

Locke and George on Original Acquisition

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The ownership of natural resources, particularly land, is of the utmost importance for many economic and social problems our world faces today. Many developed countries are undergoing housing crises. The ratio of the median home price to the median income has risen for decades, forcing many to rent or live with family members. One third of Americans between 18 and 34 live with their parents, a share that is higher in almost all European countries, and over half in many.¹ The housing market has a deep history of exclusion along racial lines as well. Many neighborhoods legally barred African Americans until well into the 1950s and 1960s. Some of the effects of this institutionalized racism persist today.² The failure of the most productive and dynamic cities to add more housing has prevented people from moving there to pursue better opportunities, creating a sizable drag on the entire country's GDP.³ The prevailing pattern of land use, especially car-oriented suburban development, is a major contributor to climate change and biodiversity loss. Housing is most importantly a key driver of wealth inequality. Piketty (2014) found that inequality has been increasing since the second world war because labor's share of output has been decreasing relative to that of capital, and that real estate constitutes the majority of the capital stock in wealthy countries. But subsequent research found that Piketty underestimated the role of housing in inequality—one paper showed that higher prices for real estate account for all of the increase in inequality that has been seen in rich countries in living memory.⁴ Real estate has two components: land and a building. The fundamental cause of the problems I identified above is land—and the rules we make for how land can be used—not structures. Structures slowly depreciate because of use and exposure to the elements but land always appreciates because it is fixed in supply and demand for land increases as the economy grows; the increase in housing prices is ultimately due to increases in land prices.

Land is thus at the center of several problems of distributive justice. But its role in the theory of distributive justice has been either seriously misunderstood, or entirely neglected. It has

¹ Pew (2023)

² Rothstein (2018).

³ Hsieh and Moretti (2019).

⁴ Rognlie (2015).

been entirely neglected by patterned theorists and Rawlsians, who typically do not draw a distinction between land and produced wealth (buildings and other capital), and instead view social wealth as a homogenous distributive category. The distinctive importance of land has been seriously misunderstood by the other main approach to distributive justice: the historical theories developed by Nozick and Locke.

My aim in this paper is to identify and correct the central error at the heart of such historical theories of distributive justice. A historical theory of justice has two parts: a theory of original acquisition and a theory of exchange. The former shows how individuals can generate entitlements, and the latter shows how individuals can transfer existing entitlements among themselves. I develop the latter theory in a companion paper,⁵ and focus on the former here. Lockeans argue that we become entitled to natural resources by improving them. But the value of an improved natural resource decomposes into (1) the value of the improvement and (2) the value of the resource *in situ*. Lockeans hold that improvers are entitled to the sum of these two values. But this is incorrect: improving a natural resource only gives one an entitlement to the value of the improvement one created. The *in situ* value of natural resources, as I will explain below, is entirely extrinsic and determined independently of the activities of the improver. Therefore, Locke's labor mixing argument gives us no reason to think that improvers are entitled to the value of natural resources. They are only entitled to the value added by their improvements.

Locke aimed to derive ownership of natural resources from the self-ownership of those who improve resources. But I will show, on the contrary, that self-ownership is inconsistent with private ownership of natural resources. Likewise, Nozick developed an argument that taxation is morally on a par with forced labor. But this argument, if successful, proves too much for Nozick's purposes. Since natural resource ownership is inconsistent with self-ownership, the rents that must be paid to resource owners by non-owners for the use of natural resources are also morally on a par with forced labor. If taxation is slavery, then rent⁶ is too.

These considerations imply that distributive justice requires a full land value tax of the kind proposed by Henry George in his 1879 book *Progress and Poverty*. George (1839 – 1897)

⁵ Forrester, "Justice in Exchange."

⁶ I use the term "rent" here and throughout to refer to payments made for the use of natural resources, not also for payments made to improvements like houses or other buildings. I further explain this concept in the second section.

was one of the most influential Americans of the 19th century, and his economic and social thought had impact around the world, leading to political movements and institutional change in the United Kingdom, Ireland, Hong Kong, Australia, Singapore, Norway, South Korea and other countries. Pittsburgh had a partial land value tax for most of the 20th century, and there is some compelling evidence that this policy provided beneficial effects, especially during the city's period of deindustrialization in the 1980s and 1990s.⁷ Some American cities, like Detroit, are revisiting Georgist ideas today.⁸ Unfortunately, George's ideas are largely unknown among contemporary social theorists though they offer compelling solutions to many pressing social problems pertaining to housing, the environment and inequality.

Here is how the paper will proceed. First, I review Locke's theory of original acquisition. Then, I explain why the key "labor mixing" argument fails. In so doing, I develop a novel reading of the "enough and as good" proviso drawing on the idea that natural resources, when they are scarce, command an *economic rent*. Third, I discuss George's efficiency- and justice-based arguments for rejecting private ownership of land in favor of public appropriation of land's value through a land value tax. Land value taxes—unlike all other taxes—both increase the total wealth of society and lead to a more just distribution of that wealth. (I mostly use the terms "land" and "natural resources" interchangeably to denote a category I take to include all natural things useful to humans, such as water, sunshine, fisheries, mineral rights, fossil fuels, air rights and even the radio frequency spectrum. When clearly indicated by the context, though, I sometimes use "land" in its ordinary sense: a location on the surface of the earth). In the fourth section, I develop my view of original acquisition, which builds on George's views and derives all economic entitlements from self-ownership. In the fifth section, I move from ideal theory to the real world, and examine how we could make modest changes to our institutions that would implement the ideal of distributive justice I develop in the paper, and how these changes would address the social problems I identified above. The sixth section briefly concludes.

⁷ Yang (2014), Yang and Hawley (2022), Plassman and Tideman (2000), Oates and Schwab (1997), Banzhaf and Lavery (2010).

⁸ The Economist (2023).

1. Mixing Labor with Natural Resources

The original state of ownership, according to Locke, is that each person owns themselves (*Second Treatise* §27), and everything that is not a human person is held in common by everyone (§25). Locke's *First Treatise of Government* argues, against Robert Filmer's *Patriarcha*, for both of these claims. The first claim embodies a liberal respect for individual autonomy: no one can be born as a slave to anyone else. The second claim, for Locke, has a theological basis: God gave the world to everyone in common. If one rejects this theological claim, one should instead think that the world is initially unowned. How could someone start out with a claim to a part of nature just in virtue of who they are, before they do anything or before anything is given to them?

Locke develops an argument purporting to show how something commonly owned can become privately owned, without the consent of all of the common owners. The argument takes place in two stages. The first is the *argument from eating* (§26-28).⁹ When something is eaten, it becomes part of us, and we become entitled to the eaten thing because as self-owners, we own all of our parts (§26). Therefore, there must be some mechanism by which unowned objects can come to be owned, because we must eat to survive. The second stage is the *argument from labor mixing*. Does appropriation first occur when we digest, or when we eat, or when we prepare, or when we transport, or when we first gather? To Locke, "labour put a distinction between [the gathered item] and common" (§28). When someone mixed his labor with an object in common, he "joined" his labor to the thing, and thereby makes it his property (§27). Since all men are self-owners, a man is entitled to "the labor of his body, and the work of his hands." Ownership of natural resources follows from self-ownership. This is clear when the world literally becomes a part of the self through digestion (the argument from eating), but it also holds, for Locke, when part of the self—one's labor—is affixed to an external object (the argument from labor mixing).

Once labor has been identified as the mechanism by which common things can come to be owned, Locke extends his account beyond things that are eaten. We do not eat and digest land itself, so land does not eventually become part of us like the fruits of the land do. Yet, the labor mixing mechanism operates here too. When we improve the land for cultivation (by digging canals, clearing, adding fertilizer, tilling, etc.) we mix our labor with it. Since we own our labor, we then come to own the bit of what was previously commons that our labor is mixed with.

⁹ This argument can be run for other essential biological functions, like drinking, breathing and defecating (on the latter see Ephraim 2022).

There are two provisos in Locke's account. First, in appropriating something from the commons, one must not let anything be wasted (§31, 38). Second, there must be "enough and as good" left for others after one appropriates. This condition holds for both land (§33-37) and the fruits of the land (§27). Locke mentions this proviso very early in the account, in only the third paragraph: "For this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough and as good left in common for others" (§28).

There are many questions to be raised about the idea of labor mixing and its role in generating entitlements. Nozick famously observed (1973, 175) that the proportion of labor in the mix seems to matter: if I dump a can of tomato juice that I own into the ocean, I do not come to thereby own the ocean, even though my labor is mixed with the tomato juice which is then mixed with the entire ocean. So perhaps the labor mixing must be direct. The labor particles attached to the tomato soup cannot bond with the water molecules in the ocean, as it were. This is a fundamental law of proprietary chemistry: the part of the commons you mix your labor with must be small enough to absorb the quantity of labor you mixed with it.¹⁰ Unfortunately, neither Locke nor Nozick works out the laws of proprietary chemistry with any precision.

2. Labor Mixing does not Establish Ownership of Natural Resources

I will not try to work out these details, either. I will instead focus on a more fundamental problem for the labor mixing argument. The most this argument establishes is that we are entitled to the economic value of the improvements we make to natural resources; it does not establish that we can come to have full ownership of the improved natural resource.

It takes two analytical tools, the development of which both post-date Locke, to see this point clearly. The first is thinking of property as a bundle of rights, an idea laid out in Hohfeld (1917). Property is not a unitary right; rather, it consists of a bundle of rights which can be disaggregated, including the rights to use, to control, to exclude, to gift, to dispose of, to the economic value of, etc. The second is the law of rent, the first general statement of which was made by David Ricardo in the 1810s.

¹⁰ Adverse possession presents another problem: what happens when you mix your labor with something, then I do too, without your knowledge or consent? Does your labor prevent my labor from bonding with the resource? Or does the bond between labor and resource decay over time making adverse possession possible eventually? The latter principle is embodied in the law of adverse possession in common law countries.

Here we will primarily be concerned with three constituents of property rights: the right to exclusive use, the right to the economic value of an improvement, and the right to the economic value of the natural resource. Consider the difference between the apple I have just picked and the apple remaining on the tree in the commons. The “improvement” I added to the apple is the fact that the apple is in my hand rather than the tree. Improvements are generally inseparable from the resources that they improve.¹¹ It is not possible to take my apple away from me without taking the labor attached to the apple away too, since the labor is just an aspect of the improved resource. Locke states that “every man has a property in his own person...The labour of his body and the work of his hands we may say are properly his” (§27). It follows directly from the self-ownership thesis that we are entitled to the economic value of the improvements we create. But it does not follow from the self-ownership thesis that we are entitled to the economic value of the resources we labor upon.

The physical inseparability of improvements and resources obscures this fact. If we could separate the improvement and the resource, the labor mixing argument gives us no reason why it would not be permissible to leave the laborer with their improvement and return the resource to the commons. The inseparability of improvements and resources explains why it would be wrong for someone to take the resource I improved without compensating me—because they would take the improvement that I created and violate my self-ownership. But the labor mixing argument does not preclude the community from demanding compensation for the improver’s use of a resource that all community members are equally entitled to. The inseparability of improvements and resources and one’s entitlement to the improvements one makes explains why labor generates a *provisional* right for the laborer to use the resource they improved. But improving a resource does not generate the strong suite of property rights over the improved resource that is typically assumed.

Locke was aware of the distinction between the economic value of natural resources and the economic value of improvements, but he did not understand the factors that cause natural resources to be valuable. There are both textual and biographical grounds for this. Locke emphasizes (§40) that improvements typically constitute 90% or more of the value of land, which shows clearly that he grasps the conceptual distinction at issue. He also emphasizes that

¹¹ In some cases, it is possible, though prohibitively costly, to separate improvements from land. If I’ve built a house on some land, then it is possible to take the house apart and move it somewhere else.

land is often so worthless that it can be obtained for free (§36). And Locke would have been keenly aware of the economics of land given his long-standing and substantial involvement with the leading land speculation and development syndicate of the late 17th century: the Lords Proprietors, led by his patron and employer, the Earl of Shaftesbury.¹² Locke acted as a secretary for this syndicate, which had been given a grant of all the lands in the Carolinas. He was responsible for developing the *Grand Model for the Province of Carolina* and drawing up the *Fundamental Constitutions of Carolina*, which established slavery and a feudal system in Carolina with the Proprietors at the top. Locke played a role in organizing efforts to populate the new colony with free settlers, indentured servants and enslaved Africans, mainly by trying to persuade wealthy sugar planters in the Caribbean to move their households and enslaved laborers to Carolina.¹³ Locke would have understood that the primary obstacle to the financial success of this venture was not securing the legal rights to the land itself (that was done by the mere decree of Charles II), but rather “improving” the land by peopling it with workers, both free and enslaved, so that the Proprietors could collect a portion of their agricultural production as rent. For this reason, a headright system was instituted that compensated any planter who brought a worker, free or enslaved, to Carolina.

Why, given that Locke had both a theoretical and a practical grasp of the distinction between the value of improvements and the value of natural resources, did he fail to see that labor mixing is not sufficient to generate an entitlement to the value of a natural resource? My conjecture is that there is a second discovery that post-dates Locke that, if he were aware of it, would have enabled him to see the flaw in his thinking. That discovery is the law of rent, which plays a central role in David Ricardo’s (1817) *Principles of Political Economy and Taxation*, which builds on the discussion of rent in Adam Smith’s (1776) *Wealth of Nations*.¹⁴ The law of rent has a tight analytical connection to Locke’s “enough and as good” proviso.

The term “rent” in this context means economic rent: the value paid to the owner of a natural resource for its use in production. If you rent your home or apartment, only part of your rent is “rent” in this sense. Part of your payment pays for the building, but another part pays for the land. The law of rent determines how much rent a natural resource can command in each

¹² Armitage (2004).

¹³ Locke was also an inaugural shareholder in the Royal African Company, the company that imported more enslaved people to British North America than any other.

¹⁴ Book 1, chapter 11. Smith’s understanding of rent was itself influenced by the thought of the Physiocrats.

period. Since the fair market value of a natural resource—like the value of any asset—is the present value of the income it generates in each period (i.e., rents in later periods are discounted at the market discount rate), the law of rent also determines the value of natural resources.

The law says that the rent for a resource is the difference between the productivity of that resource and the productivity of the resource at the margin of production, that is, the productivity of the best resource that is freely available for use. Not all land is of the same quality: some parcels will produce more than others if the same amount of labor is applied to both. Locke recognized this, for his proviso states that there must be enough *and as good* left for others. Suppose that land comes in just two different qualities: when a unit of labor is applied, the A-land produces 10 units, and the B-land produces 6 units. Suppose that all of the A-land has been claimed, but some B-land is still available. Here, B-land is the margin of production. Consider a worker who could work on either A-land owned by someone else or on B-land that is freely available. The worker could earn 6 units by working the B-land, so the owner of a parcel of A-land could charge up to 4 units of rent to attract the worker to work on the A-land. Thus, the rent for use of the A-land is 4 units, the difference in productivity between the A-land and the margin of production. The B-land yields no rent because the difference between its productivity and the margin of production is zero.¹⁵

The law of rent is tightly connected to Locke's proviso, but in a way that Locke would not have been able to see given the state of the economic sciences at his time. If less than all of the A-parcels have been claimed, there is enough and as good left for future appropriators. In such a situation, A-parcels receive no rent, since the difference in productivity between them and the margin of production (other A-parcels), is zero. Since they command no rent, they have no economic value, by the valuation formula for natural resources stated above. Hence, if there are more A-parcels to be appropriated (i.e., when there is enough and as good), the economic value of the A-parcels themselves is *zero*. But if all of the A-parcels have been taken, future appropriators are not left with enough and as good; instead, there is land remaining, but it is worse than the land already appropriated. And if all of the A-parcels are taken, the A-parcels will start to yield a rent of 4. As such, they will have a value several times as large (how large, exactly, depends on the rate at which the rents are capitalized).

¹⁵ The law of rent can be used to derive a law of wages too. See George (1879; book 3, chapter 6).

We have just drawn out the connection between the law of rent and the proviso: when there is enough and as good, no one pays rent, and the economic value of all natural resources is zero. When there is not enough and as good, users of all but the least productive resources must pay rent,¹⁶ and land more productive than land at the margin of production has a positive value.

The “enough and as good” proviso is clearly not satisfied today. All of the land in habitable areas, not just all of the best land, has been appropriated. But Locke believed that the proviso was satisfied in his own time. Private ownership of English land was not problematic, Locke thought, because the unlanded can go elsewhere: “let him plant in some inland, vacant places of America” (§36).¹⁷ Three observations about this must be made. First and foremost, such places were not vacant, but home to indigenous people who would soon be dispossessed. Second, land in America was not freely available—most of the land in Carolina, for instance, was sold to settlers by the Lords Proprietors and its users had to pay part of their agricultural produce as rent. And most importantly, even if land were freely available in America, it would not satisfy the proviso because it was not as good as the land in England. The unlanded of England had to go to great expense, often indenturing themselves for years, even to reach this land. Once there, the settlers would find that its distance from the ultimate consumer market in Europe made the land less valuable.

The connection between Locke’s theory of property and English colonialism is a matter of longstanding scholarly controversy,¹⁸ and as such, fully assessing it is beyond the scope of this paper. Our purpose here is to understand why Locke mistakenly believed that the proviso was satisfied. This belief seems to serve as a dual justification for private property in England and for English colonization in America. Native Americans had no right to the land, on Locke’s view, because they did not improve it through agriculture.¹⁹ And since they had no claim to it, the availability of American land served as a justification for the English private property regime—and its expansion through the enclosure movement back in England.²⁰ This is why some scholars view Locke’s role as a colonial administrator as informing his political writings, and trace

¹⁶ Economists typically consider people who own the resources they use (like homeowners) as paying an “owners’ imputed rent” to themselves, which reflects the opportunity cost of their resource. So, when there is not enough and as good, even owner-users (implicitly) pay rent.

¹⁷ Locke reports in the same paragraph that free land was then available even in Spain.

¹⁸ Brewer (2017), Armitage (2004), Farr et al. (2008).

¹⁹ Murray (2022), Arneil (1996), Bishop (1997), Corcoran (2007) and Burkhart (2018), (2019) discuss Locke and Native Americans.

²⁰ Ephraim (2022) discusses Locke and enclosure.

analytical shortcomings in Locke's defense of his views to his interest in advancing the English colonial regime.²¹ Such explanations may well be correct, but analytical grounds for Locke's mistake can also be identified. Because he did not understand the law of rent, Locke mistakenly thought that the following two states of affairs are compossible: some land has a positive value and there is enough and as good land left. The law of rent shows that these are not compossible; indeed, land's economic value arises *precisely because* there is not enough and as good. The law of rent reveals that land's economic value is due to its scarcity.

Locke instead mistakenly thought that the value of land is determined by the land's natural intrinsic features. This mistake is most clearly on display in §43 where Locke writes that an acre of land in England and an intrinsically similar acre of land in America have the same "natural intrinsic value," and from this infers that any differences in their overall value must be due to differences in the labor applied to them. In other words, Locke identified land's economic value with its productivity. But the law of rent shows that this is a mistake: land's economic value is not determined by its productivity alone, but rather, by its scarcity—how much land there is relative to peoples' demand to use land. George (1879; 166), explains the point quite well: "I may have very rich land, but it will yield no rent and have no value so long as there is other land as good to be had without cost. But when this other land is appropriated, and the best land to be had for nothing is inferior, either in fertility, situation, or other quality, my land will begin to have a value and yield rent." This means that land's value is entirely extrinsic, something that is even more apparent in the case of urban land, which we will study below.

In summary, the labor mixing argument successfully shows that the improver is entitled to the value of their improvements, but fails to show that the improver is entitled to the value of the resource they improve. The proviso is not best understood as a scope condition that determines the circumstances under which one might acquire strong rights to natural resources that hold in perpetuity, but is rather best understood as a condition that modulates the strength of the rights of all resource owners as resources become scarcer and command higher rents: all landowners owe compensation to those who they exclude from their land to the extent that land becomes scarce and rents increase. When the proviso is satisfied the value of all resources is zero. As such, when the proviso is satisfied, improvers have the full suite of rights over the resources they improve. But when the proviso is unsatisfied the values of all but the least

²¹ E.g., Bernasconi and Mann (2005).

productive resources are positive, and the rights of improvers are attenuated by the interests of other community members,²² in ways that we shall discuss in the next two sections. The proviso is not satisfied today, was not in Locke's day, and indeed, probably never has been in the history of human civilization since proximity to cities raises land value, so distributive justice in a post-proviso setting is ultimately the more important topic.²³ The important lesson of the labor mixing argument is that improvers are entitled to the value of their improvements, but the key question for distributive justice in a post-proviso setting is this: who is entitled to the value of natural resources?

3. George's Critique of Appropriation

Henry George has an answer to this question, or at least the beginnings of one: the community is entitled to land value. George's main idea was that a tax on natural resource rents is both efficient and just, and should replace all other taxes. If a land value tax (LVT) is set at a level equal to the land's economic rent, the tax allows the government to socialize all of the land's economic value, preventing this value from being appropriated by private individuals. This idea will serve as the basis of my account, developed in the next section, of who is entitled to natural resource rents. In this section I will reconstruct George's most interesting arguments against the private appropriation of natural resources.

George offers both efficiency- and justice-based arguments for the LVT. Though George's thought is under-appreciated by contemporary social theorists, the LVT remains a popular idea among economists because taxes on the unimproved value of natural resources are efficient.²⁴ Economists know that taxation transfers some economic value to the government in the form of taxes collected, but also destroys economic value in the form of deadweight loss because taxation distorts incentives. The exception to this general rule is if taxes are placed upon perfectly inelastic factors of production, and natural resources are the only such factor. Perfect inelasticity of supply means that the supply does not change in response to changes in price or tax levels. People work less if their incomes are taxed, save less if interest on their savings is taxed and consume less if their consumption is taxed. These responses all create deadweight loss.

²² George (1879, 342-343).

²³ This is something that Locke says very little about, apart from the claim that after a state has been formed its primary function is the protection of property and the regulation of property relations.

²⁴ Some economists have also studied the distributive effects of LVT. See Schwerhoff et al. (2022).

But taxes on natural resources do not change the amount of natural resources that exist. Thus, the efficiency-based argument for land value taxation is that only the LVT merely transfers, but does not destroy, value. LVT, unlike other taxes, allows us to redistribute the economic pie without causing the pie to shrink in so doing. This argument is widely accepted among economists,²⁵ and since it is well-understood and not controversial, we will focus instead on George's justice-based arguments.

Locke and George agree on the two claims that have structured our discussion of original acquisition so far. First, all property rights fundamentally derive from the right of self-ownership.²⁶ Second, all people (initially at least) have equal rights to natural resources. Of the latter claim, George writes: "The equal right of all men to the use of land is as clear as their equal right to breathe the air – it is a right proclaimed by the fact of their existence. For we cannot suppose that some men have a right to be in this world and others no right" (336). And of the former he writes "What constitutes the rightful basis of property?...the right of a man to himself, to the use of his own powers, to the enjoyment of the fruits of his own exertions...As a man belongs to himself, so his labor when put in concrete form belongs to him" (332). Locke and George agree that improvers are entitled to the value of their improvements. Locke thinks that a right to the value of the resource that is improved follows from this, but George shows that it does not.

George has two arguments for this. The first is relatively simple. (1) Improvers do not create and are not responsible for the value of the natural resources they labor on: natural resource value is not the fruit of the individual improver's exertions, and it is not labor "put in concrete form" like improvements are. (2) Since labor is the *only* way that entitlements are generated, we can conclude that improvers are not entitled to the value of the natural resources that they work on, because the unimproved value of the resources is independent of the labor of the improver. The analysis of natural resource value using Ricardian rent theory of the last section supports the first premise. The second premise is just a restatement of the claim that all

²⁵ Ramsey (1927) identified the more general version of this result: that taxation is better to the extent that it falls on less elastic factors of production. Stiglitz (1977) proved the "Henry George Theorem:" land value taxes are always a sufficient source of revenue to provide public goods.

²⁶ See Layman (2020, section 5.2) for an analysis George's views of self-ownership.

property rights derive from self-ownership, since George follows Locke in considering someone's ability to labor as an extension of the self.²⁷

Natural resources themselves are not made by anyone and their economic value is due not to individual improvers, but to the fact that the community's aggregate demand to use resources exceeds their supply. This is why the economic rents generated by land are the ideal source of revenue to fund public projects that benefit the entire community. We can see this point clearly in the case of urban land. A modest apartment in Manhattan costs about \$5,000 per month to rent and more than half of that figure—we can conservatively say 60%—is payment for the land rather than the building. Why is the landlord able to charge \$3,000 from the tenant just for the use of a very small parcel of land? Why is the tenant willing to pay this much? George clearly identifies what gives urban land its value (1879, 238-239):

“Here is the heart, the brain, of the vast social organism...Here, if you have anything to sell, is the market; here, if you have anything to buy, is the largest and the choicest stock. Here intellectual activity is gathered into a focus, and here springs that stimulus which is born of the collision of mind with mind. Here are the great libraries, the storehouses and granaries of knowledge, the learned professors, the famous specialists. Here are museums and art galleries, collections of philosophical apparatus, and all things rare, and valuable, and best of their kind. Here come great actors, and orators, and singers, from all over the world. Here, in short, is a center of human life, in all its varied manifestations.”

Nothing that the landlord himself does can affect how much people are willing to pay to use his land, though the landlord can affect how much people are willing to pay to use his building by keeping it clean, safe and in good condition. Rather, the value of urban land is determined by the rest of the community, and in particular, urban land's value is determined by its *location* with respect to other things of value: job opportunities, leisure activities, restaurants, the arts, social life, transportation infrastructure, utilities and many more valuable things. In short, the land value of our Manhattan apartment is due entirely to the fact that it is in the center of a metropolitan area of 20 million people. The land is valuable because of the positive externalities produced by all of these nearby people and their activities, not anything the landowner does. The community has the right to collect payments for the use of land, because the community

²⁷ Sreenivasan (1995) calls the view that labors are entitled to the things they produce because they are self-owners “the doctrine of maker's right.”

produced the land's value. The landlord is only entitled to collect payments for use of his building, which he individually produced. The landlord gets to keep \$2,000—the rental value of his building—but the land rental value of \$3,000 must be returned to the community. The landlord cannot legitimately charge the tenant to access value produced by everyone in the community, but this is what they are able to do if they receive the rental value of the land.

Goods with positive externalities will be under-supplied by the free market, and one way to correct this is for the government to subsidize them. But another way to correct this is to invent technologies that allow people to internalize the positive externalities of their productive activities, which both (1) incentivizes people to produce more and (2) allows people to enjoy more of the fruits of their labor that they were entitled to all along. The LVT is a social technology that internalizes positive externalities at an enormous scale. Since urban land gets its value entirely from positive externalities produced by everyone in the city, returning the land's value to the people who create it internalizes this positive externality and thus has attractive properties from the perspectives of both efficiency and justice.

George's second argument is much more profound and intricate, as it shows that our rights to freely use natural resources actually follow from our equal rights as self-owners (331-332). It will be easiest to see this by studying the extremal case first, using a thought experiment from George (1879, 345):

“Place one hundred men on an island from which there is no escape, and whether you make one of these men the absolute owner of the other ninety-nine, or the absolute owner of the soil of the island, will make no difference either to him or to them. In the one case, as the other, the one will be the absolute master of the ninety-nine—his power extending even to life and death, for simply to refuse them permission to live upon the island would be to force them into the sea.”

George uses this thought experiment to argue that if slavery is unjust, then private ownership of natural resources is unjust too (345), and he later concludes: “It is the ownership of the soil that everywhere gives the ownership of the men that live upon it” (347). The thought experiment is not just an abstract philosopher's trick. Rather, George wrote two years after the end of reconstruction and comments extensively on the failure of emancipation to truly free formerly enslaved people given that there was not land reform in the South concurrent with emancipation (1879; book 7, chapters 2-3). The end of slavery did not fundamentally change the social order of

the South, because concentrated ownership of land was an institution that was just as important for enabling economic oppression along racial lines.

The island case helps us easily see that a necessary condition of self-ownership is having a certain kind of access to natural resources. The islanders in George's case clearly do not have the kind of access to natural resources that they require as self-owners, because the island's owner can deny them access to the natural resources they need to survive. Thus, if one's access to natural resources is dependent on obtaining permission to use them from another, then one does not have the kind of access to natural resources one requires as a self-owning, autonomous individual. Even if the owner never actually denies the islanders access to the resources, the fact that he has the ability to do so gives him *power* over them. The island owner is in a position to *dominate* the islanders. By threatening to deny them access to resources, the owner can force the islanders to do things that they would not otherwise do (e.g., pay rent for using the resources). Because of this power imbalance between resource owners and non-owners, Daniel Layman (2020, 189-191) reads George as arguing here that a regime of private ownership of natural resources makes it impossible for natural resource owners and non-owners to stand in *relations of equality* with one another.

The normative claim that self-ownership requires access to natural resources has a physical basis in the kind of beings we are. The human body is not an isolated physical system. The self cannot exist in a vacuum, and its continued existence is physically dependent on the natural world in a variety of ways. We must breathe, eat, drink, absorb heat, and in general, maintain homeostasis, all using the resources nature provides. This is a point that even Locke recognized, since it is the ground for his *argument from eating*. That argument held that biological necessities resulting from the interconnectedness of the self and the world is, in the first instance, the ground for appropriation from the commons. Our right to use the natural resources that are necessary for homeostasis, for Locke, trumps the rights of all of the initial common owners, so that we may appropriate edible things. For George, our right to use natural resources necessary for homeostasis is inconsistent with the private appropriation of all such resources by others, because if someone controls the preexisting material basis of one's continued existence, then they have power over one.

Though the *argument from eating* is important, the inverse of this argument is of greater concern to George. We need access to natural resources not just for consumption—a concept I

take to include not just eating, but any process by which we derive welfare from interacting with objects in the material world—but also for production. We have a right as self-owners to the fruits of our labor, but labor cannot occur unless there is land to labor upon. So, in order to exercise our right of self-ownership, we require a certain kind of access to natural resources that we can use in production. Layman (2020, 188) characterizes this point using Rawls’s distinction between the value and the extent of a right: George thinks that the right of self-ownership would have no value without free access to natural resources. Here is how George states the point (1879, 339):

“The recognition of individual proprietorship of land is the denial of the natural rights of other individuals...For as labor cannot produce without the use of land, the denial of the equal right to the use of land is necessarily the denial of the right of labor to its own produce. If one man can command the land upon which others must labor, he can appropriate the produce of their labor as the price of his permission to labor...The one is unjustly enriched; the others are robbed.”

And George concludes a similar line of reasoning in another passage (334): “When non-producers can claim as rent a portion of the wealth created by producers, the right of the producers to the fruits of their labor is to that extent denied.” Land is one of the three factors of production, along with labor and capital, and land is a necessary input in the production of all goods and services. One might think that this claim is no longer true in the contemporary knowledge economy, but in fact, knowledge industries are some of the most-land intensive industries that exist. Most of the valuable intellectual property is produced in leading knowledge economy hubs like Boston, New York and San Francisco, on some of the world’s most expensive land, by workers who have high salaries in large part because the knowledge worker must pay for expensive housing in the knowledge hub. So even the abstract, seemingly disembodied production of knowledge requires land, like every other kind of production.

We can now reconstruct George’s second argument against private ownership of natural resources in its full generality:

P1. In order to produce anything, one needs to use natural resources.

P2. If natural resources are privately owned, then producers must purchase permission to use resources from private owners.

P3. If producers must purchase permission to use natural resources from private owners, then they will not get to keep all of the value that they produce.

P4. Since they are self-owners, producers are entitled to all of the value they produce.

C. If natural resources are privately owned, then producers will not get what they are entitled to as self-owners—private appropriation of natural resources is inconsistent with self-ownership.

We just examined P1. P2 is true when the proviso is unsatisfied—natural resources command a rent (meaning people will pay to use them) when there is not enough and as good. Providing a full defense of P4 is beyond the scope of this paper: here I follow both Locke and George in thinking that self-owning individuals are entitled to the value they create when they labor.

The third premise is the only one that stands in need of further analysis, and can be explicated by way of comparison with Marx's concept of surplus value developed in *Das Kapital*. Marx's writings, like George's from the other side of the Atlantic, are reactions to the enormous social dislocation caused by the transition from an agricultural economy to industrial, urban capitalism. Both men developed systematic accounts of the pathologies of industrial capitalism and identified remedies—total revolution in Marx's case and incremental reform to eliminate the vestigial institutions that cause capitalism's pathologies in George's case. George's thought had a great deal more influence than Marx's in the 50 years after *Progress and Poverty* was published, though Marx's thought shaped the course of the twentieth century after 1917.

Marx thought that workers in a capitalist system are exploited because their wages are less than the value they produce—the difference being surplus value captured by capitalists. George thought that workers who must pay rent for the use of natural resources owned by someone else are exploited by the resource owner. The key disagreement between Marx and George on this point concerns the nature of land and capital—and whether private ownership of one or both of these factors necessarily leads to exploitation. Suppose that I harvest wheat on one acre of your land, using your equipment. The wheat I harvest is worth 50 units of value, but I only receive 20 units of wages, because I must pay you 30 units for providing the means by which I produce—the land and capital. Marx would say that all 30 units you receive are unearned surplus value. But George would say that the share of the 30 units I owe you for using your equipment is your legitimate, earned profit *qua* capitalist, though the share of the 30 units I must pay you because you have control of the land is illegitimate, unearned rent that you receive

qua rentier. George rightly notes that people make capital using their own labor, and are thus entitled to the profits they make by using or hiring out their capital because they are entitled to the value they produce by laboring.²⁸ But no one made the land. This means that the rents you make from renting out the land are not protected by your self-ownership; on the contrary, they compromise my self-ownership because I must pay the rents using the value I create, and thus I cannot retain all of the fruits of my labor. Control of natural resources allows resource owners to illegitimately extract value that is produced by others. Capitalists do not extract surplus value from workers, only landlords do. Capital is reproducible and in the long run its price falls to its cost of production, but land is not reproducible, and its price rises in the long run. Strong property rights over land and strong property rights over one's labor and capital are radically different, owing to the different natures of land, labor and capital. Marx conflates this important distinction between capital and land in his treatment of surplus value.²⁹

In the island case, the islanders cannot produce anything unless they obtain permission to use the resources on the island, and since the owner can grant this permission, the owner can extract value produced by the islanders. Indeed, since the islanders have no alternative but to use resources on the island, the owner can extract all of the value the islanders produce, though the owner will likely let the islanders keep just enough that they can stay alive to continue working in the future. I agree with George that such a situation is morally indistinguishable from slavery. The island owner should be regarded as the direct and total owner of the islanders. The ability of landowners to extract value created by land-users is not limited to the simple, idealized case of the island, though. It also occurs, to a lesser degree, in the actual world, where private ownership of natural resources is less concentrated and there are competitive resource markets, and where the relations between landowners and land-users are multiply intermediated by complex legal structures and financial instruments.³⁰ Since land is scarce in the real world due to both high demand and poor policy choices that restrict the supply of usable land, the landowners can still

²⁸ In fact, George views capital as merely labor that is stored up in material form. See George *Science of Political Economy* (Book 3; chapter 14, 17).

²⁹ Marx wrote in a letter to Friedrich Sorge: "Theoretically the man [Henry George] is utterly backward! He understands nothing about the nature of surplus value" (quoted in Layman 2020, 205). Layman goes on to conclude: "Given Marx's own confusions about economic value, this remark surely goes some ways toward suggesting that George might be on the right track."

³⁰ See George (1879, Book 7, chapter 2) for a more complete discussion of this. In this discussion, George emphasizes that wages tend toward a subsistence level because land rents tend to increase as the economy grows and technology progresses, allowing landowners to capture a greater portion of the value workers produce.

extract a share (sometimes a large share) of the incomes of land-users. This situation still gives landowners power, still precludes relational equality, and is ultimately inconsistent with the self-ownership of those who use land. In other words, in the real world, the ownership of the tenants by the land-owners is neither direct, nor total.

We can now see that George's argument that landowners illegitimately extract value from land users also bears a striking similarity to Nozick's (1973, 169-174) argument that taxation is morally on a par with forced labor. Nozick argued that there is no morally significant difference between a situation where someone can take the earnings from five hours of work from you in exchange for granting you permission to work, and the situation in which someone forces you to work for five hours. If an entity can take five hours of earnings from you, then this makes the entity a part-owner of you. But no part of this argument turns on whether the entity in question is the state. The state takes some of your earnings in exchange for granting you permission to work: it will revoke your permission to work—by putting you in jail—if you do not pay taxes. But landowners, too, take some of your earnings in exchange for granting you permission to work: they will revoke your permission to work—by withholding access to the natural resources that are necessary for all production—if you do not pay rent. Since all valuable human activities require the use of natural resources and no one made these resources, if someone can extract a tribute of five hours of your earnings for allowing you to use a resource, then that person is a part-owner of you.

Remember that the situation where you must pay someone to access natural resources is quite unlike the situation in which you must pay to access goods or services produced by other self-owning individuals. The former compromises your self-ownership, but if you do not pay to access the goods or services produced by someone else, you undermine their self-ownership. George writes: “the rightfulness which attaches to individual property in the produce of labor implies the wrongfulness of individual property in land...whereas the recognition of the one places all men upon equal terms, securing to each the due reward of his labor, the recognition of the other is the denial of the equal rights of men, permitting those who do not labor to take the natural reward of those who do” (336). Self-ownership requires both free access to natural resources and private property over the things that one produces. Self-ownership protections extend into the world in two directions: to protect the things that one makes, and to ensure one's

access to the natural resources one needs' in order to produce. And both protections are necessary conditions for standing on equal terms with one another.

Nozick uses his argument to attack patterned theories: they are unacceptable because people must be partially enslaved to realize the favored pattern. But the argument proves too much for Nozick's purposes, as he does not realize that the argument is also damning for the kind of Lockean historical theory of acquisition that he favors. Such theories are unacceptable because people must be partially enslaved to protect the land claims of the original appropriators. If taxation is morally on a par with forced labor, then rent is too. Both patterned and Lockean-historical theories are inconsistent with self-ownership. Only a Georgist-historical theory, which I will develop in the next section, is consistent with self-ownership.³¹

4. Original Acquisition, Reconsidered

I am now in a position to state my view of original acquisition, which builds on George's insights. I follow George, and Locke, in thinking that all property rights fundamentally derive from self-ownership. And I accept George's argument that private appropriation of natural resources is inconsistent with self-ownership. So, I agree with George that the improver is

³¹ The owner of a natural resource can extract rent from the users of that resource just as the sovereign can extract taxes from the citizens, but landownership and political power are analogous in other respects, too. Locke thought of the state as originally emerging from a union of the landowners in some region, and conceived of its territorial rights as an amalgamation of the property rights of its citizens, and its main purpose as the protection of property (though see van der Vossen (2015) for an alternative to this standard reading). It is therefore not surprising that the governments modeled on Locke's political thought initially restricted the franchise to property owners. Ownership of natural resources, when it is certified and protected by the state, should be understood as a kind of overlapping or delegated sovereignty. This point deserves special emphasis in light of the recent Supreme Court ruling in *City of Grants Pass vs. Johnson*, in which the Supreme Court permitted cities to criminalize sleeping in public. Since it is biologically necessary to sleep, this in effect to criminalize failure to own land or to obtain permission from a landowner to use their land, since otherwise one must sleep in public. In other words, cities can now make it illegal not to own or rent land. States exercise sovereignty over a geographic territory: they can determine the rules that govern that territory, and they have the power to exclude people from that territory. Landowners exercise quasi-sovereign powers over their landholdings. Landowners determine what rules apply to their landholdings: they can determine who uses their land and what they can do there. They have a broad suite of powers to exclude from their territories just like the state does. The right to exclude entails the right to forcibly remove, which landowners have too. The powers of deportation and the powers of eviction are variants of the same power: the power to exclude and forcibly remove someone from a physical space. Landowners share in the state's monopoly over the legitimate use of force in a territory, since they can forcibly evict. The wrong of eviction and displacement should be thought of as analogous to the wrong of removal of a people from a territory, because there is a tight connection between territorial rights and property rights over land (the issue of exclusion and occupancy rights has been discussed in the recent literature on territorial rights, see Simmons (2016), Nine (2019), and Stilz (2013) for related discussions). I hope to further develop this analogy in future work.

entitled to the value of improvements and the community at large is entitled to natural resource rents.

How should these rents be distributed among community members? This decomposes into two questions. First, what is the scope of “the community” that is entitled to the natural resource rents? Second, how should the rents be divided among the members of the community? These are really two aspects of the same question: how much of a given natural resource’s rent should each person get?

Perhaps the most straightforward answer is a view I call “Cosmopolitan Egalitarian Georgism” (CEG).³² According to CEG, all of the natural resource rents in the entire world should be equally distributed among all of the people in the world. Therefore, since global GDP is about \$105 trillion, and if natural resource rents are about 8% of global GDP, this implies a global GDP per capita of around \$13,000, and a global natural resource rent per person of \$1,040.³³ Proponents of CEG think that every person should receive a universal basic income funded by all of the natural resource rents in the world. On this way of looking at things, everyone on earth would be an equal owner of a company that owned the entire earth, with their shares paying regular dividends. Everyone’s shares are diluted when a new person is born, and shares are retired every time someone dies. One would not be able to sell or otherwise alienate one’s earth shares.

CEG has a certain appeal. If we take seriously and literally the claim that each person is an equal owner of the earth, then CEG is the only view that would give to each person their due. But we shouldn’t think that everyone originally jointly owns the earth, following Locke, but rather, that no one does, following Rousseau.³⁴ We all have symmetrical rights vis-à-vis natural resources, but it is wrong to conceptualize these rights in terms of equal joint ownership.

The basis of my argument against CEG is the fact that people contribute unequally to causing a natural resource to have the rent, and accordingly, the value, that it does. I will illustrate this using the example of urban land. Consider the economic rents generated by

³² Steiner (2009) defends this view. Mathias Risse (2012) defends a view he calls “The Common Ownership of the Earth” but this view is substantially different from CEG. See Abizadeh (2013) for a discussion.

³³ The rent share is difficult to estimate because economists typically define natural resource rents in a way that excludes rents on urban and suburban land (including imputed rent for owner occupied properties). Eden and Kuruc (manuscript) report world bank data going back 50 years that shows natural resource rents (excluding urban land) fluctuate between 3 and 5 percent of GDP. Urban land rents are probably at least another 4% of GDP, given that urban land represents more than 25% of the capital stock of advanced countries according to Piketty (2014).

³⁴ Rousseau, *Discourse on the Origin of Inequality, Part II*.

Manhattan Island, which has a value of perhaps a trillion dollars. This means that the annual rent is, let's say, \$100 billion. CEG implies that each of the Earth's 8 billion people is entitled to their share of Manhattan's annual rent--\$12.50. Recall that Manhattan's value is not an intrinsic feature of the island, but rather, its economic rent derives from the fact that demand for using space on Manhattan far exceeds the supply of available space. And many people demand to live in Manhattan because of the productive activities of everyone who lives in the metropolitan area.

But if this is the case, then why should a subsistence farmer who lives on the other side of the planet—someone whose community, let's suppose, is, by choice, completely independent from the global economy—receive a check every year for her portion of Manhattan's rent? The initial problem that George highlighted with private ownership of natural resources, recall, was that if resources command an economic rent, then the people who are paid this rent can appropriate some of the fruits of the labor of those who pay the rent, benefitting from what they do not produce. But CEG suffers from the very same problem. Since Manhattan's economic value derives from the productive activities of those who live in the city, CEG allows people who did not create Manhattan's economic rents to appropriate value created by the labor of people living in the NYC metro area. This is not just.³⁵ The problems with CEG are inherited by any other egalitarian form of Georgism restricted to a smaller, non-cosmopolitan community, since the people in the metropolitan area do not all contribute equally to producing the economic rents of urban land. So, even metropolitan egalitarian Georgism will not work, but it is *closer* to the truth than is CEG.

This leads us to the correct view, which I shall call “proportional Georgism.”³⁶ According to this view, people ought to receive natural resource rents in proportion to their contribution to creating those natural resource rents. People who live outside of a metropolitan area largely do not contribute to the urban land value in that metropolitan area, and this explains why they are

³⁵ Michael Otsuka (1998) argues that natural resources should be distributed in a way that makes up for natural disadvantages. We might interpret this as a prioritarian form of Georgism. My argument against CEG rules out this view too: Otsuka's proposal would allow the naturally disadvantaged to appropriate value produced by the naturally advantaged. The value of natural resources does not appear *ex nihilo*, waiting to be distributed to the neediest party; rather, it exists only because there are more productive uses we can put resources to than there are resources. Claims on natural resource value are claims on someone's productive activity.

³⁶ George did not draw the distinction between proportional and egalitarian views that I develop here, though there is more textual support for regarding George as holding a proportional view. Layman (2020) interprets George as holding a “world sharing” view, rather than egalitarian view, according to which all land should be held in common and managed by the government.

not entitled to its urban land rents. Egalitarian Georgism is the special case of proportional Georgism where everyone contributes equally to creating natural resource value.³⁷

It will be helpful to begin by characterizing this view at a high level of abstraction. George writes (1879, 334): “For the right to the produce of labor cannot be enjoyed without the right to the free use of the opportunities offered by nature, and to admit the right of property in these is to deny the right of property in the produce of labor.” If you are able to use all of the natural resources that you want to use without getting permission from anyone else, then you have the kind of free access to natural opportunities required by self-ownership. If everyone is in such a situation, then the Lockean proviso is satisfied and no natural resource commands an economic rent. Natural resource rents arise only when people have incompatible interests in using some resource. If people have incompatible interests in using a resource, not everyone can have free use of natural opportunities. What should we do in such a situation? Who should get to use the resource, given that no one is entitled to it *ex ante*? George writes (1879, 343) that in such situations, “our rights to take and possess cannot be exclusive; they must be bounded everywhere by the equal rights of others.” Which way of allocating resources in such situations would recognize everyone’s equal rights? What would all of the potential users agree to were they to collectively decide, on equal terms, how the resource is to be used?

My contention is that the person with the strongest interest in using the resource should be allowed to use the resource, but this person must compensate the other potential users for excluding them from the resource. Though some scarce resources can be collectively sustainably managed when conditions permit small-scale, face-to-face interactions,³⁸ typically the best response to scarcity is to allocate exclusive rights to control the resource to individuals. Everyone should agree that the person who has the strongest interest in using the resource should get to use the resource, because this way of allocating resources will maximize the amount of compensation that can be provided to the other potential users.

If we imagine a hypothetical auction in which people bid for the right to exclusively control the resource, then the highest bid is what constitutes the economic rent of the resource; it is just the market clearing price for the resource. The winner of the auction, who has the

³⁷ I argue in “Emissions Rights and Environmental Justice” that the atmosphere’s ability to absorb greenhouse gasses is a rent-commanding resource that we all have symmetrical interests in using, and as such, egalitarian Georgism is a good model for distributing this resource’s rents.

³⁸ Ostrom (2009).

strongest interest in using the resource, must pay the winning bid to the losers, who have weaker interests in using the resource, in order for the winner to legitimately exercise exclusive control of the resource. And the compensation should be divided among the potential users in proportion to the magnitude of their interests in using the resource, so that those who bid only a small amount get only a small amount of compensation, and that those who did not bid at all because they have no interest in using the resource get no compensation. If all rights to use resources are assigned in this way, all resources will obtain their highest and best use—everyone will be able to use the resources that they can make the best use of. Likewise, everyone will be adequately compensated for their exclusion from other resources by the people who do get to use those natural opportunities. All of the people with interests in using some resource will participate in the auction for that resource; these are the people who *contribute* to creating the natural resource's value because rents arise from incompatible interests in using scarce resources. And each person is compensated in proportion to their interests in using the resources, that is, in proportion to their contribution to creating the resource's value.

Our free access to natural resources—a necessary condition of our equal rights as self-owners—must be secured in two different ways, depending on whether the proviso is satisfied. If there is enough and as good, then everyone can actually use any resource she wants to use. But when there are conflicting interests in using a resource, the person with the strongest interest in using the resource must pay the resource's economic rent to compensate the other potential users, and the compensation must be divided among them in proportion to the magnitude of their interests in using the resource. In the latter case, each person's rights to freely access natural opportunities is limited only by the equal rights of others.³⁹ This is the only way that excluding someone from access to a natural resource can be justified.

This way of putting things reveals why the land value "tax" is ultimately a misnomer (though one I will continue to use). The payments that landowners must make are compensation for their exclusion of other potential users that legitimize their exclusive use of the land. Such payments do not stand in need of justification because they infringe on a property owner's rights—as taxes on wages, consumer spending and profits do. On the contrary, they are what

³⁹ George (1879, 336-337).

create the landowner's rights to exclude others from the land.⁴⁰ Therefore, we see once again how "taxes" on land are quite unlike taxes on other goods, owing to the different natures of land, labor and capital. So long as the owner of capital or personal property made it themselves or in free cooperation with others, or it is at the end of the chain of legitimate transfers that originated with someone who made it themselves or in free cooperation with others, the owner's exclusion of others does not stand in need of justification, since others have no claims on you or the things you do or make.⁴¹ For this reason, George thought, and I agree, that when a full LVT is implemented other taxes would be unjustified and unnecessary. Such taxes are inefficient, because taxing elastic factors of production yields deadweight loss. Eliminating taxes on production would allow people to keep more of what they produce using their labor and capital, and as such, is a requirement of distributive justice.

Our discussion of proportional Georgism has so far proceeded at a high level of abstraction, and has involved some idealizations, especially concerning the notion of willingness to pay: this is not a good proxy for someone's interests in the real world because people have different abilities to pay. We could never actually administer an auction for all of the natural resources in the world and ensure that everyone's bids perfectly reflected their interests, and we could not precisely assign compensation to the auction losers in the way I have described.⁴² But there are a number of natural resource governance institutions that would instantiate the key normatively important features I discussed above. Thus, we will now proceed to study the institutions that could actually implement this model of distributive justice.

5. Land Value Tax in the Real World

How do we actually secure peoples' free access to natural resources under real world conditions of scarcity? In this section we will identify (1) how the revenue the government raises by the LVT should be spent, (2) how the LVT can be implemented on a practical level, and (3) what beneficial effects we might expect from the LVT.

⁴⁰ As such, landowners should be able to pay more in taxes to obtain a thicker bundle of rights to exclude others, and should be able to pay less when they have a thinner bundle of rights to their land, say, when it is under a conservation or public use easement.

⁴¹ I defend this claim further in a companion paper on justice in transfer.

⁴² This is something I agree with Dworkin (1981) about, despite the fact that our respective resource auctions are otherwise quite dissimilar.

George thought that the state should represent its citizens' interests in using land and use the revenue that it collects from LVT to fund public services like infrastructure, parks, utilities, libraries, public education, and many more. George (1879, 454) summarizes his vision: "We should reach the ideal of the socialist, but not through governmental repression. Government would change its character, and would become the administration of a great co-operative society. It would become merely the agency by which the common property was administered for the common benefit." George's minimal state is thus quite unlike Nozick's: managing public assets (land) to maximally benefit its citizens is its primary function.

While an egalitarian Georgist might favor using revenue raised from a LVT to fund a universal basic income, proportional Georgism recommends using LVT revenues to replace the revenue that comes from taxes on income, saving and transactions, which currently fund such public services. Replacing these taxes with a LVT will benefit people roughly as required by proportional Georgism, since reducing these taxes will allow people to keep more of what they produce.

It is also worth noting that LVT is always sufficient to fund beneficial public spending, because public investment generates land value. This result—dubbed the "Henry George Theorem" by Stiglitz (1977)—implies that government investment in public goods will always raise the land values in the catchment areas of such goods by an amount more than the initial cost of the investment. In other words, public spending on local public goods is self-financing if there is a LVT. A number of studies of individual public investments like building highways, extending subway lines, etc. have found that public investments generate at least as much land value as the investment costs.⁴³ The United States has seen a chronic inability to adequately fund beneficial infrastructure like California's high speed rail and the New York City subway system because we largely do not use the land value that these projects generate to finance them. We instead largely allow windfall benefits from public investment to accrue to private landowners when the government makes investments that increase the value of their land.⁴⁴ Citizens are understandably reluctant to commit their tax dollars to finance public spending if most of the benefits of such investments accrue to private landowners. And when there is a proposal to fund

⁴³ Much of this research is summarized in Korngold (2022).

⁴⁴ Ryssdal and Hollenhorst (2024) document how recent federal industrial policy (the CHIPS Act) has led to such a dynamic in Arizona.

public infrastructure through a LVT like New York City's congestion pricing plan (the plan would put a modest flat fee on use of the streets—which constitute about one third of Manhattan's land), they often fail for political reasons including opposition from special interest groups. In addition, governments can often generate land value, which they can capture to fund public services, without making any investments at all, simply by liberalizing land use rules by relaxing zoning and other restrictions, and capture this value through a LVT.⁴⁵

An additional mechanism, severance taxes, allows governments to raise revenue from natural resources such as oil, coal, minerals, timber, etc. when those resources are severed from the Earth. Such taxes allow the government to capture some or all of the value of natural resources. Public ownership of renewable energy generation capacities like hydropower share some of the same beneficial features. Norway is the country most closely aligned with Georgist principles, as it raises a substantial portion of government revenues through public ownership of hydropower, fossil fuels and minerals. Wise management of natural resources has allowed Norway to become by far the wealthiest nation in the world that is not a micro-state or tax haven. Several U.S. states like Texas, New Mexico and Alaska rely heavily on severance taxes as well, and Alaska uses them to fund a universal basic income for its citizens.⁴⁶ Even intangible natural resources like rights to the radio broadcast spectrum have been auctioned to raise public revenue, and can thus be considered as a kind of LVT.

Now we can turn to urban and suburban land. Georgist ideas, as they were taken up in East Asia in the 20th century, resulted in public leasehold land tenure systems, in which citizens (or collections of citizens represented by developers) purchase long term leases on land, usually 99 years. Public leasehold is less common in the United States, but still practiced in some cases, most notably the site of the world trade center. After the term is up the land reverts to the government which can lease the land again. A large portion of public revenue in Hong Kong and Singapore (the second wealthiest country in the world that is not a micro-state or tax haven), as well as regional government revenue in China, is raised in this way.⁴⁷

Moving to such a system would not be a good idea in Anglophone countries, which are overwhelmingly accustomed to indefinite ownership. But we can implement a LVT with only

⁴⁵ Kim (2020).

⁴⁶ On the Alaska fund, see the essays in Widerquist and Howard (2012).

⁴⁷ Hui et al. (2004).

minor changes to existing land tenure and property tax systems. Every jurisdiction in the United States today has property taxes, which are set and administered on the state and local level. In most places, land and improvements are assessed jointly and taxed at the same rate. Since a portion of the value of real estate is the value of land, traditional property taxes constitute a partial LVT. But compared to a full LVT where all taxes are laid on land value and improvements are not taxed, traditional property taxes penalize improving one's property, and reward land speculators, because owners who underutilize their land pay lower taxes. This leads to immense waste, because it induces speculators to keep land idle rather than improving it, something that George extensively comments on.⁴⁸ Thus, we can now see that our contemporary land use regime not only violates the "enough and as good" proviso, but also violates Locke's anti-waste proviso, given that landowners are rewarded for underutilizing (letting go to waste) their land's potential. The LVT will reclaim this waste.

Many jurisdictions assess the land and the improvements separately when collecting property taxes, and this is becoming much easier and cheaper using mass appraisal technologies made possible by advances in econometrics and machine learning.⁴⁹ In a few jurisdictions, mostly in Pennsylvania, land is taxed at a higher rate than improvements. As I mentioned in the introduction, Pittsburgh had a partial LVT for 90 years where land was taxed at a maximum of five times the rate at which improvements were taxed, and there is ample evidence pointing to its beneficial effects. My proposal for how the LVT could be most easily implemented is for other state and local jurisdictions to (1) assess land and improvements separately using mass appraisal technologies and (2) gradually increase the tax rate on land and gradually decrease the tax rate on improvements (as well as gradually decrease taxes on income, saving and consumption). A gradual shift to a LVT would give the real estate markets time to adjust, and would mitigate the complaints that current landowners may have compared with a more abrupt transition to a more just property regime.⁵⁰

⁴⁸ George (1879, book 5) examines the interaction between these speculative dynamics and the business cycle.

⁴⁹ Wang and Li (2019).

⁵⁰ George (1879, Book 7, chapter 3) vehemently argues against J.S. Mill's (1848) contention that landowners would be entitled to compensation if the value of their land was socialized. George thinks that such compensation would be just as morally bankrupt as the British Government's compensation of the expropriated slave holders of the British West Indies, which Mill also supported. I am inclined to agree with George rather than Mill: we do not normally think that people are entitled to compensation when their taxes are increased (otherwise net tax increases would be impossible). Likewise, it is formerly enslaved people, and perhaps their descendants, who are the ones entitled to reparations, not the expropriated former slave holders. Fully evaluating such issues of transitional justice is beyond the scope of this paper, though. See Layman (2020) for a further discussion.

Finally, since real estate is constituted by land and an improvement, increasing property taxes, by its very nature, increases the taxes on land. And since real estate in the largest cities and most desirable locations has a high land value to improvement value ratio, even traditional property taxes in such places are largely taxes on land. This means that a polity can become more just merely by replacing income taxes with property taxes. It is worth comparing America's two largest states in terms of population and economy to see this point. Since proposition 13 was passed in 1978 capping property tax increases at 2% per year grandfathering current owners into low taxes, California has seen the onset of the nation's worst housing affordability crisis, has high wealth inequality, and funds public services largely through high taxes on personal incomes. Texas's government, by contrast, is funded by some of the highest property tax rates in the country alongside severance taxes on oil and gas, with no income tax.⁵¹ Texas's average property tax rate is more than double California's. As such, it has lower inequality than California, and highly affordable housing despite having one of the most dynamic economies in the country. In California, the way to get ahead was to have bought property there in the 70's, but in Texas, the way to get ahead is to move there and work hard, since your earnings will not be taxed, and you will spend relatively little on housing. California, and other Western states, have also suffered from a number of economic and environmental problems due to their Lockean system of water rights allocation known as "prior appropriation."

If widely implemented, a LVT would ameliorate the housing and inequality crises that I discussed at the start of the paper. Inequality is high and rising because land is unequally distributed, allowing a small portion of people to profit from the success of the entire economy to a degree that is disproportionate to their contribution to that economy. High and rising land prices means high and rising housing costs, which have a number of detrimental effects. The exclusion of African Americans from property markets in the mid-20th century is arguably the main cause of today's racial wealth gap, and this inequity would be remediated by taxes on land. Taxing land and eliminating taxes on improvements would stimulate development, causing more housing to be built in the most productive cities and the most dynamic neighborhoods (those places with the highest land values). Merely putting more people in the most valuable places will lead to economic growth. And this change in development patterns would also promote urban density, which has important environmental benefits. Georgist policies would at once promote

⁵¹ See Loughead et al. (2022) for a summary of state-level tax base variation.

racial, housing, climate and economic justice. But by far the most important feature of the land value tax is that its capacity to promote justice does not come at the cost of economic growth. On the contrary, the land value tax is an idea that holds immense promise because it can simultaneously increase and more fairly distribute society's wealth.

6. Conclusion

I will conclude by briefly reviewing what I have argued in this paper. Contrary to what Locke and Nozick have argued, our self-ownership does not allow private appropriation of natural resources like land; rather, self-ownership is incompatible with private appropriation of natural resources. Nozick's argument that taxation is morally on a par with forced labor also implies that paying rent to private owners of natural resources is also morally on a par with forced labor. Explicating Locke's proviso using the law of rent allows us to see what was plausible about his view—that improvers are entitled to the improvements they make to natural resources. Insights from George allowed us to clearly see that owners of land have no claim to the land's value, since this value is due to the community at large. George's land value tax is not only the sole just tax, but also the only efficient one. As such, it can both more fairly distribute, and increase, the wealth of society.

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