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Dephysicalised Property and Shadow Lands

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Abstract:

Not knowing or caring that life depends entirely on the material conditions and limits of a given landscape is the sign of an already dematerialised culture (Plumwood 2008, p. 141; McManus and Haughton 2006, p. 118). The dominant legal model of dephysicalised property encourages dematerialisation. Dephysicalised property has been instrumental to the dispossession of human and non-human communities from their lands and the disentanglement of integrated ecologies into separable natural resources and eco-services. The simplicity of the dephysicalised model of modern property relations masks the complex, dynamic and networked nature of peopled landscapes, allowing landholders to disown the adverse consequences of their proprietorship. This chapter critically reviews the concept of dephysicalised property, its geographical manifestations, and its corollary: the disownership and externalization of its material conditions and products. Dephysicalised property facilitates a powerful cultural fantasy that whatever externalities there may be, their cost will be borne by anonymous and future others, in the 'distant elsewhere' (Wackernagel and Rees 1996) of 'shadow' lands (Plumwood 2008, p. 139).

<a>Dephysicalised property and shadow lands

<b>Introduction

Land had long been a distinctive and complex phenomenon in English common law (Seipp 1994, p. 86). The doctrine of estates meant that land was not 'owned' in the absolute way in which, for example, an object, classified as property, was owned. 'Perhaps the single most striking feature of English land law has been the absence, within its conceptual scheme, of any overarching notion of ownership' (Gray and Gray 2009, p.56). Land had a 'greater significance than the sum of its economic production and use value' and was 'an important component of identity' (Seipp 1994, p. 46). It was used simultaneously by different people for different reasons in different ways (Jones 2019, p. 194). 'Land could sustain multiple overlapping claims by many individuals and casual or regular uses by many others' (Seipp 1994, p. 87). But, with the transition from feudalism to capitalism, the long separated legal categories of land law and property law gradually merged so that land was increasingly regarded as an object of property. This shift required 'the dispossession of many English peasants, but much more brutal was the colonial experimentation . . . with improvement' (Jones 2019, p. 190) that began in the seventeenth century. The English colonisation of foreign lands and peoples allowed for 'new forms of social and property relations for the production of profit, including slavery and genocide, which could not be practiced in Europe' (Jones 2019, p. 189; see also Ince 2018, p. 895). The alienation of peoples from places and the reduction of land to a set of commercially valued commodities were inconsistent with traditional English land laws.

The change from land law to property law instituted legal and economic norms that are now mostly accepted uncritically and reproduced through education and practice (Holder 2013, p. 560; Graham 2014). Referred to as the dephysicalisation of property, this is one of the most significant contributions of modern law to anthropogenic environmental change. It is also one of the greatest obstacles to the objectives and implementation of environmental law (Sax 2008). Dephysicalised property is a theoretical model used to foreground the abstract legal right as the true object and value of a property relation, since rights may arise over any 'valuable subject matters of possession' (Postema 1986, p.174). The acceptance of the rights-centred dephysicalised property model as the optimal regime for allocating the goods of life has blinded law's servants (Rudden 1994, p. 81) to the agency both of the physical world and of property law in the physical world. Its acceptance has also led to broader cultural blindness to the material conditions and consequences of modern property law. Dephysicalised property relations have facilitated the forced removal of peoples from their traditional lands (Jones 2019; Ince 2018) and the fragmentation of those lands into component parts (Costanza and Folke 1996). Val Plumwood describes the diasporas and deforested, mined and drained landscapes of dephysicalised property as 'shadow places' (Plumwood 2008, p. 139), which are thought to be separated from the legal property relation as its side-effects and externalities. Shadow places, however, are not materially separate or external to property relations – they create capital and constitute the material basis of entitlement.

This chapter reviews the historical, theoretical and geographical development of the model of dephysicalised property before turning to consider shadow places as the corollary of the model. Far from

an optimal regime, dephysicalised property underpins a paradigm of law that is not materially viable beyond the early modern worldview of abundance and plenty (Locke [1689] (1960), pp. 296–7). Taking into account environmental scarcity and global conflict (Darian-Smith 2016; Harriss-White 2015), it is no longer possible to rationally defend and reproduce the model of dephysicalised property in the research, teaching and practice of property law (Davies, 2019).

<b>Dephysicalised property

<c>In theory

Dephysicalised property is a model of people–place relations in which the legal relation between people and place has entirely erased place. Property is now a relation exclusively between people. This model of interhuman relations is articulated in terms of abstract legal rights. Dephysicalisation describes the transition from land law, through which people held non-exclusive interests in land, to property law, through which a person or a legal entity owns an exclusive abstract legal right in relation to a commodifiable resource or asset (such as land). Dephysicalisation corresponded with the socio-economic transition from feudalism to capitalism. In pre-capitalist England, land was 'not freely disposable' (Macpherson 1975, p. 110). Rather, it formed the basis of social and political identity, obligations and status (Sugarman and Warrington 1995, p. 111). Importantly, because land was largely inalienable, so too was the power attaching to it (Langford 1991, p. 288). With the rise of capitalism, 'land was no longer considered to provide power but to be vulnerable to it, as object' (Graham 2011, p. 42). The taking of land, as an object of power, necessarily occurred at both physical and abstract levels. Enclosure and colonisation were sustained periods of violent land-taking and resistance through political and military power. The moral rationale to dispossess people of their lands and disrupt long-established legal relations between people and places relied heavily on the notion of the 'improvement' of both (Graham 2011, pp. 32–4). The goal of the improvement discourse was the cultivation of 'waste' lands into commercially productive landscapes and the progress of human society itself (McRae 1992). As Langford points out: 'Improvement was a favourite word of the 1760s and 1770s, carrying with it a great mass of material aspirations and moral assumptions. In nothing is this seen more clearly than in immense resources devoted to the exploitation of the most basic of national assets, the land' (Langford 1989, p. 432).

Land-taking necessarily involved both law avoidance and law reform. The reconceptualisation of people–place relations apparent in the 'socioeconomic experimentation' with taking foreign lands and establishing slavery in the colonies 'outside the customs and conventions' of Europe is an instance of the former (Ince 2014, p. 112). In England, dephysicalisation involved law reform on a massive scale through Enclosure Acts of Parliament (Neeson 1993; Graham 2011, p. 51; Jones 2019, p. 201). The role of land changed from the bedrock of socio-political power to a transferable source of wealth. 'Land had to be free from customs and rights which interfered in the most productive land use' (Jones 2019, p. 189). It also had to be free from complex reciprocal networks of traditional socio-economic obligations and responsibilities (Graham 2011, pp. 58–9). Consequently, the diverse feudal variations of physical people–place relations were homogenised into a singular national and imperial discourse of property as an abstract legal relation

between a 'person' and a 'thing' (Graham 2011, p. 43). The adoption of the word 'thing' removed land (as a specific place) from the legal model of property and substituted it with any non-specific object or thing that could be commercially valued and legally alienated. John Stuart Mill remarked that when 'the value of the income drawn from' the land became less than the value a prospective purchaser was willing to pay for it, a new system of land ownership emerged (Mill [1878], (2004) pp. 255–6).

Removing land from the model of the property relation was, however, only half the work. The other side of the property relation was human. One of the biggest intellectual hurdles that land law had to overcome in the transition from feudalism to capitalism was the moral basis and social structure of landholding. Feudal social relations were rationalised through a religiously determined hierarchical order in which one's position in the property network was determined by community and family standing at birth. To change this, it was necessary to establish a justification for landholding independent of preordained status. This was indispensable to the development of dephysicalised property law in England and served also as the premise of the dispossession of peoples from foreign lands. The project of British colonisation thus corresponded with a newly formulated moral order and social structure. The new model facilitated the alienability of land and the alienation of peoples from their traditional lands by scaling down the human side of the model from a landed nation, community or family to 'one solitary person alone in complete and exclusive possession of one tract of land' (MacFarlane 1978, quoted in Jones 2019, p. 194). It was the first stage in the dephysicalisation of property, substituting inalienably peopled places for commodifiable and alienable things and abstracting human networks and communities into individual units devoid of family and community obligations (Davies 2012).[1]

The second stage in the dephysicalisation of property resulted from the success of the first stage. The transition from the land-based model to the rights-based model worked symbiotically with the new alienability of land to produce national and global land markets through which wealth was created and accumulated. By the nineteenth century, markets in new intangible commodities had developed, requiring legal protection for their security and proliferation. English legal theorist Jeremy Bentham complained that the already dephysicalised person–thing property model was outdated because it excluded intangible items that should be regarded as 'things', such as company shares and copyright (Sokol 1994). Bentham defined property not as a relation between a person and a physical thing but as an abstract legal relation between persons. His intention was to extend the source of capital from land and its products to legal rights themselves. Transcending the materiality of land altogether, Bentham argued that property both derived from and constituted modern law: 'Property and law are born together, and die together. Before laws were made there was no property; take away laws, and property ceases' (Bentham [1840] (1978), p. 52).

The two-stage dephysicalisation of property law between the seventeenth and nineteenth centuries was confirmed and critiqued by legal scholars in the twentieth century. In the United States, Wesley Newcomb Hohfeld (1913; 1917) published influential articles concerned with correcting society's 'unfortunate tendency to confuse and blend' physical things with abstract legal property rights (Hohfeld 1913, p. 20). The notion that property referred to land or physical things was 'fallacious', he argued, since rights between persons constituted the entire property relation. Several late twentieth-century legal scholars further

[1] For a discussion of relationality and individualism in modern law, see Nedelsky 2011.

observed that modern property can now potentially 'include all legal relations' precisely because it is so abstract (Vandevelde 1980, p. 362; see also Lametti 2003, p. 338). In 1991, English property law scholar Kevin Gray wrote that property is a 'vacant concept' so meaningless that it could be regarded as 'an illusion' (Gray 1991, p. 252). Beyond its legal significance, dephysicalised property has also been analysed in terms of its broader political (Vandevelde 1980), social (Macpherson 1973) and environmental (Arnold 2002; Grinlinton 1996; Graham 2011) significance. Legal analyses of dephysicalised property in the early twenty-first century are informed in part by the growing recognition of the agency of law in climate change (see, for example, Grinlinton and Taylor 2011; Carruthers et al. 2011) and the emergence of the Anthropocene (Biber, 2014; Baker, 2015). The scholarship points to the significance of dephysicalised property both within and beyond the law and legal discourse. These impacts remind us that 'dephysicalisation is not just a theory – it is a practice' (Graham 2011, p. 160) reshaping human society, transforming people–place relations, and leading broader anthropogenic environmental change.

<c>In practice

As a practice, dephysicalised property dispossessed human communities and displaced them from their lands. Rationalised variously in legal terms – for example, the *terra nullius* doctrine – dephysicalised property could not exist today without a sustained history of physically removing people from the places in which they had lived for centuries and even millennia. This dislocation undermined existing non-transplantable legal regimes that derived from and regulated complex people–place relations (Laudine 2009; Altman and Kerins 2012; Gammage 2011; Pascoe 2014). Without the place-based knowledge manifest in the laws of local communities, and without the observance of local laws by those communities, entire landscapes were misread, neglected and damaged by newcomers (see, for example, Dunlap 1999; Weaver 2003; Muir 2014; Crosby 2004).

Dephysicalised property, by design, is potentially applicable to any valuable right. It can facilitate the exchange of capital in whatever form it may take now and into the future. One of the earliest consequences of this versatility was the fragmentation of places into sets of separable resources. Solid, liquid and gaseous parts of landscapes were legally distinguished and then physically extracted and removed. For example, in the United States in the nineteenth century, dephysicalised property allowed landowners to extract oil and gas from the land that they owned even though such deposits traverse property boundaries. Furthermore, since land ownership could now be fragmented into smaller and simultaneous interests, the ownership of extracted resources could be granted to miners who leased all or part of the land. The model not only allowed multiple landowners to tap into the same deposit, it also encouraged them to 'exhaust a pool as quickly as possible, before others did, even if such rapid exhaustion entailed enormous waste' (Vandevelde 1980, p. 356).

In late twentieth-century Australia, the dephysicalised model made it possible to unbundle legal rights to land from the water flowing across or adjacent to property boundaries.[2] Water licences that were once

[2] In 1995, the Council of Australian Governments agreed to major water law reform by which state governments legislated water markets and separated water from land entitlements. See Bjornlund and O'Callaghan 2003; McKay 2008; Pigram 2006.

tied to land ownership could be alienated and traded. It is now possible to purchase land without also acquiring the legal right to access water that flows through it. Water markets in Australia were once lauded for their innovative management of water scarcity. However, determining the total quantum of water available for trading is highly contested. Mass fish kills in the Murray–Darling Basin, for example, are linked to the overallocation of water licences and poorly regulated private water extraction (see, for example, Slattery at al. 2019). Another example of the fragmentation of landscapes is the biodiversity offset. Known as 'habitat compensation' in Canada, 'biobanking' in Australia, and various similar terms in the United States, the basic concept is that land developers can circumvent prohibitions on habitat destruction and biodiversity loss by committing to preserve a different landscape. While the alleged function of a biodiversity offset is to 'balance development and conservation goals' (Curran et al. 2014, p. 617), empirical evidence suggests that this is difficult to achieve. Researchers contend that restoring 'species richness' might be possible within a century, at best, and 'assemblage composition' can take 'hundreds to thousands of years' (Curran et al. 2014, p. 617). Significant reform of these market mechanisms is advocated by researchers of biodiversity conservation (McDonald et al. 2016).

Dephysicalised property has thus been instrumental in the dispossession of human and non-human communities and the disentanglement of integrated ecologies into separable natural resources and eco-services. Its manifestations in the accelerated exhaustion of oil and gas deposits, the collapse of aquatic ecosystems, and exponential biodiversity loss are examples of the maladaptation (McDonald 2010) of this hyper-abstract legal model to specific physical conditions. The next section explores the correlate of dephysicalised property: its disowned shadow lands.

<b>Alienation, robbery and rift: the shadow lands

Dephysicalised property allows a legal person (human or other legal entity) to alienate their property right. Indeed, this model underpins land markets and the fluidity of capital. The process of alienation within the model, however, is framed as a unilateral one by which humans exercise their agency over passive objects of property, erasing the bilateral nature of the alienation of land (Graham 2011, p. 45). Since the prerequisite of alienation is the entanglement of people and places, its effects are mutual. 'If we alienate the living processes of which we are a part, we end, though unequally, by alienating ourselves' (Williams 2005, p. 84). By dephysicalising property's 'objects' into rights, modern property relations obscure the agency of the material 'thing' or 'object' of property over human life. This 'conceptual failing' (Jones 2019, p. 193) makes it possible to disown the material costs and effects of the alienation of people–place relations. 'The result is that nature is "alienated", and physical and biological balances are violated' (Harriss-White 2015, pp. 2–3).

For well over a century, the violation of 'balances' in people–place relations caused by alienation has been the subject of sustained scholarly enquiry. In particular, this scholarship attends the consequences of the uncoupling of sites of production and consumption following the transition from land-based to capital-based economies. It reveals the legacy of dephysicalisation because it concerns the replacement of place-based knowledge and land use decision-making in ecological contexts with a placeless model of land

ownership devoid of responsibility for its material effects. Ownership of land, in modern law, is attached neither to responsibility for the land nor to knowledge about it. 'Owners are not required to be expert. They are not required to have good reason for their decision' (Katz 2013, p. 1477). And yet their decisions 'bind us all' (Katz 2013, p. 1475). The rupture of people–place relations, the associated loss of place-based knowledge, and the fragmentation of integrated ecological systems have profound consequences on entire ecological systems and processes.

In 1855, American agricultural chemist George E. Waring Jr gave a speech to the Geographical Society of New York (Waring [1857] 1999), in which he decried 'ecological losses to the soil' (Foster 1999b, p. 296). Waring explained that soil quality is not isolated from the vegetation it supports:

> The fertility of the earth's surface depends on the presence in the soil of certain materials which are employed in the growth or formation of plants. These materials do not act externally. They enter the structure of the plant, and become incorporated with its parts, thus forever to remain until liberated by the decomposition of its tissues. (Waring [1857] 1999, p. 305, quoted in Foster 1999b, p. 296)

Waring's far-reaching conclusion that industrial-scale agriculture was 'robbing the earth of its capital stock' (Waring [1857] 1999 p. 305, quoted in Foster 1999b, p. 296) was based on his observation that landscapes are networks of connected parts. His writing informed the research of German soil scientist Justus von Liebig (1862), who believed that:

> the elementary soil nutrients, nitrogen, phosphorous and potassium, were being removed from the soil and sent to the cities in the form of food and fibre, where they ended up contributing to pollution rather than being re-circulated to the soil. The result was the systematic robbing of the soil of its nutrients. (Foster and Holleman 2014, p. 205)

The German economist Karl Marx incorporated the chemical analysis of Waring's and Liebig into his 'ecological critique of capitalism' as 'the alienation of the "metabolic interaction" between humanity and the earth' (Foster and Holleman 2014, p. 206). In Marx's analysis, the rupture in the material relationship between people and place could be traced directly to the expansion of private property:

> Large landed property reduces the agricultural population to an ever decreasing minimum and confronts it with an ever growing industrial population crammed together in large towns; in this way it produces conditions that provoke an irreparable rift in the interdependent process of the social metabolism, a metabolism prescribed by the natural laws of life itself. The result of this is a squandering of the vitality of the soil, which is carried by trade far beyond the bounds of a single country. (Marx [1863–65] 1981, quoted in Foster 1999a, p. 379)

From this perspective, the separation of soil nutrients from the food and fibre they produced was an obstacle to sustaining the material basis of life itself. Waring and Liebig's theories of soil robbery and Marx's theory of metabolic rift underline the abstractness and unsustainability of dephysicalised conceptions of landscapes, land use and land ownership. Their work reveals the strangeness of the modern paradigm of people–place relations: a world more imagined than real, without limits and connections. The inescapable costs of such abstraction certainly existed but were located elsewhere – for example, in 'crammed' and polluted cities, and in the extraction of alternative sources of soil fertility from Peru and Chile once local soils were 'exhausted' (Foster 1999a, pp. 375–8). Thus, responsibility for the consequences of dephysicalisation was imposed on other peoples and places.

The scholarly analysis of the disownership and displacement of the effects of dephysicalisation continued into the twentieth century. In 1965, Swedish academic Georg Borgstrom introduced the concept of 'ghost acres', which comprised the 'computed, non-visible acreage' that a country would need as a supplement 'in order to be able to feed itself' (Borgstrom 1965, quoted in McManus and Haughton 2006, p. 116). In 1980, American sociologist William Catton introduced the concept of 'phantom land' (Catton 1980) to describe 'how we currently use the ecological productivity of ecosystems that no longer exist' (McManus and Haughton 2006, p. 116), such as our dependence on fossil fuels. In 1991, Jim MacNeill, Pieter Winsemius and Taizo Yakushiji described 'shadow ecologies' (MacNeill et al. 1991), 'the unseen and often undervalued dimensions of the ecology of a country, community, or city' (Wapner 2000, p. 357). This analysis presents an example of 'ecological displacement' (Wapner 2000, p. 357), whereby environmental costs and harms are evaded through their transference or postponement (Satterthwaite 1997, cited in McManus and Haughton 2006, p. 118). Ecological displacement is facilitated and legitimated by a dematerialised paradigm of law and justice. It exploits the invisibility of shadow ecologies, 'since it involves discounting the lives of those who live in resource-supply areas or who find themselves on the receiving end of the industrial waste-stream' (Wapner 2000, p. 357) and generations 'yet to be born' (Wapner 2000, p. 359).

In 1996, informed by this long line of scholarly enquiry, Mathis Wackernagel and Bill Rees published *Our Ecological Footprint* (Wackernagel and Rees 1996). The book presented a 'metaphor for ecological impact' and measured 'the impact of consumption and subsequent waste discharge by converting impact variables into a single unit of land' (McManus and Haughton 2006, p. 115). Pulling the curtain back on 'robbery of the soil', 'ghost acres', 'phantom lands' and 'shadow ecologies', the concept of the ecological footprint exposes the 'disproportionalities in environmental impact', whereby 'the centre capitalist countries rely heavily on importing resources from countries of the periphery, and engage in various forms of outsourcing of production and environmental load displacement' (Foster and Holleman 2014, p. 209). An ecological footprint re-establishes people–place relationality. For example, the ecological footprint of Silicon Valley is calculated to be six times the Earth's capacity (Mattei and Quarta 2018, p. 1). Whatever its limitations as a reliable metric, the ecological footprint makes visible the hidden inequity and unsustainability of an economic and normative framework that disowns and displaces its own material costs and effects.

In the twenty-first century, Australian eco-feminist philosopher Val Plumwood writes of the split in the world between 'nice (north) places' and 'shadow (south) places' (Plumwood 2008, p. 140). The nice places are where the fruits of labour are enjoyed, while the shadow places are where labour is expended and waste is deposited. Shadow places are the disowned 'externalities' of nice places. Plumwood argues from a 'justice perspective' that this is morally wrong and ecologically unviable: 'The places that take our pollution and dangerous waste, exhaust their fertility or destroy their indigenous or nonhuman populations in producing our food, for example, all these places we must own too' (p. 147). Towards this goal, a 'lesson from the indigenous model' that Plumwood encourages us to consider is a form of land ownership in which economic rights of production and consumption arising in a parcel of land are aligned with moral responsibilities of care for the same parcel of land (p. 148). The theory of shadow places aims to collapse the artificial and abstract bifurcation of the world into sites of consumption and sites of production and waste. Plumwood's concept 'goes to the heart of justice in the Anthropocene' (Muir 2017, p. 114).

In different ways, from the perspectives of diverse disciplines, a similar theme emerges from many years of scholarly attention to the abstractness and abstraction of the modern use and ownership of land. The paradigm of modern land law, now known as property law, is grounded in neither place nor time and thus robs both the Earth and its inhabitants of their necessary connection now and into the future. Marx foreshadowed that:

> [t]he private property of particular individuals in the earth will appear just as absurd as the private property of one man in other men. Even an entire society, a nation, or all simultaneously existing societies taken together, are not owners of the earth, they are simply its possessors, its beneficiaries, and have to bequeath it in an improved state to succeeding generations . . . (Marx [1863–65] 1981, quoted in Foster 1999a, pp. 384–5)

Similarly, Waring contended that '[m]an is but a tenant of the soil and he is guilty of a crime when he reduces its value for other tenants who are to come after him' (quoted by Henry Carey in 1858: Foster 1999b, p. 293). Through the analyses and insights of these scholars, it is possible to appreciate how dematerialised modern people–place relations are in legal and cultural discourses. The simplicity of the dephysicalised model of property masks the dynamic and relational nature of landscapes and pretends human independence from them. The model encourages the displacement of its risks and costs to its correlate shadow lands. The latest contribution to this scholarship is from climate science, which tells us that even if modern land law were successfully reformed to position people as mere 'tenants' of the soil, 'the lease is very short' (Harriss-White 2015, p. 13). As English economist Barbara Harriss-White reminds us, '[t]he present human population may survive on this planet only as long as it allows them to' (Harriss-White 2015, p. 13).

<b>Conclusion

One of the factors that led to the emergence of the model of dephysicalised property was the desire to transcend the material conditions of human life. A consequence has been the ease with which those conditions can be disowned. The Earth's finite and dynamic systems and cycles establish unavoidable ecological and economic limits to production and consumption, determining in part the materiality of the human condition. Transcending and disowning our materiality is what the abstract legal model of dephysicalised property encourages. Dephysicalised property not only absents 'things' from the property relation, it also conceptually fragments 'things' into component parts devoid of their material contexts. This chapter has connected the dephysicalised property regime to its corollary: the disownership of the 'shadow places' that challenge and confront modern property relations precisely because they have supplied the material conditions that 'enable our lives' (Plumwood 2008, p. 141). I concluded my book *Lawscape* by saying '[i]f we want to know how to reshape our property law, we have to look no further than the landscape because it is the landscape that reveals our place in the world and the opportunities and limits of our connection with it' (Graham 2011, p. 206). No property regime lasts forever. As we begin to reconceptualise property relations in the Anthropocene, we can learn critical lessons about the failure of the dominant model of dephysicalised property by paying closer attention to its shadow lands.

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