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Nozick's Rectification Principle: A Critical Defense

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NOZICK'S RECTIFICATION PRINCIPLE

A Critical Defense



Universiteit Leiden

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Philosophy, Politics and Economy

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Supervised by

Tim Meijers

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I. INTRODUCTION

A. Purpose

In this thesis, I will discuss Robert Nozick's entitlement theory of justice as developed in his *Anarchy, State and Utopia*.¹ Specifically, I will examine his theory of justice in holdings and its three constituent principles of justice in acquisition, justice in transfer, and the principle of rectification. The core focus of this thesis is, however, on Nozick's principle of rectification, which ties his entitlement theory together.²

In its essential role, the rectification principle has been the subject of many critiques. They are various but for purposes of my thesis I group them into two broad categories that I will treat separately.

First, many of the critiques call into question whether rectification as envisioned by Nozick *makes conceptual sense at all* due to such fundamental concerns as the unavoidable but extensive counterfactual conjectures it entails, a general lack of accurate historical records, the non-identity problem, and a variety of other problems.³ I will discuss these criticisms and find that many of them have substantial merit in that they illuminate the serious difficulties that claims for rectification will experience. I will argue, however, that they do not invalidate Nozick's entitlement theory. On the contrary, to the extent that these criticisms make it more difficult for claimants to make a persuasive case for rectifications, they inadvertently strengthen Nozick's theory of justice in holdings. For under the law, and under common sense, it is reasonable to presume that holdings are just until proven otherwise.

The other critiques, however, concern claims that Nozick's entitlement theory is *internally inconsistent*. They claim that history is so replete with injustices that justice in holdings can only be established with massive government mandated redistributions. But such massive redistributions create a conundrum in that they are precisely what Nozick declares himself so firmly opposed to in *ASU*. This contradiction, critics claim, renders Nozick's

¹ Nozick, *Anarchy, State, and Utopia*. Henceforth *ASU*.

² Nozick, *ASU*, 149–52; Lomasky, *Rights Angles*, 17–18.

³ Waldron, "Superseding Historic Injustice"; Waldron, "Redressing Historic Injustice"; Cowen, "How Far Back Should We Go"; Thompson, "Historical Injustice and Reparation"; Lomasky, *Rights Angles*.

entitlement theory internally inconsistent.⁴ Focusing on Nozick, Nahshon Perez formulates the libertarian conundrum as follows:

[Strict adherence to justice in holdings] will entail a large-scale policy of rectification [with] at minimum, a large-scale intervention in current holdings and a state of affairs in which there are virtually *no secured cases of ownership*. *De facto*, this means a policy of redistribution – *a concept opposed to libertarianism*. [...] In attempting to solve the problem of rectification, [libertarians] pay in hard currency indeed: namely, the weakening of certain foundational libertarian assumptions.⁵

Underscoring the libertarian conundrum, Perez emphasizes that his critique focusses “on the *internal structure* of libertarian thought, and not on the ongoing intellectual struggle between libertarians and left-liberals.”⁶

Perez’s emphasis is important. As Thomas Kuhn has shown, while polemics between proponents of competing paradigms are commonplace, they rarely bring one down.⁷ But here Perez and others are using the libertarian paradigm’s own *foundational* principles and probing its internal consistency.

This attack on the internal consistency of libertarianism is fueled by Nozick’s opposition to massive redistributions in order to, so to speak, “reboot the system.” He is all too happy to let bygones be bygones.⁸ And after his own vacillations on the difficulties of rectification and a halfhearted gesture towards equalitarian notions, Nozick firmly asserts: “yet, a line must be drawn.”⁹

Of course, the gravity of the critics’ claims of internal inconsistency hinges on the *monetary magnitude* of required rectifications associated with the historical injustices.¹⁰ For example, if the required rectifications are, as Perez conjectures, impossibly large, then the

⁴ Perez, “Libertarianism, Rectification and Property Rights,” 2012, 1; Friedman, *Nozick’s Libertarian Project*, 38–40.

⁵ Perez, “Libertarianism, Rectification and Property Rights,” 2012, 1–2. (Emphasis added)

⁶ Perez, 1–3. (Emphasis added.)

⁷ Kuhn, *The Structure of Scientific Revolutions*.

⁸ Schefczyk, “Let Bygones Be Bygones?” Schefczyk notes: “Nozick seems to advocate something like [an eternity view] when he compares justice-preserving to truth-preserving transformations. This suggests that information as to when an injustice occurred is irrelevant for the question of rectification, [...]. On this account, the fact that certain legal rights expire is due to purely pragmatic difficulties such as tracing back causal chains and legal transactions over a long period.”

⁹ Nozick, *ASU*, 153.

¹⁰ Nozick, 149–50, 231; Perez, “Libertarianism, Rectification and Property Rights,” 2012, 1; Cowen, “How Far Back Should We Go.”

critics' claims are bolstered and Nozick's entitlement theory is substantially and perhaps fatally weakened.¹¹ On the other hand, if the required rectifications are small, then the critics' claims are diminished. As such, the issue of the *monetary magnitude* of possible rectifications is central and worthy of further examination.

To this purpose, I will consider the historical injustice of slavery in the United States and the currently growing demands for reparations, i.e., rectification.¹² Given that the institution of slavery is one of the gravest historical injustices, an assessment of the magnitude of necessary rectifications would illuminate much about the libertarian conundrum. My notion is that *if* a complex and systemic injustice such as slavery can be rectified without calling all current holdings into question, *then* most historical injustices can likely be similarly rectified. This conditional proposition is what I intend to examine.

Specifically, I will consider the injustice of slavery as it existed in the United States from its foundation in 1776 up until 1865, when the Thirteenth Amendment proclaimed that "neither slavery nor involuntary servitude, [...] shall exist within the United States, or any place subject to their jurisdiction."¹³ For the injustice of slavery during this time period, I will provide an *empirical and data driven analysis* to quantify the requisite Nozickian rectification.

As part of this analysis, I will also explore questions concerning how far back one must *and* can go, what a victim may require as rectification for an injustice, and various other complications that cannot be simply ignored in the face of practical real-world applications.

B. Conclusion

Having examined the question of how large rectification for slavery ought to be, I conclude that it should be minimal or nil *if the question is analyzed under Nozickian libertarian principles*. My conclusion is based on (a) a review of the conceptual problems with claims for rectification, and (b) an empirical analysis that provides a rough estimate of how much claimants can possibly expect to receive for rectification (if we generously set aside the conceptual problems).

¹¹ McConnell, "Moral Dilemmas," 5–10.

¹² Mulligan, "Should Current Generations Make Reparation for Slavery?"; Davis and Ed, "An Historical Timeline of Reparations Payments Made From 1783."

¹³ United States Senate, "13th Amendment to the U.S. Constitution."

As such, I conclude that Nozick's entitlement theory or libertarianism is not proven to be internally inconsistent on account of rectifications, as claimed by critics. There is no libertarian conundrum.¹⁴

It is important, however, to qualify my conclusion as it is easy to misread its intentions. I am not arguing here that the injustice of slavery and its aftermath should just be ignored—rather, I am cautioning on the basis of Nozickian principles against reflexive linkages between a systemic historical injustice and the administration of monetary rectifications, as a collective *mea culpa*.¹⁵ My observation in this regard echoes that of Katrina Wyman:

[She argues] that notwithstanding the prominent role moral arguments play in these claims, it is difficult to justify redress for historical injustices in moral terms. This does not mean that redress never is morally warranted. But the difficulty of making a strong moral argument for redressing historical injustices is instructive. In particular, it helps to explain why redress has not been implemented in many instances notwithstanding extensive public debate and why, when redress has been implemented, it often has been on a relatively limited scale.¹⁶

Further, it is worth noting here that, to the extent that African Americans are still suffering today from certain social ills traceable to the institution of slavery, there are sound moral, political and economic arguments for accommodating policies. We should not forget that even if a persuasive case for rectification of slavery under libertarian principles is probably not possible, libertarians generally do view it as their moral duty to engage in charity and other activities to improve the wellbeing of all members of society.¹⁷

C. Overview

This paper is organized as follows. In Chapter II, I will discuss Nozick's theory of justice in holdings. Special attention is given to the rectification principle and Nozick's instructions for how to conceptualize and determine rectification. His one-paragraph instructions are compact but contain more meaning than is generally recognized. I show that Nozick in fact uses specific terms that have precise meanings in statistics. And, once those terms are interpreted as

¹⁴ Perez, "Libertarianism, Rectification and Property Rights," 2012, 1; Perez, "Libertarianism, Rectification and Property Rights," January 2014, 123.

¹⁵ Slavery is often portrayed as America's "original sin." Gordon-Reed, "America's Original Sin."

¹⁶ Wyman, "Is There a Moral Justification for Redressing Historical Injustices," 129.

¹⁷ Huemer, *The Problem of Political Authority*, 148–82; McCloskey, *Bourgeois Equality*, 553–85.

statistical concepts, a clearer and more complete picture emerges. Next, I formulate Nozick's instructions into two equations to derive a monetary present-day value of the requisite rectification. Consistent with Nozick's conception of rectification, I will calculate the monetary present-day value as the differential between two end-states—an unjust end-state and a just end-state. I will refer to this differential alternately as *rectification* or the *monetary delta*.

In Chapter III, I will discuss a number of issues that will frame my empirical analysis and assessment of the monetary delta required for the rectification of slavery. First, I discuss and delineate the conditions to determine the nature of historical injustices. Next, I confront the problem of retrospectively passing judgment on practices that were legal and well accepted in the past but are no longer so—specifically, slavery. This raises the question: on what retrospective basis can we now find it to have been unjust and warranting rectification? I show that Nozick's reliance on natural law principles allow us to sidestep this issue and make absolute judgements that should hold throughout time.

I also discuss in this chapter how Nozick's use of Adam Smith's *Invisible Hand Theorem* sets him apart from Locke and other social contract thinkers. For Nozick, the minimal state does not require planning by a centralized, governing agency: instead, it emerges.¹⁸ I will show how Nozick's conception of the state as created by some invisible hand is at odds with notions of “collective guilt,” which are so often embraced by other theories of rectification.¹⁹

Next, I introduce the legal concept of the burden-of-proof to underscore that holdings must be presumed just, until proven otherwise. Claimants for rectification must proof their claims before government can seize holdings and redistribute them. The burden-of-proof is an essential threshold for ensuring that redistributions of holdings establish new patterns that are just.

In Chapter IV, I will discuss a number of important critiques that have been levied against Nozick's rectification principle, such as the various problems with counterfactuals, the risk of damaging just holdings, the significance of the applied rate of interest for historical

¹⁸ Nozick, *ASU*, 18–22.

¹⁹ Cowen, “How Far Back Should We Go”; Sher, “Ancient Wrongs and Modern Rights”; Lyons, “The New Indian Claims and Original Rights to Land”; Thompson, “Historical Injustice and Reparation.”

injustices, why it is extraneous that there are no clear, immemorial historic titles, and the limitation of the rectification principle when applied to non-fiduciary historic injustices.

Last, in Chapter V, I perform my empirical analysis by means of publicly available data to show that rectifications for slavery should be small or nil. The analysis is structured around Bernard Boxill's argument that descendants of slaves are entitled to reimbursement for the underpaid labor of their ancestors, which is a notion consistent with Nozick's concept of rectification.

The empirical analysis is twofold. First, I use a study done by Thomas Craemer to calculate the unpaid labor of slaves to which descendants of slaves are entitled under Boxill's arguments. Next, I perform my own study to corroborate Craemer's results.

The results of this analysis are compared to the total present-day wealth—i.e., holdings—of the United States to determine their relative magnitudes. I show that the calculated rectifications in Craemer's study and my own amount to less than a half of one percent of all present-day holdings in the United States.²⁰ In view of this, I conclude that even a rectification for the historic injustice of slavery can be absorbed by the system without requiring the "massive government mandated re-distributions of holdings" alleged by critics.²¹

²⁰ Hechler-Fayd'herbe, *Global Wealth Databook 2021*, 24.

²¹ Perez, "Libertarianism, Rectification and Property Rights," 2012, 1.

II. NOZICK'S THEORY OF JUSTICE IN HOLDINGS

A. *Justice in Holdings*

In *ASU*, Nozick introduces the concept of justice in holdings, with the central term “holdings” relating to the ownership of such property as land, stocks, property, and other financial assets under an individual’s possession. Nozick uses the concept of justice in holdings to develop his ideas about under which conditions one is entitled to one’s holdings. As a libertarian, Nozick is motivated in this endeavor in large part by his objective to push back against calls for government mandated redistributions of holdings to attain “end-state principles.” For example, Rawls’ “difference principle” may be seen as promoting such an “end-state principle.”²² In contrast to affecting such principles, Nozick is focused on how a distribution of holdings has historically come about.²³

Nozick’s theory of justice in holdings consists of three principles:

1. *The principle of justice in acquisition*, which is concerned with the just-original-acquisition of un-held things and the processes of how un-held objects or holdings may come to be held or acquired.
2. *The principle of justice in transfer*, which pertains to the just-transfer of holdings and is concerned with voluntary exchanges, gifts, frauds, as well as particular conventional details fixed upon in a given society, such as mortgage regulations.
3. *The rectification principle* which is concerned with the rectification of injustices in case the principle of justice in acquisition or the principle of justice in transfer is ever violated.²⁴

In a perfectly just world, the following inductive definition would cover the entire subject of justice in holdings: A person who acquires a holding by proper application of the principle of justice in acquisition or who acquires a properly acquired holding by applying the principle of justice in transfer is entitled to that holding. Conversely, no one is entitled to a

²² Rawls, *A Theory of Justice*, 65–73.

²³ Nozick, *ASU*, 149–218; Rawls, *A Theory of Justice*, 65–73.

²⁴ Nozick, *ASU*, 150–52; Meijers, “Justice Between Generations,” 19.

holding except by the repeated application of the principles of justice in acquisition and justice in transfer.²⁵

On a societal scale, this means that a society's distribution of holdings is just *if*, and *only if*, it arose from another just distribution by such a just process. But of course, our world is not perfectly just but rather rife with injustices: hence the need for rectifications. To rectify injustices and to (re-)establish justice in holdings—Nozick's main purpose—the principle of rectification plays a critical role, as I will discuss below.²⁶

B. The Critical Role of the Rectification Principle

Loren Lomasky notes that “the history of every people on every continent is a story of rapine and plunder with occasional sunshine breaking through the dark nights of carnage.”²⁷ Even the most casual survey of human history confirms Lomasky's gloomy assessment. Because the focus of Nozick's theory of justice in holdings is on the extent to which society's current distribution of holdings is just, an examination of how this distribution of holdings historically came about is not just relevant but essential.²⁸ How holdings were originally acquired and subsequently transferred will make them either just or unjust.

If an injustice transpired and a holding is in fact unjust, then the principle of rectification requires for that injustice to be rectified by going through the history of transfers up until the original injustice. The notion is that by rectifying the chain of events up until the original injustice, the process of rectification comes to conclusion and justice in holdings is re-established.

Clearly, an analysis of how the rectification principle might be applied in practice is important. Unfortunately, Nozick himself is of limited help here. In fact, Nozick appears to have almost deliberately—and perhaps wisely—avoided getting drawn into the myriad complications that quickly arise when the rectification principle is applied to current real world injustices.

²⁵ Nozick, *ASU*, 150.

²⁶ Nozick, 152.

²⁷ Lomasky, *Rights Angles*, 17.

²⁸ Nozick, *ASU*, 151–53.

Recognizing the complexities, Nozick himself raises some important questions about how the principle of rectification would work:

Is an injustice done to someone whose holding was itself based upon an unrectified injustice? How far back must one go in wiping clean the historical slate of injustices?^[29] What may victims of injustice permissibly do in order to rectify the injustices being done to them, including the many injustices done by persons acting through their government?³⁰

Having raised the questions, Nozick declines to offer what he himself calls a “theoretically sophisticated treatment” of these issues. Rather, he sidesteps complications by conveniently assuming a just initial distribution of holdings for his further explorations.³¹ Nonetheless, Nozick does provide us with a compact description of how he envisions rectification to be implemented.

C. Rectification—the Monetary Delta

In essence, Nozick offers us only the following paragraph on rectification:

The principle of rectification presumably will make use of the best estimate of subjunctive information about what would have occurred (or a probability distribution over what might have occurred, using the expected value) if injustice had not taken place. If the actual description of holdings turns out not to be one of the descriptions yielded by the principle, then one of the descriptions yielded must be realized.³²

Nozick footnotes this short statement with an additional insight into how he conceives of the task:

²⁹ The slate of historical injustices may be cleared once an injustice was committed *to* and *by* an individual their common ancestor, for at that point the offsetting inherited-claims would likely cancel each other out—they would be, so to speak, part of your shared heritage.

Rudimentary algebra shows us that a common ancestor generally occurs relatively quickly. Consider that you have 2 parents, 4 grandparents and (presumably) 8 great-grandparents, etc. If your deceased great-grandfather stole from one of your deceased great-grandmothers, you would gain no benefit from rectifying this historical injustice. A more sophisticated mathematical proof of common and shared ancestry can be found in Joseph Chang’s “Recent Common Ancestors of all present-day individuals.” He calculated that after “ $1.77 \lg n$ generations, a tiny amount of time in comparison with the order n time required to get a one-parent CA [i.e., common ancestor], everyone in the population is either a CA of all present-day individuals or extinct. [...] Even if we took n to be 5 billion, this would imply a CA just about 32 generations ago — perhaps 500 years or so.” Chang, “Recent Common Ancestors of All Present-Day Individuals,” 3–6; Rohde, Olson, and Chang, “Modelling the Recent Common Ancestry of All Living Humans.”

³⁰ Nozick, *ASU*, 152.

³¹ Nozick, 152, 161–64.

³² Nozick, 152–53.

If the principle of rectification of violations of the first two principles yields more than one description of holdings, then some choice must be made as to which of these is to be realized. Perhaps the sort of considerations about distributive justice and equality that I argue against play a legitimate role in this subsidiary choice. Similarly, there may be room for such considerations in deciding which otherwise arbitrary features a statute will embody, when such features are unavoidable because other considerations do not specify a precise line; yet a line must be drawn.³³

Terse as this language is, there is much meaning to be extracted. I will focus on the terms subjunctive, distribution function, expected value, and realized. All four are precise terms that carry narrow meanings in statistics. Taken together, Nozick's description of the rectification principle provides us with clear instructions. It also delineates how to calculate a monetary delta that comprises rectification.

First, Nozick's use of the term "subjunctive" is instructive in that it underscores the hypothetical nature of the exercise. The term: "Subjunctive is a grammar mood that expresses a hypothetical situation. *It indicates something that should have happened but did not.*"³⁴ In other words, the subjunctive information to be gathered for rectifications calls for the construction of counterfactual scenarios reflecting what should have happened but did not. (As discussed in chapter IV, the counterfactual nature of rectifications has drawn considerable criticism).

Second, is the phrase "a probability distribution over what might have occurred, using the expected value." This phrase appears to be provided not so much as an alternative to the "best estimate" but rather as an explanation of what it means: i.e., how it should be operationalized. Nozick uses "or" not to indicate an alternative but as an equivalent or substitutive phrase.³⁵ Understood as such, the "best estimate," following Nozick, is obtained by recognizing that the subjunctive information (of counterfactual scenarios) may follow a distribution function of possible counterfactual scenarios. This distribution is over many possible scenarios of varying likelihoods: i.e., some scenarios—and there could be many—are more probable than others.

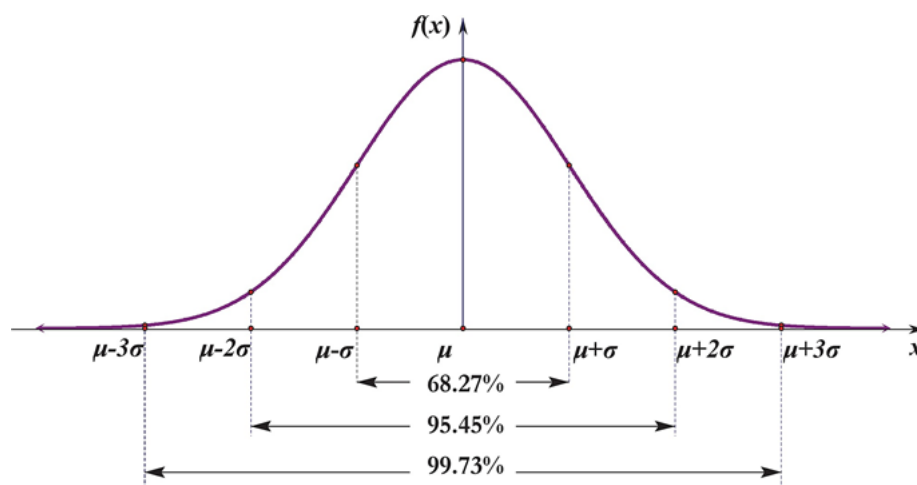
³³ Nozick, 153.

³⁴ "Subjective Vs Subjunctive." (Emphasis added)

³⁵ "Definition of Or."

For example, an enslaved man deprived of an education could have become president of the United States *but for* the fact that he was enslaved—this is possible, but not plausible. Alternatively, the same man could have become a day laborer in the cotton fields—this is both possible and plausible. Obviously, many of such scenarios of varying likelihoods may be considered. And they may be grouped under a distribution function, with a mean, μ , and a standard deviation, σ , as shown in the normal distribution below.³⁶

While Nozick does not suggest what type of probability distribution is likely to be most appropriate, the normal distribution below serves to illustrate what he was discussing. Unlikely scenarios, such as a former slave in a counterfactual scenario as a free man becoming president of the United States, would fall in the far-right tail of the distribution. On the other hand, a probable scenario of the free man living from agriculture, much like 80% of all workers in the South, would fall under the hump of the distribution, around the mean, μ .³⁷



Following standard statistical techniques, Nozick then suggests simplifying and condensing the distribution of all these possibilities. For this he introduces the concept used by statisticians: the “expected value” of a distribution.

Formally, this statistical concept is defined as follows:

³⁶ The standard deviation is a statistical measure of the dispersion of data relative to their mean. It is calculated as the square root of the variance. Hargrave, “What Is the Standard Deviation?” Under a normal distribution, 99.7% of the observations—which here would be the counterfactual scenarios—fall within 3 standard deviations of the mean. Ady, “The Standard Normal Distribution & Applications.”

³⁷ Goldin and Sokoloff, “The Relative Productivity Hypothesis of Industrialization,” 482.

The expected value may be defined as “a weighted average of the possible realizations of the random variable (the possible outcomes of the game). Each realization is weighted by its probability.”³⁸

In the current context, the expected value may be understood as some weighted average—the arithmetic mean, μ —that meaningfully represents all possibilities (by weighing their respective probabilities of occurring.)³⁹ It is “expected” because statistically it is *the most probable outcome*.

Also note that the term “realization” (in the above definition) parallels Nozick’s use of that term when he says elsewhere: “one of the descriptions yielded must be realized.” Again, Nozick draws here on a precise statistical term to provide a methodology for operationalizing rectification. That is, the counterfactual scenarios are what statisticians call a “variable” with many possible realizations. And each realization has its own probability under the distribution function. As noted, the expected value associated with that distribution is the weighted most probable outcome.

The use of the expected value is further motivated by Nozick in the referenced footnote (see above). Here Nozick recognizes that rectification involves much conjecture and so he reluctantly opens the door to advocates of distributive equality. But that gesture is quickly curtailed, however, as he notes: “yet a line must be drawn.”⁴⁰

Returning to the first paragraph, Nozick provides in closing that *if* the counterfactual (best estimate) scenario differs from the historical path, *then* the counterfactual must prevail: i.e., a rectification is in order to *realize* the counterfactual scenario.

Nozick’s short but precise formulation of the rectification principle sets up the following two equations:

³⁸ “Expected Value.”

³⁹ “In the theory of probability, the expected value for any given random variable X is written as $E(X)$. It is a conception of the *weighted arithmetic mean* of a sizeable number of realizations of the random variable X that are independent. The alternate names for expectation are the mathematical expectation, average, expectation, mean, or first moment. Expected value is one of the key concepts in the fields of economics, finance and many more. The expectation of a constant is a constant.” “Expected Value| Expected Value - Define, Cases, Properties, Formula, Examples.”

⁴⁰ Nozick, *ASU*, 153.

1. $\Delta \text{ Holdings} = \text{Expected Value of Counter Factual Holdings} - \text{Value Actual Holdings}$
2. $\text{Rectification} = \Delta \text{ Holdings}$

Where:

$\Delta \text{ Holdings}$ is the monetary delta that measures a change in holdings.

In other words, to quantify the monetary value of a rectification one must determine the delta between (a) the best-estimate-monetary value of the counterfactual holdings, and (b) the value of actual holdings. In simple terms, it may be thought of as the monetary compensation a victim of an injustice must receive in order to be made whole. Henceforth, I will refer to it as the *monetary delta*.

We should reemphasize that for Nozick, rectification concerns primarily an adjustment in holdings to achieve what justice requires of holdings.⁴¹ That is, Nozick's rectification principle is intended to correct for *monetary damages* caused by injustices. Hence, the adjective monetary.

The latter observation—that it concerns only monetary compensation for damages—is critical and warrants two corollary observations:

- (1) First, it greatly simplifies the task at hand by limiting the subjunctive information for counterfactual scenarios to only monetary data—expressly excluded are such things as compensation for pain and suffering, and other quality of life considerations.
- (2) Second, this conception of rectification—the “but for” construction for calculating monetary damages—is also consistent with the approach used for damages calculations in a contemporary legal context.⁴² While legal constructs are not determinative for our analysis, certain legal concepts are usefully applied to illuminate complexities. For example, in establishing the validity of certain calls for rectification, the legal concept of the *burden-of-proof* may help us evaluate the strength of the evidence presented.

⁴¹ Nozick, 149.

⁴² Moore, “Causation in the Law,” 2.

III. REDRESSING HISTORICAL INJUSTICES AND THE BURDEN OF PROOF

A. *Historical Injustices*

While this paper considers the historical injustice of slavery under Nozick's rectification principle, it must be noted that Nozick does not define *what* a historical injustice is. In fact, the term historical injustice is not even used in *ASU*. Nozick does use the term "past injustice."⁴³ This, however, provides no further insights, as he sets the same condition for a past injustice as he does for a present-day injustice: any interference with the *voluntary* exchange of holdings. But, since the core focus of this thesis is on an empirical analysis of the historical injustice of slavery—which raises unique challenges for all people involved have passed—some conditions must be set to differentiate between present day injustices and historical injustices.

The literature on distributive justice and rectification is vast and draws not only on philosophical considerations but also on litigations involving various historical injustices, such as the Holocaust, the Armenian genocide, the forced displacement and killing of native peoples, etc. Not surprisingly, it does not offer a universally accepted definition. Still, there is some consensus on the following conditions.

A historical injustice must meet four conditions:

- i. The injustice was committed at least a generation ago.
- ii. The injustice was committed or authorized by a collective entity, such as a government or corporation.
- iii. The injustice harmed many individuals.
- iv. The injustice concerned violations of fundamental human rights, often involving discrimination based on race, religion, or ethnicity.⁴⁴

Slavery in the United States meets these conditions.

With one exception, the above conditions also seem consistent with Nozick's notion of justice and injustice. The last condition—i.e., condition *iv*, the violation of fundamental human rights—would possibly be too broad for Nozick, as it goes beyond the acquisition and transfer

⁴³ Nozick, *ASU*, 149–53.

⁴⁴ Wyman, "Is There a Moral Justification for Redressing Historical Injustices," 133–34.

of holdings. For example, it could cover systemic discrimination based on race which, while morally wrong, does not in itself interfere with the voluntary exchange of holdings. Thus, it would not constitute an injustice for Nozick.

I will use the aforementioned conditions in curtailing my further examination of the issue, but only to the extent that, following Nozick, they concern an interference with the voluntary exchange of holdings.

B. A Retrospective Judgement on Institutional Slavery

How to judge the past? Philosopher and lawyer struggle alike with the question of retroactive judgements. As Huemer observes, “by current standards, every government 500 years ago was illegitimate” and “[in] the year 1800, there where, by modern standards, no genuine democracies.”⁴⁵ Cowen makes the same point, as do others.⁴⁶

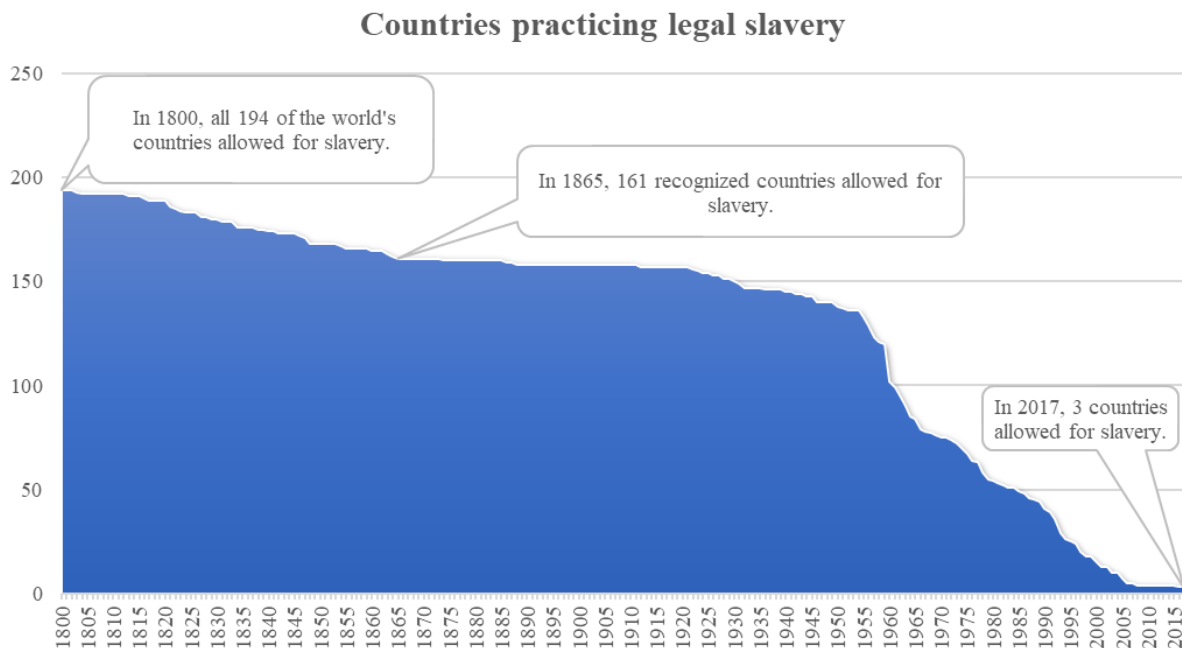
In the 18th and 19th century slavery was commonplace and legal in most of the world, but certainly in the United States, where it was an institutionalized practice until the ratification of the Thirteenth Amendment in 1865.

The graph below shows for all current countries in the world the dates that slavery was formally abolished.⁴⁷

⁴⁵ Huemer, “A Liberal Realist Answer to Debunking Skeptics,” 1992–94; Huemer, *The Problem of Political Authority*, 337.

⁴⁶ Cowen, “How Far Back Should We Go”; Hayek, *The Road to Serfdom*, 10–23, 123–56; Roser, “Democracy.”

⁴⁷ Adapted from: Rosling, “Legal Slavery v1 — Documentation | Gapminder”; Rosling, Rosling, and Rönnlund, *Factfulness*, 60.



Thus, while today the practice of legalized slavery would make a country an “out-law state,” possibly provoking international repercussions, sanctions and boycotts, this was not true at the time.⁴⁸ The fact that slavery was commonplace and legal, however, creates a problem if we want to retroactively assess whether an injustice took place, and if so, how it should be rectified—which is the issue at hand.

Ironically, as Huemer, as well as McCloskey, point out, it is the liberal values that emerged in Western Europe and the United States—such as the rights to life, liberty, and protection against and compensation for injustices—that led to the abolition of slavery.⁴⁹ In a way, it is like descendants of slaves saying “Yes, your forebears helped to free my forebears, but I sue you because they did not do it soon enough.” So, how then to judge legal slavery in a country proclaiming that people have “*unalienable Rights to Life, Liberty and the pursuit of Happiness*”?⁵⁰

Nozick suggests an explanation:

Moral philosophy sets the background for, and boundaries of, political philosophy. What persons may and may not do to one another limits what

⁴⁸ Nozick, *ASU*, 17.

⁴⁹ Nozick, 365–66; McCloskey, *Bourgeois Equality*, 410; Huemer, “A Liberal Realist Answer to Debunking Skeptics,” 1992–94; Rosling, Rosling, and Rönnlund, *Factfulness*, 60.

⁵⁰ Adams et al., “Declaration of Independence.”

they may do through the apparatus of a state, or do to establish such an apparatus. The moral prohibitions it is permissible to enforce are the source of whatever legitimacy the state's fundamental coercive power has. [And fundamental] coercive power is power not resting upon any consent of the person to whom it is applied.⁵¹

As Nozick laments, the state does not require consent of the individual for coercive power to be applied, justly or unjustly, even in situations where a significant part of the population is enslaved.

However, since we are analyzing slavery in the United States under Nozickian principles, we can conveniently sidestep this particular complication of retroactively imposing our values on the legalized practices of yesteryear. Under natural law invoked by Nozick in *ASU*, wrong is wrong and right is right, no matter when. For Nozick famously starts *ASU* with the claim that individuals have natural rights "and there are things no person or group may do to them (without violating their rights)."⁵² He also ends his book with the following emphatic conclusion:

[The] minimal state treats us as inviolate individuals, who may not be used in certain ways by others as means or tools or instruments or resources; [the minimal state] treats us as persons having individual rights with the dignity this constitutes. [...] How *dare* any state or group of individuals do more. Or less.⁵³

Under Nozickian principles thus articulated we can judge the institutionalized and legal practice of slavery in the United States as one of *the* most heinous historical injustices committed by this country.⁵⁴

C. Justice, Political Society and the Invisible Hand Theorem

Most social contract theories do necessitate a political society for the enactment of justice. Thomas Hobbes famously observed that without a political society:

[There] is no place for Industry; because the fruit thereof is uncertain: and consequently no Culture of the Earth; no Navigation, nor use of the commodities that may be imported by Sea; no commodious Building; no

⁵¹ Nozick, *ASU*, 6.

⁵² Nozick, ix.

⁵³ Nozick, 333–34.

⁵⁴ Nozick, 326–31.

Instruments of moving, and removing such things as require much force; no Knowledge of the face of the Earth; no account of Time; no Arts; no Letters; no Society, and which is worst of all, continuall feare, and danger of violent death; And the life of man, solitary, poor, nasty, brutish, and short.⁵⁵

Similarly, for Immanuel Kant there is no enforcement of justice without the institution of a state.⁵⁶ And for Locke, we are born into a political society: “That all men being born under government, some or other, it is impossible any of them should ever be free, and at liberty to unite together, and begin a new one, or ever be able to erect a lawful government.”⁵⁷ Thus, for Locke, justice must be found in a political society. Rawls famously defined justice as fairness, which is the essential characteristic of just institutions maintained by a political society.⁵⁸ Justice and political society are inextricably intertwined.

So, does Nozick’s justice in holdings necessitate a political society, or do his libertarian principles rooted in natural law, such as men being free and equal and engaging in a *voluntary* exchange of holdings, precede it?

Since Nozick took inspiration from Locke, it is worthwhile to note that Locke also states that even in the state of nature, another “magistrate” may judge a person.⁵⁹ And thus to an extent it is a moot question whether justice in holdings requires a political society if an individual may punish injustice.⁶⁰ Still, it is important to draw a distinction here between Locke, other social contract thinkers, and Nozick.

Nozick explicitly distances himself from notions of a social contract, whether hypothetical, tacit or signed, as a precondition for a political society. Instead, he uses an adaptation of Adam Smith’s *Invisible-Hand Theorem* to explain how certain patterns may emerge without there being a centralized entity, a planner, to guide or shape them.⁶¹ That is, a minimal state may emerge through individual actions by individual actors, each pursuing his or her own interests, respectful of others, and engaging in *voluntary* transactions, i.e., transfers of holdings. In fact, for Nozick there is no such thing as a metaphysical political society that

⁵⁵ Hobbes, *Leviathan*, 89.

⁵⁶ Flikschuh, “Reason, Right, and Revolution: Kant and Locke”, *Philosophy & Public Affairs*,” 375–404; Kant, *Groundwork of the Metaphysics of Morals*.

⁵⁷ Locke, *Two Treatises of Government*, 173.

⁵⁸ Rawls, *A Theory of Justice*, 10-11, 17, 118–23.

⁵⁹ Locke, *Two Treatises of Government*, 119.

⁶⁰ Nozick, *ASU*, 11–12, 59–63, 96–98, 106–7, 135, 137–40; Locke, *Two Treatises of Government*, 116–21.

⁶¹ Smith, *The Wealth of Nations*, 589–616; Hayek, “The Use of Knowledge in Society,” 519–30; Nozick, *Socratic Puzzles*, 191–97.

transcends its individual members. The “whole” is *not* greater than or distinct from its constituent parts: individual people.⁶² This is analogous to philosophical materialism claiming that a human being is no more than the constituent cells.⁶³

This observation matters when we proceed to look at slavery and what rectification may be necessary. Many discussions of reparations for historical injustices call on governments, as political societies, to make reparations, to compensate “groups” of people who in some form or another have been harmed.⁶⁴ For example, should the United States government compensate native Americans for the loss of “their” lands?⁶⁵ Such claims appear to presuppose some form of “collective fault and collective guilt” and require drawing on general tax revenues for rectifications.

Nozick’s conception of society is at odds with these approaches. He forces us to deconstruct the question and restate it in terms that recognize that claims for rectifications should be *individualized*, as should the obligations on whom the burden for rectification may fall.⁶⁶ That is, rectification should consist of native American *A* demanding rectification from person *B* (and where appropriate *C*, *D*, etc.).

D. Demands for Rectification and the Burden of Proof

Before I discuss various critiques of Nozick’s rectification principle, an important point needs to be made with respect to what in a legal context would be called the “burden of proof.”⁶⁷ When demands for rectification are made, who has to prove what?

This discussion serves to address the question of what to do if claims are insufficiently proven, which is a common and central question in moral, civil and criminal law. While legal constructs are not necessarily determinative in a philosophical analysis of calls for rectification, they are not irrelevant either for a number of reasons.

⁶² Nozick, *ASU*, 18–25.

⁶³ Ramsey, “Eliminative Materialism.”

⁶⁴ Waldron, “Redressing Historic Injustice”; Sher, “Ancient Wrongs and Modern Rights”; Thompson, “Historical Injustice and Reparation”; Wyman, “Is There a Moral Justification for Redressing Historical Injustices,” 133–34. Etc.

⁶⁵ Lyons, “The New Indian Claims and Original Rights to Land.”

⁶⁶ Nozick, *Socratic Puzzles*, 201–64.

⁶⁷ Walton, *Burden of Proof, Presumption and Argumentation*, 1–144; Williamson, “Philosophical Expertise and the Burden of Proof”; Nozick, *Socratic Puzzles*, 201–48.

First, Nozick often implicitly and explicitly contrasted his “formal” theory of justice with John Rawls’ “substantive” theory of justice as fairness.⁶⁸ As demonstrated by his discussions in *ASU*, Nozick gives great weight to procedure and less to the outcome, whereas Rawls’ substantive approach does the opposite. In fact, Nozick was firmly opposed to well-meaning efforts to effectuate patterned outcomes under any moral reasoning and instead applied Smith’s *Invisible-Hand Theorem* as the self-effectuating procedure—the unguided process—through which justice in holdings comes about. This process, however, is essentially bounded by an assessment of what is legal and what is not legal, and when. Nozick’s awareness in this regard is manifest in another work:

Awareness of the difficulties in formulating rules to handle all the cases which will arise often leads to talk of the role of judicial discretion in a legal system, and to the incorporation within legal codes of statutes dealing with the avoidance of evils, which do not attempt to specifically handle the possible cases.⁶⁹

He then proceeds to examine one of the difficulties in making cross-generational claims for rectification—the very issue at hand:

If under the new law, the defendant's act is no longer an offense, he is then found innocent. If some act performed by someone prior to the promulgation of the new law is an offense (only according to the new law), he is not tried.⁷⁰

Further, the seminal question of whether there was an interference with the voluntary exchange of holdings—i.e., an injustice as defined by Nozick—cannot be answered in a vacuum. The determination of what is a voluntary exchange must consider a “social” context, since without a social context—the presence of multiple parties that have a minimal understanding of codes of conduct—there could not be an exchange. For this, Nozick postulates a minimal state, shaped into existence as if by an invisible hand.⁷¹ The purpose and duty of this state is among others to provide a *legal structure* to ensure property rights.⁷² While the details of this legal structure are generally left unspecified by Nozick, he does assign to the law the

⁶⁸ Gosepath, “Equality,” 6–8, 9–14, 24–26.

⁶⁹ Nozick, *Socratic Puzzles*, 206.

⁷⁰ Nozick, 371.

⁷¹ It is interesting and possibly relevant to note that this minimal state may very well be referring to a version of the United States of America. Given that the USA and *ASU* are anagrams, as well as that Locke inspired the authors of *The Declaration of Independence* who proclaimed the unalienable *Rights* that Nozick uses as a basis for his argument. Adams et al., “Declaration of Independence”; Nozick, *ASU*, 18–21.

⁷² Nozick, *ASU*, 3–153.

primary task of adjudicating justice in transfer.⁷³ As such, seminal legal concepts, such as the burden of proof, *must* be part of the conversation when claims for rectification are made, especially where it concerns cross-generational claims that are not clear cut.⁷⁴

Third, the legal profession has long dealt with issues of injustice and there is much to be learned from it, on how to establish the truth of things that are claimed. In fact, some notable legal scholars have made significant contributions to libertarianism, entitlements and the issue of rectifications.⁷⁵ In most well-developed legal systems, such as those found in the European Union and the United States, criminal justice law contains a presumption of innocence until proven guilty, *ei incumbit probatio qui dicit*.⁷⁶ Likewise, there is generally a presumption that existing holdings are just until proven otherwise. To establish the opposite—i.e., that holdings are unjust—the burden of proof rests typically with the claimant. In other words, with respect to justice in holdings, a property is presumed to have been justly acquired by, or transferred to, the current owner until a counter claimant proffers convincing proof that the holding is in fact his or hers.⁷⁷ In sum, *the burden of proof in claims for rectification rests with the claimants*.

Relevant to my purposes, the burden-of-proof typically has two constituent components: (i) burden of production, and (ii) burden of persuasion. As such, the concept of the burden-of-proof has important implications for how to evaluate calls for reparations. I will come back to this in chapter V. Indeed, with respect to Nozick's entitlement theory and the empirical analysis in this thesis, its importance cannot be overstated. Failure to meet the burden-of-proof in a claim for rectification for slavery *shrinks the monetary delta*—and significantly weakens the claims of Nozick's critics.

Next, rectification is not just an abstract philosophical concept without real world applications, to the contrary. Calls to redress historical injustices are increasingly common, in addition to the many ongoing claims stemming from World War II and the looting or theft of

⁷³ Nozick, 149–53.

⁷⁴ Nozick, *Socratic Puzzles*, 191–97, 205–48.

⁷⁵ For example, for addressing the difficulty in assessing claims, Epstein notes: “Prevention here dominates rectification. In ordinary times, one of the quiet heroes of the modern law is those boring systems for the registration of land titles that reduce to the vanishing point the likelihood of erroneous dispossession of real property.” Epstein, *Simple Rules for a Complex World*, 66–67.

⁷⁶ Skontzos, “The Burden and Standard of Proof in Model International Procedural Law”; “Burden of Proof”; Kaplow, “Burden of Proof”; Kaplow, “On the Optimal Burden of Proof.”

⁷⁷ Neuborne, “Preliminary Reflections on Aspects of Holocaust-Era Litigation in American Courts.”

art works, buildings and other properties from Jewish and other victims.⁷⁸ Also, legal claims for rectification increasingly cover injustices inflicted under colonialism, the killing and mistreatment of native peoples, etc.⁷⁹ In these litigations and the subsequent academic articles, the philosophy of redistributive justice, such as Aristotle's *Nicomachean Ethics*, and Nozick, are often cited to provide a conceptual framework for restitution.⁸⁰ When courts of justice are asked to examine these various claims for rectification, they must invariably consider which party has the burden of proof and whether it has been met. And, as a practical matter, the specific legal constructs, which arise under Nozick's invisible-hand theorem, may determine in which jurisdiction as well as what claims are brought forth.⁸¹ Put differently, the burden of proof sets a threshold for when rectification can be awarded.

These observations are fully in line with Nozick, who argues that it is obviously desirable that right carries a greater moral weight than wrong.⁸² For Nozick, the burden of proving a wrong, lies with the claimant.

Last, given that this thesis conducts an *empirical analysis* of the injustice of slavery and asks what the *magnitude of rectification* should be, I must likewise consider whether there is sufficient proof to support specific demands for monetary compensation. Taking money from some and giving it to others—a rearranging of holdings in order to establish justice—requires reliable data and information to construct counterfactuals. In this, the burden of proof plays an essential role.

⁷⁸ Neuborne; Lomasky, *Rights Angles*, 18.

⁷⁹ “CNN - Guidelines Set for Returning Nazi-Looted Art - December 3, 1998”; Nayeri, “Museums in France Should Return African Treasures, Report Says”; “JDCRP – Jewish Digital Cultural Recovery Project.”

⁸⁰ Neuborne, “Preliminary Reflections on Aspects of Holocaust-Era Litigation in American Courts,” 34–37; Wyman, “Is There a Moral Justification for Redressing Historical Injustices,” 147–69; Aristotle, “The Nicomachean Ethics of Aristotle,” bk. 5.

⁸¹ Neuborne, “Preliminary Reflections on Aspects of Holocaust-Era Litigation in American Courts,” 37–39.

⁸² Nozick, *Socratic Puzzles*, 205–48, 370–71.

IV. PROMINENT CRITIQUES OF NOZICK'S JUSTICE IN HOLDINGS

Since its publication, Nozick's *Anarchy, State, and Utopia* has garnered considerable academic notoriety as well as ample critiques. Perhaps because Nozick never replied to any of such criticism, for he did not want to spend his life writing, as he put it, "the son of *Anarchy State and Utopia*," many remain unresolved.⁸³ In this chapter, I will discuss some of the more prominent ones as they relate to Nozick's rectification principle, which is the central focus of this thesis.

The purpose of this is to explore conceptual problems associated with rectification beyond the narrow discussion provided by Nozick. The insights will then serve to inform my case study, an empirical and data driven analysis of rectification for slavery in the United States.

Specifically, I will discuss five major points of critique. First, I will discuss the critique that Nozick's rectification principle has to postulate "counterfactual situations"—i.e., a conjecture about what would have occurred if an injustice had not taken place. This problem is many faceted and involves such issues as the non-identity problem, the butterfly effect and the problem of net-gaining because of oppression. I will peruse each. Next, I will discuss the critique that rectifications in turn risk the injustice of damaging the holdings of innocent people. Third, I will examine the critique that while it is necessary to apply interest in accounting for historical injustices, even small changes in the rate of interest may dramatically swing restitutional payments beyond magnitudes that seem reasonable or even possible. Fourth, I will discuss the critique that there are few if any clear historical titles establishing just acquisition or just proprietorship. Last, I will discuss the critique that Nozick's principle of rectification fails to restore non-fiduciary injustices, such as torture.

A. Problems with Counterfactuals

Essential to Nozick's notion of rectification is the consideration of "what would have occurred if the injustice had not taken place."⁸⁴ The notion is that by making a comparison between what

⁸³ Nozick, 1–2.

⁸⁴ Nozick, *ASU*, 150–52.

has historically happened with what might have happened had an injustice not occurred, one can calculate what rectifications need to be made to “right a wrong.”

Following the economist Tyler Cowen, Nozick’s prescription may be translated as a comparison between “end-states” to determine restitutions. The differential between the two end-states—the end-state of victimhood and the end-state in a counterfactual scenario—is then used to make “the victim whole again” or to serve some other moral standard.⁸⁵

However, because this method of determining rectifications involves a conceptualization of events that did not *in fact* historically transpire, it concerns substantial conjectures about “counterfactuals.”

Nozick’s notion of rectification through conjectures about counterfactuals has drawn considerable criticism. I will concern myself with four different critiques associated with counterfactuals articulated by Cowen and philosopher Jeremy Waldron.⁸⁶

First, I will discuss the general complications of how to develop a counterfactual scenario. Next, I will discuss how counterfactual speculation about historical events faces what is known as the “butterfly effect” in chaos theory—i.e., how a slight change might have enormous consequences for subsequent events. Third, I will discuss what is known as the “non-identity problem.” This concerns the fact that the persons making a claim for rectification of historical injustices, such as the present-day descendants of slaves, may not have existed *but for the injustice*, i.e., a counterfactual scenario would *counterfactually* whisk the claimant out of existence.⁸⁷ Last, I will discuss the complication for historical rectifications when an injustice created a net gain for the damaged party.

1. *How to select a proper counterfactual?*

The construction of a counterfactual scenario—essential to rectifying an historical injustice under Nozick’s rectification principle—is predicated on the assumption that the historical injustice *did not occur*. This poses a problem, however, in that all we know—under the best of

⁸⁵ Cowen, “How Far Back Should We Go,” 19.

⁸⁶ Waldron, “Redressing Historic Injustice”; Cowen, “How Far Back Should We Go.”

⁸⁷ Cowen, “How Far Back Should We Go,” 20; Parfit, *Reasons and Persons*, 351–77.

circumstances—is what in fact did happen. We do not know how history would have unfolded under a counterfactual scenario.

There is simply no guide to reconstructing an alternate course of events on which all parties to a claim for restitution should be expected to agree. As Cowen observes, while the “strongest argument in favor of counterfactuals is that it is impossible to do without them [, ...] generally, there can be no empirical guide to choosing the appropriate counterfactual.”⁸⁸ Indeed, even if parties do agree on the basic outlines of what might have transpired absent an injustice, this does not resolve the uncertainty that is inherent in counterfactuals.

Cowen addresses this predicament and concludes that invariably we are faced with what he dubs an “ineradicable indeterminacy.”⁸⁹ That is, there remains an uncertainty that cannot be eradicated even when the parties involved in the rectification of an injustice agree on the basic outlines of a relevant counterfactual scenario.

As a possible solution, Cowen suggests using moral theory to determine a relevant counterfactual as follows. By comparing some act of injustice to “the right thing to do” as defined by an appropriate moral theory, a moral benchmark can be established for estimating comparative liabilities. He suggests that the law engages in this sort of comparisons frequently. For example, when a man walks away from a drowning woman in a river, his liability is high if he could have easily thrown her a lifesaver or leapt into the water to save her. On the other hand, if there was no lifesaver or the man could not swim, then his liability is diminished.⁹⁰

Still, Cowen argues that moral theory is not without pitfalls either, as it might not offer clear guidance on the relevant “right thing to do.” Take for example the moral obligations of a counterfactually wealthy slaveholder. A “right thing to do” might have been buying slaves and freeing them upon purchase. However, the slaveholder might also simply have ceased buying slaves himself and freed his own slaves, or he might have made it his principled duty to legally free all slaves in his state by pushing for new legislation. Should he have pushed for federal legislation? Possibly this wealthy slaveholder should have pushed for a world-wide supra-national abolition of slavery. All courses of action might be considered having done the right thing under a given counterfactual scenario. The problem that Cowen notes is that without

⁸⁸ Cowen, “How Far Back Should We Go,” 22–23.

⁸⁹ Cowen, 23.

⁹⁰ Cowen, 23.

knowing how far the relevant moral obligations extend, it is difficult to pin down a single morally relevant scenario.⁹¹ From his discussion of the complications in selecting a proper counterfactual, Cowen reaches two conclusions that are important to the empirical analysis I conduct below.

The first is that restitutional claims have the greatest moral force when the value of a loss or a stolen resource is *well defined*. For example, if I steal \$20 from Tim, I owe Tim at least \$20. However, if I steal a book of unknown value from Tim, my relevant liability is, according to Cowen, diminished as he notes: “Just as the law takes special care to protect the innocent, it should be especially reluctant to over-punish the guilty.”⁹²

Cowen’s second conclusion is that as the number of generations since an injustice increases—and thereby the number of possibly hypothetical counterfactuals also increases—the value of a loss or a stolen resource becomes less defined. This leads Cowen to argue for awarding smaller more symbolic restitutions for distant historical injustices.⁹³

Both these conclusions will be expanded on below in my application of Nozick’s rectification principle to the historical injustice of slavery in the United States of America.

2. *The “butterfly effect” and a film+ of history*

In chaos theory, there exists what is known as the “butterfly effect.” The term stems from a hypothetical situation in which a tornado is said to have been instigated weeks earlier in a different location by the wing-strokes of a butterfly moving a tiny amount of air.⁹⁴ In general, the term has come to refer to the possibility that small, seemingly insignificant events may have large, dramatic and unforeseen consequences.

When applied to the construction of counterfactual scenarios, the butterfly effect suggests that an injustice we seek to rectify might have large and dramatic consequences for the life of the particular victim or even for the course of history and the current distribution of holdings in a society. But we simply do not know whether and to what extent such dramatic

⁹¹ Cowen, 23–24.

⁹² Cowen, 24.

⁹³ Cowen, 24.

⁹⁴ Ambika, “Ed Lorenz.”

consequences occurred, nor can we know what alternate history might have unfolded but for the injustice.

Next, and aside from the butterfly-effect, there is the more direct observation that in general we do not know how a person's life might have unfolded, but for the injustice. Consider an example provided by Waldron, in which a person is unjustly enslaved in what we shall call situation E. From a natural flowing of events follows situation F, and thereupon situation G, etc. Now say that this series describes significant events defining the enslaved person's life as it historically happened. If, however, we replace E with a counterfactual situation by assuming what would have occurred if the injustice had not taken place, we get situation E+. From E+ follows a different line of events, not to F and G, but to F+ and G+, etc.⁹⁵ That is, through altering the life-defining events, the flow of this person's life will be fundamentally altered. What emerges is, so to say, an entirely different film of history.⁹⁶ That is, a film+ of history.

Waldron identifies at least two problems with counterfactuals leading to a different film of history. First, he raises the possibility that all present holdings might have to be called into question when calculating the difference between the world as it is and the film+ world. This is because for Waldron, injustices in holdings creeping into a market system have an effect not only on immediate victims but, via the price mechanism, on all those who trade in that market.⁹⁷ Therefore, a substantial enough injustice might over time potentially corrupt all holdings throughout the entire global market system. This dynamic is analogous to a virus that once attracted by a single "patient zero" spreads through the world to become a global pandemic.

Waldron's second problem is that we simply cannot know how history would have unfolded in a film+ world. For example, how would a never enslaved person in E+ have used his freedom? Could this person in the film+ world have become a business magnate leaving millions for potential descendants, or a general known for his ruthlessness, slaughtering thousands of innocent people? Of course, he could also have become a childless drunk. These speculations only compound when we consider the multigenerational impact of an injustice. What would the descendants have made of their lives? We simply cannot know these things. Counterfactual scenarios by their very nature are more speculation than fact. So, when

⁹⁵ Waldron, "Superseding Historic Injustice," 8–9.

⁹⁶ Sher makes a similar argument in Sher, "Ancient Wrongs and Modern Rights," 10–12.

⁹⁷ Waldron, "Superseding Historic Injustice," 12.

addressing the compounding conjectures of multigenerational scenarios, Waldron notes that there is no reason *not* to assume that a descendent might have willingly lost all his holdings in a poker game, and thus, no rectifications for descendants would need to occur.⁹⁸ He concludes that, where it concerns historical injustices, unwinding the film of history to construct a more “just” film+ version is at least an extremely complicated endeavor and might result in arguably even unjust consequences. For more impactful injustices, like for instance slavery, Waldron concludes that in most cases, it is simply impossible to construct a proper counterfactual scenario.

His concerns about the feasibility of constructing meaningful counterfactual scenarios for rectifying injustices—especially where it concerns historical ones—pose a serious challenge to claims for rectifications. However, three additional qualifying observations are in order.

First, if a transfer occurred through the principle of justice in transfer, even if a price is different than it would have been in a just world, no injustice has occurred in that transfer *per se*. As Waldron notes: “[It] is the act of choosing that has authority, not the existence as such of the chosen option.”⁹⁹ Thus, an individual injustice should not necessarily lead to contamination of all holdings in society.

Second, Waldron’s concerns support Cowen’s observation that rectifications should be small in situations of great uncertainty to not over-punish the guilty, or their descendants.¹⁰⁰ This further diminishes the merit of substantial and large claims for rectifications for historical injustices inflicted on long gone victims.

Last, but importantly, it should be noted that dead people cannot be compensated. So, by definition there can be no contemporary rectification of injustices inflicted on people who are now dead. Only living people—such as descendants—can receive rectifications. That is, the train of events for which counterfactual scenarios need to account is truncated to exclude any impact on the deceased. Under this reading, the film+ spans a shorter history and the butterfly effect is smaller.

⁹⁸ Waldron, “Redressing Historic Injustice,” 145.

⁹⁹ Waldron, “Superseding Historic Injustice,” 11.

¹⁰⁰ Cowen, “How Far Back Should We Go,” 24.

In Chapter III, I expounded on the notion that *the burden of proof* in claims for rectification rests with the claimant. Therefore, to the extent that Waldron's concerns weaken or diminish potential claims for restitution, they serve to strengthen Nozick's entitlement theory and any presumption of justice in holdings.

3. *The non-identity problem for counterfactual claims*

Counterfactual scenarios for intergenerational justice also give rise to the issue of Derek Parfit's famous non-identity problem.¹⁰¹ To the extent that a counterfactual scenario changes the course of a former-victim's life—as it likely would—it will also impact the moment of conception of descendants or prevent it altogether. This means that a descendant who makes a claim for rectification of an injustice inflicted on his ancestors would not have existed *but for* the injustice. The inconsistency in such a claim is succinctly captured by Andrew Cohen as: “How can any person have a claim to compensation for a wrong that is a condition of her existence?”¹⁰²

Parfit's non-identity problem is especially prevalent for rectification concerning slavery which involves so many counterfactual situations. When counterfactually, no person would have been enslaved and shipped to the United States, then the lives of these injured persons would not have been the same, nor would the lives of their descendants. This counterfactual world might have millions of situations where a film+ of history would be inserted. Through a plurality of applied butterfly effects, it would be an utterly different world, where none of the people currently alive would even exist. The people in the counterfactual world would have entirely different existences.¹⁰³ Therefore, the descendant(s) of injured persons could not have existed *but for the injustice*.¹⁰⁴ This means that if the claimant is a descendant of the injured party, this claimant is unlikely to have standing in their own claim as he or she would be *counterfactually* whisked out of existence in the construction of the monetary delta.

Cowen demonstrates this philosophically surprising argument by applying Parfit's notion to the historical injustices of land theft suffered by the Māori in New Zealand.¹⁰⁵ He

¹⁰¹ Parfit, *Reasons and Persons*, 351–77.

¹⁰² Cohen, “Compensation for Historic Injustices,” 81.

¹⁰³ Parfit, *Reasons and Persons*, 351–77; Roberts, “The Nonidentity Problem,” 2–3, 10–11.

¹⁰⁴ Cowen, “How Far Back Should We Go,” 20.

¹⁰⁵ “Māori Land Loss, 1860-2000 | NZHistory, New Zealand History Online.”

argues that if land had not been stolen from the Māori, then these counterfactual Māori might have married different people or at least would have conceived their children at different times and places. Since entire biographical histories would be different, no current Māori with a right to this stolen land would have been born. Therefore, the land theft made the current living Māori better off, for if there was no land theft, *these* Māori people would not exist.¹⁰⁶

He argues that when the application of counterfactuals is taken literally, the yielded restitution would be zero for almost all historical injustices. For instance, when the non-identity problem is applied to the descendants of slavery, one could argue that the people asking for rectification literally would not have existed if not for the injustice of slavery.

According to Cowen, an advocate of historical rectification might compare the welfare of someone who was born to some equivalent person who might have otherwise been born: i.e., do a comparison of end-states, as suggested by George Sher.¹⁰⁷ However, Cowen points out that historical claims for restitution always end up comparing distributional patterns, rather than tracing back all notions of right and wrong to the welfare of specific individuals due to Parfait's non-identity problem.¹⁰⁸ And he is right.

Following Cowen, for historical rectification of injustices such as slavery, this means that the non-identity problem lowers the strength of historical claims—although the right to make the claim does not disappear entirely—for claims towards rectification by people who would not have otherwise existed.

4. *A net-gain because of oppression*

A final potential problem with counterfactuals is that sometimes a victim receives a net *gain* from an injustice instead of a net *loss*. For example, given the pervasive poverty in many West African countries, descendants of slaves in the United States are likely better off if a direct comparison is made than they would have been without the enslavement of their ancestors. A comparison of end-states leads to the conclusion that the necessary restitution for slavery should be null: i.e., under this reading, no rectification would be required.¹⁰⁹

¹⁰⁶ Cowen, "How Far Back Should We Go," 20.

¹⁰⁷ Sher, "Ancient Wrongs and Modern Rights," 8.

¹⁰⁸ Cowen, "How Far Back Should We Go," 21.

¹⁰⁹ Cowen, 19–22.

However, this reading does ignore the common perception of justice as well as considerations for any non-fiduciary damages that the descendants of slaves might still suffer (as will be discussed below). More symbolic rectification, such as a monument or commemorative plaque might have a place in such instances where there is a net-gain because of oppression.¹¹⁰ These considerations, however, are beyond the scope of this thesis.

B. The Risk of Rectifications Damaging Holdings of Innocent People

Philosophers Maurice M. Goldsmith and Mark D. Friedman argue that, when misapplied, the principle of rectification could damage the holdings of innocent people.

According to Friedman, the principle of rectification cannot, consistent with Nozick's other principles, justify taking holdings from people who *did not* benefit from and whose ancestors could not plausibly be accused of benefiting from past depredations.¹¹¹ Friedman's distinction between those who *did* benefit from an injustice and those who *did not* is in principle straightforward.¹¹² It implies that simple injustices can and should be rectified by having persons who benefited from the injustice pay for the rectification. If the rectification is computed correctly, then justice in holdings is restored—which is the purpose of the rectification principle.

The delineation between who *did* and who *did not* benefit, however, is more complicated where it concerns historical intergenerational injustices, such as slavery. For example, if in the 21st century you inherited a holding corrupted through slavery in the 18th century, are you *or* are you not someone who benefitted from slavery?¹¹³

To explore the problem of who *did* and who *did not* benefit, Goldsmith gives the example of John and William. John unjustly acquired some land and pigs from William. Normally, the principle of rectification would require John to give back the land and pigs, with possible additional reparations for the damages suffered by William. But let us assume a situation where John's unjust acquisition is not rectified. Further, let's assume that by hard

¹¹⁰ Bittker, *The Case for Black Reparations*, 129–31.

¹¹¹ Friedman, *Nozick's Libertarian Project*, 39–40.

¹¹² An interesting though possibly not immediately relevant philosophical question is what a benefit exactly entails. Further research into this philosophical enquiry could be started in Beauchamp, "The Principle of Beneficence in Applied Ethics," 15–18.

¹¹³ Goldsmith, "The Entitlement Theory of Justice Considered," 588–93.

work and intelligence, John increases his wealth, which is passed on to his descendent John II. John II also works hard and intelligently furthers his inherited holdings. He marries well and his descendent, John III, finds himself economically, culturally and socially advantaged. William on the other hand, because of John's unrectified injustice, became a landless and pig-less person with nothing to leave for his descendants. His descendants, William II and III were likewise landless and pig-less persons and thereby economically, culturally and socially disadvantaged. If John's original injustice is preserved, what rectification is John III obligated to make to William III, as the sole surviving descendant of William?¹¹⁴

To explore this question, assume for the moment that we are not considering problems with counterfactuals and that we have all the historical information necessary for rectification. We are also assuming, *ceteris paribus*, equivalent capabilities in dedication and intelligence across generations of Williams and Johns.

With these provisos, Goldsmith gives three options for rectification of the injustice committed by John:

1. Transfer all or a large part of John III's wealth to William III.
2. Compensate William III for only the *historical* value of which the first William was unjustly deprived.
3. John or his descendants must pay William or his descendants for the unjust use of the holding either (a) what the holding was worth to John, as well as what worth the holding has created by the labor of John (which reiterates option 1), or (b) a monetary sum with some additional interest during the period the Johns held the unrectified holding which leaves John III with the labor of John I and II, if they are more productive than the applied rate of interest.

A problem Goldsmith has with Option 1 is that neither John II nor John III committed any injustices; however, the fruits of their labor would be taken from them. Goldsmith maintains that redistributing holdings—that were justly acquired through hard work—in this manner is the opposite of what Nozick's entitlement theory is supposed to achieve.

¹¹⁴ Goldsmith, 588–93.

The problem Goldsmith has with Option 2 is that a “fixed value” for the holding—for example, a piece of land—might over time either *understate* or *overstate* the worth of the holding as it may change significantly due to outside influences, such as, say, the fortuitous happenstance of the holding being surrounded by a prosperous town, or fatefully becoming submerged under water.

Goldsmith further notes that a fixed market price for rectification might incentivize the first John to “take now and pay later,” and clear a handsome profit in the process. While fining the first John might work to disincentivize him from committing an injustice, fining John II or John III for the crimes of their ancestor would be unjust.

The problem Goldsmith has with Option 3 relates to how the rate of interest is determined. If the rate of interest is too high, John III would still have to pay for the crimes of John, which is unjust. On the other hand, if interest is set too low, injustices might be incentivized with a “take now and pay later” prospect of unjust profit.¹¹⁵

Therefore, there exists a serious challenge as to how to find a proper balance between correcting unjust holdings and protecting justified holdings that I will need to consider in Chapter V.

C. The Rate of Interest and Historical Injustices

When positive interest is applied to historical injustices—such as in Goldsmith’s 3rd option—the *rate* of interest is especially important in determining the magnitude of rectifications. And disproportionately so. The concern is that the rate of interest, when applied over long-time horizons, can dramatically swing the monetary delta, *greatly and possibly inappropriately outweighing all other considerations* used to construct the counterfactual scenarios.

As is well-known, money can grow to surprisingly large amounts if a cumulative rate of interest is applied over long-time horizons.¹¹⁶ The standard equation for such a calculation is $A = P(1+r)^n$.¹¹⁷

¹¹⁵ Goldsmith, 588–93.

¹¹⁶ Piketty, *Capital in the Twenty-First Century*, 164–98.

¹¹⁷ Where A=the amount after interest, P is the principal amount, r= the interest rate as a decimal and n=the number of years of interest.

Cowen gives a calculation where a loss of \$1 billion worth of resources two hundred years ago, with a compound interest of 3%, results in a restitutional award of \$369.4 billion just by reinvesting the interest on the amount, cumulatively. At an interest rate of 5%, however, the restitutional amount explodes to \$17.3 trillion.¹¹⁸ In other words, over a span of two hundred years, a 5% rate of interest would result in a rectification that is about 46 times larger than at a 3% rate of interest. To be sure, the choice of a rate of interest can dramatically swing the magnitude of restitutional payments for historical injustices, and time compounds this.

The determination of an appropriate rate of interest to be applied to damages is standard fare in legal cases. Often times, such interest rates for restitutions are determined by the courts based on precedent or on some other considerations, such as the “opportunity cost” of money or statutory mandates.¹¹⁹ Where it concerns rectifications, however, it is not clear what theory should determine the rate of interest. One guide could be to see what money could have earned in a risk-free environment over the time horizon in question. A risk-free rate in contemporary applications is commonly some form of a government bond issued by an OECD country. But for the long historical period, relevant to slavery, that determination should consider such upheavals as a civil war and two world wars, a cold war, and wars in Vietnam, Iraq and Afghanistan, and many economic crises in the 20th and 21st century. Under these circumstances, it is entirely unclear what an appropriate rate of interest would be for growing the lost principal of money associated with an historical injustice to a current day restitutional value.

Given the cumulative, compounding nature of the rate of interest over time, it likely is the most significant factor when discussing rectification. In their article, “The Economics of Reparations,” William Darity Jr and Dania Frank compare the calculations of different economists for the required rectification of slavery, and their numbers range from around \$3.4 billion up to \$10 trillion.¹²⁰ *That is a ratio of 1 to almost 3,000*, and the differential is almost entirely explained by the rate of interest. At a too high rate of interest, what *ought* to be paid as rectification, simply *cannot*, for the monetary amount would dwarf the value of all worldwide

¹¹⁸ Cowen, “How Far Back Should We Go,” 18.

¹¹⁹ Bastiat, “That Which Is Seen, and That Which Is Not Seen”; Frank, *The Economic Naturalist*, 5–6.

¹²⁰ Darity and Frank, “The Economics of Reparations,” 328.

holdings.¹²¹ This disproportionate effect of the rate of interest on rectifications is problematic for the following reasons.

First, the rate of interest should not be a constant number. For every year between 1776 and 2022 it must, to some degree, reflect the inflation rate in that year. But the inflation rate may fluctuate wildly from period to period for reasons that have nothing to do with the injustices for which we are trying to calculate rectification.¹²²

Further, if we were dealing here with precise calculations, then an argument could be made that “the numbers are what they are.” But we are not dealing with precise calculations. Rather, any calculation of rectifications for slavery involves mostly guess work in constructing counterfactuals. In view of this, it would seem quite unreasonable to have the rate of interest dwarf all other considerations concerning who owns what to whom, especially when it is applied without method.

In any event, as discussed in more detail below in Chapter V, under Nozickian principles, an appropriate rate of interest for historical injustices is the actual historical rate of inflation.¹²³

D. There Are no Clear Titles

A common critique of Nozick’s entitlement theory is that there are no clear titles that would satisfy Nozickian criteria.¹²⁴ As Jana Thompson notes, most claims for rectifications by descendants of injustice will be undermined because in many cases, “forebears possessed what they did only because of a previous injustice.”¹²⁵ For example, with limited or no written languages, native American tribes did not have a tradition of recording titles. Further, their tacit land-rights were established for the most part through the ebb and flow of wars with the stronger tribes driving out weaker ones. Obviously, when later they lost their lands to European settlers, the emerging pattern of holdings was unsupported by clear titles. There were no records; and there was no justice, other than might makes right.

¹²¹ McConnell, “Moral Dilemmas,” 5–10; Stern, “Does ‘Ought’ Imply ‘Can’?,” 42–61.

¹²² Free To Choose Network, *Milton Friedman Speaks*.

¹²³ See, Webster, “\$1 in 1776 → 2022 | Inflation Calculator.”

¹²⁴ Cowen, “How Far Back Should We Go,” 18–19; Thompson, “Historical Injustice and Reparation,” 121; Lomasky, *Rights Angles*, 17–18.

¹²⁵ Thompson, “Historical Injustice and Reparation,” 121.

I believe that the lack of clear titles, however, is not as problematic as some of Nozick's critics make it out to be. It is true, of course, that if we look far back in history then there is little justice: for certainly, the origin of most historical holdings is found in the practice of might-makes-right. But that does not necessarily condemn all present-day holdings. The overwhelming majority of holdings have been created in recent times. As Deidre McCloskey argues, most of the high valuable consumer items have been created very recently. Modern economic growth and the vast majority of holdings emerged only in the last century.¹²⁶ Ayn Rand for example makes the argument, that "without the creative power of man's intelligence, [—or as McCloskey might put it, ideas—] raw materials remain just so many useless raw materials"¹²⁷ For example, consider that without chemist like Humphry Davy or Hans Christian Ørsted and their ideas, the refinement of valuable and useful aluminum would be undiscovered, and all aluminum would remain nearly worthless and useless bauxite. And a similar case can be made for all modern holdings, even land. An acre of land in, e.g., central Tokyo is worth multiple millions of dollars, while an acre of land in central Siberia can be bought for less than a hundred dollars. Thus, surrounding circumstances massively influence even land value.

Moreover, as Waldron notes, property rights are not necessarily permanent and enduring. Nozick's entitlement theory establishes an intimate relation between a resource or object and a person as a basis for property rights. But, if this person and object are separated through an injustice—say someone stole the object—then the relation between this person and *their* object may evaporate over time.¹²⁸ Furthermore, people die of old age and most holdings degrade over time if they are not maintained; this is surely true for holdings such as houses, which require constant upkeep to prevent ruin and dilapidation.¹²⁹ The evaporation of relations between objects and persons becomes especially relevant when multigenerational inheritances are considered. If both the object and the person who had a relationship with the object are gone, then for whom, may we ask, is the rectification?

Further, consider that the Dutch economy churns out almost one trillion dollars worth of goods and services *annually*. For the United States this figure is over twenty trillion dollars

¹²⁶ McCloskey, *Bourgeois Equality*, 31–36.

¹²⁷ Rand et al., *Capitalism*, 18; McCloskey, *Bourgeois Equality*.

¹²⁸ Waldron, "Superseding Historic Injustice," 16.

¹²⁹ McCloskey, *Bourgeois Equality*, 129–38.

annually.¹³⁰ To be sure, whatever untitled holdings might have fueled the initial expansion of these economies, the uncertainties about the original acquisition of such holdings are washed away as insignificant amidst the vast annual creation of wealth in today's global economy.

Furthermore, up until 1860 most people in the United States—free or enslaved—were too poor to leave an inheritance to their children. This means that the expected value of counterfactual scenarios is that descendants of slaves would not have inherited anything, other than perhaps some personal items of little monetary value. The following supports this assertion.

First, consider that throughout history the vast majority of people lived in what is often referred to as “Malthusian poverty;” i.e., poverty so severe that death by food deprivation was a common cause.¹³¹ And well-into the nineteenth century the majority of people still lived so poorly that they survived on something akin to a “moldy loaf of bread, some curdled milk, [with] bad schools, bad shelters, and bad sanitation.”¹³² While the United States provided for better living conditions and higher incomes than in the Old World, even in the USA, most families were generally unable to accumulate wealth as whatever they earned was typically spent on housing and food, thus wealth was either spent on maintenance or food.

This assertion is also supported by Thomas Piketty who shows that for most of history and even in the current period, the vast majority of people tend to leave little or no inheritance to their children.¹³³ This was especially true before 1900.¹³⁴

Lastly, certain holdings of a more permanent nature, such as land, tend historically to have been well-documented in most developed societies. Municipalities in developed nations often do have land titles dating back centuries.¹³⁵ In England, and as a common law country, the United States, there is the phrase: “since time immemorial, or time whereof the memory of man runneth not to the contrary.” It is used to justify a claim or right so old, that it is accepted

¹³⁰ “Report for Selected Countries and Subjects.”

¹³¹ Malthus, “An Essay on the Principle of Population”; Rosling, Rosling, and Rönnlund, *Factfulness*, 48–66.

¹³² McCloskey, *Bourgeois Equality*, 5–29.

¹³³ “Wealth and Income Concentration in the SCF,” 1989–2019 Panel B; Piketty, *Capital in the Twenty-First Century*, 260–62.

¹³⁴ Even in wealthy Europe the average inheritance before WO1 of the bottom 90% of society was less than €900 (when adjusted for inflation). And that is with 100 years of what McCloskey calls “great enrichment” McCloskey, *Bourgeois Equality*, 8–61.

¹³⁵ Epstein, *Simple Rules for a Complex World*, 66–67.

as if it has always been so.¹³⁶ An example is the city of London which has been there since time immemorial.

In sum, while historical injustices lay at the roots of most societies, the absence of clear titles and the common occurrence of shared ancestry—which over time weave a cobweb of countervailing and offsetting claims—erode the validity of long past claims for rectification.¹³⁷ For it is worthwhile to reiterate that it makes little sense to start a claim for rectification against yourself.

E. Limitation of the Rectification Principle in Restoring Non-fiduciary Injustices.

Critics such as Cowen and Thompson note that Nozick's principle of rectification is limited in the sense that it deals only with "the restoration of expropriated possessions or the provision of an equivalent for these." That is, it only deals with monetary reparations for fiduciary injustices and fails to deal with non-fiduciary injustices, such as torture.¹³⁸ And this is true.

But, while these critiques correctly illuminate a limitation of Nozick's rectification principle, they seem to miss the point that Nozick's entitlement theory is constructed for the purpose of establishing justice in holdings precisely where it concerns *fiduciary* holdings. As such, it is not surprising that non-fiduciary injustices are unaccounted for. To an extent, it is like criticizing your car for its lackluster ability to fly. In Chapter V, I will argue that not all injustices, such as for example, the torture of a great-grandfather, can be inherited.

For sure, Nozick's entitlement theory is limited in comparison and can at most establish justice in holdings. It does not aim to address other concepts of justice or injustice. However, when justice in holdings is thoroughly applied, other conceptions of justice will naturally follow.

For example, beyond the scope of Nozick's entitlement theory is Iris Young's notions that concern the structure of society, in which citizens contribute to that social structure with

¹³⁶ Participation, "Prescription Act 1832."

¹³⁷ As stated in [footnote 29](#), I believe that the slate of history may be cleared once the injustices was committed to and by a common ancestor, for at that point, the historical injustice has become part of the shared human heritage. Chang, "Recent Common Ancestors of All Present-Day Individuals"; Rohde, Olson, and Chang, "Modelling the Recent Common Ancestry of All Living Humans."

¹³⁸ Cowen, "How Far Back Should We Go," 18–19; Thompson, "Historical Injustice and Reparation," 120.

every purchasing decision they make, through an interrelated chain reaction, i.e., eerily similar to justice in holdings.¹³⁹ Justice in holdings does for example require rectification of international and ongoing injustices such as holdings constructed through conflict minerals, or coercively enforced labor. To an extent, justice in holdings might even be more demanding in ensuring international justice (in holdings) than Rawls is in *The Law of Peoples*.¹⁴⁰ However, to thoroughly proof this claim goes well beyond the scope of my thesis.

To conclude, justice in holdings cannot rectify the non-fiduciary injustices committed to deceased ancestors, although when properly applied, it does demand the rectification of ongoing injustices to such a degree that Justice in Holdings is the standard most corporations that claim to be ethical strive for, which will over time, certainly prevent further unrectified injustices.

¹³⁹ This argument draws on an earlier paper of mine; Young and Vogt, *Responsibility for Justice*, 95–122; Ankum, “The Social Connection Model Without Structural Injustice (Cosmopolitics),” 12.

¹⁴⁰ Rawls, “The Law of Peoples,” 50–62, 67.

V. NOZICK'S RECTIFICATION PRINCIPLE AND SLAVERY IN THE UNITED STATES—AN APPLICATION OF THE THEORY

As discussed, critics claim that Nozick's entitlement theory is internally inconsistent.¹⁴¹ They conjecture that the required rectifications for historical injustices such as slavery will be so large that they would require massive government mandated redistributions. This, they say, is at odds with Nozick's entitlement theory that aims to secure robust property rights. Hence, the alleged internal inconsistency.¹⁴²

In this chapter I will put this conjecture to the test. I will apply Nozick's rectification principle to the historical injustice of slavery in the United States of America, which arguably was one of *the* largest injustices committed in that country's history.

In what follows, I will set aside previously discussed arguments questioning the validity of cross-generational rectifications, such as the non-identity problem. The problems are aptly summed up by the legal academician and seminal author on the subject of rectification, Boris Bittker, when he observed that "[there] is merit in the argument that the Americans [today], who would have to pay the bill, are no more responsible for ante-bellum slavery in the South than for serfdom in pre-1861 Czarist Russia."¹⁴³ Nonetheless, I will set aside these valid objections and proceed to quantify the required rectification for slavery under Nozickian principles.

This chapter is organized as follows:

First, I will discuss a number of considerations bracketing the scope of the calculations. As Cowen notes, rectification "may be a matter of right, but those rights carry across the generations only with serious limits."¹⁴⁴

¹⁴¹ This chapter is influenced by earlier papers Ankum, "An Inquiry into the Internal Consistency of Robert Nozick's Libertarian Entitlement Theory (Distributive Justice)"; Ankum, "The Rectification of Historic Injustices."

¹⁴² Perez, "Libertarianism, Rectification and Property Rights," 2012, 1–2; Perez, "Libertarianism, Rectification and Property Rights," January 2014, 123–24.

¹⁴³ Bittker, *The Case for Black Reparations*, 11–12.

¹⁴⁴ Cowen, "How Far Back Should We Go," 31.

Second, I will discuss a study of rectification for slavery conducted by Thomas Craemer.¹⁴⁵ His study calculates rectification as the sum of *unpaid slave labor*. This approach echoes Bernard Boxill's, who likewise argues that rectification should reflect unpaid labor.¹⁴⁶

Craemer's approach is especially on point because, unlike many other studies of rectification, it does not mix the injustice of slavery and the injustice of racism.¹⁴⁷ He narrowly focusses on slavery as it existed in the United States from 1776 to 1865. Further, his approach is also in line with Nozick in that he sought to quantify the monetary delta between the historic events of slavery and the counterfactual scenario under which those African Americans would have been free and able to earn market wages.

Nonetheless, I will need to make two important modifications to Craemer's study to make it correctly Nozickian. Those changes reflect that: (a) Craemer fails to account for in-kind compensation (room and board); and (b) Craemer inappropriately applies a rate-of-interest instead of the historical rate of inflation. (These issues will be discussed in detail.)

Last, to corroborate the results of the modified-Craemer study, I will present my own analysis and show that the results are approximately comparable. The modified-Craemer study results in a rectification for slavery of approximately \$633 billion; my own analysis results in \$677 billion. That is about a 7% difference.

The conclusion of these analyses is that relative to the total holdings in the United States, rectification would only require a minimal adjustment in holdings. That is, the magnitudes of rectification—calculated in the modified-Craemer study and my own as \$606 billion and \$677 billion, respectively—would entail only a minimal adjustment in holdings. Consider that as of 2021, total wealth in the United States is estimated to be \$126 trillion.¹⁴⁸ This means that, setting aside all complications, rectification of slavery would impact only about 0.5% of holdings. In sum, Perez's concerns are unfounded.

¹⁴⁵ Craemer, "Estimating Slavery Reparations."

¹⁴⁶ Boxill, "The Morality of Reparation," 120; Boxill, "Black Reparations," 7.

¹⁴⁷ Darity and Frank, "The Economics of Reparations."

¹⁴⁸ Hechler-Fayd'herbe, *Global Wealth Databook 2021*, 24.

A. Considerations Bracketing Rectification

i. Not all injustices are automatically inherited by descendants

For Nozick, as for Locke, people are not automatically entitled to an inheritance.¹⁴⁹ By extension, this means that descendants of unjustly treated people are *not* automatically entitled to rectification of the injustices inflicted on an ancestor.

Consider that if a rich man dies, his son is not automatically entitled to inherit the riches. The son's inheritance is determined by the father's will, since it is the father's right to dispose of his wealth as he sees fit.¹⁵⁰ Of course, as a practical matter, most societies have default provisions in place in the event the father has no will governing his estate—but that does not matter here. Even Thompson, as an advocate for reparations, observes that the “right of bequest is a liberty right possessed by the person who makes the bequest. It does not entitle family members to claim an inheritance as their right.”¹⁵¹ Likewise, therefore, if a man was unjustly prohibited from acquiring or keeping wealth and subsequently died poor, his son is not automatically entitled to his father's right to rectification.

Of course, this does not mean that descendants of slaves are never entitled to inherit claims their enslaved ancestors might have had. It does raise the question, though, of when and how such rights transfer across multiple generations. The question is even more difficult to tackle when the lineage is mixed with parents who were never enslaved, who have no slaves in their ancestry or who even are related to the perpetrators of injustices, such as descendants of slaveholders, some of whom were African or African American.¹⁵² In the absence of written wills or other documents supporting claims of inheritances, the linkage across generations quickly dissolves.

It must be noted, however, that my confined view on the role of inheritances in calculating rectifications contrasts with those of others addressing the issue. For example,

¹⁴⁹ Nozick, *ASU*, 162; Bird-Pollan, “Death, Taxes and Property (Rights),” 19–25; Locke, *Two Treatises of Government*, 90; Cowen, “How Far Back Should We Go,” 25–28; “Inheritance - Wills.”

¹⁵⁰ Cowen, “How Far Back Should We Go,” 27; Lyons, “The New Indian Claims and Original Rights to Land,” 257–58.

¹⁵¹ Thompson, “Historical Injustice and Reparation,” 126.

¹⁵² According to African-American historian, John Hope Franklin, “The majority of Negro owners of slaves had some personal interest in their property. [...] There were instances, however, in which free Negroes had a real economic interest in the institution of slavery and held slaves in order to improve their economic status.” Gates, “Did Black People Own Slaves?”; Eltis and Engerman, *The Cambridge World History of Slavery*.

Boxill argues that descendants of slaves do have rights of inheritance. Specifically, Boxill argues that descendants of slaves are entitled to the undercompensated work done by their ancestors.¹⁵³

In my empirical analysis for quantifying the rectification for slavery (see below), I will suspend the above issue, as well as the previously mentioned complications with counterfactuals, and assume that all fiduciary claims are automatically inherited.

ii. Only Fiduciary Damages Can Be Inherited

An analysis of rectification under Nozickian principles should be restricted to an accounting of the fiduciary impact of slavery *on holdings*. If an injustice does not impact holdings, then under Nozickian principles, no rectification is warranted.

By contrast, non-fiduciary injustices, such as emotional and physical pain, suffering, insults, humiliation, emotional anguish and the general loss of wellbeing experienced by slave descendants, are not inheritable. Under Nozickian principles, such non-fiduciary injustices do not impact justice in holdings.

iii. Slavery and Racism Should not Be Conflated

Since I am examining estimates for the rectification of slavery, I will ignore various other historical and ongoing injustices that others often group together with the legacy of slavery.

For example, some rectification analyses may group together the injustice of slavery itself with the injustices of racism, such as Jim Crow laws and other forms of segregation that held back African Americans especially, but certainly not exclusively, in the South of the United States.¹⁵⁴ But, while slavery and racism are obviously interrelated, they are not the same. Racism has its own independent roots in culture and prejudice and endures without slavery in the United States and elsewhere—the two should not be conflated, at least not for the purpose at hand: Nozickian rectification for slavery as it existed in the United States from 1776 through 1865.

¹⁵³ Boxill, “The Morality of Reparation,” 120; Boxill, “Black Reparations,” 7.

¹⁵⁴ Darity and Frank, “The Economics of Reparations.”

iv. The legal system has made rectifications

In countries with well-functioning legal systems, injustices are currently and have historically been rectified through courts and other supporting institutions. Thus, to the extent that injustices have already been rectified by the courts, they do not need to be re-rectified under the principle of rectifications.

While slavery in the United States was officially outlawed in 1865 with the ratification of the Thirteenth Amendment, there are instances of court interferences *before* that, providing for some nominal form of rectifications.

For example, there is the case of Elizabeth Freeman, who in 1780 legally gained her freedom as well as 30 shillings as reparation. But she is not the only example of slaves filing suits in court against slaveholders and winning their freedom.¹⁵⁵ And even after the 13th amendment was enacted in 1865, there are records of court cases in the South where former slaves sued slaveholders for damages and won.¹⁵⁶

These instances, however, were the exception to the rule and do only marginally impact any serious examination of what rectification for the injustice of slavery is warranted.

v. Properly construed rectification should reflect compensation and not restitution.

In the calculation of damages associated with injustices, legal systems tend to differentiate between “compensation,” and “restitution.”¹⁵⁷ This differentiation has important implications for how to view and calculate rectifications.

Compensation is generally calculated to reflect the “financial damages” incurred by the plaintiff due to the defendant’s illegal or unjust actions. For example, if person A damages the

¹⁵⁵ “‘Just to Say, ‘I Am Free’’: EBSCOhost”; Schweninger, “Freedom Suits, African American Women, and the Genealogy of Slavery.”

¹⁵⁶ Jones, “Lea VanderVelde, Redemption Songs.”

¹⁵⁷ The term damages “refers to compensation that is recovered by a person as compensation for an injury or loss. Damages may include lost income, wages and other economic losses, compensation for pain, suffering and other non-economic losses, and in some cases awards of punitive damages meant to punish a wrongful actor and to deter others from committing similar wrongful acts.” Larson, “How Are Damages Calculated After an Injury or Lawsuit | ExpertLaw.” Nozick, *ASU*, 70, 93; Kull, “Introduction Symposium,” 1763–66; Boxill, “Black Reparations,” 3.

car of person *B*, then the damage to person *B* is the loss of value of her car: i.e., the loss in the monetary value of her car.¹⁵⁸

Restitution is conceptually different. In the case of restitution, the court orders the defendant to give up unjustly acquired monetary gains to the claimant. For example, if a bar owner plays a musician's copyrighted songs without paying royalties, the musician is not "damaged" the way a person is when damaging a car in an accident. The musician is no worse off—in fact, she may be better off if some patrons happen to like her music and decide to purchase it.

Nozick's notion of rectifications—the monetary delta—is consistent with compensation and not with restitution. As such, rectification for the historical injustice of slavery should only concern compensation. This means that if slaveowners were able to live better lives because of slavery, this "unjust enrichment" does not constitute a basis for rectification.¹⁵⁹ In sum, if properly construed, rectification should reflect compensation and not restitution.

B. Thomas Craemer's Estimate of Rectification

To quantify rectification under a Boxill-like claim that descendants of slaves are entitled to the unpaid labor of their ancestors, I use the work of Craemer.¹⁶⁰ In addition to reviewing a number of studies on rectification for slavery, Craemer presents his own calculations. In this, he specifically quantifies rectification in terms of, as Boxill would have it, unpaid labor. As such, Craemer's calculations are appropriate for my purposes.

However, I will need to make two adjustments to Craemer's calculations in order to make them consistent with Nozickian principles. The adjustments are simple but fundamental. They pertain to the following:

¹⁵⁸ The exact laws governing damages and restitution are vast and complex and are well beyond the scope of this thesis.

¹⁵⁹ Goldsmith, "The Entitlement Theory of Justice Considered," 588–93.

¹⁶⁰ See William III's cultural and social advantages Boxill, "The Morality of Reparation"; Craemer, "Estimating Slavery Reparations."

1. *In-Kind Compensation*: Craemer ignores that slaves received in-kind compensation in the form of room and board. Thus, to calculate Nozick's monetary delta in terms of unpaid wages, we need to account for room and board.
2. *Rate of Interest*: Craemer applies a rate of interest of 3% that grows the unpaid wages from 1776 to 2009 on the assumption that the outstanding balances would have accumulated over time. In a Nozickian counterfactual scenario, however, the most probable path is that people inherited nothing, because money would be consumed.¹⁶¹ A more appropriate rate of interest is the rate of inflation, which over time was lower than the 3% Craemer applies.

The adjustments are discussed below. Importantly, once the adjustments are made, Craemer's results are approximately comparable to my own previously construed calculations.

Craemer's methodology is straightforward. First, he calculates the total number of hours slaves worked for each year from 1776 through 1865. Then he multiplies those hours times *average market wages*, to get the total dollar amount of unpaid labor. He then applies a 3% rate of interest for the time value of money to express those unpaid wages in current day dollars (in Craemer's study that is 2009). His methodology essentially follows the equation below:

$$(\text{Slave Labor Hours}) * (\text{Average Market Wages}) = \text{Rectification (1865)}$$

His historical data on slave labor hours are derived from the US Census, with a necessary in-between step. The this is because the census data he uses are incomplete in two ways: (a) the first census was taken in 1790, which means there are no data from 1776 to 1789; and, (b) the census was taken only once in a decade, which means that there are no data for the in between years. Craemer fills in the gaps in historical population data through a simple linear extrapolation.¹⁶²

The rectification Craemer has in 1865 is approximately \$74 million.¹⁶³

¹⁶¹ Bittker, *The Case for Black Reparations*, 72.

¹⁶² Craemer, "Estimating Slavery Reparations," 648.

¹⁶³ Craemer calculates a rectification of \$5,931,336,366,538 in 2009. Discounting this to the year 1865 at a rate of 3% per year gets \$73,838,401,789. This is calculated as: $\$5,931,336,366,538 \times (0.97)^{(2009-1865)} = \$73,838,401,789$.

i. Adjustment #1: In-Kind Compensation (Room and Board)

Craemer uses *average market wages* and ignores that slaves received in-kind compensation. Once in-kind compensation is accounted for, however, the underpaid portion of labor—i.e., the monetary delta—is smaller by 52%. (See below).

For, we should consider that slaves were “maintained” by their owners and received “in-kind” compensation in the form of room and board. After all, they were valuable assets and slaveholders, grimly comparable to owners of livestock, had an incentive to keep them in a state of reasonable health.¹⁶⁴ This contrasts with employers of free labor, who could readily exploit and then replace their exhausted workers by hiring new ones.¹⁶⁵

Another important consideration is that free market wages for ordinary manual labor, such as cotton picking, tended to converge (as it still does in much of the developing world) onto *subsistence level*—i.e., the bare minimum to keep people alive. This means that the wages for free labor would not have been much higher than the “in-kind” compensation received by slaves.¹⁶⁶

This observation is supported by Adam Smith who noted, in *The Wealth of Nations*, that “work by freeman comes cheaper than that of slaves.”¹⁶⁷ Given historical complexities and lost data, Smith’s assertion is not easy to validate and opinions on it differ. Still, to the extent that Smith is correct, it further suggests that the monetary delta between free market wages and slave labor may be less than imagined, especially if one considers that slave labor is not entirely uncompensated.

American economist Stanley Lebergott analyzes the labor force of the United States in the 19th Century and finds that the vast majority of people—more than 50%—worked in agriculture.¹⁶⁸ This was even more true for the predominantly agricultural economy of the

¹⁶⁴ In general, slaves were of course treated badly. But so were free men, who also did backbreaking work in factories of the rapidly industrializing Union states.

¹⁶⁵ In the absence of government regulations and labor laws, conditions of British factory workers during the mid-18th Century were notoriously appalling. Factories also still used child labor with no regard for the children’s health or wellbeing. Mokyr, *The Lever of Riches*, 111–42. This was often true in the United States as well, although a shortage of workers in the rapidly expanding economy of the former colony appears to have improved working conditions.

¹⁶⁶ Marx and Engels, *The Communist Manifesto*, 29–36.

¹⁶⁷ Smith, *The Wealth of Nations*, 118.

¹⁶⁸ Lebergott, “Labor Force and Employment, 1800–1960,” 4–5.

South where 80% of the population worked in agriculture in 1850.¹⁶⁹ This means that if slaves had been free men, then under the *most probable Nozickian-counterfactual scenario*, they would have been farmhands, like the vast majority of workers.

Farmhands typically earned no more than subsistence wages, which afforded them food and shelter, but little more. For example, in 1860, a farmhand in Massachusetts—which was a high paying state—could expect to make around \$1 a day, which was tantamount to about \$18 to \$25 a month, or they could opt for a lower monthly salary of \$10 to \$12, which included room and board.¹⁷⁰

Indeed, it appears that after emancipation and the resolution of the Civil War, the economic conditions of former slaves did not notably improve, for a number of reasons. For one, as freedman Houston Hartsfield Holloway wrote, “we colored people did not know how to be free and the white people did not know how to have a free colored person about them.”¹⁷¹ But also, and perhaps more importantly, the basic economics of southern plantations and manual labor—by former slaves, and then day laborers or sharecroppers—simply did not support higher wages.

All of this suggests that the monetary delta constituting the basis for compensating descendants of slaves for lost wages is probably small.¹⁷² In fact, using the previously discussed data on wages earned by farmhands in Massachusetts, we can actually calculate a reasonable upper-limit for underpaid labor—i.e., *our monetary delta*.

As noted, in 1860, a farmhand in Massachusetts could make around \$18 to \$25 a month, or a lower monthly salary of cash payments of \$10 to \$12 and free room and board. Thus, room and board are \$8 to \$13, and this is the in-kind payment that slaves received. This also means that slaves were underpaid by about \$10 to \$12 per month. That is, slaves, who received only room and board, earned 48% ($\$12/\$25 = 0.48$) less than their free counterparts.

Thus, only 48% of Craemer’s rectification is strictly speaking unpaid labor. I will adjust his number below.

¹⁶⁹ Goldin and Sokoloff, “The Relative Productivity Hypothesis of Industrialization,” 480.

¹⁷⁰ Wright, *Comparative Wages, Prices, and Cost of Living*, 47.

¹⁷¹ Nast et al., “Reconstruction and Its Aftermath - The African American Odyssey.”

¹⁷² Wright, *Comparative Wages, Prices, and Cost of Living*, 47.

ii. Adjustment #2: Rate of Interest

Craemer applies a 3 percent rate of interest to reflect the time-value-of-money. His notion is that if the underpaid labor had been paid out, then it would have accumulated over time at a 3% rate of interest.

Craemer's use of the 3% is not appropriate under a Nozickian analysis. Monies of underpaid labor would *most probably* not have been invested and subsequently been inherited by descendants of slaves over one century and a half later. Rather, under the most probable counterfactual scenario, those monies would have been spent—people were poor. To be sure, the average farm workers did not leave a substantial inheritance to their children and grandchildren. Typically, as elsewhere in the world, the common man left little or nothing.¹⁷³ In sum, Craemer's assumption that monies would have been invested and grown at a 3% rate of interest is inappropriate, and surely for the purposes at hand.

Instead, the appropriate rate of interest should only make the value of a dollar (in unpaid labor) in 1865 equivalent to a dollar in 2022 (Craemer uses 2009 values) *in terms of its purchasing power*. This is accomplished by applying the actual historical rate of inflation over the years from 1865 to the current period. That is, applying the rate of inflation makes a dollar in 1865 equivalent to a dollar in 2022.

Importantly, since the rate of inflation is substantially lower than the 3% used by Craemer, this significantly downsizes the rectification amount Craemer calculates.

iii. Modified Results Craemer

Craemer's results are readily modified to reflect the above two considerations (in-kind compensation and inflation rate).

First, to account for in-kind compensation, note that Craemer's amount of unpaid labor (rectification) as of 1865 is \$74 million.¹⁷⁴ But, this number is overstated: as discussed, it fails to account for in-kind compensation (room and board). To be precise, only 48 percent of the

¹⁷³ "Wealth and Income Concentration in the SCF," 1989–2019 Panel B; Piketty, *Capital in the Twenty-First Century*, 260–62.

¹⁷⁴ Craemer calculates a rectification of \$5,931,336,366,538. Discounting this to the year 1865 at a rate of 3 percent gets \$73,838,401,789. This is calculated as: $\$5,931,336,366,538 \times (0.97)^{(2009-1865)} = \$73,838,401,789$.

\$74 is unpaid labor.¹⁷⁵ Thus, the correct amount is \$35.5 million ($0.48 \times \$74 \text{ million} = \35.5 million).

Second, in order to correct for Craemer's inappropriate rate of interest, all we need to do is apply the *actual rate of inflation* over the period from 1865 to 2022 to the \$35.5 million. This results in a total amount for rectification as of 2022 of \$606 billion.¹⁷⁶

In sum, when appropriately modified Craemer's study calculates a Nozickian rectification as of 2022 of approximately \$606 billion. Relative to the total holdings in the United States this would entail only a minimal adjustment in holdings, only 0.48%.¹⁷⁷

C. Corroboration of the Modified-Craemer Study

Before searching out the Craemer's study, I performed my own independent analysis: the result is a rectification for unpaid labor of \$677 billion. This is approximately 11.5% higher than Craemer's modified calculation. Still, it is roughly in the same "ballpark." Using essentially the same conceptual framework as Craemer, I calculate rectification for underpaid slave labor as follows.

First, I determine for each year that there was slavery in the United States (1776-1865) the total number of slaves. Then, using the Massachusetts data on wages, I calculate the unpaid labor portion of wages as \$12 per month (as discussed). This is \$144 of unpaid labor per year, per slave.¹⁷⁸ The yearly amount of unpaid slave labor is calculated by multiplying the two:

$$(\text{Number of slaves in a year}) \times (\$144) = \text{Unpaid slave labor in a year}$$

I do this calculation for each year that there was slavery, from 1776 through 1865.

Next, I express the historical underpayments in term of 2022 dollars. I do so by applying *historic inflation factors*.¹⁷⁹ The grand total of underpayments is \$677,165,549,742, in 2021 dollars.

¹⁷⁵ $\$12/\$25 = 0.48$ (See discussion above.)

¹⁷⁶ Webster, "\$35,442,432,858.72 in 1865 → 2022 | Inflation Calculator." This is: \$606,222,157,415.76

¹⁷⁷ Even when using Craemer's original calculation, total rectification would amount to 28%. A lot, but not enough to break Nozick's theory. Hechler-Fayd'herbe, *Global Wealth Databook 2021*, 24.

¹⁷⁸ I purposely picked a high paying state, as well as applying 1860's wages consistently over the entire period.

¹⁷⁹ Webster, "\$1 in 1776 → 1865 | Inflation Calculator."

A number of in between steps, however, must be mentioned. As Craemer notes too, there is no complete data on how many slaves worked in the United States. The most we have is Census Data every ten years from 1790 to 1860, summarized in the table below.¹⁸⁰ But we need data for 79 years of slavery.

Year	Slaves
1790	697,681
1800	893,602
1810	1,191,362
1820	1,538,022
1830	2,009,043
1840	2,487,335
1850	3,204,287
1860	3,953,731

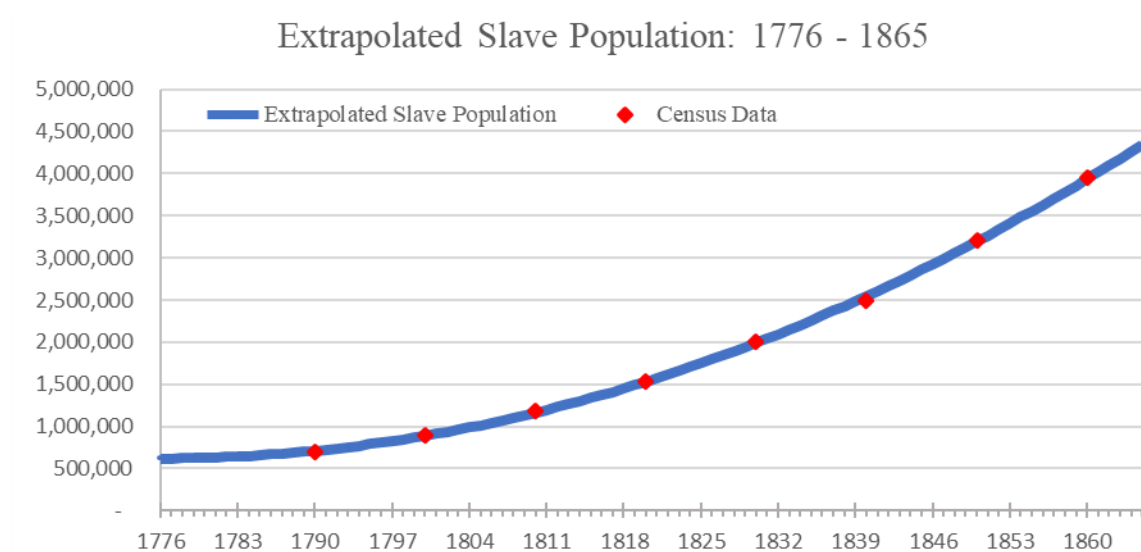
The missing annual data must be filled in through extrapolation. Cramer uses a linear extrapolation between known data points. Population growth, however, is rarely linear. Therefore, instead of using Craemer's method of linear extrapolation, I estimated a trendline to fill in the gaps. For this I used a rudimentary feature for data analysis that is standard in Microsoft Excel.¹⁸¹ The trendline closely matches the historic data and it allows me to "estimate" for each year from 1776 to 1865 the annual slave population.

The estimated trendline provides a near perfect fit, with significant coefficients and a R Square-statistic of 0.99.¹⁸² It looks as shown below. Capturing the historic census data nearly perfectly, the trendline gives us what we are looking for: estimates for the missing years.

¹⁸⁰ "U.S. Population in 1776 and 1790"; "Statistics on Slavery"; "U.S. Population Series"; US Census Bureau, "Publications"; "Fact Sheet on Slavery and Emancipation American Abolitionists and Antislavery Activists"; Bowman, "Review of Dictionary of Afro-American Slavery.," 678.

¹⁸¹ Microsoft Excel has a build in data analysis package. By selecting the eight census data slave populations, a trendline is readily calculated under data/data/analysis/regression. Various models can be chosen, but the best fit was obtained with a polynomial $y = \text{intercept} + x^2 + x$. (See statistics of the regression below.)

¹⁸² R-Squared is a statistical measure of fit indicating, in this case, how much of the variation of the dependent variable—i.e., the slave population—is explained by the trendline. Fernando, "What Is R-Squared?"



With the missing slave population data for each year, we can now calculate the total underpayments for all slaves per year, for each year that there was slavery in the United States. Next, I use the actual historic rate of annual inflation to express the underpayments in 2021 dollars.¹⁸³

The grand total is then calculated by adding up the rectifications for each of the 79 years in which slavery was legal in the United States: it is \$677 billion (\$677,165,549,742).¹⁸⁴ This number essentially corroborates the modified Craemer's study.

D. Welfare—an Alternative to Rectification?

When responding to calls for rectification for slavery, it is relevant to consider whether payments have already been made in the form of welfare programs. It would be unjust to require American taxpayers to pay for a re-rectification. While a full discussion of welfare programs is well beyond the scope of my thesis, a few observations are relevant.¹⁸⁵

First, it is important that the understanding of welfare as a form of rectification was commonly accepted by American politicians in the 1960's. In fact, many programs were

¹⁸³ Webster, "\$1 in 1776 → 1865 | Inflation Calculator."

¹⁸⁴ Ankum, "Rectification Calculation."

¹⁸⁵ Poole, *The Segregated Origins of Social Security*; Sowell, *Discrimination and Disparities*.

intended to compensate disadvantaged people for historical injustices by leveling the so-called playing field and ensuring that every person could make use of the opportunities available in a free society.¹⁸⁶

To put the numbers into perspective, the average welfare recipient currently receives around \$11,000 annually, which in the aggregate is about 18% of the United States' GDP.¹⁸⁷ While this amount is spread over a wide range of programs and purposes, a significant proportion of this goes to low-income African Americans, many of whom we may assume are descendants of slaves. Again, these payments were traditionally seen by advocates for welfare as a rectification for the innumerable injustices endured by the African American community, i.e., slavery, Jim Crow laws, segregation, etc.¹⁸⁸

A comparison between the *one-time* rectification calculated in the modified Craemer results divided by the African American population gives each African American individual a one-time payment of about \$14,433.86. It is informative to compare this amount to the recurring *annual* welfare payments of on average \$11,000 per recipient.¹⁸⁹ The latter quickly dwarfs the former after a mere two years.

While ultimately the comparison between welfare and rectification misses the point—because the two are essentially different—non-libertarians may find comfort in the notion that in some form, rectification is being made through welfare programs and other support systems.¹⁹⁰

¹⁸⁶ Mead, *Beyond Entitlement*, chap. 2.

¹⁸⁷ “Social Protection - Social Spending - OECD Data.”

¹⁸⁸ Mead, *Beyond Entitlement*, chap. 2.

¹⁸⁹ $\$606,222,157,415.76 / 42,000,000 = \$14,433.86$

¹⁹⁰ Henry, *Race, Poverty, and Domestic Policy*, pt. 1,3; US Census Bureau and Creamer, “Poverty Rates for Blacks and Hispanics Reached Historic Lows in 2019”; Nozick, *ASU*, 149–53.

VI. CONCLUSION

I have examined Nozick's entitlement theory in light of two general categories of criticisms concerning his rectification principle: (a) whether there can be justice in holdings if rectification is conceptually flawed—so, can it be done—and (b) whether rectifications for historical injustices would be so large as to render the entitlement theory *internally inconsistent*—i.e., would rectification warrant massive redistributions and call into question all holdings?

With respect to the first question—whether rectification is conceptually flawed—I have examined a number of prominent criticisms. For the most part these criticisms point to potentially serious problems claimants for rectification will encounter in proving their claims. I conclude, however, that these problems do not invalidate Nozick's entitlement theory. On the contrary, I argue that holdings should be presumed just until proven otherwise. Given the potential difficulties in proving claims that can withstand scrutiny, it is unlikely that claimants in this regard will be able to meet their burden of proof. That is, the conceptual problems with rectification are simply an intricate part of examining injustices and do not fundamentally undermine Nozick's notions about justice in holdings.

The second category of criticisms—i.e., whether claims for rectifications of historical injustices would be so large as to render the entitlement theory internally inconsistent—hinges on the *monetary magnitude* of the claims. If the claims can be shown to be large, then the criticism is likely to have substantial merit; conversely, if the claims are small, then the critique is diminished. Putting the issue to the test, I examined the historical injustice of slavery as it existed in the United States of America from 1776 to 1865. The notion is that slavery is conceivably one of *the* most heinous and widespread injustices committed in the United States—it therefore makes for a robust testcase. That is, if rectification can be made for slavery without massive redistributions threatening all holdings, then rectification can be made for other injustices as well.

Drawing on available data and standard techniques for analyzing damage claims, I calculate a reasonable estimate for rectification to be approximately *\$606 billion* in 2022. While this is a substantial amount of money, when compared to the total wealth in the United States of \$126 trillion, it is only about 0.48%. This means that even if the United States government decided to make explicit rectifications for slavery and distribute \$606 billion, it

would hardly cause a massive redistribution in holdings, as claimed by critics. In sum, the principle of rectification is not likely to render Nozick's entitlement theory *internally inconsistent*.

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