Animals and urban gentrification: Displacement and injustice in the trans-species city

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Abstract
Urban gentrification debates are essentially anthropocentric, ignoring how the presence of animals at the gentrification frontier can promote or oppose capital accumulation. By way of corrective, this article reviews geographical work on the relations of human and non-human animals in gentrifying neighbourhoods, arguing for a trans-species perspective on urban gentrification that considers the different ways animals are caught up in gentrification struggles. Noting that gentrification sometimes involves the violent and unjust displacement of non-human animals, the article concludes by arguing that anti-gentrification discourse might usefully place more emphasis on the animal ‘right to the city’.

Keywords
animal geographies, biopolitics, displacement, gentrification, trans-species urban theory

I Introduction
In the wake of calls to develop a ‘more-than-human’ urban geography (Braun, 2005), the presence of animals in cities has attracted increasing and deserved attention from urban scholars (e.g. Arcari et al., 2020; Franklin, 2017; Holmberg, 2013; Houston, 2019; Steele et al., 2019). Although some of this work positions non-human animals as present in cities only to the extent that they are permitted by humans (e.g. as domesticated pets, working animals or sources of food), an emerging body of work on urban animal geographies has emphasised that animals can be active and resourceful urban agents (Barua and Sinha, 2017; Davies and Brooks, 2019; Hodgetts and Lorimer, 2020). While such accounts of animal agency have perhaps not fully dislodged the anthropocentrism of urban studies, they have nonetheless helped flesh out the bones of a putative ‘trans-species’ urban theory that explores how cities are constituted through, and produced by, the relationships between human and non-human animal dwellers (see Horkova, 2008; Holmberg, 2015; Wolch et al., 1995). Such theorisation is of more than academic import, promoting forms of planning that improve the quality of urban life for animals and humans alike (Maller, 2018).

In this article, we explore the way that relations between human and non-human animals shape the uneven production of space by focusing on perhaps the most-widely studied
phenomena in contemporary urban geography: gentrification. Although sometimes depicted as mired in endless debates about supply- versus demand-side explanations of land revaluation (Cartier, 2017), gentrification studies are arguably overcoming this intellectual impasse by embracing assemblage theories and exploring the role of the non-human in enhancing the affective and aesthetic qualities that add value to property (e.g. De Haan, 2018; Linz, 2017; Kern, 2015). One notable tradition here has been the identification of green or eco-gentrification, whereby environmental remediation and green place-making, either inadvertently or otherwise, creates enclaves of environmental privilege excluding lower income residents (Quastel, 2009). Here, a sizeable literature now details how the creation of green corridors, public open spaces, urban farms, renewed waterways and pollution-reduction zones frequently results in the inflation of property values in adjacent neighbourhoods and transforms lower income or mixed communities into more affluent and exclusionary ones (Anguelovski et al., 2019; Dooling, 2009; Pearsall, 2012).

Identifying where green initiatives displace long-time residents – and where they do not – has witnessed eco-gentrification studies grappling with questions of both social and environmental justice (Anguelovski et al., 2019). Yet despite their emphasis on the non-human, and related questions of ‘nature’, eco-gentrification studies make remarkably little of the way that non-human animal life is impacted by gentrification (for a notable exception, see Hunold, 2020). Perhaps this is not surprising: by definition, gentrification debates are concerned with the displacement of lower class residents by more affluent ones (Elliott-Cooper et al., 2020). But what about the non-human occupants of the city? Is it too fanciful to argue that the remit of urban studies, inflected by questions of environmental justice, needs to consider the impact of gentrification on non-human animals? That some animals might be the victims of gentrification? Or, conversely, that other animals might be part of the infrastructures of gentrification that exclude and displace?

This article explores such questions in the light of trans-species urban theories that consider how urbanisation impacts on non-human animals, how city dwellers react to animals in their midst and how animals are objectified in urban planning processes (Wolch, 1995). We do this by outlining a number of instances where non-human animals have been caught up in gentrification struggles, their lives variously ‘intermeshed with human others who also live at the edge of eviction’ (Gordon, 2020: 4) or the gentrifying classes that displace and replace them (Tissot, 2011). Like the wider gentrification literature, this review is tipped towards the cities of North America and Western Europe, but recognising gentrification has become an increasingly global strategy involving transnational developers who form alliances with local state actors (Wyly, 2015), it also engages with examples from Southern Africa, Central Asia and Latin America to show that the ‘biopolitics of gentrification’ plays out differently in varied contexts. Arguing that this urban specificity demands careful scrutiny of how animals are either valued or vilified at the gentrification frontier, we also use this review as an opportunity to engage with the thorny problematic of the ‘right to the city’ by exploring whether the displacement of particular animal species from gentrifying neighbourhoods can be regarded as an infringement of their ‘right to remain’.

II Trans-Species Urban Theory

Urban theory has, since its beginnings in classical sociology, emphatically emphasised human agency. This anthropomorphism is mirrored in widespread myths about cities, which are depicted as a thoroughly human achievement: Hinchliffe (1999) suggests that a foundational story of cities is that they are cultured spaces
from which wild nature has been expunged. This is not to say that nature does not exist within cities: rather, it is the case that ‘wild’ (first) nature has been supplanted by ‘grey’ (second) nature (Wachsmuth and Angelo, 2018). Technologically and socially mediated notions of biosociality reign, with limited irruptions of the ‘wild’ tolerated primarily as a way of reminding urban dwellers of their privileged precedence. For example, when writing of the boundary-making that separates nature and culture, Anderson (1995: 278) draws attention to urban zoos as domesticated spaces within which ‘the raw material of nature is crafted into an iconic representation of human capacity for order and control’. In much of the global North, this domestication was part of a wider biopolitical project that sought to equate particular forms of human and non-human life: as cities came to be read as monuments to progress, Uddin (2015) argues that zoos came to represent the triumph of white civility over black, animal, savagery.

Domestication is evident in other urban geographies making particular distinctions between human and non-human animals. For example, some animal species have been deemed an environmental nuisance when encountered in the urban, subject to discourses of verminisation that argue they need to be exterminated to promote public health (e.g. see Craddock, 2000, on rats in San Francisco; Nadal, 2019, on rabies control via dog extermination in India; Connolly, 2017, on SARS and bird-keeping in Georgetown, Malaysia). Such discourses have generally depicted animals as epidemic villains, not victims, and presented a one-sided case for their forcible sterilisation, extermination or expulsion from the city. On occasion, such concerns about disease have entwined with moral anxieties about unruly animal behaviour, as Philo (1995) notes in his analyses of the 19th-century removal of livestock from London: cattle slaughter, milk production and other ‘noxious’ trades requiring animals’ presence in the city were eradicated to remove the ‘unseemly sight’ of animals defecating and rutting in the streets. Smallholdings, shambles, wet markets, paddocks and stables have also been removed from many cities in the global North, albeit their replacement with suburban gardens encouraged city dwellers to incorporate domesticated animals into their households as pets (Howell, 2015).

This might suggest that animals only persist in cities where they have been thoroughly socialised and domesticated, constituting ‘lively commodities’ whose liveliness is subject to considerable constraint (Rock, 2013). However, this ignores the multiplicity of species that continue to fly over, dig under, swim through or otherwise colonise the city. Wolch (2002) suggests that in North American cities, these include significant numbers of amphibians, bears, cougars, coyotes, deer, foxes, raccoons, reptiles, skunks, squirrels, starlings and colonies of feral cats. In other urban contexts, geographers have explored the contested presence and mobilities of species including macaque and rhesus monkeys, fruit-bats, peregrine falcons, pigeons, bats, gulls, coywolves, feral chickens, cockatoos, raccoons, snakes and wild boar (Gordon, 2020; Hinchliffe and Whatmore, 2006; Houston, 2019; Luther, 2013; Maller and Farahani, 2018; Philo and Wilbert, 2000, Rutherford, 2018, Stillfried et al., 2017; Thomson, 2007; Yeo and Neo, 2010). Some of these species have to negotiate a bewildering range of environmental stressors – noises, smells, textures, tastes – that are quite alien to them (Hodgetts and Lorimer, 2020). In spite of this, many animal communities thrive in cities, making remarkable behavioural adaptations to exploit the affordances of urban landscapes as breeding and feeding sites (Bateman and Fleming, 2012). Indeed, some species have become more widespread in urban than rural spaces. Hinchliffe (1999) refers to such synanthropic urban animals as city-nature formations,
adaptive species that could not readily survive in the ‘wild’.

Griffiths et al. (2000: 58) conclude that despite modern urbanism’s preoccupation ‘with the elimination of unregulated nature’, the realisation of a post-natural city is impossible (see also Lewis, 2020, on the animal occupation of cities under COVID-19). The idea of the anthropocentric city, founded on ontological binaries—humans/non-humans, organic/artificial, wild/tame—has hence been found wanting, with the rise of trans-species urban theory a notable response. Such theory de-centres anthropological influence and aims to acknowledge animals as active participants in urban social life. For Wolch (2002: 721–735), this is vital to progress urban theory and recognise an ‘anima urbis’ where ‘the breath, life, soul and spirit of the city...is embodied in its animal as well as human lifeforms’. The challenge here has been to produce accounts that are not simply human geographies of animals. Philo and Wilbert (2000) suggest this involves overcoming the established processes of Othering that prevent us (as humans) from seeing non-human animals as significant urban actors in their own right. Unsurprisingly, work that has attempted this has focused on charismatic species in urban space—especially those larger mammals whose mobilities are most legible to us (Gibbs, 2020; Hodgetts and Lorimer, 2020). There are though notable dangers in attributing subjectivity and intentionality to these animals, with their behaviour not always readily understood via the familiar tools of anthropological or sociological enquiry (Holmberg, 2015; Hovorka, 2008; Ingold, 1983). Likewise, notions of agency appear particularly problematic when applied to those ‘almost-animals’ (including microfauna and microbial life) whose capacity to observe, learn and adapt seems limited (Gibbs, 2020). Yet as a wholesale rejection of the ‘familiar architecture of urban analysis’ (Barua and Sinha, 2019: 1170), trans-species urban theory insists that humans adapt to animals’ presence as much as animals adapt to living alongside humans. It hence positions urbanisation as a process that transforms the lifeworlds of humans and non-humans alike—something that is vitally important to remember when we consider the impacts of gentrification.

In the remainder of this article, we explore the intersections between non-human life and urban gentrification by addressing the different ways animals are implicated in the revaluation of cities. In so doing, we highlight some of the ways that animals are enrolled in gentrification as more-or-less active agents of change but also show that they can be its victims. We do this to emphasise the importance of cultivating a more equitable multi-species city (Van Dooren and Rose, 2012), but do so mindful of the limitations of analyses which too-often ignore those animals ‘off-staged’ in urban animal research: most notably, those animals captive in laboratories, slaughterhouses and zoos (Acari et al., 2020; see also Gibbs, 2020). Although there are clear ways in which the inclusion of such animals into analyses of metabolic urban processes might help us cast the dynamics of gentrification in a new light, the majority of the work we discuss here instead focuses on the ways that human lives at the gentrification frontier entangle with all number of feral, wild and stray animals and the way these are distinguished from, or transformed into, companion animals or pets. To these ends, the remainder of this article offers four cuts through the literature. While the first of these considers the displacement of animals at the gentrification frontier, the second conversely addresses the way some animals are deliberately enrolled in urban up-scaling and green gentrification projects. The third section considers the way animals mark out the shifting boundaries between tamed and wild urban spaces, while the fourth explores the way animals become a form of ‘living property’ used by gentrifiers to mark out territory. Noting that in all of these situations, animals are subject to biopolitics that renders them as ‘less than
human’ occupants of the city, in the final, concluding section, we engage with questions of animal rights and argue that gentrification scholarships needs to address the question of which animals have the ‘right to remain’ in cities where both devalued animals and stigmatised people are displaced in the pursuit of capital accumulation.

III Displacing the Animal

One dominant way of figuring gentrification has been as the rolling-out of a gentrification ‘frontier’, a language redolent of colonialism and the desire to subjugate Otherness. In Neil Smith’s now-classic account of the Lower East Side, for example, this involved the annexation of what was seen as an ‘untamed’ neighbourhood characterised by street homelessness, sex workers and drug users. Described as ‘feral’ populations, these people marked out the Lower East Side as a place requiring forms of urban sanitation, with these ‘abject’ populations ultimately displaced by white, middle-class occupiers (Smith, 1996). Many subsequent accounts have noted that such processes of ‘spatial purification’ are characteristic of urban gentrification, with the erasure of perceived toxicity a frequent prelude to episodes of gentrification. Kern (2015), for example, argues that the symbolic projection of environmental pollution onto certain (human) bodies allows neighbourhoods to be represented as clean and green only once these bodies have been displaced. Hence, while urban gentrification has often been embraced by young professionals keen to leave the orderly suburbs for the authenticity of inner-city living, it has been repeatedly shown that white, middle-class gentrifiers’ expressed love of social diversity has clear limits (Tissot, 2014) and they remain distinctly anxious about the presence of embodied forms of Otherness that appear to threaten their investments in place (Cheshire et al., 2019). Gentrification can then manifest in antagonisms between gentrifying incomers and longer established dwellers about the state of the local environment, exacerbating the displacement pressures which those residents might experience (Goossens et al., 2019).

The language of the frontier emphasises continuities between recent processes of gentrification and the biopolitics of colonialism which subjugated racialised Others to spatialised violence and control. It figures both gentrification and settler colonialism as processes in which narratives of progress are used to justify displacements. In colonial times, the diverse ecologies of swamps, forests and deserts were often deemed an impediment to the health and well-being of newly arrived human populations, with ‘indigenous’ animals depicted as an abject presence in need of sanitation and removal by new-arrived settlers. But in most accounts of gentrification, it is the displacement of human subjects that is emphasised, despite the fact that urban gentrification can also displace multiple forms of animal life. Palmer’s (2003) insightful paper on animals and urbanisation offers a valuable perspective on this, exploring the parallels between human and non-human subjugation at the frontier. Palmer notes that when ‘wild’ lands are annexed for capital accumulation, this involves animal extinction, enclosure or the gradual destruction of ecological niches. Shifting focus to gentrifying neighbourhoods, this encourages us to catalogue the ways in which particular animal species have come to be depicted as ‘out of place’ in gentrifying neighbourhoods, subject to a biopolitics that identifies them as expendable: as Wilson (2019: 27) notes, spatial concepts including the frontier and the boundary are regularly invoked in urban encounters with animals, the threat posed by animals to property and capital often sufficient to justify their violent exclusion. The fact that such expulsions or extinctions rarely provoke widespread human grief appears directly related to the production of value under capitalism (Pitas and Scheglovitova, 2019).
An example here is provided by those species depicted as pests in neighbourhoods undergoing gentrification. The verminisation of brown rats is an obvious case: they are among the most widespread urban dwellers, having evolved to exploit the abundant forms of shelter and food found in cities (Margulis, 1977). Viewed as a vector for leptospirosis and hantavirus, they are much maligned as an urban species, meaning they often burrow in and around empty and abandoned buildings to avoid extermination attempts. When these sites are redeveloped in the midst of a gentrification boom, this brings them into the open: studies show that wealthier, whiter populations are then more prone to report rat sightings to the authorities than lower status socio-economic groups (German and Latkin, 2016), meaning that efforts to displace rats are more pronounced in gentrifying neighbourhoods than in low-income ones (Lipstein, 2019). In New York, Mayor De Blasio unveiled a coordinated US$32 million ‘assault’ on rats in 2017, with the gentrifying areas of Brooklyn a particular focus for activity: here, new rubbish bins have been installed, more regular litter pick-up scheduled and dry-ice pellets used to suffocate rats in their burrows. Ironically, it is the displacement of some of New York’s 500 feral cat colonies from areas undergoing redevelopment that is thought to have resulted in the overall increase in rats, with terriers now bought in to hunt the rats instead (Lipstein, 2019).

The ‘NIMBY’ anxiety that incoming gentrifiers voice about rats mirrors the anxieties they can express about the other feral or stray urban inhabitants thought to pose a threat to the cleanliness of ‘their’ neighbourhood (see Baker et al., 2020; Draus and Roddy, 2018; Mayorga-Gallo, 2018). Various forms of avian life can be included here, with pigeons a particularly efficient but unwelcome transgressor of socio-spatial order (Jerolmack, 2008). In different contexts, crows, sparrows and starlings have also been figured as flying pests (‘rats with wings’), responsible for noise pollution, building damage and disease (Fine and Christoforides, 1991; Rupprecht, 2017). As with complaints about rats, gentrifiers moving into areas with significant bird populations may seek to displace these ‘noisy pests’ as part of the more general process by which they assert a middle-class version of defensive homeownership (Cheshire et al., 2019). One notable manifestation of this intolerance generated headlines in 2017 when trees in front of a new flat development in Bristol were fitted with spikes to prevent birds defecating on the owners’ expensive cars below. More widespread, perhaps, has been the war waged on seagulls (herring gulls) in British coastal resorts, especially along the south coast. Although many of these resorts have had a ‘run-down’ reputation, depicted as blighted by poorly maintained houses in multiple occupation (Smith, 2012), recent attempts at ‘grot-busting’ in coastal towns including Hastings, Margate and Bognor Regis have involved the displacement of seagull colonies (alongside building repair, streetscape maintenance and litter removal). Once regarded as an integral part of the seaside, discourses of noise, filth and aggression now surround seagulls, with Trotter (2019) suggesting that normative ideas of safe, gentrified consumption now exclude the presence of gulls: while they are protected by the Wildlife and Countryside Act 1981, local authorities have removed eggs and nests, flown hawks to scare gulls away and strongly discouraged visitors from feeding birds. Further hostile architectures have emerged, with the spikes fitted to ledges and roofs a literal manifestation of what Flusty (1997) describes as the ‘prickly’ space that renders cities uncomfortable for ‘non-consumers’.

Animals figured as obstacles to clean and ‘green’ gentrification are then subject to various forms of displacement. Here, it is tempting to draw parallels between Palmer’s (2003) typology of animal displacement and Marcuse’s (1985) description of the multiple forms of direct and indirect human displacement.
associated with gentrification, which ranges from the deliberative evictions of renters and attempts to make the neighbourhood inhospitable for them, through to the ‘slow violence’ enacted by incomers who impose their privileged way of life on the locale. Of course, human and non-human animals do not face equivalent forms of violence, but like the low-income occupants of spaces undergoing gentrification, animals are often depicted as the Other of respectable society, a population easily sacrificed in the name of ‘improvement’. For Palmer, there are clear parallels between the colonisation of indigenous people and the treatment of animals at the frontier:

Colonized peoples, having lost their land, were often forced to live lives regarded as primitive, unclean or transgressive by the colonizers (confined in small spaces, deprived of sanitation, resources, education). For this dirtiness, poverty and ignorance the colonizers then condemned them... Similarly, animals, having lost their habitat, are driven by humans to become scavengers and pests in urban areas – and then condemned by humans for their resulting “unclean”, transgressive habits. (Palmer 2003: 52)

The possible equations being made here between the lives of scavenging animals and ‘human outcasts’ come freighted with dangers, namely the superficial conflation of the lives of particular animal species and people of colour (Bloch and Martinez, 2020; see also Boisseron, 2018). Irrespective, it is clear that animals, like many existing human populations, can sometimes be cruelly passed over in the urban policies that promote gentrification: characteristically, areas subject to gentrification/colonisation are described as being of little intrinsic worth, with scant regard shown for the existing occupiers and the work they do in making place habitable. Animals are rendered relatively powerless in such urban struggles (Hovorka, 2008), forced to adapt or flee as the gentrification frontier is rolled out. But this is not always the case, as in some instances, ‘charismatic’ or culturally valued animal species are actively enrolled in gentrification.

### IV Upscaling with Animals

Eco-gentrification literatures show environmental remediation and the cultivation of a ‘more natural’ urban environment is often implicated in the middle-class upscaling of inner-city districts (Håkansson, 2018; Moore and Kosut, 2014; Quastel, 2009). In some instances, this has seen a reversal of the biopolitics that figures animals as agents of disease and pollution, with discourses of ecological restoration identifying select species as agents of environmental remediation and sustainability (Hunold, 2020). Far from being figured as a nuisance, these species are being encouraged to (re)colonise specific neighbourhoods through deliberative human provisioning of nesting and feeding sites, such as insect hotels, beehives, hedgehog boxes and bird-feeders designed to accommodate desired species. As McKiernan and Instone (2016) argue, this entails a biopolitics that can sometimes invert ideas of particular species as pests or invasive aliens and reinscribe them as valued inhabitants. Rendered as symbols of sustainability, such species are ‘put to work’ by those cultural entrepreneurs who use environmental and green discourse to add value to local products and spaces (Zukin and Bratslow, 2011).

Urban honeybees provide a case in point. Cultural histories of insects are replete with myths of monstrosity, with the idea of ‘swarm’ transgressing modern ideals of the bounded subject (Lorimer, 2007). Consequently, colonies of wasps – a synanthropic species – are habitually destroyed despite the fact they are pollinators and ecologically valued predators (Baker et al., 2020). In contrast, honeybees have been increasingly depicted as charismatic microfauna, welcomed by urban residents as endangered
pollinators whose prevalence is being undermined by colony collapse syndrome and parasitical infection (Benjamin and McCallum, 2009). While over-managed suburban gardens are sometimes unattractive to bees, the fact that modern agricultural landscapes typically provide poor foraging opportunities means bees now tend to flourish better in the city than the countryside. This has encouraged the development of urban wildflower ‘pollinator gardens’, alongside professional apiculture, urban hives and other measures aimed at increasing bee populations (Lemelin, 2013). Abandoned land, railway sidings and brownfield sites have also been adapted to become flower-rich bee-havens, with ‘rail-to-parks’ initiatives like New York’s High Line – perhaps the most famous instance of urban rewilding – embodying a form of ‘agri-ecture’ designed to promote the well-being of urban pollinators (Millington, 2015).

Given many of these attempts to cultivate animal habitats in cities increase property values in surrounding neighbourhoods, they constitute a de facto example of ecological gentrification (Dooling, 2009). Indeed, Patrick (2014) was among the first to identify New York’s High Line as an instance of both gay and green gentrification, an attempt to displace multiple populations seen to signify decay and despoilment: in the case of the High Line, queers of colour, young people and various forms of plant life were displaced to make way for a particular reconciliation of white middle-class aesthetics and ‘native’ biogeography. Nonetheless, these displacements were justified with reference to improvements in the city’s environmental quality, including the enhancement of its biodiversity: continuous blooming throughout the year on the High Line makes it attractive to over 30 species of North American bee.

This hints at a re-valuation of the pollinator population, with the bee helping to transform disused urban infrastructure into a ‘green’ space because of its perceived capacity to make cities more sustainable. Bees have then been implicated in other instances of urban gentrification, with Moore and Kosut (2014: 519) noting that honeybees have become generally more visible in North American cities ‘thanks in part to a revived interest in urban farming, locavore food movements, green consumerism, DIY culture, and a demand for gourmet boutique honey’. In Bushwick, Brooklyn, a gentrifying neighbourhood filled with artist lofts and galleries (as documented by Zukin and Braslow, 2011), bee-keeping has become indelibly linked with artist collectives (Moore and Kosut, 2014). In 2011, beehives were established on top of the Whitney Museum of Art on Manhattan’s Upper East Side. In Buffalo, New York, traditional zoning laws banning bee-keeping have been reversed, while in Athens, Georgia, legal bee-keeping is actively encouraged through licensing (Braverman, 2013). In such instances, bees are not just symbols of upscaling but are employed as form of labour that contributes to ‘ecosystem services’ (Barua, 2019).

Beyond urban bees, green gentrification has encouraged innumerable localised nature-based initiatives designed to attract and incorporate animals. This includes wildlife corridors allowing animals to penetrate deeper into the city (Evans, 2007); log-piles for microfauna (Price and Banks, 2018); nesting sites for birds of prey on tall buildings (Hunold, 2019); restored wetlands for voles, frogs and newts (Mabelis, 2005) and so on. Bird and bat boxes, hedgehog houses, insect hotels and habitat walls are becoming a familiar part of ‘green infrastructure’ of cities, with developers encouraged to provide these as part of new developments (Ives et al, 2010). Meanwhile, in coastal communities, particular marine species are being encouraged to return as a way of cleaning seafronts, encouraging species diversity and buffering the coastline from potential flooding. For example, Wakefield (2019) argues that the creation of oyster reefs off coastal New York represents an ‘oyster-erture’ that serves to reconnect the city with
nature by promoting an affluent, green and clean urbanism for the 21st century. This feeds on the reputation of oysters as upscale food and positive culture representations of oysters as having both commercial and ecological value. Such ‘oysterification’ is also evident elsewhere, with oyster restoration projects sometimes tied into place-marketing strategies that are revaluing coastal communities as spaces of leisured consumption (Hubbard, 2020).

All of this points to the fact that many species of animal are now able to occupy ‘a myriad of friendly spaces created by ecologically-restored waterways, parkland, backyards, urban farms, community gardens, green roofs, rain gardens, and other greened spaces that are rewilding cities through provisioning wildlife in unexpected places’ (Hunold, 2019: 89). Not all of these are in gentrified neighbourhoods, but in cities where proximity to ‘nature’ is increasingly valued, urban ecological initiatives and gentrification appear synergistic. As spelt out here, eco-gentrification can involve the use of charismatic and valued animals to sell places, with gentrifiers purposefully welcoming particular ‘wild’ animal populations. At the same time, some middle-class dwellers have invoked powerful socio-environmental discourses connecting urban ecologies, animal welfare and high-quality food production when reintroducing livestock (e.g. hens, goats, pigs) to cities as a form of ‘metabolic labour’ (Barua, 2019; Blecha and Leitner, 2014; Horkova, 2008). Yet much about the relationship between urban upscaling and this selective biophilia remains conjectural: though there is evidence that higher income residents in gentrifying neighbourhoods are disproportionately involved in urban gardening and farming (Håkansson, 2018), and that affluent residents are more prone to feed birds and encourage pollinators (Davies et al., 2009), these associations need much more careful specification. One important avenue of exploration here concerns the encounter between animal and gentrifier, and the affective binds that emerge between human and non-human residents (Paniagua, 2019; Wilson, 2019). As Butler (2012) argues in his examination of the reintroduction of chicken-runs as part of urban farming, perhaps the very narrative of what it means to be a gentrifier is shaped by the type of animals the gentrifier is prepared to live with and among?

V Animals and Boundary-Making

Much of the above analysis of urban upscaling rests on the assertion that ‘marginalized residents of impoverished neighborhoods who are themselves struggling for resources and recognition may be notably less tolerant of wildlife than residents of wealthier neighbourhoods for whom living alongside wildlife tends to be an amenity rather than a symbol of political and economic abandonment’ (Hunold and Lloro, 2019: 2). Yet on the other hand, we have the idea that higher income dwellers are quicker to report animal ‘pests’, with municipal by-laws and regulations allowing authorities to displace animals that appear to pose a threat to middle-class residential norms (Gaynor, 2018). This suggests a complex politics whereby certain animal species are readily welcomed in gentrifying neighbourhoods but regarded as pests in lower income areas and vice versa. Shaw (2017), for example, writes of urban foxes as a species that have traditionally largely shunned public housing and lower income areas in the UK for more suburban, middle-class gardens which have better potential for catching, sleeping and breeding. With gentrification, however, they appear to have followed affluence into the inner city, adopting to a middle-class lifestyle, moving between city parks with overflowing bins and luxified inner-city homes where (some) owners appear tolerant of their presence as an ‘aesthetic asset’. Yet Shaw (2017) dismisses the idea that foxes are middle-class subjects per se and describes them instead as parasites on middle-class, gentrified
lifestyles. Indeed, this notion of foxes as unwelcome urban pests has found expression in recent media stories about foxes becoming ‘bigger and bolder’, with several reports of attacks on children in London in 2010–2013 leading the-then Mayor Boris Johnson to describe urban foxes a ‘menace’. Cassidy and Mills (2012) suggest that considerable work was undertaken by media and government alike to redraw the boundaries between urban and rural foxes, the former deemed ‘out of place’ in the gentrified city. This can be played-up for humorous effect: Cassidy and Mills (2012) describe how the BBC comedy series Mongrels (2010) juxtaposed Vince, a violent, predatory, rural fox, with Nelson, an urban and urbane fox (Vulpes metrosexualus) who lives in Hackney, sips skinny lattes and subscribes to a Sunday broadsheet.

As such, the placed distinctions made between welcome and unwelcome animal involve the invocation of boundaries between nature/culture that entwine with notions of class to produce a complex social geography of acceptance. In areas undergoing gentrification, the visibility of particular species can then be a proxy for class change. For example, dogs – the most obvious and ubiquitous urban pet – are a species whose variable visibility has been read as indicative of the limits of the gentrification frontier. As alluded to in earlier sections, because of anxieties about public health and nuisance – e.g. dog-bite injuries, rabies, faeces spreading disease, the potential for road traffic accidents – the presence of street and stray dogs is often understood as indicating a lower status urban neighbourhood (Todorić and Ratkaj, 2011). When reported, dogs can be seized by the authorities, neutered and sometimes euthanised, with Srinivasan (2013) documenting a biopolitics of ‘cruelty and kindness’ in which the social, legal and the spatial splice together to constitute ownerless ‘pye’ or ‘pariah’ dogs as problematic urban subjects. Yet this spatial disciplining can also extend to pet dogs, with some ‘vicious’ breeds being deemed as worthy of tighter regulation (Instone and Sweeney, 2014). Here, Bloch and Martinez (2020) show that police dog shootings tend to concentrate in marginalised, over-policed and economically deprived areas where notions of ‘public safety’ are invoked to justify shooting of ‘dangerous breeds’. Their study of the animal/canine nexus suggests that the violence enacted against dogs by the police is a social problem that can be mapped onto ‘a very human landscape of racial and class segregation’ (Bloch and Martinez, 2020: 147). While they are at pains not to reify the connections between particular dog breeds and human social groups (especially communities of colour), they argue that stereotypes of ‘big dog’ owners as members of criminal gangs instigate forms of deadly violence against animal Others.

In southern Africa, such stereotypes of canine violence are informed by specific histories of colonialism and racism (Swart, 2008). Due to their use in the colonial security services, ‘purebred’ German Shepherds, Rhodesian Ridgebacks and Boerboels embody the ideas and violence of the coercive white supremacist regimes of Rhodesia and apartheid South Africa (Doble, 2020), with the aggression of white-owned dogs towards black bodies framing human–dog interactions (Van Sittert and Swart, 2008). In contrast, the dog most commonly seen in a township is the Africanis, one of the three indigenous southern African breeds (alongside the pedigree Boerboel and Ridgeback). Africanis are known by the imprecation ‘kaffir dog’ – combining the abusive racial insult ‘kaffir’ with the volatile meanings of ‘dog’– and are often depicted as a mongrel resulting from uncontrolled breeding (Baderoon, 2017: 346). Canines hence become the physical and ideological outriders of their owners, with the genetic richness of Africanis dismissed as less valuable than the reified pedigree characteristics of Boerboels and Ridgebacks.
In the gentrification of southern African cities, dogs can articulate the innermost anxieties and prejudices of their owners (McCrindle et al., 1999). In 1990s, Harare, for example, the emerging black African middle classes, protected their newly acquired homes via the ‘mimicry of ‘colonial security regimes that involved keeping vicious dogs, [and] putting ‘beware of the dog’ signs on gates’ (Dande and Swart, 2018: 162). Transforming ‘African traditions of good neighbourliness in Harare’s low-density suburbs’, this exposed children to vicious dogs and painful rabies vaccinations. Across other post-colonial Southern African cities, dogs have then taken on roles once performed by human agents of the state and ‘replaced the colonial squad car as the cheap defence of private property’ (Coovadia, 2014: np). In Mozambique, new beachfront developments in Bethel, Maputo, associated with the governing Frelimo elite are patrolled by dogs and their private security human handlers. Cape Town – the regional epicentre of gentrification – has seen a sharp increase in guard dogs, alongside armed guards and the high walls that make concrete the new neighbourhood enclosure (Lemanski, 2004). Cape Town’s guard dogs initiate new encounters as they harass black domestic workers, cyclists and even schoolchildren, who identify dog owners’ homes as danger areas in the gentrifying Capri Village on the Cape Peninsula (Bray et al., 2011).

Guard dogs and companion dogs hence occupy a relatively privileged position in southern Africa, albeit that the relationship between canines, class and race has been complicated in the postcolonial era. Zimbabwean author Shimmer Chinodya’s (2017) short-story Strays describes how different dogs are treated:

A dog is a dog. The average African dog is a little less than that. The average African dog is a creature to be kicked, scolded and have missiles thrown at it …[whereas]… a European dog is more than a dog … It is a member of the family, with a personality, name, a kennel, a veterinary aid card and, of course, a budget… A suburban African dog in an aspiring middle-class household is something between the two. While it probably benefits from the example of its white neighbours, it remains a household appendage. (Chinodya, 2017: 82–83)

In 2012, the South African President, Jacob Zuma, argued that those upwardly-mobile black citizens who love their pets more than people exhibited ‘a lack of humanity’, equating dog care with white culture and chiding those that spent lavishly on their dogs, walked them or took them to the vet.

Nonetheless, among new South African black urban elites, regimes of dog ownership changed as they became viewed as a means to secure newly acquired property. New dog owners in newly rich areas have forged unfamiliar and deeply affecting relationships:

Bruno was tall, brown and handsome. Without fail, whenever I returned home Bruno would run to the gate to welcome me – for 10 glorious years. On the last Thursday of February 2015, Bruno died. And I did something that is very un-African: I cried for my dog Bruno. What deed can be more un-African than an adult black male crying over a dead dog? If I could I would have avoided it, I swear. I would have postponed it until I had left the dierekliniek [vet]. (Maluleke, 2015: np)

Tinyiko Maluleke’s story shows that black gentrifiers are challenging their own racial identity through their relations with dogs as companion species. But it is not just the human in the human–dog relationship that is undergoing a transformation: the Africanis dog or ‘Township special’ has itself been gentrified in recent years and is increasingly likely to find a home in the white suburbs (Swart, 2008). The South African Breeders Association, for example, has sought to rehabilitate the Africanis as ‘the real African dog’ and a valued symbol of the ‘indigenous’ – a strategy that Baderoone (2017) describes as a
white project that aligns whiteness with indigeneity. Both Zuma’s critique of dog care by emerging black middle classes and, conversely, the white efforts to reclaim the Africanis illustrate the malleable power of the dog, an animal central to the securitisation of gentrification in southern Africa.

**VI Pedigree and Property**

Discussions of the shifting classed boundaries between different breeds of dog suggest that there are significant ways that animals mark out and defend gentrifying neighbourhoods. Landlords are known to add significant non-refundable surcharges to rental deposits for those owning ‘dangerous’ breeds (Graham et al., 2018). More widely, Power (2017) notes a general coincidence between pet ownership and rental insecurity, with many choosing to keep pets without landlord knowledge. In general terms, dogs belonging to working-class residents are among the first victims of gentrification: in rapidly rising property markets, landlords can use the presence of ‘nuisance’ dogs to evict residents, with households given the choice of giving up their pet or their home. Subsequently, gentrifying populations coming into the same neighbourhoods may bring dogs with them and impose middle-class social norms through the ownership of particular breeds: in the US, poodles, terrier mixes, chihuahuas and yorkies have been noted as gentrified breeds (Grier and Parry, 2018). Tissot (2011: 273) concludes that, like ‘certain clothes, eating habits, and decorating styles’, such breeds are a marker of gentrification.

The symbolism may not have the violence of repressive policies directed toward homeless people, but nonetheless has real consequences… Because dogs can be tools of distinction as much as objects of love, their presence and the practices related to them allow gentrifiers to inscribe specific values into their physical surroundings. (Tissot, 2011: 273)

This is far from an isolated example: there have been numerous studies concluding that incomers arguing for dog-friendly parks (and ‘dog-runs’) enact exclusionary language. In the US, as in Southern Africa, this effective privatisation of space through pets is racialised, inscribing white, middle-class norms in areas that have previously accommodated more ethnic diversity (Graham and Glover, 2014; Maygorogi Gallo, 2018; Tileva, 2016; Urbanik and Morgan, 2013; Vincent, 2019). Only days before George Floyd was killed by police in Minneapolis, the world’s media highlighted the case of white dog-walker Amy Cooper phoning 911 over the presence of a ‘threatening’ black bird watcher in Central Park, New York, as a depressingly symptomatic instance of white privilege (Abrican, 2020).

The fact that pet dogs can make gentrifiers’ norms visible shows how animals can be key vessels for urban neoliberalism. Nast (2006) underscores this point when she casts light on the highly commodified affective relationship (‘pet love’) between dogs and owners that has coincided with the rise of post-industrial urban consumption. Suggesting that rises in dog ownership are associated with the growth in childless households – especially those headed by LGBTQ-identified individuals – she figures pedigree pet dogs as pampered child substitutes, noting they sometimes become elite consumers in their own right, provided with *bijou* pet hotels, yoga classes and dog beauticians. Elsewhere, Nast (2012) identifies commercial ‘doggie-love’ landscapes in the US as elite white landscapes. Examples here include the gentrified neighbourhoods of Williamsburg and Prospect Park, Brooklyn, which are replete with Pamper-Your-Pet stores and dog parks (Lees, 1996), while dog-food trucks like *Milo’s*...
Kitchen and Frosty Pooch move between hipster havens and pet-friendly parks to map out a wider geography of canine gentrification in New York (Olsen, 2012).

On this basis, Tileva (2016) speaks of ‘yappies’: middle-class human–dog formations drawn into forms of conspicuous consumption in dog-friendly bars, stores and restaurants. Sometimes, this extends to provision of housing being sold as pet-friendly (Carlisle-Frank et al., 2005). An example here is the Landsby building in Wembley Park, developed by Tipi. Here, 295 rental flats are made available to tenants with pets, subject to their pet undergoing a selection ‘interview’ with Tipi staff alongside Frankie the Cavapoo (a cavalier King Charles’s spaniel poodle cross-breed) to check they are sufficiently well-behaved around other animals. All pets in the development get an identifying Tipi collar, a goody bag on arrival and access to dedicated dog-runs. One-bedroom flats in this ‘curated’ development start at £1800 per month, with an additional £50 charge per month for (well-behaved) dogs (or £30 for cats). (Estate Agent News, 2018)

The centrality of pets in gentrified landscapes such as these suggests that animals can feature as ‘lively commodities’ in ‘socio-spatially uneven processes of wealth accumulation and investment’ (Nast, 2006: 304). This is particularly the case in post-industrial societies where place-based identities have eroded, and many urban singles report feelings of aloneness that they seek to assuage by living alongside companion animals (see Plourde, 2014, and Robinson, 2020, on the appeal of cat and rabbit cafés for urban singles). In many cities, contemporary housing design acknowledges that ‘fuzzy’ household companions are more likely inhabitants of inner-city housing than children under 15. For example, Japanese company Felissimo, which has sold cat-related products since 2010 to support foster care for abandoned cats, has completed a 12-apartment rental development in Kobe with separate litter-tray bathrooms for cats, rooms linked with cat-flaps alongside doors and climbing play areas throughout. So at the same time that feral cats are being driven out of gentrifying districts, pampered pets are becoming valued residents (Hansen, 2013).

While the positioning of animals as part of the gentrifying class is then problematic, figuring animals as consumers in their own right does pose important questions about rights to the city and the social exclusions that are sometimes justified in the name of environmental progress. It is the nature of these exclusions that we consider in our concluding section.

VII Conclusion: The Animal Right to the City?

Taking different cuts through the emergent literatures on animals and cities, this article has argued that analyses of gentrification need to be open to the idea that animals are involved in the processes that add, or subtract, value from neighbourhoods at the gentrification frontier. These processes are, by necessity, geographically variable, entangled with a biopolitics that distinguishes those forms of life that are expendable or disposable from those that are worthy of protection. Despite general protections preventing animal cruelty, in moments of gentrification, animals can shift category from being valued or companion species to be labelled unwanted pests or feral populations: their exclusion or even extermination is justified on broad grounds of nuisance, disease or simple offence, with the ambiguous nature of the term pest allowing a broad range of non-human animals to be cast as ‘outlaws’ standing in the way of urban development (Braverman, 2013). In different contexts, questions of food safety or biosecurity may be to the fore in such biopolitics, with the non-human animals deemed to belong in gentrified or valued neighbourhoods inevitably very different in cities in the global South and global North. But despite these geographical variations, what is common about
these processes is that they treat animals as ‘lively commodities’ (Collard and Demsey, 2013) – that is to say, bodies whose capitalist value is derived from their status as living beings. This suggests that gentrification scholars should be more open to exploring the ways that ‘animal capital’ entwines with other forms of capital at the gentrification frontier, with Barua (2019) reminding us that the economic value of places always needs to be considered with reference to the more-than-human processes that ‘remake and regenerate’ the world (see also Murray, 2015, on bio-gentrification).

As such, this article has argued that the incorporation of non-human animals into the analysis of urban gentrification produces new possibilities for theorising the way that capital accumulation via gentrification is dependent on particular entanglements of human and non-human life. Yet there is another obvious reason for urban gentrification scholars to adopt a trans-species perspective: namely, that non-human animals can be the victims of gentrification as much as low-income residents (see also White, 2020, on the animals of the displaced). Yet the well-being of animals is rarely noted when spaces are gentrified, save for occasional attempts to prevent the displacement of ‘protected’ species such as horseshoe bats, crested newts and stag beetles (Snep and Opdam, 2010). Consequently, many animals are violently displaced from neighbourhoods undergoing change: in this sense, human gentrifiers constitute an invasive species introducing social practices and behaviours poisonous to many ‘native’ non-human animals.

While we have stressed throughout this article that there are obvious dangers in equating human and animal life, a trans-species approach suggests such displacements need to be highlighted in campaigns for social and spatial justice, with animals valued beyond their role as consumer object/subjects involved in the upscaling of select urban neighbourhoods. This is important given urban planning processes seem both unwilling and unable to acknowledge the multiplicity of forms of life that exist in the city or dislodge the assumption that it is the ‘wills and desires of human beings’ that should be privileged over all else (Metzger, 2016: 589). Here, Wolch’s (2002) figuring of animals as a concrete ‘subaltern’ urban population reinforces this point and stresses the need to develop a more compassionate form of planning that promotes a more equitable sharing of city space between humans and animals. For Metzger (2016: 597), this requires an opening up of new ways of co-existing (or being-together) in planning processes and a situated ‘ethics of responsibility’ that he terms ‘cosmopolitical care’. This, and related ideas of seeing the world from the standpoint of animals (e.g. Carter and Palmer, 2017), addresses the problem that animals are essentially voiceless within planning processes. But given Metzger (2016) is pessimistic about the possibility of institutionalising trans-species urban planning, perhaps we need to go further to advocate an ‘animal right to the city’?

Within debates on gentrification, the right to the city concept has long been an important mobilising device, with the ‘right to remain’ a central motif highlighting the injustices associated with displacement (Elliot-Cooper et al., 2020). To some extent, this type of right claim is beginning to be enshrined in law, with legal adjudications recognising the rights that some human communities have to remain in situ, especially if there are no alternative locations where they might conceivably live together (Hubbard and Lees, 2018). But like the concept of the right to the city itself, the right to remain appears decidedly anthropocentric, based on the claims that human residents have to remain within neighbourhoods that they have helped to create, economically, socially and politically. Extending the legal right to remain to non-human animals might then be important if we are to enact a politics of resistance that acknowledges the full range of social and environmental injustice set in motion by gentrification.
But can we really conceive the ‘right to the city’ from a trans-species perspective? Shingne (2020) partly addresses this when comparing the lives of human and animal scavengers in Indian ‘slum’ and Argentine ‘barrio’ communities, noting that animals are frequently figured as ‘immigrants’ in a way that inaccurately defines urban space as settled by humans prior to the presence of animals. For Shingne, the culls of ‘pests’ that frequently accompanies slum clearance and urban development figures animals as illegal occupiers where it might instead be better to think of street dogs, feral cats or racoons as neighbours (cf. Donaldson and Kymlicka, 2011, on ‘urban denizens’). Here, she is suggesting that anti-gentrification measures underpinned with reference to equalities legislation need to be extended to the non-human, arguing this requires a softening of the legal distinctions between nature/culture, urban/rural and human/animal:

In taking on the individual cases challenging the status quo on legal personhood and access to urban space and resources, we may in time be able to revisit the idea of animals as legal citizens, sovereigns, denizens, or something totally new, once the divides have been softened. I am playing the long game with this proposal, looking to bring systemic change to our political language, which will change how we think about different groups, how we define them in public policy, and finally how we act. (Shingne, 2020: 14)

Shingne’s (2020) provocative account finishes with some examples where animals’ ‘right to the city’ urgently needs addressing, including the mass exclusion of street dogs by infrastructural development in Indian’s ‘hundred cities’, attempts to prevent racoons scavenging in Toronto and efforts to push wild boars away from gentrified neighbourhoods of Berlin. To this list, we can add many of the aforementioned instances where animals inhabiting the city have been removed from the neighbourhoods where they are able to access the resources necessary to thrive. As Shingne notes, in that sense, many urban non-human animals have much in common with the slum dwellers, lower class residents and homeless populations with whom they commonly share space (see also Gillespie and Lawson, 2017; Narayanan 2017; Srinivasan, 2019).

But beyond by-laws allowing the return of livestock or urban farming to cities (Butler, 2012), real-world examples of the institutionalisation of animal rights to the city remain rare. In Curridabat, San Jose, Costa Rica, green spaces have been reimagined around non-human inhabitants, with the mayor proclaiming bees, bats, butterflies and hummingbirds as citizens (Greenfield, 2020). In Toronto, feral cat colonies can be registered and protected, meaning residents who complain about cats from such colonies are told these are part of a legitimate, managed population (Van Patter and Hovorka, 2018). Cow protection laws allow livestock to roam Indian streets, with efforts taken to prevent their injury in traffic accidents (Narayanan, 2018). But in such instances, the granting of rights often appears to rest on the recognition of the animals in question having charismatic value rather than status as an urban neighbour per se. Against this, Houston et al. (2018) draw on Haraway’s (2016) notion of becoming-with to think through the mutuality between human life and the microbial and non-individuated ‘almost-animals’ that humans seldom acknowledge. Houston et al. (2018: 196) suggest that a genuine ‘ethics of entanglement’ would recognise the significance of a more diverse range of animals as co-producers of urban space, positing cities as trans-species communities where ‘humans, plants, soils, microbes, birds, fungi, insects, native and non-native animals’ interact. However, extending a rights discourse to under-valued, ‘awkward’ and vilified urban animals – such as ‘ant colonies in our kitchen, water bugs in the shower, or slugs in the vegetable patch’ (Ginn et al., 2014: 115) – is clearly fraught with
problems. After all, few would argue that animals that spread infectious diseases have the ‘right to remain’ in the low-income communities where residents are most vulnerable to illness. Analyses of the urban geographies of cockroaches, bedbugs, flies and rats (e.g. Biehler, 2013; Horton and Kraftl, 2018) do little to suggest that these animals could ever be considered good neighbours given their capacity to crawl and scuttle around domestic interiors biting, eating and defecating. Some animals, it appears, lack the capacity to be seen as anything other than disturbing and ‘out of place’ in the city.

But even if we baulk at the notion of granting all animals the ‘right to the city’, could telling stories about the ecological diversity evident in neighbourhoods threatened by gentrification be a means of preventing the displacement of both their human and non-human inhabitants? At present, many attempts to prevent displacements are made solely with reference to human diversity and rights to difference (Hubbard and Lees, 2018): expanding this to emphasise the entanglement of multiple animal species in urban life implies a different argument in which social and environmental justice are conjoined in a wider discourse about eco-social rights and responsibilities. One important dimension of this may be to assert the ecological rather than the exchange value of neighbourhoods discoursed as dirty or even toxic, fighting against the capitalist impulse to produce green and clean ‘nature spaces’ where sustainability equates to profitability (see Campkin, 2007, on the ambivalence of dirt in the city, and Lorimer, 2016, on the ecology of ‘rot’). Steele et al. (2020) argue that this promotion of ‘dirty green cities’ would require a new language of rights, acknowledging that both human and non-human constitute the matter of cities and that landscapes of dirt and decay are sometimes worth preserving. This is not an easy terrain to navigate, given it would often require the inversion of normative distinctions between those animals that are valued as companion species and those that are not. It would, however, expand the criteria for the protection of animals beyond the species and spaces currently deemed of financial value in the ‘green’ consumer city (Srinivasan, 2019). In gentrifying cities where capital and property interests reign supreme, the conceptual and political challenges this poses are immense, but a reconceptualisation of gentrification as a trans-species process appears vital to counter urban greening efforts that evaluate animals only in terms of their potential to enhance human liveability and capital accumulation.

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