Towards sustainable property? Exploring the entanglement of ownership and sustainability

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Abstract
This article explores the relation between ownership and sustainability on a conceptual level. It specifically examines different imaginaries of sustainable property by asking how private property rights and their restrictions are conceptualized as instruments for sustainability. To do so, conflicting notions of property that underlie Western jurisprudence and political theory are contrasted. This brings us to the identification of two major traditions in property thought that build on atomist or relational conceptions of society and property, respectively. Property might be conceived as an owner’s exclusive control over an object, or as a ‘bundle of rights’ that comprises entitlements, restrictions, and obligations to various actors. Largely within the paradigm of modernization as a trajectory of sustainability, these two fundamental traditions in property theory relate to different approaches to encode sustainability into property law: i) propertization, i.e. the extension of private property forms, as in the case of carbon emissions trading schemes; ii) the acknowledgment of social and environmental obligations inherent to property, illustrated by the social obligation norm in German law.

Keywords
atomism, imaginaries, modernization, ownership, private property, property law, sustainability, transformation

Résumé
Cet article se penche sur la relation existant entre propriété et durabilité sur un plan conceptuel. Plus spécifiquement, il explore différents imaginaires relatifs à une propriété durable en analysant comment le droit de la propriété privée et ses restrictions peuvent être conceptualisés comme des instruments au service d’un développement durable.

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C’est pourquoi je compare des notions qui, tout en sous-tendant la jurisprudence occidentale relative à la propriété privée, sont pour autant contradictoires. Cela permet d’identifier deux traditions majeures dans la conceptualisation de la propriété et qui s’appuient respectivement sur une conception atomistique de la société et une conception relationnelle de cette dernière. La propriété peut être comprise comme le contrôle exclusif d’un propriétaire sur un objet, ou comme un « faisceau de droits » qui inclut des droits, des restrictions et des obligations envers divers acteurs. En grande partie, au sein du paradigme concevant la modernisation comme une trajectoire durable, ces deux traditions, fondamentales dans la théorie de la propriété, renvoient à des approches inscrivant différemment la durabilité dans le droit de la propriété : i) l’extension de la propriété privée, comme dans le cas des programmes créant un marché du carbone ; ii) la reconnaissance d’obligations sociales et environnementales inhérentes à la propriété, comme l’illustre la norme de l’obligation sociale dans la Constitution allemande.

**Mots-clés**
atomisme, droit de la propriété, durabilité, imaginaires, modernisation, possession, propriété privée, transformation

**Introduction**

How are property and sustainability connected? One answer to this question is that well-defined property rights incentivize sustainable use of resources. Yet, according to an increasingly shared critique, the way property rights are currently instituted in law and interpreted in jurisprudence, largely as guarantors for free markets, is inherently connected to the overuse of natural resources and therefore detrimental to nature and endangering our future. From such a perspective, new visions of property (Taylor and Grinlinton, 2011; Alexander, 2011; Babie, 2010; Bosselmann, 2011; Pistor and De Schutter, 2016) are needed to reshape property rights such that they support sustainable economies. This body of literature, contra classical critiques of property in the tradition of Pierre-Joseph Proudhon or the Franciscans, does not postulate the abolition, but a reform of property systems. It reveals alternative imaginaries of property rights, embodied in a broader framework that aims to protect the environment and serve the common good. Against this backdrop, the present article examines the connectedness of these two highly contested concepts. It argues that any conceptualization of sustainability needs to incorporate an account of how ownership is and should be instituted. This article specifically builds on the assertion that institutionalizations of ownership are tied to *imaginaries of sustainability futures* (Adloff and Neckel, 2019). In a broad sense, I understand, following Charles Taylor, imaginaries as ‘that common understanding that makes possible common practices and a widely shared sense of legitimacy’ (Taylor, 2004: 23). While such imaginaries refer to ‘the way ordinary people ‘imagine’ their social surroundings’ (2004: 23), they are often infiltrated by theories (2004: 24). Imaginaries incorporate a ‘background understanding’ of social life, that ‘is both factual and
normative; that is, we have a sense of how things usually go, but this is interwoven with an idea of how they ought to go’ (2004: 24).

The scope of the article is conceptual. I aim to explore the relation of property and sustainability imaginaries as an entangled one, asking how and what notions of private property relate to imaginaries of sustainability. Specifically, I examine diverging conceptions and proposals to reassess and reshape private property in order to make it a constitutive element of sustainable futures. To illustrate such imaginaries and their manifestations in politics and law, I refer to recent carbon trading schemes as well as to the social obligation norm in German law, which comprises the notion that ownership necessarily entails responsibilities towards the society. I draw on property theory and Western jurisprudence literature because of their performativity and their infiltration of the property imaginary. As a matter of fact, this strand of thought heavily influences political and legal tools intended to implement sustainability measures. However, I do not aim to offer an account of how property is understood in law; my goal is to shed light on the underlying social imaginaries of property, society, and sustainability. It is also beyond the scope of this article to evaluate whether and to what extent politics based on the respective imaginaries are, in fact, sustainable.

Sustainability as a key concept in social change broadly refers to the capacity to exist continuously over time. As a guiding principle, it postulates that the need of present generations must not be met at the expense of future generations (WCED, 1987). Yet although sustainability seems to be largely accepted as a normative end of contemporary politics, there appears to be no consensus on particular goals and visions of how a sustainable society might look like, nor on how to get there. Accordingly, in their analysis of ‘futures of sustainability’, Frank Adloff and Sighard Neckel (2019) propose to distinguish between different ideal types of sustainability trajectories which they label modernization, transformation, and control. These rely on different imaginaries. For example modernization might entail visions of green growth, whereas proponents of a major socio-ecological transformation envision an end of growth. Control, the third trajectory, refers to a state of ecological emergency that might lead to suspension of democracy, with resilience as a leitmotif (ibid.). Mainly within the trajectory of modernization, I explore different imaginaries of sustainable private property.

Like sustainability, property as a concept appears to be contested (Cockburn, 2016; Davies, 2012). Whereas the standard conception of property focuses on individuals’ liberty to basically do as they please with their possessions, a ‘counter-tradition’ (France-Hudson, 2017) in property theory recognizes fundamental limitations to the power over the objects owned and regards restrictions and obligations as inherent to property. In other words, conflicting images of property coexist: an image of the right to exclude others with no further obligations versus an image of property resting on such obligations. This schism, I show, is related to the juxtaposition of atomistic and relational approaches to the social world. Arguably, it broadly resembles a contrast between the analytical approaches of law and economics, or institutional economics, on the one hand, and that of socio-legal studies, or anthropological and sociological accounts to ownership, on the other. From a sociological perspective, I regard property not as fix and stable, but as varying along several dimensions. Among the basic dimensions are responses to the issues of (i) what qualifies as an object of property, (ii) who qualifies as an owner, (iii)
how use rights are defined, (iv) how rights are enforced and sanctions institutionalized, and (v) how and under what conditions rights might be transferred (Carruthers and Ariovich, 2004). Ownership then can be understood as comprising something like a bundle of rights (see Honoré, 1961; Penner, 1996; Wyman, 2017) among persons regarding objects to be owned. In this article, the bundle view serves mainly as a representation of a property imaginary that opposes the notion of absolute and exclusive control over things, free from any inherent obligations. Yet it is also an element of a sociological account on property in itself, since it rejects the underlying atomism in the absolute and liberal views of property. Consequently, the bundle metaphor has increasingly been employed in sociology, anthropology, cultural studies, and history during the last few decades (Siegrist, 2006: 25; Hann, 1998, 2007; Benda-Beckmann et al., 2006). Somewhat leaving aside the issue of its general applicability to diverse and plural property systems and underlying imaginaries, the analysis in this article is limited to Western imaginaries and legal categories. It does not deal with indigenous imaginaries nor struggles over the recognition of underlying worldviews in politics and law (Kauffman and Martin, 2017).

The article is organized as follows: first, I contrast different traditions in property theory that are, as I argue, linked to fundamentally different imaginaries of what property is. They differ along several dimensions: property can be conceived as a subject-object relation, or as a social relation between subjects. Some attribute a core (the right to exclude others from using a thing), others regard it as being fluid or pluralistic. In addition, limitations and obligations might be seen as external or internal to property. Secondly, I build upon these conflicting views by assessing the entanglement of property and sustainability. I identify two different basic imaginaries of sustainable property. One idea relies on an extension of property titles to pollution, another on the idea of restricting the use rights of property, acknowledging inherent obligations to ownership.

**Conflicting views on property and ownership**

I shall begin by uncovering different prominent conceptions of property that partly contradict each other and have been object of debates for centuries. I thereby intend to show that a tension lies at the core of the understanding of property: a tension between the idea of absolute liberty and autonomy on the one hand and social relatedness and social obligations on the other. This is what Joseph William Singer (2010: 61) refers to as two traditions in property theory – ‘one that assumes that many exercises of property concern the owner alone and another that views all exercises of property rights as potentially affecting others and thus imposing externalities on them’. The first view builds on an ‘atomist’ understanding of society (Taylor, 1985) and ‘possessive individualism’ (MacPherson, 1990) and regards ‘legally imposed restrictions on the ability to act freely on one’s own land as limitations on the rights of the owner and presumptively illegitimate’ (Singer, 2010: 59). The second one is based on a relational approach to society, and Singer labels it the ‘good neighbour’ or ‘environmental’ conception of property. ‘This view takes for granted that owners have obligations as well as rights and that one purpose of property law is to regulate property use so as to protect the security of neighboring owners and society as a whole’ (2010: 60, emphasis in original). Contrasting these two major traditions, I treat their concepts and notions of property as representations or manifestations
(be they current or historical) of conflicting imaginaries of property that in turn structure the way the relation between property and sustainability is conceived.

**Absolute or relational property? From exclusive power over an object to a bundle of rights**

One dominant notion in everyday understandings is that property means the absolute dominion over an object owned. In this view, it refers to an exclusive power that an owner exercises over the objects she owns. Correspondingly, Jeremy Waldron defines that ‘[i]n a system of private property, the rules governing access to and control of material resources are organized around the idea that resources are on the whole separate objects each assigned and therefore belonging to some particular individual’ (Waldron, 1988: 38; italics added).

Such an understanding fits in the ‘standard liberal model’ that underpins ‘most influential Western theorizing about property’ (Hann, 2007: 290). It partly resembles the legal concept of absolute private property that emerged in common law by the early 19th century in the field of land rights. Previously existing feudal use rights to land were elevated to absolute property rights (Pistor, 2019: 30–35). The concept of absolute private property rights, or the ‘sovereign conception of property’ (Boonen and Brando, 2016: 141), to land has since ‘conquered the world’, as Katharina Pistor argues (2019: 33), by spreading during colonialism, and later by becoming ‘the blueprint for economic policy advice by the World Bank and other agencies’ (Pistor, 2019: 33). It roots in an absolutist and physicalist conception of property that is often associated with William Blackstone, the famous 18th century judge, jurist and politician (see Vandevelde, 1980).

In this strand of thought, property is detached from complex social relations that govern use and access rights; it is, concisely, the relation between a person and a thing. The absolutist tradition has historically emerged during the shift from feudal societies to capitalism, or market societies (to use a Polanyian framework, highlighting the regulative and political origins of markets (Polanyi, 2001; cf. Hann, 2007; Frerichs and James, 2018)). Rich and differentiated social relations, entailing a complex set of diversified access and use rights, became increasingly disconnected from the concept of ownership, and the idea that one object has one owner became more and more convincing (see Habermas, 2016 for a ‘doing law’ perspective on 19th century Marburg region in Germany, analyzing trials in court). This absolute and physicalist notion of property can be found both in common law and civil law traditions, which illustrate its centrality (Godt, 2017: 163).

The right to exclude others from using one’s property-as-a-thing is at the core of property as institutionalized in market societies. Markets rely on excludability because buyers would not be willing to pay for a right to consume a particular good if they could not exclude others from consuming the same good. Part and parcel of the underlying imaginary of private property is its connection to the liberal vision of autonomy with its focus on individual self-interest and an ‘atomist’ vision of society. Property, in this sense, refers to ‘a private sphere of discretionary decisions’ of individuals (Menke, 2020: 160). It rests on negative liberty, i.e. the fundamental freedom from interference by others and the state.
Historically, the absolutist conception of property that emerged in the 18th and 19th centuries appears to abate continuously (Grey, 1980) in favor of a kind of pluralization and disintegration of property which is typical of reflexive modernity in Ulrich Beck’s sense (Siegrist, 2006: 51; cf. Auer, 2014; Frerichs and James, 2018). A shift has occurred, challenging both the focus on ‘things’ and ‘absolute’ dominion. First, property became more and more ‘dephysicalized since the end of the 19th century so that it could protect any valuable interest, not just things’ (Vandevelde, 1980: 366). Secondly, property became limited in the sense that an owner could no longer exercise absolute control over others with respect to her interest in an object owned (ibid). According to Christoph Engel (2002), recent increasing regulative restrictions that are imposed on owners can be seen as a ‘Verdünnung’ (dilution, or thinning) of property rights. However, the notion of property as an absolute dominion over things, manifested in exclusive private ownership, is still influential as an imaginary and describes quite well the commonly shared idea of what private property means (Babie, 2010: 540). It may in fact be conceived as an underlying ‘Leitidee’ (central idea, basic conception) (Hann, 2007: 288) in liberal and neoclassical thought on property. For example, it backs the law and economics approach, or institutional economics, that analyses property regimes in terms of efficiency and according to the types of incentivization they give rise to.

In the late 19th and early 20th century, the bundle of rights view emerged as an alternative concept of property. The bundle view is closely connected to common law, yet it is in principle applicable also to civil law (see Auer, 2014 for a detailed account). Following Wesley Newcomb Hohfeld (1913, 1917) and Anthony M. Honoré (1961), ownership is not conceived as a relation between an owner and an object, but as an aggregate of social relations between persons, comprising entitlements, restrictions, and obligations. To own property in this conception means that one has some configurative set of rights, privileges, powers, and immunities. For example, one’s claim (e.g. to land) corresponds to someone else’s obligation (e.g. to not trespass her land). Honoré identifies eleven standard incidents of ownership: ‘Ownership comprises the right to possess, the right to use, the right to manage, the right to the income of the thing, the right to the capital, the right to security, the rights or incidents of transmissibility and absence of term, the prohibition of harmful use, liability to execution, and the incident of residuarity.’ (Honoré, 1961: 113) These incidents are not individually necessary, but offer a systematic account of the legal relations that are constitutive of different forms of ownership. Note that such bundle does not only comprise rights, but also liabilities and prohibitions. In fact, Honoré (1961: 113, 134) rejects the label ‘bundle of rights’, partly because the unilateral reference to rights omits liabilities and prohibitions.

In a nutshell, the bundle of rights view rejects any conception of property being homogeneous or having a narrow, well-defined core. Ownership can be manifested in various bundles, and it is not fixed or stable. ‘In truth, private property has almost no core content that is recognized in all times and all places’, as Eric Freyfogle (2011: 46) puts it. Ownership is fluid and malleable. This fundamental rejection of a substantial core of property is itself contested. One strand of critique posits that the right to exclude is essentially the fundamental core of property (Merrill, 1998: 731; Penner, 1996). Yet even such essentialist conceptions of property have to acknowledge the many different forms that
property might take in different contexts (Wyman, 2017), and they usually fail to solve conceptual difficulties that arise from instances of property rights that do not entail a right to exclude (Anderson, 2019: 515). Another critique goes beyond the question of an essential core of property and instead accuses the bundle view of not being able to concisely distinguish property relations from other forms of legal interests (Penner, 1996: 739ff.; on recent ‘essentialist’ critiques of the bundle theory, see Wyman, 2017).

The strength of the bundle metaphor is precisely that it allows to shed light on various instantiations of different conceptions of property, because it does not assert a definite and defining core. Defining what counts as property and who is able to own which objects in which regard, is a matter of how the independent incidents of ownership are institutionalized in a given property system (Benda-Beckmann et al., 2006: 15). Such institutionalizations vary tremendously, as a historical and intercultural comparison shows (Siegrist, 2006: 25). In fact, thanks to the openness of the bundle view to property’s malleability, it is possible to grasp the historical, cultural, and institutional variety of governance systems of collective goods or natural resources. As Chris Hann notes, a basic insight is that ‘property relations do not have to follow the presently dominant model. They can point to alternative ways of organizing social life based on ideas of sharing, mutuality and inclusion that have prevailed in most forms of social organization in the past – and which survive in shadowy, attenuated forms in our own societies, and rather more vigorously in some others’ (Hann, 1998: 9). Such a perspective also allows to cover different imaginaries of ownership. Accordingly, from an anthropological perspective, property ‘takes the form of a series of abstract rules which determine access, control, utilization, transfer and transmission of any form of social reality susceptible to dispute’ (Godelier, 1978: 400). These rules may be applied to ‘any material or intangible reality’ (ibid.).

Empirically, a variety of property forms and systems goes well beyond a dichotomy of private and public property. The pluralist and diverse approach to property that is inherent to the bundle view allows to assess complex common property relations. For example, Elinor Ostrom and colleagues offer an influential approach to analyze the governance of common-pool resources (Schlager and Ostrom, 1992; Ostrom and Hess, 2007). They identify five property rights that appear to be particularly important for common-pool resources. These are defined as the rights of access, withdrawal, management, exclusion, and alienation. Furthermore, they distinguish between different positions (owner, proprietor, claimant, authorized user, authorized entrant), which allows to construct a tableau in which particular rights are attributed to respective positions. ‘Full ownership’ in the liberal sense (comprising of all the five rights of access, withdrawal, management, exclusion, and alienation), then, is but one configurative manifestation among others. Exclusive private property, public or state property and various forms of communal property can be identified as specific forms of how the set of relations regarding a ‘thing’ (be it material objects, intangibles, common-pool resources) are institutionalized. The bundle view on property helps to overcome a simple, yet in a sense misleading juxtaposition of private, public, and communal property. It shifts the analytical focus to the variety of relations that define which actors hold which rights, and to what kind of restrictions and obligations are entailed.
Boundaries and obligations: An external limitation or a property of property?

This brief discussion of property concepts reveals major differences in the way limitations to the power of an owner and to her freedom to do as she pleases with an object owned are conceptualized. In my view, such differences constitute a major point of departure for the analysis of property and sustainability as entangled concepts, because they affect the way their very relation is imagined.

Corresponding to the conflicting traditions in property theory mentioned above, two different basic imaginaries regarding limitations to property can be identified. The first relates to the absolute, sovereign notion of property, and to the atomist view of society. Here, private property rights are conceived of as giving its owner an unrestricted power to use, possess, or alienate an object as she pleases and to exclude anyone else. In this line, limitations, by and large, are regarded as illegitimate, although it is regularly recognized that property rights are never absolute, but in fact incomplete and necessarily bounded by general laws (Wyman, 2017: 201). The extent and the quality of the boundaries, however, are always contested (Pistor, 2019: 46). It is important to note that according to this conception, limits are external to property, insofar as they stem from non-property laws. Harold Demsetz (1967: 347) illustrates this with a drastic example: one is allowed to harm one’s competitors by selling superior products, but not by shooting them, not because of property law, but because it is generally forbidden due to human dignity and with respect to the common good. Such a notion of external limits to property seems to be common ground in property theory.

The second view rejects the idea of a core of property that is nested in negative liberty (the autonomous right to exclude), by focusing on a plurality of values that shape property. It thereby allows to include a ‘far broader range of issues that can legitimately be discussed with reference to property, such as the obligations that property entails for its owners’ (Cockburn, 2016: 84). In fact, it holds limitations to property as being inherent to property law itself. Such a view is elaborated within the ‘progressive property’ or social obligation theories of property (Alexander, 2009, 2019; Singer, 2009, 2010). Gregory Alexander, as well as Joseph William Singer, establish their argument by critically scrutinizing the traditional liberal view of individual autonomy, based on natural rights, which is linked to the exclusion of others. In line with Taylor, such an atomist vision of autonomy is criticized for not taking into account the inalienable relatedness of individuals. Alexander suggests a ‘thicker’, inherently social, vision of autonomy as ‘self-authorship’, which would include an ‘ability to deliberate’ (Alexander, 2019: 100ff.). Because property rights are institutionalized as a means to achieve human flourishing, obligations to others and society as a whole comprise a fundamental part. Taylor explains that ‘the free individual who affirms himself as such already has an obligation to complete, restore, or sustain the society within which this identity is possible’ (Taylor, 1985: 209). Echoing this view, Alexander maintains ‘that an owner is morally obligated to provide to the society of which the individual is a member those benefits that the society reasonably regards as necessary for human flourishing’ (Alexander, 2009: 774). Thus, owners qua ownership have obligations towards non-owners. Property serves social ends and value, not only individual autonomy in the liberal sense.
Imaginaries of sustainable property

In order to explore the entanglements of property and sustainability, I now turn to selected imaginaries of sustainable property that rest, in part, on the different notions of atomist and relational property. As mentioned in the introduction, one strand of critique of the standard conception of property rights perceives it as being causally connected to unsustainable ways of living. Paul Babie argues that climate change ‘is a problem made possible by the concept of private property, and made real by its idea’ (Babie, 2010: 542). According to Babie, the popular idea, or imaginary, of private property conceives it ‘as an inviolable sole and despotic dominion controlling an invisible hand, which is justifiable because in that way the choices made pursuant to such power, through markets, produce benefit for others’ (Babie, 2010: 542). The predominant – atomist and absolute – private property imaginary allows to make choices ‘without regard for others and without interference from others (ibid.). Exercising rights to private property on this basis systematically produces externalities that in turn pose a major threat to sustainability, because interests of others, as a rule, do not have to be taken into account. Externalities affect others not only within the particular borders of a given national (or supra-national) jurisdiction, but also beyond. Ecological externalities might do harm elsewhere or on a global level.

Now, if externalities are systematically produced by our private property regime and this is identified as a key problem, the task is to find ways to deal with such externalities and reduce them. The question, then, is what kind of sustainable private property imaginaries exist and how do they allow conceptions that tackle the problem of externalities. I contrast two different approaches that institutionalize particular property forms in order to solve sustainability-related problems. First, the case of greenhouse gas emissions trading represents an attempt to achieve sustainability by internalizing negative externalities of economic production through the allocation of marketable private property in the form of intangible property rights. The underlying logic of propertization asserts that the extension of private property rights by creating new property titles makes it possible to incorporate unsustainable externalities into a sustainable economic behavior. Secondly, in contrast, I refer to attempts to contribute to sustainability through recognizing social or environmental obligations and therefore by imposing restrictions to private property rights. Obligations in this sense mean to account for and reduce negative externalities that pose harm to others. For example, agricultural land use might be restricted by tying it to the enforcement of environmental protection measures such as the preservation of biodiversity. Mainly US law is referred to when it comes to the atomist view of property, whereas the case of German law serves as an illustration of how social and environmental obligations restrict proprietary rights. Note that I contrast two different legal systems in a quite stereotypical manner. This simplification might not do justice to the complexity of actual settled law in either of the two settings. However, it serves to illuminate the differences and tensions between the two main types of private property imaginaries.

Propertization as the road to sustainability: Creating new private property titles

One prominent manifestation of a sustainable property imaginary rests on the vision of private property as an efficient solution to pollution and resource overuse. It understands
such threats to sustainability mainly as a public good problem that can generally be solved by introducing well-defined private property rights. This is, basically, the standard approach in the new institutional economics tradition. Its imaginary is rooted in long durée processes of propertization that prevail in modernity (notwithstanding that counter-movements of de-propertization have also been existing, cf. Hann, 2007). According to Hannes Siegrist, ‘propertization refers to objectifiable social, legal, cultural and economic processes that result in relations being interpreted and institutionalized, either wholly or partially, as property relations’ (Siegrist, 2006: 32; my translation). With regard to Pistor’s (2019, 2020) approach, who uses the concept of ‘coding’ to assess how assets are capitalized in law, propertization refers to processes that ‘encode’ various kinds of relations in property law by creating new private property titles. This often is a process of producing scarce assets out of abundant resources. The establishment and expansion of intellectual property rights may serve as one example for propertization. Another instantiation is the emergence of carbon trading.

Broadly speaking, climate change is in this view mainly regarded as a problem of insufficient or impossible common-pool resource management. The solution is to create private property rights that improve resource management by setting legal and economic incentives to protect the climate. The basic intuition is quite straightforward and follows Garrett Hardin’s (1968) assertion of a ‘tragedy of the commons’ – a tragedy of destructive resource overexploitation due to the mismatch of individual and collective interests. While it would be collectively rational to jointly avoid overuse, each rational individual’s incentive is to keep using the resource since they benefit from it individually, whereas corresponding costs of resource overexploitation are borne by everyone. Thus, scarce but freely available resources will not be used efficiently and sustainably; they are instead at a constant risk of being depleted. That such a tragedy is, in fact, far from being inevitable, has been shown by a rich research program in the tradition of Ostrom and others (Ostrom and Hess, 2007; Obeng-Odoom, 2016; Lacroix and Richards, 2015). This holds at least for small and medium sized common-pool resources that can be governed by local communities. Such commons are not to be conflated with the kind of unregulated open-access systems that Hardin (1968) refers to. However, climate change and global commons in general pose problems that are more complex and demand a ‘polycentric’ governance approach (Ostrom, 2014) that includes collective action on the global level.

For the purpose of this article, it is of no concern whether or not the assertions and solutions offered by Hardin and his followers are right and accurate. Instead, I explore this strand of thought because it hints at a specific, underlying imaginary of an efficient and sustainable private property. From the perspective of the tragedy of the commons, the underlying problem of carbon emissions is that individuals are able to appropriate benefits from emitting a pollutant at the expense of the (global) community, and it is (nearly) impossible to exclude free riders. In line with Garrett Hardin (1968) and Ronald Coase (1960), a viable solution is to end open access (or cost-free pollution) and to create private property rights. The core idea of carbon emissions trading draws heavily on this line of thought in neoclassical economic theory. In an influential article that is often quoted in proposals for carbon emissions rights, Demsetz (1967) provides an account of the conditions under which private property rights emerge. He offers a cost-based approach, arguing that private property rights emerge when its costs become lower than
its benefits. This means that the ratio of beneficial and harmful effects of regulation via private property is crucial for the establishment of such rights in the first place. The institutionalization of property rights seems necessary from an economic perspective if its benefits exceed its costs. Now, if ‘new or different beneficial and harmful effects’ (1967: 350) occur or are recognized, the ratio might change and it might become efficient to create private property rights, to internalize the externalities that come with polluting. Carbon emissions have, over the last decades, been increasingly recognized as causing such harmful effects on a global or planetary level. Therefore, in the line of Demsetz, ‘the gains of internalization [have] become larger than the cost of internalization’ (1967: 350); accounting for external costs thus has become efficient.

The concept of an emissions trading scheme is a market-based approach to environmental legislation. Proponents argue that such schemes provide certainty with respect to the total volume of emissions (as they create a cap) and, simultaneously, guarantee a high degree of flexibility because the decision where and how emissions are reduced is left to the market. Such a conception partially resembles, I argue, the ‘neoliberal order of appropriation’ as identified by William Davies (2012). With this term, Davies refers to a ‘metaphysical grammar’ (2012: 176) that ‘views human beings as unable to adequately deal with discursive ambiguity and an absence of clear boundaries’ (2012: 179). Conscious deliberation on how to achieve emission cuts seems to be prohibitively costly, inefficient and also illegitimately suppressing individual liberty. Therefore, if the necessity to cap emissions is recognized as a policy goal and it is specified by political decisions how much reduction shall be targeted, at least the decentral market mechanism should determine who emits how much and when. In such cap-and-trade schemes the maximum amount of total emissions is determined politically, not via the market mechanism. Competition on the market refers to prices, not quantities.

Today, approaches to limit carbon emissions via emissions trading schemes exist on the global level (Kyoto Protocol), on the interstate level (e.g. in the European Union), yet also on the country level (e.g. in New Zealand and Costa Rica) or on a regional one (e.g. in California, or in Northeastern United States with the RGGI, the Regional Greenhouse Gas Initiative). In fact, carbon emissions trading has been introduced by several countries as a means to meet their greenhouse gas reduction targets as specified in the Kyoto Protocol. Legal characteristics differ and the extent to which carbon rights constitute intangible property rights in the respective legal sense is highly debated. Charlotte Streck and Moritz von Unger, for example, conclude their overview of various carbon rights schemes in this way: ‘The result is an ambiguous regulatory definition of the tradable unit created, often withholding the property status expressis verbis’ (Streck and Von Unger, 2016: 183). For example, the Acid Rain Program in the US, one of the first cap-and-trade schemes, explicitly stated that allowances do not constitute property rights (ibid). Yet, notwithstanding its potential legal classification as something other than property rights, allowances in emission trading schemes are still regularly conceived as property rights by governments, emitters, and buyers (Cole, 1999). In her discussion of such schemes, Christine Godt highlights the role of regulators in such ‘legislatively installed private property rights, administered by the state and intended to complement public command and control regulation’ (Godt, 2017: 160). Godt proposes the term ‘regulatory property rights’ to grasp this specific combination of public and
private rights and argues that they oppose the conventional ideals of exclusive owner control (2017: 161). This feature of regulation, however, is not a genuinely new quality of property rights; it rather unfolds an element that is constitutive to any kind of property, as Godt herself rightly admits.

In fact, the view of emissions rights as intangible property is consistent with the idea of private property as a particular manifestation of a bundle of rights. It is true that holders of certificates do not have the right to manage their property, i.e. to transform and alter it. Yet it entails all rights – except one, the right to manage – that Elinor Ostrom and Charlotte Hess (2007) deem, as a bundle, sufficient to label it full ownership. Holding carbon emissions rights, then, might be something different from having full private ownership rights. Since emission certificates can usually be held, consumed, traded, and used as a security, it is nonetheless reasonable to speak of private property. I would argue that the basic imaginary behind carbon trading is that of private property as exclusive control – albeit restricted by legislation – over emission certificates in order to govern scarce resources efficiently (in this case: emissions without catastrophic external costs). Creating new property rights of course implies that previously existing property rights might become restricted. For example, owners of coal-fired power stations are requested to hold emission allowances in order to use their plants. Yet it is precisely the extension of the form of private property that is considered to make the economy more sustainable. In this view, creating new private property titles that can be traded on the market solves the dramatic problem of global resource overuse and pollution. To put it more broadly, carbon trading schemes express the imaginary of a possible balance of environmental and natural demands with the logic of markets and capitalism (France-Hudson, 2017: 125). This imaginary of a sustainable property perfectly relates to the notion of modernization – one of the three trajectories of sustainability identified by Adloff and Neckel (2019). It envisions a green economy, sees markets as disciplinary means to incentivize technological innovation and, by and large, regards given structures as sufficient.

Restricting property: Social and environmental obligations

Contrary to the idea of creating new property rights in forms of intangibles, other proposals to reconcile property and sustainability emphasize the capability to restrict and limit an owner’s control over her property. This imaginary is based on the recognition of obligations that are inherent to property. Such a ‘social obligation norm’ (Alexander, 2009) has been identified in various legal traditions. According to Alexander, for example, the social obligation norm is ‘implicitly acknowledged’ in American property law, although it has not been systematically developed (2009: 752). In contrast, the German Grundgesetz (i.e. the Constitution) explicitly recognizes the social obligation norm (see Lubens, 2007 for a thorough comparison of the social obligation norm in German and US law). This is why the case of the German law serves as a well-known example for its legal manifestation. Note that I am not concerned here with the debates on the extent to which these norms actually affect jurisprudence and settle case law.5

Article 14 of the Grundgesetz (GG) contains a guarantee of ownership, together with a statement that the particular content of property rights will be set out in legislation, a qualified power on takings, and a general statement that ownership carries with it
obligations towards others. While the specific legislature that is mentioned in §14 of the GG is provided in the Civil Code (Bürgerliches Gesetzbuch), the GG prevents any conception of property without obligations. The conviction that the obligation to the common good also includes an environmental obligation was first held in the decision of the Bundesgerichtshof (German High Court in civil matters) in the so-called ‘Buchendomurteil’ (Cathedral of Beech Trees Case) in 1957. An owner was prevented by prohibition to remove a ‘centuries old grove of beech and oak trees [. . .] popularly known as the Cathedral of Beeches’ that had been designated for protection for more than thirty years (Raff, 1998: 678). The ruling held that the owner was not to be compensated because the preservation order did not constitute an incident of expropriation, but merely a specification of his obligations. ‘Legislation, or administrative action requiring preservation is not an interference with the owner’s power of disposition, but instead a concrete expression of the social obligation which burdens the property in view of its situation’ (Raff, 1998: 678).

Later, during the 1980’s, it became increasingly recognized in German court rulings that land and resource use is limited by obligations towards the common good. This has led, inter alia, to increased protection against overgrazing caused by cattle, to the ban of specific hazardous chemicals, to restrictions in the use of pesticides and chemical fertilizers on farmland (Bosselmann, 2011: 37). A milestone in this development is the so-called ‘Nassauskiesungsbeschluss’, a ruling on wet gravel pit mining that was passed by the Federal Constitutional Court in 1981 (see Auer, 2014: 138–142). Here again, the Court clarified that restrictions or limits to the exercise of control over one’s land are not necessarily to be regarded as takings or appropriations. Instead, the purpose of property might require to restrict the owner’s freedom. It stated: ‘Private land use is limited by the rights and interest of the general public, to have access to certain assets essential for human well-being such as water’ (BVerfGE 58, 300, as translated in Bosselmann, 2011: 37). This ruling is a noticeable manifestation of the obligation norm of property.

The corresponding imaginary of property refers to the relational idea of social connectedness as a constituent of private property. Environmental concerns legitimize and justify impositions of boundaries to property. The bundle of rights is reassessed with a stronger focus on the duty not to harm. This view also envisions modernization as a trajectory towards sustainability, and it does not oppose markets or other predominant mechanisms and structures. It relates to a ‘liberal order of appropriation’ that ‘defends and criticises private ownership’ (Davies, 2012: 179; italics added). In this order, private property rights are regarded as justified as long as their limitations are well established. In fact, the notion of Verantwortungseigentum (responsible ownership) as envisioned by Paul Kirchhof (2005) is derived from an ordoliberal thinking that renders markets and well-defined property rights as supreme. Yet Kirchhof’s notion of Verantwortungseigentum understands individual autonomy not in a radical libertarian view, focusing on negative liberty alone. Instead, essentially, individual liberty is partially limited as to pursue the common good.

With regard to the interlacing of the concepts of property and sustainability, it is interesting to reflect on the justifications and reasons for the acknowledgment of obligations. In the cases and rulings mentioned above, restrictions were imposed because actions of owners adversely affected other members of society or the general public – not by
concerns for nature or the environment per se (for a similar treatment of sustainability issues in US law, see Circo, 2009). This means that environmental obligations are justified indirectly, within an anthropocentric framework. In 1987, the Federal Administrative Court ruled explicitly that ‘the law cannot provide for the health of ecosystems per se, but only in so far as required to protect the rights of affected people’ (BVerwG 4 C 56. 83, as translated in Bosselmann, 2011: 37). In this line, restrictions on the use of property for the purpose of enhancing ecological sustainability for its own sake are regarded as an illegitimate confinement of an owner’s freedom and exercise of control. Social obligations are seen as inherent to property, environmental obligations in themselves are not. In the end, the latter are still perceived as external impositions on owners. Any obligation towards the environment has to be derived from social obligations. For example, once a temporal dimension of the common good is taken into account, in a way that it does not only include current but also future generations, then social obligations and environmental obligations might merge. Environment is to be protected because future generations have the same right to benefit from it as current generations. Such a take resembles the account of sustainable development as expressed in the famous Brundtland Report, which demands that ‘the ability of future generations to meet their own needs’ (WCED, 1987: 41) shall not be compromised by actions of the current generation. In such a view, a sharp distinction between social and environmental obligations referring to the common good and to the environment, respectively, is misleading.

There does exist, however, an alternative vision, in which property is more directly enmeshed with ecological sustainability. Here, environmental obligations are not perceived as obligations towards other members of society or future generations, but towards the ecological environment for its own sake. In this regard, some jurisprudence scholars have for long advanced the postulation that the concept of the relation between humans and nature has to be reassessed. Freyfogle, for example, demands a declaration of interdependence as ‘a pronouncement in our scheme of ownership norms that all components of nature are connected to all other components and that all users of nature are partners and co-fiduciaries’ (1993: 1290). He thus postulates a new imaginary of ownership that overcomes the overly individualistic heritage of 18th century thought and reinvigorates a sense of common belonging to nature. Such an imaginary affirms, for example, that trees should have standing (Stone, 1972). The underlying legal imaginary builds on the idea of granting rights to nature. It rests on an attempt to overcome anthropocentric jurisprudence and to include more-than-humans (Graham et al., 2017; on the nature/culture distinction see Adloff and Hilbrich in this volume). In a sense, the struggle for rights of nature can be seen as conflicts about if and how to encode sustainability or habitability issues into law. From a perspective on private property, granting rights to nature implies putting restrictions on existing property titles.

The current debate on whether agricultural land use should be restricted in a way that helps to preserve biodiversity (Busse, 2019) might serve as another example. Constraints on agricultural land use could be imposed, tying ownership rights to land to the enforcement of environmental protection measures such as the preservation of biodiversity. For the present purpose, I am not concerned with how such schemes or the granting of rights to nature might be implemented, how stewardship could be organized, and what problems would emerge. More modestly, I simply seek to draw attention to the underlying
trajectory of transformation that rests on restricting property rights over environmental resources via the recognition of genuine rights of nature. This imaginary is transformative in the sense that it rejects or at least scrutinizes the strict dualism between nature and society. Arguably, however, it also entails an element of modernization: the particular idea to reconfigure the human-nature relation builds on the further extension of the scope of basic Western legal categories, not so much on a transformation of the concept of modern subjective rights as such (for such a critique, see Menke, 2020). It thus resembles an expansion of rights, understood as an element of progress in modernity (Wagner, 2018).

Conclusion

The futures of sustainability are entangled with the way ownership is organized and property rights are modeled. As shown, influential imaginaries of property-sustainability relations vary in how they conceive the two respective concepts. Following Adloff and Neckel (2019), trajectories of sustainability might be differentiated into modernization, transformation, and control. Property imaginaries differ according to their social-theoretical underpinning (e.g. atomist or relational) and largely corresponding notions of exclusive control over things or relational bundle of rights. These notions, in turn, relate to understandings of limitations to property being external or internal.

Analyzing the entanglements, I associated two different sustainable private property imaginaries with the trajectory of modernization. One is largely consistent with neoclassical economic thought and postulates an extension of the domain of property via the creation of new property titles that are adversely linked to the costs of pollution. Property, here, is essentially a right to exclude that can be bought and sold on the market. At the same time, this imaginary entails an element of control, insofar as a restrictive political regulation is utilized to limit (i.e. exercise control) harm done to the atmosphere. A second conception of sustainable private property focuses on limitations and stricter boundaries of property rights. Such restrictions in the form of social and environmental obligations are either conceived of as being external or internal to property. This depends on the underlying concept of property, as well as on the value that is attributed to nature. Environmental obligations in an anthropocentric worldview are justified by the harm that unrestricted control of property causes to human society. In a more radical view, nature is valued intrinsically, and obligations are justified because they are detrimental to nature per se.

As reminded above, I identified two basic imaginaries of property that are linked to jurisprudence thought, the absolute and the bundle view (18th/19th vs. 20th century). They are connected to the opposition between atomist and relational accounts of social life which, broadly speaking, respectively perceive boundaries as being external or internal. By and large, from a pragmatist perspective, the two imaginaries might be regarded as expressions of different ‘orders of appropriation’, namely of a neoliberal and a social-liberal order, respectively (Davies, 2012).

The two imaginaries also loosely correlate with differences between economic and sociological as well as anthropological views. Chris Hann observes that anthropology lost its focus on property issues in the post-colonial decades, at a time when the
emerging law and economics approach laid ‘the foundations for a dogmatic revival of
the standard liberal model’ (2007: 293). This standard liberal approach analyses prop-
erty law in terms of efficiency and thus is blind to justice as a value of law on its own
(Pistor, 2020; Pistor and De Schutter, 2016; Wesche and Rosa, 2018). It is, therefore,
time to rethink ownership and property within the social sciences beyond the narrow
law and economics approach. In fact, I have shown that the conflicting accounts on
property are not equally suitable as analytical perspectives to assess the complex dimen-
sions of property. On a conceptual level, I suggest that the bundle metaphor offers a
suitable basis to explore ownership and property from a sociological perspective. This
view and its application in institutionalist theory are better able to grasp the empirical
variety of ownership forms than alternative traditions that focus on a core of exclusivity
and absolute power. The bundle metaphor shifts focus to a complex set of relations,
entailing rights and obligations. It asks which actors holds what rights, and which obli-
gations incur to whom. A simplistic view of private or public property is rejected insofar
as the plurality of bundle sticks and their specific configuration is taken into account.
Whereas an atomist view perceives property as a relation between a person and a thing
(the person’s dominium), the bundle view directly reveals its social nature. It focuses on
the social relations regarding things owned. In the view presented here, ‘full ownership’
in the sense that a person holds exclusive power over a thing as property, reflects simply
one imaginary of property out of several – and this plurality partly owes to property’s
fluidity and ambiguity.

Property’s malleability makes it an intriguing case for the study of the futures of sus-
tainability. Any trajectory towards sustainability implies a reassessment of how property
and sustainability are or should be enmeshed. Since property law is not stable, but
changes over time, it offers opportunities to be reshaped for sustainability purposes. For
policy makers dedicated to sustainable development and international climate agree-
ments, one important task seems to be to shape or restrict property rights in a way that
includes environmental protection. I suggest that such debates constitute a fruitful case
to study the role of property imaginaries in the futures of sustainability, and more in-
depth research seems valuable. However, identifying and exploring imaginaries does not
imply that they are equally likely to be put into praxis or pushed forward as measures to
achieve sustainability. On the contrary, their performative capacities – at least partly –
rest on powerful actors that actively engage in their legal and economic enforcement. My
analysis is limited in the sense that I have treated imaginaries as if they were more or less
powerful on their own, as if the struggle over which imaginaries frame actual political
practice was all about their respective ideal persuasiveness. However, there is of course
a significant power component in the dominance of some imaginaries over others. Also,
the focus on property necessarily entails a sort of neglect of other relevant fields (e.g.
corporate law, international law, etc.) that make the integration of sustainability goals
into property theory so challenging.

In order to illustrate the sustainability-property connection, I have drawn on examples
that are associated, by and large, with a sustainable modernization of the economy.
Another task would be to analyze more deeply property conceptions in sustainability tra-
jectories that aim to fundamentally transform economy and society (as it is, arguably,
visible in the idea of rights to nature and various indigenous cosmological views and their
property imaginaries), or that rely on exclusive control of damages at least for particular groups. Whereas I focused on the role of private property, other forms of public or communal property are equally relevant. It is up to further, empirical research to analyze how various actors struggle to implement their imaginaries of sustainable property, as well as to assess both intended and non-intended effects of politics and legal and economic practices that aim to achieve sustainability via property regimes.

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Notes

1. Christoph Menke argues that bourgeois property is constituted by this very form, together with its opposite, namely ‘property as private capacity [Vermögen] for social participation’ (Menke, 2020: 160). These two forms are parties in a ‘struggle for law’ (ibid.) between liberalism and socialism or social democracy.

2. Glen Anderson recognizes that the right to exclude is important, yet he rejects exclusionist definitions of property. ‘[B]ailments, leases, and incorporeal hereditaments’ (Anderson, 2019: 515) are examples for property rights that lack immediate rights to exclude. Others are instances in which exclusion is suspended, as in the ‘right to roam over private land’ (2019: 515).

3. Even William Blackstone (to whom the absolutist conception is commonly attributed) recognized such limits: ‘The third absolute right, inherent in every Englishman, is that of property: which consists in the free use, enjoyment, and disposal of all his acquisitions, without any control or diminution, save only by the laws of the land.’ (Blackstone, 1765; italics added; cf. Pistor, 2019: 46; for a critical account on the perception of the Blackstonian view as an absolutist, see Schroeder, 1994).

4. This at least is the underlying basic concept of carbon trading. The functioning of such carbon markets, however, partly depends on non-interference by further climate policies. Additional policies might interfere with carbon trading, leading to an inefficient or even ineffective policy mix. See Perino et al. (2019) for an economic analysis of policy mixes that inefficiently combine subsidized renewable energy, aviation taxes or legislation to phase out coal.

5. There are, in fact, different views on its relevance in practice. Godt (2017: 176), in her analysis, conceives the ‘social obligation norm’ in §14 as well as the ‘socialization’ norm in §15 GG as ‘meaningless’. In contrast, Paul Kirchhof, former judge at the Federal Constitutional Court of Germany (the Bundesverfassungsgericht), argues that such obligations are core to the purpose of property (Kirchhof, 2005).
6. The account of legal institutionalism offered by Katharina Pistor, Geoffrey Hodgson and others (Deakin et al., 2017) might comprise a basis for such a social science view on property. Due to its focus on the central role of the state as a guarantor for sustaining and legitimizing law, however, it seems incapable to grasp legal and regulatory pluralism (Griffith, 2017) that in turn seems relevant for an understanding of the empirical richness of ownership relations from an anthropological view.

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