Appropriation

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Abstract

Taking up a novel constraint for justice in distribution, which is equality between cultures, we suggest that the Lockean method of appropriation is lacking and suggest a new novel method which solves the issue of cultural equality.

1 Organization

Should lazy people have property rights? In the Lockean method of appropriation, labor mixing was outlined to be the criteria for the just acquisition of property rights. Lazy people often want to use resources without working, this creates a counter intuitive conclusion, lazy people cannot appropriate assets. Behind the veil of ignorance, where one does not know if they are lazy or non lazy, I argue that people would not agree to labor mixing as a method of appropriation. I suggest an alternative form of appropriation which lazy and non-lazy would both agree to.

Nozick is perhaps the most famous modern exponent who adopts this labor mixing view, with various Austrians also embracing the concept as "homesteading", such as Rothbard [1]. The principle under which this is usually justified is "first come first served" and the arguments usually imply that this is the method of appropriation which minimizes conflict.

A known problem with labor mixing is that the criterion itself had been devised in accordance with Locke's own values. Locke postulated that high

[1] see "Applications and criticism from the Austrian school"

quality human-beings were those which utilized their reasoning faculties the most [2]. Locke figured that to reason entailed to use natural resources to their full capacity and it is demonstration of this reasoning that would endow the human with a private property right [3]. Indeed according to Locke, since Native Americans left their land vacant a unenclosed, they were property owners and could be expropriated [4]. Native Americans did in fact delineate between territories but either these methods were not recognizable or were not considered adequate and sufficiently productive to Europeans [5]. Specifically, the practice of decomposing crops every three years to enrich the soil was considered by Locke to be wasteful and a violation of their reason [6]. In effect Locke justified the much of colonization of the new world by claiming that the new world or other areas were not in fact appropriated because the existing population were too primitive to improve the land and hence could not mix their labor with it.

The purpose of this paper is to question the legitimacy of Lockean appropriation through a social contract kind of analysis. That is, we assume that agents get together and agree on the rules for appropriation before being out in the world. I will argue that under some circumstances, the result of this agreement would be that of "narrow" property rights. In principle a migratory tribe should not have more or less property rights than non-migratory tribe. As such, property rights are not allocated on a specific asset, but are instead allocated to specific uses. Property rights MUST become broader if the specific use is experimentation or something that has an element of discovery.

The application of the social contract analysis is that a sort of "narrow" appropriation emerges. Specificity of a task and planning to discover turn out to be important variables. Specifically, a discoverer culture, that is the intended use, being to discover uses, is the only case where rights are asset specific.

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[2]Parekh, B. (1995), "Liberalism and Colonialism: A Critique of Locke and Mill", Decolonization of Imagination: Culture, Knowledge and Power, Edited Pieterse, J.N. and Parekh, B. London, Zed Books. (Parekh, 1995, p.83)

[3]Parekh, B. (1997), "The West and its Others", Cultural Readings of Imperialism: Edward Said and the Gravity of History, Edited Parry, B. and Squires, London, Lawrence and Wishart, pp. 173-193.(Parekh, 1997, p182)

[4](Parekh, 1997, p183)

[5](Parekh, 1995, p.85)

[6](Parekh, 1995, p.85)

The novelty to be explored is that behind the veil of ignorance, agents may not have enough information on the assets that exist and not enough information about what their preferences will be. The lack of perfect information entails that a static analysis is insufficient. At time 0, the social contract is signed, this could be for numerous reasons, such as avoiding war or transaction costs or whatever. Once the social contract is signed, agents go out into the world and dynamically explore it and try to meet their needs. As such, they will aim to agree to an agreement were a wide variety of preferences can be satisfied Specifically, I give an example related to disutility of working. An agent who could be called "Lazy" must also agree to the social contract.

The paper rejects most forms of appropriation. The appropriation that comes out in the end is a sort of appropriation through "planning" in the hayekian sense. We apply this theory to numerous historical examples such as Amazonian tribes, Native Americans etc. We show that an agent using this criteria would give Native Americans and the like narrow property rights.

2 Situation

Amy and Bob are stuck on an island. They will jointly agree on some kind of arrangement through a contract. It seems clear that whatever they agree to, there should be no alternative contract which will land at least one of them better off without rendering the other worse off[7].

3 Perfect information

If there is perfect information, that is agents know their own and each others preferences and capabilities, the full set of resources on the island, how all of these resources can be mixed and transformed, and know the future outcomes that will occur to either the agents or the different resources. This implies that everything can be contractually settled at this original position.

Perfect information does not imply that no production occurs. Indeed if an asset can be used to create another asset, this can be incorporated in into it's value.

[7]Pareto equilibrium

What does this mean? If the agents value having an asset for their whole lifetime and having monopoly over their asset, then this can be written in the contract. Amy and Bob can split all the assets as they like in the beginning: If Amy likes apples and Bob likes burbery bushes, they can agree on a Pareto point of assets.

In other words perfect knowledge implies a lack of need for an agreement about a property rights regime. Property rights are ex-post, there is no sense in discussing a property right acquisitional regime if the agents can agree on something before. So for appropriation to be part of the initial contract, it is REQUIRED that either there is imperfect information, or the agents enjoy the process of appropriating in itself.

To reach a pareto point in negotiation, it is necessary to have an initial endowment. The source of the initial endowment is not very important for our purposes, but perhaps the most intuitive way Bob and Amy would agree to endow the island would be that they both have half of every type of divisible asset on the island. From this initial endowment they can trade in the standard general equilibrium way. So for example if there are two bushes on the island, they each own one berry bush before trading. If there is an odd number of berry bushes they can assume half a berry bush each and presumably two half a berry bushes are worth a whole bush.
[8]

The rawlsian method of initial acquisition becomes a little more problematic when time becomes a variable. Time often has the effect of creating new agents. One could imagine that the agents agree that they will only use the resources once they exist or are born. There is an issue of what the initial endowment would be. For instance suppose that there is one asset and 4 periods. Amy is born in period 0 and can consume in period 1,2,3,4. Bob is

[8]What if there are non divisible assets? Say there is some asset that loses its value if it's ownership is divided. In this case it seems like the two agents would have to make a mechanism to allocate them. Here we describe three simple such mechanisms: 1) Agents bid for the indivsible asset using their divisible assets. The winner pays the losers bid. 2) both agents choose all possible combinations from the other agents initial set of divisible goods endowments which they would accept in exchange for giving up the indivisble goods. Amy and Bob look at each others supersets and see if there is a set in there that they prefer to the asset. If there is at least one set that either of the two agents prefer, then the mechanism is done and that transfer occurs. 3) If they both cannot find a set which they agree for the transfer, the non-divisible asset can either be randomly allocated, but a more egalitarian outcome would be to flip a coin, Amy's side shows up. All of Amy's assets are transferred to Bob and Amy gets the non-divisible asset.

born on period 2 can consume in periods 3 and 4. So the question is, is Amy fully endowed with that asset in period 1 and 2? If both agents are fully endowed then clearly Amy won't consume in the last two periods. If the agents are endowed equally ONLY in the periods in which are they are alive then Amy will consume three times overall whilst Bob will only consume once.

4 Imperfect information and symmetric players

Amy and Bob run having imperfect information does not have to a imply a change in setup. Perhaps they can simply meet again and have another contractual agreement at every new discovery. This can introduce asymmetric information problems, 1) if all new resources are equally split there is no incentive to disclose new discoveries, 2) The cost of contracting at every new information may be high 3) The cost of discovery may be higher than the gain AFTER re-negotiation, resulting in a lack of motif to discover. All of these reasons make Amy and Bob more interested in using an appropriation rule. Of course if there is more than one kind of asset, even if Amy and Bob have the same preferences, they may wish to exchange.

If Amy's and Bob's costs' of discovery are identical it seems intuitive that numerous appropriation rules could be acceptable, we could imagine the structure of the rule. Upon discovery of an asset, the appropriation rule could either occur conditionally on some action or the appropriation could be automatic. We could imagine that only some assets be appropriable depending on their value if appropriated.

An example of a costly rule is the Lockean rule, mixing labor with the land is time intensive. Here, game theoretic considerations are in order, a first best outcome is the outcome that would occur without game theoretic considerations. More detail below:

Let us take a situation where Amy and Bob are both running around on the island, exploring it more thoroughly as time progresses. They have the option at any point in time to keep exploring the island or to stop and do some other activity which will entail that they stop exploring. To illustrate, assume that they are simply searching for fertile land, and the alternative option would be to use the land, by planting crops which could be consumed.

Why might the agents want to create a costly appropriation rule? A

costly appropriation rule may be optimal because without a costly one they could OVER-discover. Suppose that upon discovery of an asset, Amy could simply appropriate it costlessly, perhaps by sticking a marker on it, here she could simply move on further explore or plants crops. If Amy was ALONE, she would prefer to cultivate the land rather than discover more. Numerous reasons could be given for this, but the simplest is simply that she likes to a certain ratio of searching/cropping per day. However due to the game theoretic considerations, that is, if Amy does not appropriate the rest of the island, Bob will, so she is forced forced to over-appropriate. Ideally we would like to come up with an appropriation rule that gets us closer to the first best.

We need to favor the activity that would take place in the first best scenario so that it occurs with our rule. In other words, if the first best is to cultivate the land, one could think of a plethora of rules to make appropriation. For instance digging a hole that is 10 meters deep could be the appropriation rule. This does not seem to be a good candidate because, while it imposes an appropriation cost it does not seem to make the agents better off. It is best if the appropriation is NOT some arbitrary cost, but is instead a byproduct of something which adds value in itself. The obvious solution is simply to say that farming the land, is what causes the appropriation.

There is nothing magical here about farming the land. It is simply what gives the first best behavior. If the first best behavior upon finding a parcel of land was to create a hammock and sleep on it for 10 hours before searching again, then the ideal appropriation rule would be sleeping on the hammock for 10 hours.

However the method of appropriation offers some interesting notions here. If the first best is simply that Amy likes to sleep around the island at various points in time, there is no need to give her property rights over the land she appropriates for all time. There is only a need to give Amy property rights which she intends to use. If for instance, the intent is to come back to this appropriated land and sleep there every 10 days, then the right is simply that Amy appropriates the right to sleep there every 10 days. As such I say her property is *narrow*. The right may be indefinite but it is narrow because she doesn't have a right for all slots. So we may have an equilibrium where every day Bob and Amy shuffle around overlapping plots on the island yet never have conflicting schedules. This rule would then guarantee that a pareto point would be achieved.

Consider the case where the property rights are NOT narrow. As before we take the first best to be that Amy and Bob return to the same parcel

every 10 days, as such, they each need at least 10 parcels to achieve their goals, so 20 parcels are required to reach the first best equilibrium without narrow property rights.

In contrast, with narrow rights, only 10 plots are required. So the advantages of narrow appropriation are twofold. 1) Less physical assets are required to achieve first best. 2) Lower total cost of discovery. The second can be true in two ways, if the agents directly communicate their discovery then the total cost is lower. If they don't communicate but instead simply stumble upon marked and unmarked property, then if they independently discover properties, there is still a lower expected value to the total cost of discovery.

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5 Imperfect information and asymmetric players

So far we have assumed that the two agents have the same preferences and cost profile. What does loosening this assumption change? There are a number of things that this situation can be analyzed with. In such a situation, it seems like the two agents may want to exchange ex-post even more than before.

While if the agents first best is identical it is easy to devise a rule, this changes if their first best is of another type. In the previous example we could simply make the appropriation rule the same as the first best outcome. However how can this rule be applied when the first best is different for the two agents? For instance Amy would have transformed the fertile land into a farm but Bob's first best would be to make to take a small rest and keep exploring.

Would heterogeneous appropriation rules solve the issue? They would solve it under certain circumstances, in this specific example, the heterogeneous appropriation rule would solve the heterogeneity of first best but it would not solve a more fundamental issue which is that the tasks differ in their length of time. So even if we impose that Bob can appropriate the asset by resting on the asset, this does not seem to be sufficient. For the simple reason that if Bob's first best is different than Amy's first best and those first bests also differ in time expended. The fact that the differing appropriation

rules will cause the agents to have different end state appropriations seems like it would not be agreed to. Why would Amy agree to a rule which will not be identical to Bob's in the same physical circumstances if this rule causes her to end up having a less than equal total appropriation?

We can speculate on some plausible reasons why Amy might agree to a rule that does not result in equal total appropriation. A trivial case is her first best would not entail that she would appropriate more than half. Another reason is if she can trade with Bob, if her own cost of discovery is higher than Bob's then she may prefer Bob to appropriate it and then trade with her.

There may be specific reasons why this would occur,

however there is a property rights regime which will in fact

6 The anti-property rights position

It is unclear why Amy and Bob would not want any property rights at all. But perhaps there is such a case.

7 Planning as appropriation

To simplify, let us assume that the assets are not consumable but they can be transformed.

As Amy and Bob go about on the island they will maximize their utility function. To do so, they will setup some schedule. Perhaps they will want to spend a given amount of time

This is perhaps best illustrated with an example:

Finititude of assets

Suppose that the island has 4 identical assets which both agents prefer equally. Let us simply posit that agents have convex daily search costs and each asset takes 1 hour to discover. That is, both agents prefer to search 1 hour in two days rather than 2 hours in one day. In other words, the optimal discovery process is that they both search for 1 hour a day. However, they both prefer to work 2 hours in one day and own 3 assets rather than work 1 hour a day and end up owning 2 assets. In this case