Western society. See also Davies (2020), whom Käll drew from.

10. See Deleuze's (1992) societies of control.

and affective power structures, organizing and monitoring bodies through technology while eliminating disorder and unpredictability from the urban space. In Käll's text, posthuman property thus becomes the multiple ways in which bodies are held up together as space via technology: how power structures[11] produce and move bodies, or how their movements are curtailed or completely stopped, based on the information and affective forces involved.

> This kind of holding up may be understood as unfolding as a specific form of design in which technological logics meet other norms such as racism, sexism, etc. to create a powerful system for privileging specific relationships between bodies over others. (Käll 2022: 116)

3. Towards a Posthuman Urban Information Ethics

This dynamic also influences our conceptualisation of the subject and its agency. In new materialist and posthuman perspectives, agency is not a characteristic solely associated with the human body. Conversely, agency is affectively diffused and distributed across both human and non-human entities. How these entities affectively act upon each other, compose with each other, and are held together become the focus of what Käll terms a posthuman ethics: a creation of knowledge and a drawing together of bodies 'in ways that escape, or at least have the potential to escape, the logics of surveillance, platform entanglements or simply the informatics of domination' (Käll 2022: 121).

Translating this back to the urban landscape, the posthuman condition compels us to

11. See e.g. platform capitalism, and the use and commodification of affect and emotions in social media platforms; and, in the end, law itself, as 'an apparatus of power that inscribes itself on the bodies' (Philippopoulos-Mihalopoulos 2014).

embody and act as predictable bodies navigating secure yet hyper-regulated spaces. Through information channelled via e.g. control apparatuses and the increased digitalisation and datafication of the urban, bodies are affectively moulded, becoming, themselves, part of posthuman property:

> the way that information is dematerialized, and our lives are enmeshed in digital technologies, occur in a manner that makes us feel comfortable, if anything at all. The changing boundaries of property control taking place here is alluring in this sense, as it works on an affective register that makes it hard to either see or resist. (Käll 2022: 142)

Responding to this, the posthuman ethics, cartographies, and jurisprudence that Käll proposes could be complemented by a specific theorisation and implementation of an urban information ethics. This ethics would acknowledge how information and its use and commodification materially 'affect' (thus, have ethical consequences on) the urban realm and bodies navigating it (Tedeschi 2019), beyond current legislative protections and regulations (see e.g. property rights and data regulation rights, Käll 2022: 140). It would unearth the agentic role of information in socio-spatio-legal processes and the (often) hidden and underestimated affective quality of law and e.g. urban policies within advanced capitalism.

4. Conclusions

This book review emphasizes the shifting boundaries between human and non-human realms, spanning private homes and urban spaces. It employs a theoretical framework of posthumanism applied within the socio-spatio-legal context of a world governed by technology and smart environments through the commodification of information and affect. These shifting boundaries prompt scholars to reconsider and reconceptualise legal futures through a novel

understanding of code and (urban) space, distributed agency, ethics, and, ultimately, the very nature of property.

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