PROPERTY & CONTRACT in ECONOMICS

The Case for Economic Democracy

DAVID P. ELLERMAN
This book argues that the recently deceased capitalism-socialism debate was wrong-headed from the beginning—like a "debate" over the private or public ownership of slaves. The question was not private or public slavery, but slavery versus self-ownership. Similarly, this book argues that the question is not whether people should be private employees (capitalism) or public employees (socialism) but whether people should be hired or rented as employees at all versus always being jointly self-employed as employee-owned companies.

Being a genuine work of political economy, the book re-examines the basic principles of private property and contract to obtain results at odds with the employer-employee relation and in favor of universal self-employment or economic democracy. Joint self-employment in the firm is the economic version of joint self-determination or political democracy in society. Private property should be based on people getting the fruits of their labor, but that only happens under joint self-employment. Market contracts should only apply to what can be transferred, but a person's labor is not really transferable (as we easily recognize for hired criminals). This book traces these ideas—the labor theory of property and the notion of inalienable rights—from the ancient Stoics through the Reformation and Enlightenment, and restates the ideas in modern terms with critical applications to economic theory.

Overall, this book provides a timely perspective on the fundamental economic and political questions in the wake of the collapse of the East-European bloc and the continuing debate in the West over the role of labor in the enterprise.
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General editors' preface

Interest is growing throughout the human sciences in studies that look for an understanding beyond what can be gotten from the narrow set of methods positivist philosophy had deemed scientific. "Theory" in the human sciences need not be restricted to exercises in mathematical model building. "Empirical work" can involve more than the search for quantitative patterns in statistical data. The "philosophy or economics" can involve more than a set of methodological recipes to make the human sciences look more like physics. The "human sciences" are starting to notice that they have at least as much to learn from the humanities as they do from the sciences. Calls for a more humanistic and interpretive approach are even beginning to be heard from within the economics profession.

The Interpretive Economics series will be an outlet for the exciting new work in economics that exemplifies what a more interpretive approach has to offer. It is particularly interested in work that is being done on the interface of economics with fields where "more interpretive" kinds of research are already going on, such as anthropology, history, sociology, linguistics, ethics, social theory, cognitive science, and others. It will include studies that shed new light on economic subjects through the creative use of interpretive approaches.

The series will comprise three major strands under the following headings.

Interpretive empirical studies. Interpretive empirical studies would include, for example, historical interpretations of past events on the basis of original, archival research, or anthropological studies of current events, on the basis of participant-observation and interviewing methods. The editors are thinking of "close-up" studies of specific market processes, economic communities and institutions, and policy making. Case studies could be undertaken of the discursive processes underlying important institutions of the economy.
for example, how a bank's employees make decisions about credit transactions, how management/labor relations are seen from "both" sides, etc.

History of economic theory. Books under this heading will study the past of economics in the light of concerns that arise in contemporary economics. The editors are especially interested in intellectual histories that are oriented toward improving our understanding of the diverse interpretive frameworks one encounters in the history of economics.

Philosophy of economics. Here the editors are looking for studies that use interpretive strategies to study the rhetoric and interpretive frameworks of economics, as well as ethical, religious, and political issues in an economic context.

This series will not be captured under one political label. What the editors share is not policy conclusions but a certain orientation about how economics can deepen its interpretive dimension, both in its theorizing and its empirical work. They share the conviction that the interpretive approach will bring new life into economic discourse and hope that the series will be an important vehicle for the dissemination of this approach.

Arjo Klamer
Don Lavoie
The Great Debate between Capitalism and Socialism is at last over. The free market and private property have decisively won. Does that mean the “end of ideology” or the “end of history”? Can we rest assured that there are no fundamental structural flaws in the western-style economy? Our legal system is structured to forbid discrimination on the basis of race, but racism persists. Is that the only type of social problem that remains — where the structure is correct in principle but the implementation is flawed?

We shall argue that the current western-style economic system is fundamentally and structurally flawed. The problems are not just in the implementation of sound principles. Moreover, we shall argue that the system is flawed because it violates the principles of the institutions that are usually associated with capitalism. That is, it violates the basic principles of both private property and democracy. From the conventional point of view, this will seem to be a strange position. Isn’t capitalism usually identified with private property and democracy? That identification has been based on the Great Capitalism-Socialism Debate, on assuming that “the alternative” to capitalism is state ownership of businesses and one-party dictatorships. But that debate is over, and accordingly capitalism can now be evaluated in a new light.

Since capitalism is so often definitionally identified with a private property market economy, we must give a more precise definition of “capitalism” so that we are not just arguing about definitions. By capitalism we mean production organized on the basis of the employer-employee relationship. We shall also use “the employment system” or “employer-employee system” as more accurate but less known names of the system based on the employer-employee relation. The alternative is a private property market economy where everyone is self-employed (individually or jointly)
in their workplace. A firm where the managers and workers are jointly working for themselves will be called a “self-employment firm,” a “worker-owned firm” (where “worker” always includes all who work in the business enterprise), or a “democratic firm” in contrast to the conventional “capitalist firm” or “employment firm.” The basis question is this – the employer-employee relation or universal self-employment in the workplace?

We shall have more that one occasion to use a slavery analogy. Consider a private property market economy where the workers were largely privately owned slaves, like the American economy before the Civil War. Suppose the defenders of such a system managed to restrict consideration of an alternative to a system of state businesses with state or socially owned slaves. The “Great Debate” would be between the “Athenian” model of privately owned slaves and the “Spartan” model of publicly owned slaves. The Athenian model would most likely be more efficient. Over the years, it would demonstrate its superior efficiency while the Spartan model might eventually collapse under its own weight. Would the victory of the Athenian model of private slave ownership signal the “end of history”? Would the victory mean that the Athenian model contained no structural flaws, only problems of implementing otherwise correct principles?

The Great Debate of our day has been similar except that the question has been the voluntary private or public hiring (or renting) of workers instead of the private or public ownership of workers. In spite of its political importance, the public-private debate has been conceptually wrong-headed from the beginning. The real question about slavery is not the public or private ownership of slaves but whether the master-slave relationship should be allowed (involuntarily or voluntarily) or should people always be self-owning (which implies that the right of self-determination should be inalienable even with consent). Today, the real question is not about the public or private employment of workers (as it was in the capitalism-socialism debate). The question is: should the hiring or renting of people be allowed at all or should people always be self-employed in their place of work?

Some would say that the universal self-employment system should be presented as a variant of capitalism rather than an alternative. That may be; there is no need to argue only about words. But there are conceptual and historical reasons to use the word “capitalism” exclusively to represent the employer-employee system so long as one is clear, precise, and explicit about that usage. When people are self-employed in their firms, then the suppliers of capital are not hiring the workers. Labor (in the sense of all the people, managers and blue-collar workers, who work in the firm) is hiring capital. Since Labor would then be the “residual claimant” (the party receiving the profits left from the revenues after the costs are covered), it would be odd to call that arrangement a variant of “capitalism.”
In any case, the reader has been forewarned; “capitalism” herein refers to the use of the employer-employee system. The alternative is a private property market economy based on universal self-employment.

INTIMATIONS OF STRUCTURAL FLAWS

The end of the capitalism-socialism debate also signals the triumph of neoclassical economics over Marxian economics. Neoclassical economics now reigns as a self-contained and virtually unchallenged scientific theory. How could there be any deep-lying structural flaws in the capitalist (employment) system without neoclassical economic theory discovering them? The answer is that basic flaws in the paradigm have always been fairly clear but that neoclassical economics has simply decided not to investigate them.

Take for example the simplest and most fundamental of insights in economics, the mutual gains of voluntary trade between two or more parties. In the absence of externalities that violate the rights of others, economics finds no reason to prohibit a voluntary exchange between knowledgeable and consenting adults. Yet no capitalist economy allows citizens to sell or buy their political votes. Why not? There are certainly willing buyers and willing sellers so there would be mutual gains from a voluntary exchange. It is easy to understand why representatives are not allowed to sell their votes (since it would violate their representative function). But why shouldn't the ultimate primary citizens be allowed to sell their votes?

The prohibition of vote selling is in direct contradiction with the simplest recommendation of economic theory. Is the prohibition just an arcane practice that should be removed in the interests of greater efficiency, or does it hint at some deeper flaw in economic theory? What is the position of economics on this conflict between received theory and the legal system? Does economics give an uncontrived explanation of this prohibition as an “exception” to the efficiency rule, or does economics recommend that citizens be allowed to sell their votes? The reader is invited to inspect the economics texts of our day to answer the question. We fear that little or no discussion of vote selling will be found. Economics tends to duck the issue.

Consider the voluntary contract to sell labor by the lifetime. The usual employer-employee contract is a short-term contract to buy and sell labor. The employer is hiring, renting, or employing the employee for some limited time period. But just as one can rent or buy a car or an apartment, why can't we have the same choice with people? Buying a car is essentially buying all the services the car can provide (like rental for the lifetime of the car) instead of buying only a certain segment of services. Applying the same option to workers, there could be a voluntary contract to “buy” a
worker in the sense of buying all the services (within the scope of the contract) the worker could provide over his or her working lifetime. That would be a modern civilized form of the old voluntary self-sale or self-enslavement contract. Yet such a contract between knowledgeable and consenting adults is forbidden in all capitalist economies.

Here again, does economic theory give any coherent account of the drastically different treatment of short-term and long-term rental contracts (applied to people)? Why is the long-term contract strictly forbidden when the short-term contract is the foundation of the system? Do economists recommend consistently with free market principles that lifetime labor contracts be allowed (like Nozick 1974 and Philmore 1982), or do they give a coherent and uncontrived explanation of this "exception"? The reader is again invited to consult the economics books of our day, but we fear that economics again ducks the issue.

Or consider the voluntary collective contract for a people to give up and transfer their right to govern themselves to an emperor or autocrat. In the employment contract, the employees give up and transfer their right to manage their activities within the scope of their employment to the employer or "master" (the original legal name was "master-servant relation"). Why not allow the same sort of collective contract in the political sphere? Indeed the postulation of such a pactum subjectionis (pact of subjugation) was the traditional sophisticated justification offered for non-democratic governments (e.g., Thomas Hobbes).

In the western political democracies, the right of political self-government is considered to be inalienable (cannot be alienated even with consent) and is vouchsafed in the political constitutions. If the analogous right was considered inalienable in the workplace, then it would imply the adoption of the system of universal self-employment. Collective self-employment in the firm is the economic analogue of political self-government or democracy. Yet the same societies consider it quite routine for the citizen-as-worker to alienate that right in the workplace (the employer is not the representative or delegate of the employees). Does economics give any coherent and uncontrived explanation of how society can be partitioned into "spheres" (e.g., the political sphere and the economic sphere) so the right to self-determination is inalienable in one sphere while being routinely alienated in another sphere? Or does economics consistently advocate that citizens be allowed the same latitude in "collective bargaining" as workers? The reader is again invited to consult the texts of our day to see whether or not economics avoids the issue.

Or consider the position of economics on the distinction between persons and things. Economics recognizes no theoretically relevant distinction between the actions of persons (namely, "labor") and the services of things such as capital goods and natural resources. Microeconomic models
routinely do not even recognize the distinction in their notation (e.g., in a production function notation $y = f(x_1, \ldots, x_n)$); much less in the substance of the models. The services of humans and the services of things are both causally efficacious; both have a "marginal productivity" in the sense that production would decrease if the services were withdrawn. Thus contemporary economics has dismissed as misguided the earlier theoreticians who reserved a special place for the actions of persons (e.g., in "the labor theory").

Yet it is quite simple to differentiate human actions from the services of things. Look at a court of law. The "tools" used in a crime are of course causally efficacious. They have a "productivity"; otherwise there would be no reason to use them in the commission of crimes. But the responsibility for the crime is traced back through the tools to the human being who used them to commit the crime. Only humans can be eligible for responsibility; not things. The court of law attempts to insure that the legal responsibility for a crime is imputed to the correct people, to the people who were de facto responsible for the crime. No liability attaches to the tools, regardless of their productivity. The people who commit crimes are to be made liable for the negative fruits of their labor. This principle at the root of juridical imputation is also at the root of private property. People should also have the rights to the positive fruits of their labor. In this form, the principle is called the "labor theory of property" and it is associated with John Locke, not Karl Marx.

The "labor theory" is a standard topic in the history of economic thought, and the question of "imputation" is part of the subject-matter in the economic theory of the firm. Yet the reader is invited to scan the entire corpus of contemporary economics texts to find one which even mentions the basic legal distinction between the actions of persons and the services of things — which even mentions that only persons, never things, can be responsible for anything. Responsibility seems to be the R-word which cannot be uttered (except perhaps metaphorically).

We have considered a number of areas where conventional economics is directly at odds with the legal structure of the western democracies. Modern legal systems

- prohibit vote-selling by citizens,
- prohibit voluntary self-sale contracts between adults,
- take basic political rights of self-determination to be inalienable,
- would not recognize any political pactum subjectivism,
- would impute responsibility only to persons (never to things regardless of their "productivity").

All these practices are in direct conflict with the most fundamental recommendations of conventional economics. On the one hand, economics does
not advocate that these practices be changed to be consistent with eco-
nomic theory and, on the other hand, it does not give a coherent and un-
contrived explanation of why these practices should be considered as
"exceptions." In short, economics tends to duck these basic issues. There
have always been these intimations of structural shortcomings, lacunas,
and flaws in conventional economics. Economics has only *seemed* to be
coherent and complete theory because it chooses to ignore the paradigm-
threatening discrepancies between the theory and the legal structure of the
modern western democracies.

**OVERVIEW**

The discrepancies outlined above between received economics and mod-
ern legal systems are not minor problems that can be patched up without
disturbing the basic paradigm of neoclassical theory. They drive to the
core of the notions of property and contract. Hence this book is about
property and contract.

It is not simply that the concepts of standard economics need to be
applied with even more cleverness to resolve these discrepancies. New
concepts need to be developed – or rather old concepts need to be re-
discovered, dusted off, and represented in modern terms. Hence our
theoretical discussions will be interrupted by forays into the intellectual
history of ideas almost totally unknown in the conventional histories of
economic thought.

The book is divided into three main parts. In Part I, the focus is on
property, principally the descriptive and normative questions of property
appropriation. The conventional view of property appropriation is clouded
by a basic myth which needs to be cleared away before the questions can
even be adequately posed. Then the functioning of the property system –
in the presence of the employment contract – can be analyzed. The nor-
mative perspective is provided by the old "labor theory of property" which
is simply the usual juridical norm of imputation applied to the matter of
property appropriation. The history of the labor theory of property has
always been obscured by the confusion with the labor theory of value, a
confusion sponsored for different reasons by both Marxian economists and
neoclassical economists. That intellectual history is analyzed and a number
of standard misinterpretations of the labor theory of property are discussed.

In Part II, the focus is on contract, principally the employer–employee
contract and its individual and collective predecessors, the voluntary self-
sale contract and the Hobbesian *pactum subjectionis*. Here we find the
analysis of intellectual history to be most revealing. Liberal capitalism
presents the most basic social question as being “consent or coercion.”
Introduction

Slavery and autocracy lie on the side of coercion while capitalism and democracy are grouped together on the side of consent. But we find a different story. We find that the most sophisticated defenses of slavery and autocracy were in fact liberal and based those institutions on implicit or explicit voluntary slavery contracts or political pacts of subjugation.

The definitive answer to the liberal defenses of slavery and nondemocratic government came not from general liberal appeals to consent or from procedural fussing about the reality of the "implicit contracts" but from the doctrine of inalienable rights that descends from the Enlightenment. The real point of debate turns out not to be "consent or coercion" but "alienable or inalienable basic rights." As noted above, neoclassical economic theory and liberal capitalist ideology contain no coherent and uncontrived notion of inalienability that would rule out vote-selling, the self-sale contract, or the Hobbesian pactum subjectio11is. Yet these prohibitions are fundamental to the modern western democracies. Thus we find the usual correlation of capitalism with democracy to be superficial. On the real question of alienable or inalienable natural rights, capitalism lies on one side of the fence and democracy on the other.

We resurrect the Enlightenment doctrine of inalienable rights (called the "de facto theory of inalienable rights") and present it in modern terms. That old doctrine of inalienable rights has considerable "bite" left in it. In fact, it supplies a critique of the contract for renting human beings, a contract which could also be viewed as the limited Hobbesian pactum subjectio11is for the workplace, namely the employer–employee contract. The theory concludes that the employment contract is invalid "in the light of natural law" (to use the older language).

Parts I and II of the book are written for "intelligent general reader." Part III applies the results of Parts I and II, namely the labor theory of property and the de facto theory of inalienable rights, to economics. Here it is assumed that the reader has an acquaintance with upper level undergraduate economics.

The initial focus in Part III is on descriptive theoretical flaws in capital theory and in general equilibrium theory (the Arrow-Debreu model) that purports to prove the possibility of a competitive equilibrium with positive pure profits. Then the focus turns to marginal productivity (MP) theory which plays the role of both a descriptive and a normative theory in neoclassical economics. A single corn-and-labor model is developed so that marginal productivity theory, the Marxian labor theory of value and exploitation, and the labor theory of property can all be compared and contrasted in the same model.

Finally, the basics of a modern theory of property and contract are sketched. The theory has both a descriptive and a normative side. Neoclassical economics has a "fundamental theorem" which relates the notions
of competitive equilibrium and allocative efficiency. We develop the similar notions for property theory and sketch the fundamental theorem of property theory.

The ideas and theories resurrected and developed in this book are in sharp structural and paradigmatic conflict with the conventional wisdom in economics and legal theory. The arguments presented here are developed in the form of a running debate with this conventional wisdom—a debate that is summarized at the end of most chapters. The debate is difficult at times to follow since the conventional wisdom does not even pose the right questions. Pouring better wine into the wrong bottles will not suffice. New bottles are developed—or rather, much older bottles are rediscovered and refurbished for modern usage.
PART I

Property
The fundamental myth of capitalist property rights

We are presenting an analysis of economic organization quite different from the perspective of the Great Debate between capitalism and socialism. The Great Debate has focused on whether workers should be rented privately for profit or should always be rented by the government and employed for the public good. The view that people should not be rented at all was not a topic in the classic capitalism-socialism debate.

We present an alternative analysis that juxtaposes employment in a private capitalist or government-owned firm to membership in a democratic firm. There are powerful barriers to this conceptual reconfiguration. There are fundamental but flawed presuppositions shared by both sides in the classic capitalism-socialism debate. Thus there has been little pressure to overthrow those common assumptions. But it is only by moving beyond the shared myths of the Great Debate that the ground can be cleared for a fresh start.

The Fundamental Myth is that the identity of the legal party undertaking a given production opportunity is determined by a property right called "ownership of the firm" or, in the Marxist tradition, "ownership of the means of production."

Both sides to the Great Debate shared the assumption that "firmhood" (the identity of the firm) is determined by the "ownership of the firm." The firm is a "piece of property." The difference of opinion was over who should own that property. State socialists argued that only the government should own the firms, while capitalists defended the private ownership of firms. Today, that debate is replaced by the "privatization debate" (see Ellerman, Vahčič, and Petrin 1992) over how best to establish private ownership of the firms.

But firmhood is not determined by a property right; it is determined by the pattern of contracts between factor suppliers. Being the firm is a
contractual role, not a property right. Here again, there are many ways to misinterpret the argument. The assertion is quite sensitive to the meaning of words and phrases such as "firm," "company," "corporation," "means of production," "capital," and so forth. The word "firm" has a specific technical meaning in the assertion "There is no such property right as the ownership of the firm." The assertion would be nonsense if by "firm" one meant "corporation" since clearly corporations are owned by their shareholders.

A CORPORATION IS NOT NECESSARILY A FIRM

Corporations are owned; that is no myth. But corporate capital can be hired out just as labor and other factors can be hired in, so the corporation is not necessarily the firm (i.e., the party undertaking production) even with respect to its own plant and equipment. It is the pattern of those hiring contracts that determines who is the firm.

Consider a production process for manufacturing widgets. The process is currently being undertaken by a corporation, Widgets Unlimited, which owns the land, factory building, and machinery. Finance is borrowed from a bank, raw materials and subcomponents are purchased from suppliers, and labor services are purchased from the employees. By the "firm" we mean the legal party undertaking this widget production process. Widgets Unlimited is undoubtedly the firm in the example. But why? Because of the ownership of the corporation or because of the company's contractual role of hiring (or already owning) the requisite inputs to the widget production process?

The question is easily answered by considering a rearrangement or reversal of the input contracts without any sale in Widgets Unlimited shares. Suppose the workers (including managers) get together, borrow the money, lease the production facilities for Widgets Unlimited, purchase the other inputs from the suppliers, and undertake the widget production process. Then the firm (= widget producer) changed hands from Widgets Unlimited to the new legal party of the associated workers without any sale of corporate shares. The Widgets Unlimited still own the same shares, but the corporation is no longer the firm (= the widget producer). It is a factor supplier to the firm. Thus the ownership of the corporation Widgets Unlimited was not the "ownership of the firm."

FIRMHOOD AS A CONTRACTUAL ROLE, NOT A PROPERTY RIGHT

There is no "ownership of the firm." Being the firm (e.g., the widget producer) is a contractual role, not a property right. What is the contractual role that is equivalent to firmhood? It is being the party that has hired or
already owned all the factor services used up in production so that party bears those costs and thus has the defensible claim on any appropriable products (e.g., widgets) produced in the process. That contractual role is called the role of the **hiring party** (since it hires the other factors) or the **residual claimant** (since it nets the value of the appropriable products minus the costs of the inputs).

In a private property free enterprise market economy, firmhood is determined by the outcome of the contest or conflict - the "hiring conflict" - over who hires what or whom in the factor markets. In abstract terms, if Capital (= the capital-owners) hires Labor (= the workers including the managers), then Capital is the firm. If Labor hires capital, then Labor is the firm. A contract reversal between Capital and Labor reverses who is the firm. There is no need for Labor to "buy the firm"; it suffices to rent the capital. And if some third party, an entrepreneur or the state, hires both the capital and the workers, that party is the firm.

The winner of the hiring conflict is the hiring party, the party which becomes the firm. If not already a corporation, the hiring party will organize the "spoil of victory" by forming a corporation which it owns. For example, if the widget workers successfully hired the other factors to undertake production, they would legally encapsulate their operation in a corporation of some type. If the workers lost the hiring conflict and remained employees, they would most likely not form a corporation. In a free market economy, one tends to find a one-to-one correlation between being the firm and ownership of a corporation just as there is a perfect correlation between winning an Olympic event and owning an Olympic gold medal. But it would be a mistake to think that someone won the event because they own a gold medal. The causality was the reverse.

**EXAMPLES OF CONTRACT REVERSALS**

A major oil company might own the facilities of a gas station but not operate the station as a business. The gas station facilities would be leased to an individual who would run the station as an independent operator. In other cases, an oil corporation might operate the station by hiring in the people to run it.

Following the Middle East oil crisis of a few years back, gas prices escalated and the profit potential of gas station operation increased. Some major oil companies which had previously leased out their stations decided to reverse the contracts and hire in the labor. The independent operators were notified that their leases would not be renewed when they expired. However, the oil company would be happy to hire them as employees to continue running the gas stations.
One independent operator in Texas staged a protest that made national television news. He barricaded himself into the station with a shotgun and issued statements to the press. He said the oil company was "stealing my business." It couldn't "just hire me"; it had to "buy me out."

The poor fellow had bought the myth; he thought he "owned the firm." In fact, he only had the contractual role of being the firm, and more powerful market participants could change that contractual role when they pleased. The oil company correctly pointed out it didn't need to "buy the firm" to take over the operation of the station; it only needed to hire in the labor.

In another example, the owner of a department store chain decided to endow his employees with "ownership." But his shares were already locked into trusts for his family and heirs. Thus he set up another corporation which was 100 percent employee-owned through an employee share ownership plan (ESOP). Then he leased all the fixed assets of his company and sold the inventory to the new employee-owned company. All the employees switched over to the new corporation which also acquired the contractual right to do business under the original tradename. By these contractual rearrangements, the firm changed hands but the original corporation didn't. The shares were still in the family trusts. The original corporation changed from being the firm (= the department store operation) to being a factor supplier to the firm.

Yet another example is the leasing movement in the Soviet Union and some other socialist countries (see Ellerman 1990). Thousands of state sector enterprises in the former USSR have leased their fixed assets to be operated by the collectivity of workers from the original enterprise. The new legal entity with the workers as its members takes over the role of being the residual claimant (i.e., is the firm) even though the state still holds the ideological fetish of the "ownership of the means of production." The contract reversals in both capitalist and socialist countries reveal the falsity of the common assumption that "being the firm" is part and parcel of the ownership of the means of production.

THE ROLE OF BARGAINING POWER

The argument that firmhood is determined by the contractual role does not assume that factor suppliers actually have enough market power to change the direction of the contracts. The argument is about the structure of the legal institutions. It makes no assumption whatever about the respective bargaining power of the market participants. That is entirely another question.

Typically large accumulations of capital have the market power to hire
in labor whenever desired. Democratic worker ownership within capitalist society is often restricted to the nooks, crannies, and backwaters of the economy. The bargaining power of the capital-owning class includes the social power of having successfully indoctrinated workers and the workers' trade union representatives that “their role” is to hire out labor, not to hire in capital and go into business. Thus the capital owners are the firm, but “being the firm” is not an attribute of capital. The accumulation of capital and the social conditioning give capital owners the power to win the hiring conflict (which Labor rarely contests) by hiring in labor and becoming the firm.

Having a position of market power is not itself a property right. Parties often lose positions of market dominance. This is the free play of market forces, not a violation or confiscation of property rights. Capital’s actual property rights (as opposed to imagined property rights) would not be violated if the capital owners lost the market power to hire in the other factors, and thus they had to hire out their capital in order to secure an economic return.

We are now in a position to appreciate the powerful ideological role of the ownership-of-the-firm myth. Capital owners quite naturally do not want their dominant social role as being the firms to be perceived as the result of mere market power which could well be otherwise without violating their “property rights.” They are accustomed to their contractual role as the firm so, like the dominant classes of the past, they see it as their right, their “ownership of the firm.” Capital is the firm because Capital “owns the firm.” Any change in Capital’s role as the firm would violate “sacred private property rights.”

The ownership-of-the-firm myth has a fundamental role in capitalist ideology; it transfigures a mere contractual role into a “sacred property right.” That, in turn, allows a most miraculous transformation of capitalism into the defender of the principles of private property. The natural basis for private property appropriation is labor. Yet the employment system is founded on denying people the right to the fruits of their labor by virtue of the employment contract. The ownership-of-the-firm myth allows the system founded on denying the labor basis for private property appropriation to present itself as the embodiment of private property.

**THE SYMBOITIC ROLE OF MARXISM**

Since the firm-ownership myth can be exposed by a simple contract reversal argument, how has it been such a stable part of capitalist ideology? As if the social power of capital was insufficient to vouchsafe the myth, Marx vastly increased its credibility by giving his imprimatur. In feudal times,
the governance of people living on land was taken as an attribute of the ownership of that land. The landlord was lord of the land. As Gierke put it, “Rulership and Ownership were bleat” (1958, p. 88). Marx mistakenly carried over that idea to capital. The command over the production process was taken as part of the bundle of capital ownership rights.

It is not because he is a leader of industry that a man is a capitalist; on the contrary, he is a leader of industry because he is a capitalist. The leadership of industry is an attribute of capital, just as in feudal times the functions of general and judge were attributes of landed property.

(Marx 1977, pp. 450-1)

Marx bought the myth.

Marx’s “ownership of the means of production,” indeed Marx’s notion of “capital,” involves the mythical “ownership of the firm.” By “capital” Marx did not simply mean financial or physical capital goods; he meant those goods used by wage labor in capitalist production. Outside of capitalist production, “capital” becomes just the “means of labor.” In short,

Marx’s “capital” = “means of labor” + “contractual role of being the firm.”

If one wishes to use the word “capital” in that sense, then not all of what is included in “capital” can be owned. There is the ownership of the means of labor (financial and physical capital goods directly owned or indirectly owned through the legal shell of a corporation), but there is no “ownership” of the residual claimant’s contractual role of being the firm.

By agreeing that there is the ownership of “capital” (which includes being the firm), Marx swallowed the Fundamental Myth of capitalist ideology even though he took great pride and joy in exposing other aspects of capitalist mythology. It should be carefully noted that this analysis of the “ownership of the firm” is entirely descriptive; it is not normative. The point is not that the “ownership of the firm” should not exist; the point is that it does not exist. Marx accepted that the “private ownership of the firm” does exist as a part of the capitalist system, and he argued that it should not exist.

By accepting the Fundamental Myth as a point of fact, Marxism becomes the perfect symbiotic partner and the ideal foil for capitalist ideology. Then the battle could rage without touching on the shared but mistaken assumption about the nature of the capitalist system. Like Voltaire’s god, if Marxism didn’t exist, capitalism would have to invent something like it as an ideological foil. Autocrats find real or imagined bugbears to justify their power, and the same psychological dynamic operates in the realm of ideology.

Marxism, which in governments means Marxist–Leninism, has been the
The Fundamental Myth

perfect foil for capitalism for other reasons as well. Perhaps another slavery analogy will illustrate the point. The present-day capitalism-socialism debate is analogous to a debate over slavery where the alternative proposed by the “abolitionists” was the public ownership of the slaves. That would be a debate with real stakes since the nationalization of the slave plantations would break the social power of the private slave-owners. But this “Great Debate” over the private or public ownership of the slaves would nevertheless miss the point; the real alternative is for the slaves to be free and self-determining. Similarly, the current Great Debate over whether workers should be privately or publicly rented misses the point; the real alternative is for people to be jointly working for themselves in democratic firms.

THE FIRM OWNERSHIP MYTH IN DEMOCRATIC THEORY

The argument for democratic worker ownership rests on two legs, democratic theory and property theory. Our purpose here is to foreshadow how the firm ownership myth has previously distorted both democratic theory and property theory by shutting off certain avenues of investigation and shunting the debate into irrelevant detours.

The idea of applying democratic principles to the economic enterprise is hardly a new idea. What principles behind the capitalist firm must be changed in order to apply democratic principles? Where is the conflict? If “rulership and ownership are blent” in the capitalist firm, then replacing capitalist rulership with workplace democracy entails eliminating the capitalist “ownership of the firm.” Thus democracy is perceived to be at war with property rights in the capitalist firm.

Most modern political theorists ignore the question of applying democratic principles to the firm. They are intellectually placated by being told that the firm is “private” whereas democracy is “public.” The inalienable human rights at the foundation of our political democracy do not reach the “private sphere.” Those political theorists who take democratic principles seriously enough to apply them to the firm still tend to misinterpret property rights by accepting the firm ownership myth.

The owner of capital resources, or the agent who acts on behalf of the owner or a number of associated owners, controls and determines, in virtue of such ownership, the process of production and the action of the workers who are engaged in the process. In its unqualified form, capitalistic organization is a form of autocracy or absolutism. In practice it is never unqualified ... We may call it ... a limited absolutism, which naturally seeks to escape its limits, and on which (so long as it exists) combinations of workers will as naturally seek to impose new limits.

(Barker 1967, pp. 105-6, emphasis added)
The preeminent democratic theorist, Robert Dahl, presented essentially this analysis of democracy in conflict with the "ownership of the enterprise" in his otherwise excellent book *Preface to Economic Democracy* (1985). In this conflict, Dahl holds that democratic principles should take precedence over property rights, and thus he develops the case for economic democracy.

That analysis takes a contractual role as a property right. The firm ownership myth includes the idea that the management rights (rulership) over the people using capital goods are part of the ownership of the capital. But those positive control rights over people are not included in capital ownership. The negative control rights to exclude other people from using the property are part of the property rights so we must digress on the distinction between positive and negative control rights.

Another person may not use one's property without the owner's consent. Thus ownership does give a right of negative control over other people's actions, the right to withhold consent and thus to specify how they will not use the property. The owner can decide what others will not do with his or her property. But that is quite different from the right to control what others will do. They may have many other options not involving that property, and those property rights give the owner no control rights over which of those options the others will choose.

The right to tell others what not to do with one's property is a negative control right. The right to tell others what to do is a positive control or management right. The negative control right over other's activities is a part of property ownership, but the positive control right to tell others what to do is not a part of property ownership. How does one acquire the positive control right over another person's behavior – the right to tell them what to do? The employment contract. Hire them.

If labor and land are to be mixed in productive work, there is no pre-existing property right which specifies whether the labor-owner or land-owner directly controls the process. Absent any contracts or agreements between the two parties, the land-owner's negative control rights can make the worker into a trespasser if he tries to use the land without consent. But symmetrically, the worker can make the land-owner into a kidnapper if he tries to force the worker to work the fields without consent. Thus when the labor and land are mixed, there must be a hiring contract one way or the other to determine positive control of the process. If the worker rents the land, he manages the work process. If the land-owner hires the worker, the land-owner manages the work. In either case, it is the hiring party which controls the use of the commodities in the production process. In neither case does the prior ownership of one of the factors by itself give management rights over the production process mixing the factors.

Or consider a factory owner who issues orders to the people working in
The Fundamental Myth

What is the legal basis for his positive control rights over the workers' actions? Absent an employment contract, the ownership of the factory gives the factory owner the right to make the workers into trespassers by denying consent. It does not automatically make the workers into servants or employees; that requires the employment contract. The positive control rights over the workers are not an attribute of capital; the employer buys those rights in the employment contract.

Here again, many social theorists are misled by hastily evoking that universal explanatory factor, "power relations." The ownership of the factory may well give the factory owner the bargaining power to hire in labor. The sequence is:

factory ownership → bargaining power → positive control via employment contract

Some theorists collapse the sequence and infer that factory ownership is "tantamount" to owning the positive control rights.

Returning to democratic theory, we find no structural conflict between democratic principles and the negative control rights which are part of private property ownership. In an economy run entirely on democratic principles, consent would of course be required as usual to use other people's property. The alleged conflict between democracy and property is really a conflict between democracy and the employment relationship.

Democracy is at war with the renting of human beings, not with private property. In the mythical picture painted by capitalist ideology, private property rights are the center of the capitalist universe. Our analysis shows that the actual center of the capitalist universe is the employment contract. The economic application of democratic theory (and the labor theory of property) presented here is based on the Copernican paradigm shift to seeing capitalism as revolving around the employment contract instead of around the "private ownership of the means of production."

THE FIRM OWNERSHIP MYTH IN PROPERTY THEORY

The Fundamental Myth also distorted thought about property rights. It influenced not only the "answers" but the way in which questions were posed, or rather, ill-posed.

The basic property question about production is about the ownership of the product.

How is it that one legal party rather than another owns the outputs of a production process?

Where the firm ownership myth holds sway, the answer is simple; the "owner of the firm" owns the product. The product ownership rights are
part of the ownership of the firm. That answer detours inquiry off in the
direction of “How is the ownership of the firm acquired?” And the stand-
ard answer is that the owners bought it, inherited it, or started the firm
from scratch. Even firms which were bought or inherited must have been
previously created. And thus all questions about property ownership in
products or firms are traced back to the initial creation of property rights.

The creation or initiation of a property right is called the \textit{appropriation}
of the property. Philosophical treatments of appropriation (e.g., John
Locke’s treatment) are usually set in some rather mythical original state of
nature when property was first privately appropriated from the common
patrimony of Nature. There is also the symmetrical matter of terminating
property rights, but that is ignored in the philosophical treatments which
tend to be non-technical and elementary.

That is the conventional story which begins by holding that the owner­
ship of the produced outputs is part of the “ownership of the firm.” But
the “ownership of the firm” is a myth. In the previous example, the widgets
produced by the same workers using the same machines and raw materials
would be owned by another party if there had been a prior rearrangement
of the hiring contracts. The product is owned by the party with the con­
tractual role of the hiring party. So how \textit{did} the hiring party get the owner­
ship of the outputs? Did that party buy the outputs from a prior owner?
No, there was no previous owner of the outputs. The hiring party is the
first owner. In other words, the hiring party \textit{appropriated} the outputs.

Thus the recognition that there is no “\textit{ownership of the firm}” leads to
the recognition that normal day-to-day production is a site of appropria­
tion. That recognition changes the debate. It means traditional theories of
appropriation such as the labor theory of property can be applied to normal
production, not just to some original Lockean state of nature.

Why don’t the workers have the labor claim on the produced outputs
(as well as the symmetrical claim against them for the used-up inputs)?
The firm ownership myth is only the first line of defense. The real defense
is the employment contract which puts the employees in a non-responsible
position of a hired factor “employed” by the employer. But the labor
theory of property is the property theoretic expression of the usual juridical
canon of assigning legal responsibility in accordance with de facto re­
sponsibility. We shall see in an intuitive example of the criminous employee
how de facto responsibility is not transferable and how the law only pretends
that labor has been alienated (until a crime has been committed). Thus the
capitalist appropriation of the product (including the liabilities for the
used-up inputs) is based not on the “private ownership of the means of
production” but upon the legal validation of an inherently invalid contract
which pretends that human actions are transferable like the services of
things.
The discussion here is a prelude to show how the recognition that the "ownership of the firm" is a myth opened up the intellectual space for the analysis of appropriation.

**SUMMARY**

There is a Fundamental Myth accepted by both sides in the Great Debate between capitalism and socialism. The myth can be crudely stated as the belief that "being the firm" is part of the bundle of property rights referred to as "ownership of the means of production." Any legal party that operates as a conventional capitalist firm actually plays two distinct roles:

- the capital-owner role of owning the means of production (the capital assets such as the equipment and plant) used in the production process, and
- the residual claimant role of bearing the costs of the inputs used up in the production process (e.g., the material inputs, the labor costs, and used-up services of the capital assets) and owning the producing outputs.

The Fundamental Myth can now be stated in more precise terms as the myth that the residual claimant's role is part of the property rights owned in the capital-owner's role, i.e., part of the ownership of the means of production.

It is simple to show that the two roles of residual claimant and capital-owner can be separated without changing the ownership of the means of production. **Rent out the capital assets.** If the means of production such as the plant and equipment are leased out to another legal party, then the lessee retains the ownership of the means of production (the capital-owner role) but the leasee renting the assets would then have the residual claimant's role for the production process using those capital assets. The leasee would then bear the costs of the used-up capital services (which are paid for in the lease payments) and the other input costs, and that part would own the produced outputs. Thus the residual claimant's role is not part of the ownership of the means of production.

This "rent out the capital" argument is very easy to understand. But it is astonishing how difficult the argument is to understand when the capital-owner is a corporation. If an individual owns a machine, a "widget-maker," then that ownership is independent of the residual claimant's role in production using the widget-maker. The capital owner could hire in the workers to operate the widget-maker and to produce widgets – or the widget-maker could be hired out to some other party to produce widgets.

Now suppose the same individual incorporates a company and issues all
the stock to himself in return for the widget-maker. Instead of directly owning the widget-maker, he is the sole owner of a corporation that owns the widget-maker. Clearly this legal repackaging changes nothing in the argument about separating capital ownership and residual claimancy. The corporation has the capital-owner's role and – depending on the direction of the hiring contracts – may or may not have the residual claimant's role in the production process using the widget-maker. The corporation (instead of the individual) could hire in workers to use the widget-maker to manufacture widgets, or the corporation could lease out the widget-maker to some other party. The process of incorporation does not miraculously transubstantiate the ownership of a capital asset into the ownership of the (net) products produced using the capital asset.

The residual claimant's role is a contractual role, not a property right. The identity of the "firm" (in the sense of the residual claimant) is determined by who hires what or whom in the markets for inputs. The "firm" is the legal party which hires or already owns all the inputs to be consumed in production and which bears those costs as the inputs are used up. Another party could take over that contractual role through contract reversals (e.g., Labor hiring capital) without having to "buy the firm."

Traditional democratic theory and property theory have both been distorted by the uncritical acceptance of the fundamental myth that residual claimancy was a property right. There is in fact no structural conflict between private property rights in capital and democratic principles. The conflict is between the employment contract and democratic principles.
The appropriation of property rights

APPROPRIATION IN PROPERTY THEORY

How is it that one party rather than another receives the profits from production? In terms of property, how is it that one party rather than another owns the product? The traditional answer is that the "owner of the firm" owns the product and gets the profits from the production process. But we have seen that the role of being the firm is not a property right. Firmhood is a contractual role; it is determined by the structure of contracts – by who hires what or whom.

The contractual nature of firmhood leaves the open question; how is it that one party rather than another owns the product? This raises the whole question of property appropriation – a question that has been systematically neglected in political economic theory. Economics focuses on the transfer of property rights in the marketplace. But to be transferred, a property right must first be created or initiated, and it will be eventually terminated. Property appropriation is concerned with the creation and termination of property rights.

WHO OWNS THE PRODUCT?

How is it that one legal party rather than another owns the product of a given production process? Consider a non-institutional technical description of a specific production process. A specific set of people perform certain labor services which use a given plant and machinery and various other materials to produce certain outputs. But that process is not just a technical activity; it is embedded in a matrix of legal institutions of property and contract. This surrounding set of legal structures will determine which legal party owns the product. But how? What is the legal mechanism or right that determines who owns the product?
The standard answer is that the right to the product is included in or attached to the ownership of some asset such as the ownership of the firm or the ownership of the means of production. As the owner of an animal owns its issue, so the owner of that asset owns the product. The rights to use an assets, the use-rights, are distinguished from the right-to-the-product or right-to-the-fruits.

When an individual has legally sanctioned rights to use an object or claim as he pleases, he has a right of ownership-utilization over it (jus utendi in Roman law). When he is permitted by the laws of the ruling organization to dispose of or consume its products, he has a right of ownership-over-the-asset's-products, or jus fruendi.

(Montias 1976, p. 116)

The assumed legal institutional setting is a private property market economy. In such an economy, this so-called right-to-the-fruits does not exist as a legal right separate from the use-rights. The ownership of the product is determined by the use-rights together with a certain legal fact-pattern. The right-to-the-fruits is only a shorthand way to refer to the appropriate fact-pattern.

The point can be easily seen by considering the abstract economic description of a production process. Let direct materials, labor services, and the services of capital be the inputs needed to produce the outputs of a production process specified by a given production function. There are numerous ways this technical production process could be legally organized in a free market economy. The owner of any one of the inputs could purchase the complementary inputs, e.g., the owner of the direct materials could hire the capital and the workers. Or another party entirely could hire the capital and the workers, and could purchase the direct materials. In any case the party who hired the inputs, the hiring party, would bear the costs of the input services and materials used up in the production process. Assuming those were all the required inputs, that hiring party would have the defensible legal claim on the produced outputs.

In no case was the hiring party required to purchase any right-to-the-fruits over and above the use-rights of the hired inputs and the purchase of the direct materials. Economic theory contemplates no markets for rights-to-the-fruits, only markets for the inputs. The inputs are symmetrical between themselves in the capitalist marketplace, and that symmetry precludes a right-to-the-product being preassigned to one particular input. To acquire the ownership of the produced outputs, the requisite fact-pattern is the ownership of all the input services and input materials used up in production. Bearing all those costs is both necessary and sufficient to have the defensible claim on the product.

When the owner of one of the inputs (e.g., capital) acquired the other
inputs and laid claim to the product, it is sometimes said the the ownership of the non-marketed input included the right-to-the-fruits. But this claim is easily refuted by considering a rearrangement of the use-rights. Let the owner of input B hire the capital instead of vice-versa. Then the new hiring party (the owner of B) could lay claim to the product without having purchased any so-called right-to-the-fruits. It was sufficient to purchase the use-rights, i.e., to hire (or already own) all the factors used in production. The ownership of the new non-marketed input (input B) does not suddenly incorporate the elusive right-to-the-fruits. In each of the cases, a party claimed the outputs because the party had borne the costs of the inputs consumed in production. The usual "right-to-the-fruits" is just a misleading way to refer to that fact-pattern.

Consider the example mentioned above of the jus fruendi whereby the owner of an animal had the right to its issue. A cow is rented from a farmer for a month to produce milk and, during that time, the cow gives birth to a calf. The farmer, not the renter, would have the right to the calf. The person renting the cow didn’t pay for the relevant inputs. There were two concurrent production processes, the short-term process of producing milk and the long-term process of breeding the cattle. The farmer was engaged in the long-term process, the farmer had paid those costs, and the farmer would have the defensible claim on the issue, the calf. The farmer’s “right-to-the-issue” is a shorthand description of that set of facts. The farmer’s claim to the issue was ultimately based on having borne the relevant costs of producing that yield.

THE REHABILITATION OF APPROPRIATION

The uncritical acceptance of the right-to-the-fruits concept leads to a neglect of the whole topic of property appropriation in economic theory. If the right to the product was part and parcel of the ownership of certain assets, then the product was not “appropriated”; it was pre-owned by the asset owner. Indeed, conventional economics does not even recognize that appropriation takes place in production. The non-recognition of appropriation in production is one of the remarkable “achievements” of the field called the “economics of property rights” (see Furubotn and Pejovich 1974; Demsetz 1988).

Philosophers follow Locke and discuss appropriation as the birth of private property rights in some primordial state where goods were held in common or were unowned. Economists follow suit and discuss the formation of private property rights out of common ownership. For instance, Harold Demsetz (1967) considers how private property in land with fur-bearing animals was established as a result of the growth of the fur trade. John
Umbeck (1981) considers how rights to gold deposits were created during the 1848 California gold rush on land recently ceded from Mexico. Yoram Barzel (1989) considers how the common property rights to minerals under the North Sea were privatized. Indeed, Barzel considers examples of non-owners obtaining benefits from unmonitored private property (e.g., an employee making a personal use of a company copying machine) as cases of the private appropriation of common property. But in Barzel's book (see his chapter 5, "The formation of rights") as elsewhere in the economics of property rights literature, there is no recognition of the appropriation of the outputs and the symmetrical termination of rights to the used up in inputs in the normal production process. The question of property appropriation in production has simply not been addressed in economic theory.

Our analysis has shown that the naive right-to-the-product concept is misleading. The product is not pre-owned by certain asset owners. The product is defensibly claimed by the legal party who fits a certain contractual fact-pattern, the party called the "hiring party." Thus new property claims are being made after all: the products of production are appropriated by the hiring party. To accurately describe the legal structure of production in a private property market economy, the concept of appropriation must be rehabilitated. Property appropriation occurs not just in some primordial original position or initial distribution, but in the normal day-to-day process of production.

THE DISTRIBUTIVE SHARES METAPHOR

Prior to the neoclassical marginalist revolution, the structure of property rights was considered part of political economy (e.g., J. S. Mill's Principles of Political Economy, especially book II, chapters I and II, "Of Property" and "The Same Subject Continued"). In the recent revival of interest among economists in property rights, e.g., in the work of Coase, Alchian, Demsetz, Furubotn, Pejovich, Williamson, and many others, there has been no rigorously specified theory of property appropriation in production. The literature is informal and largely metaphorical; it often uses the methodology of "as if." It is "as if" the firm was a "coalition" of factor suppliers each contracting for a share of the product with the entrepreneur as the residual claimant (e.g., Alchian 1984). It is "as if" the firm was just a nexus of contracts -- "nothing more than a set of contracts" (Ross and Westerfield 1988: 14). It is "as if" piece-workers were selling their product (e.g., Cheung 1983). It is "as if" employees with "profit-sharing" joined the entrepreneur in getting a share of the residual profits. These are all metaphors.

The core metaphor is the distributive shares metaphor which pictures
The appropriation of property rights

The factor owners as getting shares in the product. Income is pictured as being distributed within a firm “as if” each factor supplier had a contractual claim on a fixed or variable share of the product. In the usual treatment of marginal productivity theory, each factor is pictured “as if” it “produced” and then “received” a share of the product. It is “as if” all this were the case, but what is actually the case in terms of property rights?

As a description of property rights, the distributive shares picture is quite misleading and false. The simple fact is that one legal party owns all the product. For example, General Motors doesn’t just own “Capital’s share” of the GM cars produced; it owns all of them. Economists are, of course, aware of this “legalistic” fact, but apparently feel “called upon” to metaphorically reinterpret the product as being “shared” or “distributed” in order to account for the income received by the input suppliers. How else can one account for the other factor incomes if one factor is pictured as owning all the product?

A social scientist should resist the temptation to improve upon the “superficial” legal facts with the “deep” economic metaphor of distributive shares; the legal facts suffice to explain the factor incomes. Property can take either a positive or negative form as assets or liabilities, i.e., as property rights or obligations. By “product,” economists mean only the positive product, the output assets produced in production. But there is also a negative product. To produce the output assets, it is necessary to incur the liabilities for using up the inputs. And one can “own” or hold liabilities just as one can own assets.

The simple fact which accounts for the other factor incomes without the benefit of the distributive shares metaphor is the fact that the one party who owns all the positive product also owns all the negative product, i.e., also holds all the liabilities for the used-up inputs. General Motors not only owns all the GM cars produced but also holds all the liabilities for the factors such as steel, rubber, glass, and labor used up in production. The money paid out to satisfy these liabilities represents the costs of production. The suppliers of the steel, labor, and other factors, instead of being joint claimants on the product, are only creditors of that one party who owns all the positive and negative product. One party owns all the outputs but that party does not receive its value in net terms since that party must also satisfy the liabilities for the inputs.

THE WHOLE PRODUCT

In order to accurately describe the structure of property rights in production without the distributive shares metaphor, it is necessary to expand the usual concept of “product” to include the negative product (input liabilities) in
addition to the usual positive product (output assets). This bundle of property rights and obligations will be called the whole product, i.e.,

\[ \text{Whole product} = \text{Output assets} + \text{Input liabilities} \]

In order to describe this more complex notion of the product, we must use lists or "vectors" of commodities. Vectors give a list of different types of commodities as in a shopping list. A shopping list might have 3 pounds of hamburger and 2 gallons of milk. Since these are different types of commodities, it does not make sense to add them together (3 lbs + 2 gallons = 5 whatcvs'!?); that would be "adding apples and oranges." But one can add together two separate lists by adding likes to likes. For example, if a neighbor also had a shopping list with 2 pounds of hamburger and 1 gallon of milk, then the lists could be combined or added to yield 5 pounds of hamburger and 3 gallons of milk.

Consider a simplified example of a production process where \( Q = F(K, L) \) units of output are produced during a time period using the capital services \( K \) and the labor services \( L \). We will use vectors or lists, where the different types of commodities are always listed in the same order as follows (with commas in between):

\[
\text{(outputs, capital services, labor services)}
\]

In the simple example, the positive product is the vector of output assets \((Q, 0, 0)\), the negative product is the vector of input liabilities \((0, -K, -L)\), and the whole product is the sum \((Q, -K, -L)\):

\[
\begin{align*}
(Q, 0, 0) & \quad \text{Positive product} \\
+ (0, -K, -L) & \quad \text{Negative product} \\
= (Q, -K, -L) & \quad \text{Whole product}
\end{align*}
\]

In property theory, as opposed to price theory or value theory, the notion of the whole product replaces the notion of the residual or profit. There is no single residual quantity of property. One cannot subtract the liabilities for the used-up inputs of steel, glass, and rubber from the output of cars to obtain a property residual. The vector notion of the whole product is needed to deal with the property rights and obligations whose net value is the residual profit. Technically feasible whole product vectors are the production vectors used in the modern production set representation of technical opportunities. In the economics literature, a whole product vector is also called a "production possibility vector" (Arrow and Debreu 1954, p. 267), an "activity vector" (Arrow and Hahn 1971, p. 59), a "production" (Debreu 1959, p. 38), or an "input-output vector" (Quirk and Saposnik 1968, p. 27). The economics literature, however, does not give a property theoretic interpretation of these vectors as assets and liabilities; the outputs are simply listed as positive and the inputs as negative.
The property theoretic importance of whole product vectors lies in the fact that it is precisely these whole products which are appropriated in production.

There are two ways that a party can acquire the legal title to an asset:

1. by being the first or initial owner of the asset, or
2. by acquiring the legal right by transfer from a prior owner as in a market exchange.

The first or initial acquisition of the legal right to an asset is called the appropriation of the asset. Legal rights to assets are transferred from a prior owner by contract (or gift), but what is the legal mechanism of appropriating an asset?

There are similarly two ways that a party can dis-acquire or give up the legal title to an asset:

1. by transferring the legal right to another party as in a market exchange, or
2. by being the last or terminal owner of the asset.

In this second case, the owner would give up and surrender the legal right and claim to the asset but not by transferring it to another party (e.g., when the asset is consumed or used up in production). That is the original sense of the word "expropriation." According to Black's Law Dictionary:

This word [expropriation] primarily denotes a voluntary surrender of rights or claims; the act of divesting oneself of that which was previously claimed as one's own, or renouncing it. In this sense, it is the opposite of "appropriation". A meaning has been attached to the term, imported from foreign jurisprudence, which makes it synonymous with the exercise of the power of eminent domain, ...

(1968, p. 692, entry under "Expropriation")

Thus appropriation initiates a property right to an asset and "expropriation" (in its original sense) terminates it: in between, the property right is transferred. However, since the word "expropriation" is commonly understood today in the other derived sense meaning the compulsory transfer of assets to the government, we may use an alternative expression. Instead of saying the "expropriation of assets," we may say the "appropriation of liabilities." Thus instead of the appropriation and expropriation of assets, there is the appropriation of assets and liabilities. If we do use the word "expropriation," it will be in its original sense as the opposite of appropriation – as the termination of title.

The termination of the legal title to an asset is called the appropriation of the liability for the used-up asset. Legal rights to assets are given up through transfers to other parties by contract or gift, but what is the legal
mechanism to terminate legal title to an asset, i.e., to appropriate the liability for a used up asset?

In production, the outputs are produced and the inputs are used up. Prior to the productive activity, the output-assets were not yet created and the legal right to the inputs had not been terminated. In production, a question arises. Who is to appropriate the liabilities for the used-up inputs and who is to appropriate the outputs? The output-assets and the input-liabilities are precisely the whole product. Hence the basic question about the structure of property rights and obligations in production is: "Who is to appropriate the whole product?"

This fundamental question has both a normative and a descriptive interpretation. Who ought to appropriate the whole product and who in fact appropriates the whole product? We consider here only the descriptive question of specifying the legal mechanism of appropriation of assets and liabilities in a private property market economy.

Elsewhere the author (1982, 1985b, 1986a) has mathematically formulated double entry bookkeeping so it could be extended from numbers representing monetary amounts to lists or vectors of numbers representing amounts of different types of goods and services with no commensurate monetary values. This allowed ordinary money-based accounting to be extended to property accounting which deals directly with vectors of property rights. Property accounting inside the firm traces the stocks and flows of property rights including the appropriation of assets and liabilities that are involved in production. By evaluating all the property rights at the values assigned by monetary accounting, property accounting can be collapsed into ordinary monetary accounting so that one can see where the appropriation of assets and liabilities goes on behind the scenes in ordinary accounting. Conventional economics has not probed into the stocks and flows of property rights underneath ordinary accounting, and that has allowed it to ignore the role of appropriation in production in favor of various pictures such as the distributive shares metaphor.

THE MARKET MECHANISM OF APPROPRIATION

It is interesting that the question of appropriation does not seem to be sharply posed in the economic, legal, or philosophical literature. When the question of appropriation is discussed, then it concerns not day-to-day production and consumption but some original or primal distribution of property as in John Locke. Yet new property is created and old property is consumed in everyday production and consumption activities, not just in some mythical "original position." Moreover, when appropriation is discussed, it is limited to assets and neglects the symmetrical treatment of liabilities.
An appropriation, since it only involves one legal party such as a corporation, is not as public as a legal transfer between parties. Indeed, it is only the contested appropriations which involve two or more parties that come to the attention of the legal authorities. Examples include the negative (ownership) externalities which have received so much attention in the "law-and-economics" literature (a literature which does not even pose the question of appropriation in normal production). For example, a property damage suit arises out of a situation where one party, the plaintiff, has de facto appropriated certain liabilities which the plaintiff believes should be appropriated by another party. If the court agrees, then the resulting damage payments are an example of a legally enforced appropriation of liabilities by the defendant.

But such examples are rare whereas the matter of appropriating liabilities arises whenever property is consumed, used up, or otherwise destroyed in all production or consumption activities. The matter of appropriating assets arises whenever new property is created such as in any production activities. If contract is the normal legal mechanism for transferring property, what is the normal legal mechanism for the appropriation of the assets and liabilities created in production and consumption?

When no law is broken so that the legal authorities do not intervene to hold a trial, then there is a laissez-faire or invisible hand mechanism that automatically takes over. That is, when the law does not intervene to reassign the liability for a used-up asset, then that liability is automatically left in the hands of the last legal owner of the asset. If that party does not voluntarily appropriate the liability then the party can seek redress by trying to get the legal system to intervene and reassign the liability.

If appropriable new assets are produced as a result when certain commodities or assets are used up, then the legal party that voluntarily appropriated the liabilities for the used-up assets would naturally lay claim on the produced assets. In the absence of any reassignment of the liabilities, the legal authorities would consider that claim as being defensible. Hence we have the normal legal mechanism governing how assets and liabilities are in fact appropriated in normal day-to-day activities of production and consumption.

The Market Mechanism of Appropriation: When no law is broken, let the liabilities generated by an activity lie where they have fallen, and then let the party which assumed the liabilities claim any appropriable new assets resulting from the activity.

This invisible hand mechanism could be personified using an "Invisible Judge." The Invisible Judge rules in the lowest court in the land (the market) and always issues the same ruling: "Let it be" – namely, let the costs lie where they have fallen. When a party goes to court to seek
redress, then the party is appealing the verdict of the Invisible Judge. When a party bears the costs of production and then assumes the ownership of the positive product, the Invisible Judge has, in effect, awarded that *prima facie* right. Anyone seeking to contest it would have to go to a higher court to overturn the verdict of the Invisible Judge.

It is this laissez-faire mechanism which determines who in fact appropriates the whole product in normal production activities. One party purchases all the requisite inputs to production, including labor, and then that party bears those costs as the inputs are consumed in production. Hence that party has the legally defensible claim on the produced outputs. In this simple manner, one party legally appropriates the whole product of production (input-liabilities and output-assets).

Given a production activity, the legal party who legally appropriates the whole product of the production activity will be called "the firm." The descriptive question of who is to be the firm is answered by the laissez-faire mechanism. The whole product appropriator is the party who hired (or already owned) the inputs and assumed those costs as the inputs were used up in production and thus could lay claim to the produced outputs. Hence the determination of who is the firm, i.e., who appropriates the whole product, is based on the direction (not the terms) of the hiring contracts. If Capital hires Labor, then Capital is the firm. If Labor hires the capital, then Labor is the firm. If some third party (such as an entrepreneur or even the State) hires both the capital and workers, then that third party is the firm. Hence the determination of who is to be the firm is decided in factor markets by who hires what or whom.

There is, of course, the legal form of the stock corporation which is owned by its shareholders. But prior to the hiring contracts, a corporation is only a capital owner. It is the direction of that hiring contract which determines whether the capital-owning corporation hires in Labor and is thus the firm, or whether the corporation is only a capital supplier whose business is hiring out its capital to another party who uses it in production and who is thus the firm (whole product appropriator). There is no necessity for another party to "buy the firm"; hiring the capital will suffice. The ownership of the means of production thus embodies no legal obligation for Capital (the owners of the capital) to be "the firm," i.e., to appropriate the whole product produced using that capital. The ownership of capital is, of course, quite relevant to the question of marketplace power, the question of which party has the power to make the hiring contracts in its direction.

**APPROPRIATION NOT A RETURN TO A FACTOR**

It is part and parcel of the neglect of appropriation in economics that all income is pictured as being the result of the sale of some factor. In
property terms, that is only a transfer or exchange (factor in return for its price) so again appropriation is squeezed out of the picture.

Being the hiring party, and thus the whole product appropriator, is a contractual role. It is not the ownership of some specific asset, factor or the performance of any specific service. The whole product is thus not a return to some asset, factor, or service. It is a return to the contractual role of being the hiring party (the last legal owner of the used-up inputs). Moreover, it is a return in terms of property, not simply a value return. In the textbook model of perfectly competitive equilibrium (under constant returns to scale), there are no pure or economic profits so the net value of the whole product is zero. It is because the whole product is not a return to a factor that its value can be competed down to zero in the textbook model of competitive equilibrium. This does not mean that the hiring party gets nothing. The hiring party gets no net value in that instance, but still gets the whole product in terms of property. It gets (the role of being) the firm. Moreover, the property mechanism of laissez faire appropriation operates regardless of whether the price mechanism is in equilibrium or disequilibrium and regardless of whether the markets are competitive or non-competitive.

The whole product and its value, the pure or economic profit, is not a return to some factor. It is of no avail to postulate hidden or implicit factors in the economists’ description of the production process. At best, some hidden factor might be priced so that the profits would be exactly zero when the factor is taken into account. Hidden factors are just “fudge factors” for economic theorists; they don’t change the structure of property rights involved in production. The whole product, even if of zero value, is still appropriated; it still accrues to the contractual role of being the hiring party.

The “explanation” that profit is a return to risk-bearing is quite tautologous when “risk-bearing” means bearing the costs of production (appropriating the negative product). By the market mechanism of appropriation, the party that appropriates the negative product also appropriates the positive product and thus nets the profits. Moreover, “risk-bearing” is, in theory, an insurable function (e.g., crop insurance for production uncertainty and hedging on futures markets for price uncertainty). When risk-bearing is thus priced out as an insurance cost, the pure profit that remains is not a return to risk-bearing; it is still a return to the contractual role of being the hiring party.

Profit theory has always been a perennial sore spot in economic theory because it does not fit the mold of income as a return to a factor. Pure profits are what is left after all the factors have been priced out. It is the role of property appropriation in production that explains why one party rather than another receives the whole product, and thus receives its value, the pure profits.
SUMMARY

The conventional wisdom does not even formulate the (descriptive or normative) question of the appropriation of the (whole) product in everyday production activities. This blind spot is best illustrated by the voluminous literature on the "economics of property rights" which does not even raise the question. It treats appropriation in the context of the private apportionment of previous common property rights, not in normal production.

One reason for this conceptual gap in the conventional wisdom is the "ownership of the firm" myth. This myth is typically sustained by the failure to conceptually differentiate the firm, i.e., the party undertaking a given production or business activity (specified in a non-question-begging way), from the corporation currently undertaking the activity. The "appropriation blind spot" is supported by identifying the firm with the corporation. For instance, it is said: "There is no need for a corporation to 'appropriate' its products; the corporation already owns the results of its production activity." Such an argument is a truism based on the question-begging use of phrases such as "its products" or "its production activity." The original question of appropriation must be constantly reformulated to avoid question-begging "answers." How did the products become "its" products or how did the production activity become "its" production activity.

Consider an example. Barbara Smith uses certain raw materials to produce widgets using a widgetmaker machine with a given serial number in a specified building. So far nothing is determined about the institutional setting, e.g., about who owns the produced widgets. Then we add the institutional information that Company A employs Barbara Smith, supplies the raw materials, owns the machines, and owns the building. Then Company A would certainly own the products but for what reasons? Ownership of the machine and building, the "means of production?" No, the machine and building could have been leased by Company A from some other party, and Company A would still own the produced widgets. Company A's claim on the product is based on its bearing the flow of expenses for the inputs used up in producing the widgets - the worker's labor, the raw materials, the machine-time, and the floor space in the building. In our terminology, by voluntarily accepting or appropriating the negative product, Company A established the legally defensible claim on the positive product. Thus Company A appropriated the whole product in accordance with the laissez-faire mechanism of appropriation.

It was the pattern of input contracts which determined who bore the input costs and which thus determined what was the "product of Company A" - not the "ownership of the means of production" or the ownership of
Company A. If the building and machinery had been leased from Company A to Company B, and if Company B paid for the worker's time and the raw materials, then Company B would own the produced widgets even though the ownership of the means of production and of Company A was unchanged.

Since conventional economics does not pose the question of appropriation in production, it has not conceptualized the simplest and most fundamental of the laissez-faire or invisible hand mechanisms, the market mechanism of appropriation. Given a normative principle, an invisible hand mechanism might under certain conditions satisfy that normative principle. For instance, the fundamental theorem of price theory asserts that in the absence of externalities, a competitive equilibrium in the price mechanism is allocatively efficient. The corresponding fundamental theorem of property theory (chapter 14) shows that in the absence of certain property externalities, the laissez-faire mechanism of appropriation satisfies the basic norm of property appropriation (developed in the next chapter).
Is labor peculiar?

It is remarkable that the human science of "economics" has not been able to find or recognize any fundamental difference between the actions of human beings (i.e., "labor") and the services of things. Attempts by economists to recognize the "peculiarities" of labor have been noticeably barren. For instance, Alfred Marshall (1920, book VI, chapters IV, V) noted a number of peculiarities:

1. workers may not be bought and sold; only rented or hired,
2. the seller must deliver the service himself,
3. labor is perishable.
4. labor-owners are often at a bargaining disadvantage, and
5. specialized labor requires long preparation time.

Professor Samuelson has also recognized the first peculiarity.

Since slavery was abolished, human earning power is forbidden by law to be capitalized. A man is not even free to sell himself; he must rent himself at a wage.

(1976, p. 52) (emphasis in the original)

Instead of being a characteristic of labor itself, Marshall and Samuelson only give an observation about present-day legal institutions; it did not hold a century and a quarter ago (see Philmore 1982). Neither Marshall nor Samuelson offer any basic institution-free differentiation of labor from machine services which would account for why the services of a person may not (now) be sold all at once. Quite to the contrary, the (first) "fundamental theorem of welfare economics," the theorem that a competitive equilibrium is allocatively efficient ("Pareto optimal"), must assume away the first peculiarity by presupposing that labor can be sold all at once.
Complete future markets must be assumed for all commodities to yield the optimality of competitive equilibrium, and "labor is a commodity."

Now it is time to state the conditions under which private property and free contract will lead to an optimal allocation of resources. . . . The institution of private property and free contract as we know it is modified to permit individuals to sell or mortgage their persons in return for present and/or future benefits.

(Christ 1975, p. 334; quoted in Philmore 1982, p. 52)

Far from providing any analysis or rationale for Marshall's first peculiarity of labor, modern economics bases one of its proudest achievements ("A competitive equilibrium is allocatively efficient") on the assumption that the perfectly competitive capitalist model incorporates what is essentially a voluntary contractual form of slavery (see Philmore 1982).

The second peculiarity of labor, that the seller must personally deliver the services, has no profound import. The employee plays two roles: the owner of the entity being hired out, and the entity which is hired out. Thus the services of the entity are the services of the owner of the entity. Marshall notes how this peculiarity makes the labor-owner particularly concerned with the conditions under which the labor is employed. Moreover, the mobility of labor is thereby as limited as the mobility of the laborer. But neither of these consequences is of great importance. In addition, this peculiarity does not even hold when there is a resale market for labor as in the ancient practice or labor-gang contracting - which in modern times is called "employee leasing." The ultimate employer contracts not with the workers but with the intermediate agency or contractor who, in turn, hires the workers. The contractor selling the labor to the employer does not personally deliver the services.

The third, fourth, and fifth "peculiarities,"

- that labor is perishable,
- that labor-owners are often at a bargaining disadvantage, and
- that specialized labor requires long preparation time,

are not really unique to labor at all (as Marshall even indicates).

The inability of capitalist economics to recognize any unique and relevant characteristic of labor is an ideological blind spot based on the desire to theoretically reflect the symmetrical fact that both labor services and the services of land and capital are salable commodities in the employment system. Any fundamental differentiation of labor from the other factor services would threaten that symmetry.

Radical economists have also attempted to find a unique and relevant characteristic of labor ("Only labor is creative") that would differentiate it from the other factor services. These attempts have not been particularly fruitful. Marx attached great importance to his "discovery" of the distinction
between labor power and labor time. Yet that distinction is not even unique to labor. When one rents a car for a day, one buys the right to use the car ("car power") within certain limits for the day. The actual services extracted from the car are another matter. The car could be left in a parking lot, or driven continuously at high speeds. To prevent being "exploited" by heavy users of "car time," car rental companies typically charge not just a flat day rate but have also a "piece-rate" based on the intensity of use as measured by mileage.

Marx touched on deeper themes when he differentiated human labor from the services of the lower animals (and things) in his description of the labor process.

We presuppose labour in a form in which it is an exclusively human characteristic. A spider conducts operations which resemble those of the weaver, and a bee would put many a human architect to shame by the construction of its honeycomb cells. But what distinguishes the worst architect from the best of bees is that the architect builds the cell in his mind before he constructs it in wax. At the end of every labour process, a result emerges which had already been conceived by the worker at the beginning, hence already existed ideally.

(Marx 1977, pp. 283-4)

This conscious directedness and purposefulness of human action is part of what is now called the "intentionality" of human action (see Searle 1983). This characterization does have significant import, but Marx failed to connect intentionality to his labor theory of value and exploitation (or even to his labor-power/labor-time distinction). This is in part because Marx tried to develop a labor theory of value as opposed to a labor theory of property.

Other radical political economists of Marx's day such as Pierre-Joseph Proudhon, William Thompson, and Thomas Hodgskin were less successful at developing a theoretical superstructure. But they did move in the right direction by trying to develop the labor theory of property as expressed in the claim of "Labour's Right to the Whole Product" (see Hodgskin 1832 or Menger 1899).

ONLY LABOR IS RESPONSIBLE

If we move from the artificially delimited field of "economics" into the adjacent field of law and jurisprudence, then it is easy to recognize a fundamental and unique characteristic of labor. Only labor can be de facto responsible. The responsibility for events may not be imputed or charged against non-persons or things. The instruments of labor and the means of production can only serve as conductors of responsibility, never as the source.
An instrument of labour is a thing, or a complex of things, which the worker interposes between himself and the object of his labour and which serves as a conductor, directing his activity onto that object. He makes use of the mechanical, physical and chemical properties of some substances in order to set them to work on other substances as instruments of his power, and in accordance with his purposes.

(Marx 1977, p. 285)

Marx did not explicitly use the concept of responsibility or cognate notions such as intentionality. After Marx died, the genetic code of Marxism was fixed. Any later attempt to introduce these notions was heresy. Moreover, these notions would not supply an apologia for state ownership so they were of little use to official Marxism.

Nevertheless, while Marx did not use the word "responsibility," he clearly describes the labor process as involving people as the uniquely responsible agents acting through things as mere conductors of responsibility. The responsibility for the results is imputed back through the instruments to the human agents using the instruments. Regardless of the "productivity" of the burglary tools (in the sense of causal efficacy), the responsibility for the burglary is imputed back through the tools solely to the burglar.

The human actor has the role of the "prime mover" without being a first cause. Clear thinking in jurisprudence requires differentiating between responsibility and causality.

If we say that a definite consequence is imputed to a definite condition, for instance, a reward to a merit, or a punishment to a delict, the condition, that is to say the human behavior which constitutes the merit or the delict, is the end point of imputation. But there is no such thing as an end point of causality. The assumption of a first cause, a prima causa, which is the analogon to the end point of imputation, is incompatible with the idea of causality, at least with the idea of causality implied in laws of classical physics. The idea of a first cause, too, is a relic of that state of thinking in which the principle of causality was not yet emancipated from that of imputation.

(Kelsen 1985, p. 365)

The natural sciences take no note of responsibility. The notion of responsibility (as opposed to causality) is not a concept of physics and engineering. The difference between the responsible actions of persons and the non-responsible services of things would not be revealed by a simple engineering description of the causal consequences of the actions/services. Therefore when economists choose to restrict their description of the production process to an engineering production function, they are implicitly or explicitly deciding to ignore the difference between the actions of persons and the services of things (see Mirowski 1989 for the use of physics as a model for the human sciences).
The juridical principle of imputation

The pre-Marxian classical laborists ("Ricardian socialists") such as Proudhon, Thompson, and Hodgskin tried to develop "the labor theory" as the labor theory of property. The most famous slogan of these classical laborists was "Labour's Claim to the Whole Product." This claim was hobbled by their failure to clearly include the negative product in their concept of the "whole product." This allowed the orthodox caricature, "all the GNP would go to labor and none to property" (Samuelson 1976, p. 626), as if there were no liabilities for the used-up inputs. If Labor appropriated the whole product, that would include appropriating the liabilities for the property used up in the production process. Present Labor would have to pay Property (e.g., past Labor) to satisfy those liabilities.

The classical laborists' development of the labor theory of property was also hindered by their failure to interpret the theory in terms of the juridical norm of legal imputation in accordance with (de facto) responsibility. A person or group of people are said to be de facto or factually responsible for a certain result if it was the purposeful result of their intentional (joint) actions. The assignment of de jure or legal responsibility is called "imputation." The basic juridical principle of imputation is that de jure or legal responsibility is to be imputed in accordance with de facto or factual responsibility. For example, the legal responsibility for a civil or criminal wrong should be assigned to the person or persons who committed the act, i.e., to the de facto responsible party. Ronald Dworkin notes that this is "a principle about natural responsibility, and so, as a guide for adjudication, unites adjudication and private morality and permits the claim that a decision in a hard case, assigning responsibility to some party, simply recognizes that party's moral responsibility" (Dworkin 1980, p. 589).

In the context of assigning property rights and obligations, the juridical principle of imputation is expressed as the labor theory of property which holds that people should appropriate the (positive and negative) fruits of their labor. Since, in the economic context, intentional human actions are called "labor", we can express the equivalence as:

The juridical principle of imputation  People should have the legal responsibility for the positive and negative results of their intentional actions.

The labor theory of property  People should legally appropriate the positive and negative fruits of their labor.

In other words, the juridical principle of imputation is the labor theory of property applied in the context of civil and criminal trials, and the labor theory of property is the juridical principle applied in the context of property appropriation.
Some individuals, such as infants or the insane, are not capable of de facto responsible actions.

The statement that an individual is zurechnungsfähig ("responsible") means that a sanction can be inflicted upon him if he commits a delict. The statement that an individual is unzurechnungsfähig (irresponsible) — because, for instance, he is a child or insane — means that a sanction cannot be inflicted upon him if he commits a delict. . . . The idea of imputation (Zurechnung) as the specific connection of the delict with the sanction is implied in the juristic judgment that an individual is, or is not, legally responsible (zurechnungsfähig) for his behavior.

(Kelsen 1985, p. 364)

Regardless of their causal efficacy, things are, a fortiori, unzurechnungsfähig. De facto responsibility is not a normative notion; it is a descriptive factual notion. The juridical principle of imputation is a normative principle which states that legal or de jure responsibility should be assigned in accordance with de facto responsibility. In the jury system, the jury is assigned the factual question of "officially" determining whether or not the accused was de facto responsible for the deed as charged. If "Guilty" then legal responsibility is imputed accordingly.

Economics is always on "jury duty" to determine "the facts" about human activities. These are not value judgments (where social scientists have no particular expertise). The economist-as-juror is only required to make factual descriptive judgments about de facto responsibility. In this chapter we are not concerned with the normative principle of juridical imputation (i.e., the labor theory of property applied in the courtroom), only the descriptive question of responsibility. The normative and descriptive questions should be kept conceptually distinct. That separation is difficult since, given the juridical principle, de facto responsibility implies de jure responsibility.

In a given productive enterprise, the descriptive question asks what set of people are de facto responsible for producing the product by using up the various inputs? The economist-as-juror faces that question. The marginal productivity of tools (machine tools or burglary tools) is not relevant to this factual question of responsibility either inside or outside the courtroom. Only human actions can be responsible; the services provided by things cannot be responsible (no matter how causally efficacious). The original question includes the question of who is responsible for using up those causally efficacious or productive services of the tools.

The question of de facto responsibility, whether posed in a courtroom or outside, presupposes the understanding that persons act and things don’t. Yet it is precisely the presupposition that is "overlooked" in economic theory which treats both the services of human beings and the services of capital and land symmetrically as "input services." Economists choose to
limit their description of the human activity of production to an engineering description of the causal efficacy of the various types of input services. The uniquely responsible agency of human activities is not acknowledged.

THE ACTIVE, PASSIVE, AND HUMANISTIC PICTURES OF THE PRODUCTION PROCESS

Science is often guided by symmetry arguments. But symmetry can be misleading in the human sciences. For example, the slavery system exhibited a certain symmetry between the slaves and beasts of burden. Conventional economics exhibits a "scientific" passion for treating the human element in production, labor, as being symmetrical with the non-human factors of production.

There are two ways that labor can be treated as symmetrical with the inputs to production. One way is to animistically elevate the non-human inputs to the status of responsible agents of production co-operating with the workers. That is the active or poetic view of production.

\[ K \text{ and } L \text{ co-operate to produce} \quad \text{the outputs } Q \]

Figure 3.1 The poetic active-inputs view of production

There are two versions of the active view according to whether it is the inputs or the outputs that are taken as the active agents. The active-inputs view is the typical poetic view in the literature of economics, but we will include the active-outputs view for the sake of completeness.

The other symmetrical viewpoint demotes the human element to the level of the non-human factors as just another input to production. Thus the human activity of converting the inputs into the outputs is conceptualized as just another passive input to production – so there is no subject who carries out the productive activity. That is the passive or engineering view.
The labor theory of property

Economics tends to use one symmetrical picture of the other; either the active or poetic view where all the factors are symmetrical active agents of production or the passive or engineering view where all the factors are symmetrical passive inputs to production.

The asymmetrical humanistic view of production is based on the fact that only persons are responsible agents; things are not. In production, people use up the services of some things (inputs) to produce other things (outputs).

The following is a classification of different factual views of a production process according to how the views recognize or do not recognize responsibility. All the views are the same from the viewpoint of physics.
1 Active or poetic view:
   Active inputs  The inputs co-operate together to produce the outputs
   Active outputs  The outputs use up the inputs
2 Passive or engineering view  The inputs get used up and the outputs
   get produced in the production process
3 Humanistic view  The people carrying out production use up the in-
   puts in the process of producing the outputs

Primitive animism attributed the capacity for responsibility not just to
persons but also to non-human entities and forces. Accordingly, in order
to escape the grasp of the imputation principle that imputes responsibility
only to persons, orthodox economists have had to resurrect a metaphorical
form of animism. This sophisticated animism views productivity in the
sense of causal efficacy as if it were responsible agency. In the active-
inputs view of production, all the inputs, both human and non-human, are
viewed as "agents of production cooperating together to produce the
product." "It is an enchanted, perverted, topsy-turvy world, in which
Monsieur le Capital and Madame la Terre do their ghost-walking as social
characters ..." (Marx 1967, p. 830). These ideas did not originate with Marx.
When Marx was nine years old, the classical laborist Thomas Hodgskin
developed a critique of the animistic descriptions of production.

... the language commonly in use is so palpably wrong, leading to many
mistakes, that I cannot pass it by altogether in silence. We speak, for ex-
ample, in a vague manner, of a windmill grinding corn, and of steam engines
doing the work of several millions of people. This gives a very incorrect view
of the phenomena. It is not the instruments which grind corn, and spin
cotton, but the labour of those who make, and the labour of those who use
them...

(Hodgskin 1827, p. 250–1)

All capital is made and used by man; and by leaving him out of view, and
ascribing productive power to capital, we take that as the active cause, which
is only the creature of his ingenuity, and the passive servant of his will.

(Hodgskin 1827, 247; quoted in King 1983, 355)

Hodgskin's reference to capital as "the creature of [man's] ingenuity, and
the passive servant of his will" was echoed forty years later by Marx's
reference to the worker's using "instruments of labour" as the "instruments
of his power and in accordance with his purposes" (Marx 1977, p. 285).
These seeds of insight in Marx's description of the labor process were
unfortunately planted in the blighted soil of the labor theory of value.

The attribution of responsible agency to natural entities and forces is a
common literary and artistic metaphor that Ruskin called the pathetic fallacy
or the fallacy of personification. Examples are; "The trees angrily flailed
at the storm" and "The waves pounded furiously on the rocks." In the
contemporary literature of economics, Monsieur le Capital (in the disguise of a shovel) and Madame la Terre still do their ghost walking: "Together, the man and shovel can dig my cellar" and "land and labor together produce the corn harvest" (Samuelson 1976, pp. 536–7). But the poetic charm of the pathetic fallacy seems out of place in the science of economics. It also ignores the distinction between the responsible actions of persons and the behavior of things. A shovel does not act together or co-operate together with a man to dig a cellar, because a shovel does not act at all. It is a thing. A person uses a shovel to dig a cellar, and the person is responsible both for using up the services of the shovel (the negative product) and for digging the cellar (the positive product).

To emphasize how the "agents" of production "co-operate together," Professor Samuelson says: "Factors usually do not work alone" (1976, p. 536). The point is that, literary metaphors aside, the non-human factors do not work at all. They are worked. The land is worked by the laborers to produce the corn harvest. Machines do not co-operate with workers; machines are operated by workers.

Since language itself deeply reflects this asymmetry between persons and things, economists use a variety of amusing linguistic contortions to describe production. We have already described the use of personification involved in the active view which elevates the instruments of production into "agents of production co-operating" with the workers. To describe the passive or engineering view economists have had to become masters in using the passive voice. The subjects who carry out the human activity of production have been reconceptualized as passive inputs to production, so the production process has no subject and can only be described in the passive voice. The outputs "get produced" and the inputs "get used up," but not by anyone. The production process is not an activity carried out by human beings, it is a technological process that just "takes place."

A popular linguistic variation on the passive picture is to use some abstract noun, such as "technology," the "industry," or the "firm," as the putative subject or agent of the production process. Then the active voice can be used even though the human element is still treated as a passive input. "Technology" produces the outputs by using up the inputs. The "industry" or the "firm" produces the product.

The various pictures of production – the active-inputs, the active-outputs, the passive, and the humanistic views – can be illustrated by four possible confessions from George Washington.

- **Active-inputs or poetic view** An axe co-operated with me to chop down the cherry tree.
- **Active-outputs view** The chopping down of the cherry tree used up some of my labor and some axe services.
Passive or engineering view: Given an axe and some of my labor, the cherry tree was chopped down.

Humanistic view: I used an axe to chop down the cherry tree.

What is the difference? There is no difference from the viewpoint of the natural sciences. The difference concerns responsibility; each confession gives a different shading to the question of responsibility. The economist-as-juror has to decide which confession tells the truth, the whole truth, and nothing but the truth. It is a factual question, and economics as a factual human science cannot avoid its responsibility.

**WHAT IS LABOR'S PRODUCT?**

Given a group of apple trees, consider the human activity of Adam picking apples for an hour to produce a bushel of apples. The human activity of picking the apples for an hour is reconceptualized in economics as another "input," a man-hour of apple-picking labor, to the now subjectless production process. Given a group of apples trees and a man-hour of apple-picking labor as inputs, a bushel of apples is produced as the output. The question of who uses the inputs to produce the outputs has no answer because the actions of the people carrying out the process are construed as just another input in the engineering description of a technological input-output process.

Prior to conceptualizing the human activity of production as an "input" to a dehumanized technological conception of production, we could use two-component vectors or lists,

\[(\text{outputs, capital services})\]

The productive activities of all the people (including entrepreneurs and managers) working in the given production example produce \((Q, -K)\) which is Labor's product. Then the human activity of producing \((Q, -K)\) is reconceptualized as the "input" \(L\), an input to the now-subjectless production process. Using this artificial reconceptualization, the people working in the production process produce the labor services \(L\) and then use up \(K\) and \(L\) in the production of \(Q\). Using the vector notation, they produce the labor \((0, 0, L)\) and the whole product \((Q, -K, -L)\) which sums to the three-dimensional version of:

\[
\text{Labor's product} = (Q, -K, 0) = (Q, -K, -L) + (0, 0, L) = \text{whole product} + \text{labor services}
\]

In the conventional employment or capitalist firm, the people working in the firm, i.e., the legal party called "Labor," appropriate and sell the labor...
services to the employer who, in turn, appropriates the whole product. In “laborist production,” i.e., in a self-employment firm, Labor appropriates Labor’s product (which is the sum of the whole product and the labor services).

The vector notation can also be used to restate the various views of the production process.

- **Active-inputs view** $K$ and $L$ produce the positive product $(Q, 0, 0)$
- **Active-outputs view** $Q$ produces the negative product $(0, -K, -L)$
- **Passive view** The whole product $(Q, -K, -L)$ is produced
- **Humanistic view** $L$ produces Labor’s product $(Q, -K, 0)$

A conventional economist would immediately notice that one can formally state a symmetrical argument interchanging the role of Capital and Labor.

Let

“Capital’s product” = $(Q, 0, -L) = (Q, -K, -L) + (0, K, 0)$

= whole product + capital services

In labor-managed production, the capital suppliers start off owning the capital services which are sold to Labor who, in turn, appropriates the whole product. In conventional capitalist production (assuming the capital was supplied as equity), the Capital suppliers appropriate Capital’s product (which is the sum of the whole product and the capital services).

Which description is correct? It is one of the factual questions put to the economist-as-juror. The description using Labor’s product assumes that the human beings involved in production are the de facto responsible agents involved in production. The description using Capital’s product makes the opposite symmetrical assumption that the non-human capital factors of production are the only responsible agents involved in production. The economist-as-juror must ascertain the facts of the matter. The recognition that only human beings can be responsible regardless of the causal efficacy of the non-human factors decides in favor of the description of production using Labor’s product and against the other “symmetrical” description using Capital’s product.

**SUMMARY**

The first and second chapters were concerned with the variety of myths and metaphors used to avoid posing the question of appropriation in production. Having finally posed the question, we moved in this chapter to “rediscover” some of the concepts necessary to formulate the basic juridical principle of imputation – which in property theory is the old “labor theory of property.” The basic concept is that of “de facto responsibility.” The
The basic fact is that only the actions of persons can be de facto responsible for anything. The services of things cannot be responsible—regardless of their causal efficacy or "productivity." Conventional economics is devoted to forgetting that basic distinction.

The employer-employee system treats human actions ("labor services") as a salable commodity like the services of things. Conventional economics could not trumpet the basic distinction between human actions and thing services ("Only actions can be responsible") and still play its socially accepted role. Since even ordinary language reflects that distinction, we examined some of the amusing linguistic contortions used in economics (the active-poetic and the passive-engineering views) to avoid the distinction.

Once economics has "discovered" that machines and tools are non-responsible (unzurechnungsfähig), then it can formulate the factual question of who is de facto responsible for using up the inputs to production and for producing the outputs of production. The juridical principle of imputation (or "labor theory of property") assigns the legal liability for the used-up inputs and the legal ownership of the produced outputs (namely, the "whole product" in our terminology) to that de facto responsible party. Answering the question is easy—the people who work in that productive enterprise. Posing the right question was the difficult part. Enormous conceptual distance beyond the conventional wisdom is necessary to even formulate the question, e.g., overcoming the "ownership of the firm" myth, asking the question of appropriation of the (whole) product, and appreciating that only the actions of persons can be de facto responsible for anything. The earlier attempts to deal with these questions are part of the tortured history of the labor theory of property— to which we now turn.
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LOCKE’S THEORY OF PROPERTY

The purpose of this chapter is primarily to relate the modern treatment of the labor theory of property to Locke’s theory of property, to the labor theory of property as developed by the Ricardian socialists, and to Marx’s treatment of the labor theory of value.

The core of Locke’s theory of property is presented in chapter V, “Of Property”, in the second treatise of Two Treatises of Government.

Though the Earth, and all inferior Creatures be common to all Men, yet every Man has a Property in his own Person. This no Body has any Right to but himself. The Labour of his Body, and the Work of his hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joyned to it something that is his own, and thereby makes it his Property. It being by him removed from the common state Nature placed it in, hath by this labour something annexed to it, that excludes the common right of other Men. For this Labour being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joyned to, at least where there is enough, and as good left in common for others.

This is Locke’s classic statement of the labor theory of property, the theory that people have the right to the fruits of their labor. The argument is set in a hypothetical original state of society prior to the accumulation of capital when nature is a common resource to all. The “right” Locke postulates is a natural right that is not dependent on the particular laws in a society. Indeed, the labor theory of property is sometimes referred to as the “natural rights theory of property” (e.g., in Schlatter 1951). The theory is intended as a normative or prescriptive theory, not a positive or descriptive theory. A given legal system might or might not in fact recognize
this natural right, but the theory holds that society should recognize and codify the natural right to the fruits of one's labor in the system of positive laws.

The labor theory of property has throughout its history been entwined with and often totally confused with the labor theory of value. The admixture of the two labor theories was present even in Locke who had a somewhat rudimentary form of the labor theory of value.

For 'tis Labour indeed that puts the difference of value on every thing; and let any one consider, what the difference is between an Acre of Land planted with Tobacco, or Sugar, sown with Wheat or Barley; and an Acre of the same Land lying in common, without any Husbandry upon it, and he will find, that the improvement of labour makes the far greater part of the value. I think it will be but a modest Computation to say, that of the Products of the Earth useful to the Life of Man 9/10 are the effects of labour: nay, if we will rightly estimate things as they come to our use, and cast up the several Expenses about them, what in them is purely owing to Nature, and what to labour. we shall find, that in most of them 99/100 are wholly to be put on the account of labour.

The subsequent history of the labor theory of property has been largely a history of clarifying and elucidating the theory by disentwining it from the labor theory of value. But the mixture of the two labor theories was present from Locke onward. In the following representative quotation from a modern commentator, both theories are mentioned in the same sentence.

The citizens of his (Locke's) ideal commonwealth own property, whose possession is defined as a natural right; but the title to property is secured by labor, which is the source of value.

(Lichtheim 1969, p. 108)

Indeed, the two theories are sometimes almost identified when it is held that labor is the sole source (not measure) of the value of produced property and that therefore labor should get the title to the property.

The classical laborists or Ricardian Socialists, such as Hodgskin, looked back not to Ricardo but to Locke for the labor basis to property.

I heartily and cordially concur with Mr. Locke, in his view of the origin and foundation of a right of property. . . . [Hodgskin then quotes the basic passages from Locke.] Thus the principle Mr. Locke lays down is, that nature gives to each individual his body and his labour; and what he can make or obtain by his labour naturally belongs to him.

(Hodgskin 1832, pp. 25–6)

Halévy notes that “Hodgskin, a philosopher at the same time as he is an economist, finds the true source of the labour theory of value in Locke”
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(1956, p. 181). Hodgskin points out the inconsistency of orthodox social theorists who pay lip service to Locke's theory and then defend the usual arrangements of property.

It is not a little extraordinary that every writer of any authority, since the days of Mr. Locke, has theoretically adopted this view of the origin of the right of property, and has, at the same time, in defending the present right of property in practice, continually denied it. This is the logical consistence of literary logicians.

(p. 26)

Locke's labor theory of property has what seems to be a paradoxical position in the history of thought. On the one hand, Locke is seen as the father of orthodox liberal democratic theory and Locke's property theory usually receives theoretical support from orthodox theorists. On the other hand, the labor theory of property, with or without the labor theory of value, has been used as the basis for radical critiques of capitalism. It is part of our purpose here to address this seeming paradox.

A RE-EXAMINATION OF LOCKE'S THEORY

Was Locke a "closet critic" of capitalist production? Is the critique of capitalist production based on the labor theory of property the descendant of Locke's theory? In the standard passages quoted from Locke, the person reaping the "fruits of his labor" is working as a self-employed proprietor. The crucial test is Locke's attitude towards wage labor. This attitude and Locke's theory as a whole is illuminated by the justly famous Turfs passage.

Thus the Grass my Horse has bit; the Turfs my Servant has cut; and the Ore I have digg'd in any place where I have a right to them in common with others, become my Property, without the assignation or consent of any body. The labour that was mine, removing them out of that common state they were in, hath fixed my Property in them.

(Locke, second treatise, section 28)

In the stock phrase "fruits of one's labor," it has almost always been assumed that Locke would take "one's labor" to mean the labor that a person performs. On the contrary, we now see that Locke interprets "one's labor" to mean the labor that one owns, not the labor that one performs. The servant performs the labor of cutting the turfs from the common, but the master owns the labor. Hence the master can say; "The labour that was mine, removing them out of that common state they were in, hath fixed by Property in them."

Thus Locke's theory is based less on a principle than on a pun, the pun
of always interpreting the phrases such as "one's labour," "his labour," "the labour that was mine" to mean the labor owned rather than the labor performed. Locke's theory of property was not the labor theory of property at all. For centuries, commentators have misread Locke, always interpreting "one's labour" to mean the labor one performed. One modern commentator, C. B. Macpherson, has clearly understood the nature of Locke's theory.

To Locke a man's labour is so unquestionably his own property that he may freely sell it for wages. A freeman may sell to another "for a certain time, the Service he undertakes to do, in exchange for Wages he is to receive" (Locke, section 85). The labour thus sold becomes the property of the buyer, who is then entitled to appropriate the produce of that labour.

(Macpherson 1962, p. 215)

If one rereads the classical passages with an eye to distinction between owned labor and performed labor, then one can see that Locke's emphasis all along was on the ownership of the labor.

The Labour of his Body, and the Work of his Hands, we may say, are properly his. Whosoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joined to it something that is his own, and thereby makes it his Property . . . For this Labour being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joined to . . .

(emphasis added, section 27)

Since the labor theory of property has always been read into Locke, even by the classical laborists such as Hodgskin, Locke has looked like the ally, unwitting perhaps, of the radical critics of capitalism. But the implied radical critique was only in the eye of the beholder, not in Locke.

When Locke's assumptions are understood as presented here, his doctrine of property appears in a new light, or, rather, is restored to the meaning it must have had for Locke and his contemporaries. For on this view his insistence that a man's labour was his own . . . has almost the opposite significance from that more generally attributed to it in recent years; it provides a moral foundation for bourgeois appropriation.

(Macpherson 1962, p. 221)

Further textual exegesis by Locke scholars (e.g., Tully 1980 and the references cited therein) has not, in our opinion, significantly shaken Macpherson's conclusion.

Using the tools of the modern treatment of property theory to interpret Locke, we can see that he was simply describing laissez-faire market appropriation where labor is the only exclusively owned factor. When labor is applied to commonly owned land and natural resources, then, as usual, the positive product is legally appropriated by the party which assumed
the negative product, the costs of the used-up inputs. But if labor is the only exclusively owned input, then the owner of the labor laissez-faire appropriates the product. That is exactly what Locke was describing. A comparable situation exists today when labor is applied to commonly owned resources such as fish or minerals in the ocean. When employees catch fish from the ocean (or cut turfs from the common), the employer laissez-faire appropriates the fruits of “his labor.”

Locke imported into his so-called “state of nature” not only the whole employment relation (one of the great artificialities of history) but the laissez-faire mechanism of appropriation used by positive law. Locke’s theory, being a description of this positive law mechanism, is without moral force. The laissez-faire mechanism states that since the last legal owner of the input-assets has borne (appropriated) the input-liabilities or negative product, that party should also have the legally defensible claim on the positive product. But from the normative viewpoint, there is no reason why the owner of the input-assets ought to appropriate (i.e., “swallow”) the input-liabilities as opposed to being compensated for the used-up inputs. That is only the laissez-faire solution (letting the input-liabilities lay where they fall).

The labor theory of property (juridical imputation principle) imputes the negative product to the party de facto responsible for using up the inputs. The ownership of the input-assets only determines to whom that rightful appropriator of the input-liabilities should be liable for the inputs.

Sometimes a theory is best understood and situated when it is generalized. How does Locke’s theory generalize when capital is introduced? When privately owned capital is introduced, then the party that bears the costs of the services of the labor and capital will laissez-faire appropriate the fruits of “his labor and capital.” In the following remarkable passage, James Mill describes, without the benefit of the usual distributive shares metaphor, the employer’s laissez-faire appropriation of all the produce by bearing all the costs.

The great capitalist, the owner of a manufactory, if he operated with slaves instead of free labourers, like the West India planter, would be regarded as owner both of the capital, and of the labour. He would be owner, in short, of both instruments of production: and the whole of the produce, without participation, would be his own.

What is the difference, in the case of the man, who operates by means of labourers receiving wages? The labourer, who receives wages sells his labour for a day, a week, a month, or a year, as the case may be. The manufacturer, who pays these wages, buys the labour, for the day, the year, or whatever period it may be. He is equally therefore the owner of the labour, with the manufacturer who operates with slaves. The only difference is, in the mode of purchasing. The owner of the slave purchases, at once, the whole
of the labour, which the man can ever perform: he, who pays wages, purchases only so much of a man's labour as he can perform in a day, or any other stipulated time. Being equally, however, the owner of the labour, so purchased, as the owner of the slave is of that of the slave, the produce, which is the result of this labour, combined with his capital, is all equally his own. In the state of society, in which we at present exist, it is in these circumstances that almost all production is effected: the capitalist is the owner of both instruments of production: and the whole of the produce is his.

(James Mill 1826, chapter I, section II)

That is the application of Locke's theory in the general case when both capital and labor are privately owned inputs to production. The elder Mill's argument, that the capitalist's claim on the product is as good as the slave owner's claim, is ironically correct. The capitalist, like the slave owner, has used a legalized fraud, which pretends that the worker is an instrument, to arrive at the position of being the "owner of both instruments of production" so that he can then make a legally defensible claim on the positive product.

The truth about capitalist appropriation occasionally "slips out" in the literature of capitalist economics - usually before an appropriate metaphor has been established as the Official Truth. James Mill's factual and non-metaphorical description of capitalist appropriation - "the whole of the produce is his" - is an example. He described (probably goaded by Hodgskin) the actual property rights involved in capitalist production before Ricardo had established the Official Metaphor of distributive shares. It is clear why modern orthodox economists now prefer to hide behind the facade of the distributive shares metaphor rather than address the actual structure of property rights in capitalist production. Even though one legal party owns the entire production input-output vector of an enterprise, i.e., the whole product, the happy consciousness of modern economics describes the outcome of production in terms of the "division of the product" seemingly without any second thoughts about actual property rights and liabilities.

THE RICARDIAN SOCIALISTS

Various versions of the labor theory of value were used in the classical economic theories of Adam Smith and David Ricardo, without recognizing any property theoretic implications. Smith used labor as a measure of value in the sense that price could be viewed in terms of the labor it commanded. Ricardo interpreted the price of a commodity, for the most part, in terms of the labor directly or indirectly embodied in the commodity. The property theoretic implications of Ricardo's labor theory of value were developed by the small band of radical economic thinkers known as
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the "Ricardian socialists" or classical "laborists" (e.g., in Lichtheim 1969, p. 135).

In England, the principal Ricardian socialists or classical laborists were Thomas Hodgskin, William Thompson, and John Francis Bray (see Menger 1899 and Foxwell's introduction for a description of this school). Historians of economic thought have viewed the Ricardian socialists less as thinkers in their own right and more as precursors to Marx. This has affected the parts in the Ricardian socialists' thought which are emphasized, namely the parts that were later developed by Marx. Indeed, many aspects of the Marxian labor theory of surplus-value and exploitation can be found in the Ricardian socialists. But the Ricardian socialists or classical laborists also explicitly developed the labor theory of property, and this property theoretic theme did not survive - at least explicitly - in the value theoretic focus of Marx's thought. The deficiencies in their "classical" treatment of the labor theory of property, i.e., their neglect of the negative product in their "whole product" concept and their failure to use the juridical notion of responsibility to explain the uniqueness of labor, will be considered in the next section.

DEFICIENCIES IN THE CLASSICAL LABORIST TREATMENT OF LTP

The development of the labor theory of property by the classical laborists such as Hodgskin, Thompson, and Bray suffered from several major deficiencies - which are addressed in the modern theory. While the use of the phrase "whole product" is borrowed from them, they failed to symmetrically include the all-important negative product in their concept of the whole product. They referred to the positive product, the produced outputs, as the "whole product." But the classical laborists' claim of "Labor's right to the whole product" is incoherent without the inclusion of the negative product.

The classical laborists did, of course, realize that inputs do not fall like manna from heaven; worker-managed firms would have to pay for their inputs. For instance, when considering machinery and materials, Thompson noted that "the labourer must pay for the use of these, when so unfortunate as not himself to possess them" (1963, p. 167). But Thompson and the others did not systematically emphasize the negative product. That seemed to leave them open to the idea that the positive product can be appropriated without also appropriating the negative product, an idea which might be called "immaculate appropriation." Many critics have accused LTP proponents of advocating immaculate appropriation.

Consider, for example, an economy of self-managed firms where firm A produces capital goods such as machine lathes which are used by firm B to produce consumer goods. The firm A workers' appropriation of the
positive fruits of their labor is meaningless unless the firm B workers appropriate the negative fruits of their labor (i.e., bear the liabilities for using up the machine services). Unless the firm A workers will give away their positive product for free, the firm B workers must bear the negative fruits of their labor and satisfy those liabilities by leasing or buying the capital goods. The classical laborists' failure to explicitly include the negative product in their notion of the whole product left them open to the orthodox banality that Labor cannot expect to get all the outputs without taking due account of the other scarce factors.

Another major deficiency in the classical laborists' development of the labor theory of property was their failure to interpret the theory in terms of the juridical norm of legal imputation in accordance with de facto responsibility. The basic juridical principle of imputation is that de jure or legal responsibility is to be imputed in accordance with de facto or factual responsibility. For example, the legal responsibility for a civil or criminal wrong should be assigned to the person or persons who intentionally committed the act, i.e., to the de facto responsible party.

Since, in the economic context, intentional human actions are called "labor," we have the following equivalence.

The juridical principle of imputation = the labor theory of property

In other words, the juridical principle of imputation is the labor theory of property applied in the context of civil and criminal trials, and the labor theory of property is the juridical principle applied in the context of property appropriation. This equivalence was perhaps not evident in the classical treatment of the labor theory of property because that treatment ignored the negative product, and yet it is the negative side of the imputation principle that is applied explicitly in civil and criminal trials.

The lack of this juridical interpretation in the classical treatment led to the classical laborists' notorious failure to ever justify the slogans such as "Only labor is creative" or "Only labor is productive." Orthodox economists could correctly observe that all the factors of production, including land and capital, were "productive" in the sense that to add to or subtract from the employment of these factors would accordingly add to or subtract from the product. It is indeed true that land (including natural resources) and capital are "productive" in this sense of being causally efficacious in production. Otherwise there would be no occasion to use them. The reason that machine tools are used in metalworking and that good luck charms and magical incantations are not used is that the tools are much more efficacious.

The point is that while all the factors are "productive" in the sense of being efficacious, only labor is responsible. Capital goods and natural resources, no matter how useful they may be, cannot ever be responsible
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for anything. Guns and burglary tools, no matter how efficacious and “productive” they may be in the commission of a crime, will never be hauled into court and charged with the crime. Only human beings can be responsible for anything and thus only the humans involved in production can be responsible for the positive and negative results of production. In particular, the people working in an enterprise are factually responsible for using up the inputs and for producing the outputs. Hence the juridical principle of imputation (i.e., the labor theory of property) implies that the workers (in the inclusive sense) should have the legal liability for the used-up inputs and the legal ownership of the produced outputs.

HEGEL’S THEORY OF PROPERTY AND INALIENABILITY

Hegel had a formative influence on Marx long before Marx became acquainted with the work of the classical laborists such as Proudhon, Hodgskin, and Bray. And, like the classical laborists, some version of the labor theory of property was central to Hegel’s vision. It would not be a complete overstatement to say that Hegel’s vision was the labor theory of property writ large in the grand German metaphysical style. Instead of the mundane focus on intentional human action transforming the inputs to produce the outputs, it is Spirit, Mind, or Ideality entering the world to realize itself in the world and to make the world its own. When this grandiose scheme is boiled down to a theory of property in the Philosophy of Right, the result is a version of the labor theory.

Hegel seems to have been the first to bring together the two intellectual streams of the labor theory of property and the de facto inalienability theory. It was politically and perhaps psychologically difficult for the conservative Hegel to work out the full implications of these theories, but the ideas and connections are present in Hegel’s work.

Rational humans have intentionality; they can intervene in the world to realize their purposes and impose their will on the brute mechanism of natural forces. In so doing, humans are responsible for the difference they make. They are responsible both for what they consume or otherwise use up and for what they create.

A person has as his substantive end the right of putting his will into any and every thing and thereby making it his, because it has no such end in itself and derives its destiny and soul from his will. This is the absolute right of appropriation which man has over all ‘things’.

(Hegel 1967, §44, p. 41)

The property thus appropriated is “the embodiment of personality” (§51, p. 45). Alan Ryan has nicely paraphrased this Hegelian theme in modern terms.
In the search for freedom we distinguish ourselves from objects in the outside world which merely interact with each other in a mechanical, causal fashion; we use, alter, make, consume and control things. In doing this, we also alter the status of those things; they cease to be objects with no point or purpose, and come to reflect and embody our purposes. The world literally takes on human purposes... Only if there were already a will like our own opposing our will would we have no right, which is why we cannot, in principle, make slaves out of other persons.

(Ryan 1984a, pp. 185-6; see also Ryan 1984b, chapter 5)

This labor-theoretic theme ties in with inalienability because a person can only put his or her will in another entity if the latter is “unoccupied” and has no will of its own. To use and to transform something, we must first take possession of it, i.e., must be able to put our will into it. For anything to be transferrable or alienable between persons, the giver must be able to take his or her will out of it so the receiver can take possession, occupy it, and employ it.

The voluntary slavery contract and the employer-employee contract applied this transferable commodity model to the long-term and short-term “transfer” of intentional human actions. But the voluntary slave (“warrantee”) and the employee cannot in fact take their will out of their intentional actions so that they could be “employed” by the master or employer. They can only agree to co-operate by following the instructions of the master/employer or his agents. Instead of recognizing these contracts as invalid due to the impossibility of transferring labor, the law can erect an institutionalized fraud to account for the “fulfillment” of the contract (i.e., in the past, for the slavery contract and, currently, for the labor contract). Co-operate with the master/employer and that will “count” as fulfilling the contract for the transfer of labor. If, however, this peculiar institution of the labor contract should be abused by the commission of crimes, then the whole fraudulent superstructure will be stripped away in favor of the actual facts. The master and servant co-operated together to commit the crime, and they will be held legally responsible for the fruits of their labor.

How much of this is Hegel and how much is a modern gloss? Hegel used this de facto inalienability argument in connection with slavery. Moreover, he apparently saw the argument reaching “beyond the pale” to implicate the wage labor contract. Hence he purposely moved to defuse the application to wage labor. Voluntary slavery and wage labor are as different as “universal and particular”; the particular can be alienated but not the universal (see Hegel 1967, §67). Translated out of metaphysical double-talk, this is the rather implausible assertion that a person can vacate his or her will for eight or so hours a day for weeks, months, or years on end but cannot do so for a working lifetime. Our purpose is not to show the
desperation in Hegel's attempt to defend the employment relation with a metaphysical distinction between a spot market and a futures market in labor. Our point is that he saw those implications so he may be given some credit (against his will) for broaching the de facto inalienability critique of the employment contract.

Hegel scholarship is currently enjoying something of a renaissance (e.g., MacGregor 1984, or Pelczynski 1984). Anti-capitalist themes in Marx are being rediscovered in Hegel without turning Hegel upside down. Insofar as Marx's labor theory of value is a veiled version of the labor theory of property, that property theme was explicit in Hegel. And the de facto inalienability argument against wage labor does not seem to have survived in Marx at all. Marx's analysis emphasized the unequal bargaining power of the propertyless proletariat (the result of capitalist primitive accumulation) and exploitative wage rates in his labor theory of value and exploitation. Neither is a critique of the wage labor relationship itself. The inalienability argument implied the abolition of wage labor in favor of universal self-employment, but that argument lay buried in the work of Hegel.

"THE LABOR THEORY"

At least since Marx's time, any discussion of the labor theory of property as a critique of capitalism has been dominated by Marx's labor theory of value and exploitation. The labor theory of property simply has not had an independent intellectual life. Yet many of the ideas underlying the support and interpretation of the "labor theory of value" actually are based on the

![Figure 4.1 "The labor theory"](image-url)
labor theory of property. Hence it is best to speak firstly of "the labor theory" (LT) as a primordial theoretical soup without specifying "value" or "property." Then the various overtones and undercurrents in LT can be classified as leaning towards the labor theory of value (LTV) or the labor theory of property (LTP).

Since so much of the literature is formulated in terms of LTV, it is further necessary to divide treatments of LTV that are really veiled versions of LTP from treatments that are focused on value theory as a quasi-price theory. The LTP-oriented versions emphasize labor as the source or cause of the value of the product, while the price-oriented versions consider labor as the measure of value.

Marx's Labor Theory of Value and Exploitation

Methodological introduction

First a word on methodology. One of the earmarks of a scientific theory is that it is intersubjectively communicable and understandable. It isn't just an accumulation of a person's views or pronouncements. Other scientists should be able to understand the theory and develop its consequences independently of the originator of the theory. Some of the implications may even run counter to the expectations and desires of the creator of the theory.

We do Marx the honor of treating his labor theory of value and exploitation as a scientific theory. Many Marxists prefer to treat Marx as an oracle rather than a scientist. If an implication of his theory falls short of his expectations, many Marxists think they can "disprove" the implications by finding appropriate quotations in the sacred texts.

The second point is that Marx used a "shotgun" approach to criticizing capitalism; he used several different critiques. A modern analogy would be a computer video game with several different levels of play. Neophytes were treated to an emotional attack on capitalism based on the working conditions of Marx's day as reported by the factory inspectors. Those seeking a more principled criticism are taken to the next level of play.

The next level cites primitive accumulation which robs workers of the independent access to the means of labor. That, in turn, forces them as a propertyless proletariat to sell their labor to the capitalist class with its monopoly ownership of the means of production. But the sins of primitive accumulation in the past give little leverage in the present; they are tempered by the prescription of time. The unequal-bargaining-power critique of the wage labor contract is well within the bounds of liberal capitalism. It pushes towards the equalization of power through Big Labor collectively
bargaining with Big Capital or through the competitive determination of wage rates without bargaining power on either side of the market.

Capitalist economists argued for the competitive solution to the monopoly power critique so that took Marx to the deepest level of play, the labor theory of value and exploitation. The purpose of that theory was to show that capitalist production was exploitative even under the (unrealistic) assumption that all markets were in perfectly competitive equilibrium.

The exploitation theory in Capital

The *locus classicus* of Marx's exploitation theory is in *Capital* (vol. I). In chapter 7, Marx develops an example where workers use a spindle to spin cotton into yarn. A worker is paid 3 shillings for a "day's work." In 6 hours, the worker transforms 10 shillings worth of cotton, with 2 shillings depreciation on the spindle, into 15 shillings of finished yarn.

\[
\begin{align*}
15 \text{ s} & \quad \text{selling price} \\
= 15 \text{ s} & \quad \text{Cost} \\
\{ & \quad \text{10 lbs yarn} \\
6 & \quad \text{hours direct labor} \\
10 \text{ lbs cotton} & \\
(1 \text{ day} = 3 \text{ s}) & \quad \text{2 s wear and tear on spindle}
\end{align*}
\]

**Figure 4.2** No surplus labor

Time is not a factor in the example. There are 15 shillings of costs and the product is worth 15 shillings. There is no profit, surplus labor, or exploitation. Then Marx supposes that another 6 hours of labor can be extracted as part of a day's work (no additional pay), so with twice the inputs there will be twice the outputs.

\[
\begin{align*}
30 \text{ s} & \quad \text{selling price} \\
> 27 \text{ s} & \quad \text{cost} \\
\{ & \quad \text{20 lbs yarn} \\
12 & \quad \text{hours direct labor} \\
20 \text{ lbs cotton} & \\
(1 \text{ day} = 3 \text{ s}) & \quad \text{4 s wear and tear on spindle}
\end{align*}
\]

**Figure 4.3** 6 hours surplus labor

Now the costs of the output is 27 shillings, but output sells for 30 shillings so there is a 3 shilling pure profit. Since there was no profit before the last 6 hours of work, Marx concludes that they represent surplus labor and exploitation.

One could also concoct examples where there were losses, the selling
problem was less than the costs. What would be the point? The challenge to Marx was to show that there could be exploitation of labor in a competitive equilibrium. The example is competitive (no monopoly power argument) but it is not an equilibrium and there is no unique connection to labor.

The same "story" could be told to make it seem that a spindle owner is exploited who rents out a spindle for 4 shillings for a "day's spinning." Let us suppose the same situation except that the workers are paid even less, one shilling for six hours of work. The spindle is used for 6 hours along with 10 pounds of cotton and six hours of labor to produce 15 shillings worth of yarn.

\[
\begin{align*}
15 \text{ s} & \text{ selling price} \\
= 15 \text{ s} & \text{ cost} \\
\end{align*}
\]

\[
\begin{align*}
10 \text{ lbs yarn} & \\
\text{6 hours direct labor} & \\
6 \text{ hours} \approx 1 \text{ s} & \\
10 \text{ lbs cotton} & = 10 \text{ s} \\
6 \text{ hours spinning on spindle} & \\
4 \text{ s} & = 1 \text{ "day's spinning" }
\end{align*}
\]

**Figure 4.4** No profit

Since the costs are also 15 shillings there is no profit. Since the spindle has already been rented for the day, it is used for another six hours (no additional rent) along with twice the other inputs to yield twice the outputs.

\[
\begin{align*}
30 \text{ s} & \text{ selling price} \\
> 26 \text{ s} & \text{ cost} \\
\end{align*}
\]

\[
\begin{align*}
20 \text{ lbs yarn} & \\
\text{12 hours direct labor} & \\
12 \text{ hours} \approx 2 \text{ s} & \\
20 \text{ lbs cotton} & \\
12 \text{ hours spinning on spindle} & \\
4 \text{ s} & = 1 \text{ "day's spinning" }
\end{align*}
\]

**Figure 4.5** 4 shilling "exploitation" of spindle

Now the cost of the output is 26 shillings, but the output sells for 30 shillings so there is a 4 shilling pure profit. Since there was no profit before the last 6 hours of spinning on the spindle (with no additional rent), one could conclude that they represent "exploitation" of the spindle or the spindle's owner (even with workers paid less than before).

This result is to be expected. Marx's analysis is not based on any unique property of labor so one can easily reconfigure the examples to make it seem that any other rented input such as a spindle is exploited. One could
even develop the analogous jargon about buying a day’s “spinning-power” and then extracting more “spinning-time” than is equivalent to the day’s spinning-power. This illustrates the non-uniqueness of labor in Marx’s analysis of exploitation.

The other difficulty is that the situation is not an equilibrium. In Marx’s original example, the 3 shilling profit would lead the given producers or other profit-hungry capitalists to expand production which would bid up the price of cotton, spindles, and labor while reducing the price of the yarn flooding out onto the market. Thus any configuration of prices that yielded profits could not be an equilibrium.

There is, however, a modern explication of Marx’s exploitation theory which does produce an exploitation result under competitive equilibrium—so we turn to that modern treatment of Marx’s labor theory of value and exploitation.

The modern Marxian labor theory of value and exploitation

Marx’s value theory has been successfully formulated as a scientific theory—although the success has been a double-edged sword. Input-output theory, developed by Leontief and by Sraffa, has provided the mathematical framework for a rigorous modern development of Marx’s labor theory of value and exploitation (e.g., Morishima and Seton 1961; Okishio 1963; Morishima 1973; Wolfstetter 1973). While controversy has continued to flourish, at least there is now a common analytical core. Proofs can be given without footnotes referring to the sacred texts. It is this development above all others that has lifted Marx from being a luminary in the dark underworld of heretics to a respectful position in the neoclassical pantheon of economists as a precursor to Leontief, von Neumann, and Sraffa. The “downside” for Marxian economics is that untoward implications can no longer be “disproved” by consulting the oracle. The theory now has a life of its own. As we will see, the father may well want to disown his progeny.

The full development of modern Marxian value theory requires a heavy dose of matrix algebra. However, the basic import as a critique of capitalist production can be seen in the simplest case of one commodity (corn) and labor which requires no matrix algebra. In a more technical chapter below, the same simple corn-and-labor model is used to illustrate marginal productivity theory, the Marxian labor theory of value, and the labor theory of property. Only the outcome of the analysis is summarized here.

It is interesting to note which parts of the usual literary presentation of Marx’s theory have no role in the modern theory. Marx tried to relate the exploitation analysis to the workplace power relationship of the employer over the workers. The capitalist forces the workers to expend more labor-time than it took to reproduce their labor-power. In spite of such rhetoric
which usually accompanies presentations of the modern theory, the role of power relations did not survive in the modern reformulation. No assumptions about power relations were made in the input-output model, yet the presence of Marxian exploitation can still be derived. Hence the result does not depend on power relationships. As Robert Paul Wolff notes, there "is in fact no place in the formal analysis at which the labor/labor power distinction gets introduced" (1984, p. 178). The veneer of rhetoric about power relations and the labor-time/labor-power distinction only obscures the real basis of the exploitation result.

The modern theory also fails to be based on any unique attribute of labor. It does not explain any role of labor as either a source or measure of value since "Marxian value" is simply defined as labor content. As Robert Paul Wolff has also shown, one can even formulate a "corn theory of value and exploitation" and rederive analogous results that the corn suppliers are exploited.

By reproducing for corn or iron or coal, all the striking results that Marx derived concerning for labor, we have, it seems to me, raised questions about the foundations of Marx's critique of capitalism and classical political economy.

(Wolff 1984, p. 172)

Neoclassical economists appraise the Marxian labor theory of value as if it was intended as a price theory. But that pretense is dropped in the modern theory; it is fully acknowledged that Marxian labor values will systematically diverge from competitive market prices and that the agents in the economy will respond to prices, not "values." What then is the point of "value theory'? Is it an unnecessary detour on the way to price theory?

The Marxian literature is quite taken with the Germanic philosophical jargon of "appearance versus reality." Veils are constantly being stripped off of surface appearances to reveal hidden inner realities. Apparently "prices" are a superficial market epiphenomenon while "Marxian values" reveal a hidden deep structure. For instance, the analysis of capitalist exploitation in the modern theory results in what Morishima calls the "Fundamental Marxian Theorem": the rate of exploitation is positive if and only the rate of profit (= interest rate) is positive. This is interpreted as showing that exploitation is the hidden meaning of the surface phenomenon of a positive interest rate (a.k.a., profit rate). Without Marxian value theory to strip away the veil, one would have only the observation of positive interest rates without the inner meaning.

The machinery of input-output theory allows the calculation of the stream of primary inputs (non-produced inputs) that were used up in the production of some output. The Marxian model ignores land and natural resources, and uses labor as the only primary input. Hence the calculation of the
The labor theory: intellectual history

labor content or Marxian value is possible. Produced intermediate goods such as the seed corn are ultimately dissolved into labor so all the direct and indirect labor embodied in a bushel of corn can be summed to obtain the Marxian value of a bushel.

There is, however, another scarce resource that enters the model in a different way, namely time. Time is not a resource alongside of labor, capital, or land; time availability is an aspect of all resources. As any corn farmer can attest, corn available to be used as seed at planting time is different from having the otherwise identical corn after the planting season has passed, and similarly for other resources. The market price attached to the time availability of resources is the interest rate. To get the corn earlier rather than later, one must borrow funds to buy it so the additional price attached to the early availability of the corn is the interest on the borrowed funds.

Time puts a difference on commodities. Corn at planting time is an economically distinct commodity from corn at harvest time, and similarly for labor. Yet the definition of Marxian value ignores time. Summing the labor directly and indirectly embodied in a bushel of corn treats all the past labor as being the same so it can be meaningfully summed. But if labor at different times is distinct like “apples and oranges” then the sum is as meaningful as “3 apples + 4 oranges.”

Marxian values systematically diverge from competitive market prices. Why? Because Marxian values ignore time. In the later chapter on Marxian Value Theory, it is shown that when the definition of Marxian value is corrected to take time into account using the interest rate, then value is identical with price. Thus Marxian value is less of the "hidden inner reality" of price than just a faulty definition of price.

This analysis of Marxian value throws light on the analysis of "exploitation." The modern formulation of the Marxian labor theory of value and exploitation is in fact a just-price theory. It takes as a normative benchmark the time-saturated regime where the rate of interest \( r \) is zero. It evaluates the transactions of the actual economic regime where the interest rate is positive at the benchmark prices. It finds that the workers receive less in the actual regime than they would in the benchmark regime; that difference is precisely the "exploitation."

The same sort of "exploitation" analysis could be applied to any price change. Sell apples instead of labor. Suppose in the benchmark situation,

\[
\text{Benchmark prices} \quad 10 \text{ apples} = 1 \text{ bushel of corn}
\]

"Value" is defined as the benchmark prices; they are the "just prices." In the actual situation, the price of apples dropped relative to corn.

\[
\text{Actual prices} \quad 15 \text{ apples} = 1 \text{ bushel of corn}
\]
Suppose the apple-owner sells 300 apples in return for 300/15 = 20 bushels of corn. Let us pierce the veil of this competitive market transaction to reveal its "inner nature." In return for the 20 bushels, the apple seller first gives up 200 apples. The 200 apples have the same "value" as the 20 bushels (i.e., at benchmark prices). Everything seems fair and square. The 200 apples were "paid for" by the 20 bushels. But then the apple-seller is "forced to alienate" an additional 100 apples which is "appropriated as a surplus" by the corn-owner without any further corn payment in return. These extra 100 apples are the "unpaid" apples. In terms of corn, the corn-owner gave up 20 bushels to receive the "value" of 30 bushels so the surplus appropriated by the corn-owner represented 10 bushels of corn. The ratio of the unpaid apples to the paid apples is 100/200 = 0.5 so there is a 50 per cent rate of exploitation. Beneath the facade of the market transaction, we have revealed the exploitation of the apple-seller by the forced alienation of the surplus apples.

Marxian exploitation theory applies this same methodology to the labor contract. It clearly has nothing to do with workplace power relations. In the benchmark regime, the just interest rate is zero, the just corn price per bushel (in terms of labor) is Marxian value v, and the just wage in terms of corn is the reciprocal (1/v). As the interest rate increases from zero in the hypothetical benchmark regime to a positive value in the model, the price of labor (like the price of apples) decreases relative to the price of the wage goods (corn), so the labor-sellers are "exploited" (like the apple-sellers). Thus there is "exploitation" if and only if the interest rate is positive. That "Fundamental Marxian Theorem" may "be considered as the heart and soul of Marxian philosophy..." (Morishima 1973, p. 6).

That theorem is often interpreted as showing that exploitation is the hidden inner meaning of a positive interest rate. We have shown that the opposite is the case. The charging of interest is the hidden inner meaning of "exploitation" in the modern input-output version of Marxian value theory.

In its precise modern form, Marxian value theory has emerged as a not particularly insightful "just-price" theory expressing a Marxian version of the old Aristotle–Aquinas interest grumble. Even if one takes it seriously as a just-price theory, it is not a critique of the institution of wage labor but only a critique of unjust wage rates, i.e., the "exploitative" wage rates corresponding to positive rates of interest. Yet Marx's conviction was most certainly against wage labor itself, not just exploitative wage rates. Thus Marx hardly wanted to point out the shortcomings of the theory by discussing a "just" or non-exploitative wage rate, although that occasionally slips out.

It will be seen later that the labour expended during the so-called normal day is paid below its value, so that the overtime is simply a capitalist trick
to extort more surplus labour. In any case, this would remain true of overtime even if the labour-power expended during the normal working day were paid for at its full value.

(Mal, 1977, p. 357n.)

The just wage is the wage at which labor is “paid for at its full value.”

Capitalism is a property system that uses the wage labor contract to systematically violate people’s right to appropriate the fruits of their labor. Even if Marx’s labor theory of value and exploitation had no difficulties, it would only be a value theory. It would only be a critique of exploitatively low wage rates, not a critique of the wage labor contract itself. A critique of the contract itself requires a jurisprudential argument that implicates the very validity of the contract, e.g., the de facto inalienability argument. Marx sent a value theory to do battle with a property system. It takes an alternative property theory to provide a critique of a property system, e.g., the labor theory of property.

PROPERTY THEORETIC THEMES IN MARXIAN VALUE THEORY

The modern Marxian labor theory of value and exploitation (a variant of the labor-as-measure LTV) gives no glimpse of any relevant unique property of labor. It simply defines “value” as labor content. Marx, however, started (like Hegel) by singling out human action as the unique activity that acted upon the world to endow it with intents and purposes — even though Marx and Hegel did not use the modern vocabulary of intentionality and responsibility.

But although part of Nature and subject to the determinism of natural laws, Man as a conscious being had the distinctive capability of struggling with and against Nature — of subordinating and ultimately transforming it for his own purposes. This was the unique rôle of human productive activity, or human labour, which differentiated man from all (or nearly all) other animate creatures...

(Dobb 1973, p. 143–4)

Marx clearly saw that physical causal processes can never be co-responsible with human agents; the causal processes serve only as “conductors” to transmit human intentions. As Wieser put it, “The imputation takes for granted physical causality” (1889: 76). Indeed, in more advanced production processes, the natural forces are so arranged or (in modern terms) programmed so that with very little further human input, the interplay of natural processes will “automatically” realize the human intentions. As Marx noted, this is what Hegel called “the Cunning of Reason” (see Marx 1977, p. 285, n. 2).
Marx also was by no means exclusively concerned with developing the labor-as-a-measure version of LTV. It was not simply that value is a function of labor, but that direct labor creates the value added to the material inputs.

For the capitalist, the selling price of the commodities produced by the worker is divided into three parts: first, the replacement of the price of the raw materials advanced by him together with replacement of the depreciation of the tools, machinery and other means of labour also advanced by him; secondly, the replacement of the wages advanced by him, and thirdly, the surplus left over, the capitalist's profit. While the first part only replaces previously existing values, it is clear that both the replacement of the wages and also the surplus profit of the capitalist are, on the whole, taken from the new value created by the worker's labour and added to the raw materials.

(Marx 1972, p. 182)

We previously drew a conceptual roadmap of "the labor theory" which saw it divide into LTP and LTV. Then LTV divided into "labor as source" and "labor as measure" theories. The source versions of LTV are best understood as (confused) value-theoretic renditions of the labor theory of property.

The source/measure dichotomy should not be confused with a prescriptive-descriptive dichotomy. "Value" can be interpreted descriptively or normatively, and value theory in economics is intended as a descriptive theory. Similarly, "responsibility for" (or "source of") has a descriptive (de facto) and a normative (de jure) interpretation. The descriptive question of who is de facto responsible for committing a burglary is distinct from the normative question of who should be held de jure responsible for the burglary. The imputation principle – that de jure responsibility should be assigned according to de facto responsibility – provides the link between the two questions.

In chapter 13 below, marginal productivity theory, Marxian value theory, and the labor theory of property are all developed in the same simple corn and labor model so that the theories can be precisely compared. The theories diverge on the factual question of "What does Labor produce?" – the marginal product of labor, the net product, or Labor's product. There is no explicit divergence on the normative question of whether Labor should get what Labor produces although economists, including Marx, consider it scientifically uncouth to explicitly advocate any normative principle. MP theorists, such as Milton Friedman, take it as fact that competitive capitalism imputes to each factor what it produces. But, unlike John Bates Clark, Friedman leaves the reader to supply the obvious normative evaluation.

The source version of LTV and LTP also have both a descriptive and a prescriptive side. The controversy lies largely on the descriptive side
although the normative parts are necessary to complete any critique of capitalist production. The descriptive side of MP theory resorts to metaphor (pathetic fallacy) to picture causality as responsibility - to picture each causally efficacious factor as being responsible for producing a share of the product.

Classical laborists, such as Thomas Hodgskin as well as Marx, criticized this personification of the factors (which antedated MP theory). They based the source-LTV and LTP on the unique attribute of labor that it is the only "creative" factor. That attribute of de facto responsibility is not a concept of the natural sciences. The de facto responsibility of labor - the fact that Labor is the source of the whole product - does not even show in the physics/engineering description of a production process (e.g., in a production function). But it is central to the descriptive side of the source-LTV.

The crucial descriptive aspect remains the capturing of the human dimension of production and distribution in the labour theory of value viewed as a category of descriptive statements, rather than the possibility of 'determining' or 'predicting' prices on the basis of values...

(Sen 1978, p. 183)

Economists who seem to take it as their professional mission to rationalize an economy that treats persons as things (by allowing them to be rented) may well tend to adopt the science of things (physics and engineering) as the scientific model for "Economics" (see Mirowski 1989). Attempts to use notions unique to the human sciences - such as the notions of "responsibility" or "intentionality" - to differentiate labor from the services of things are thus deemed inappropriate in the science of economics.

Marx did take labor as the unique source of the value added so Marx played both sides of the source/measure dichotomy. It was not simply that direct labor was a measure of the value of the surplus product but that direct labor was the source of the surplus product. Indeed, Marx's whole exploitation analysis only makes sense under the labor-as-source interpretation of the labor theory of value.

Thus we come to two quite different interpretations of Marx's labor theory of value and exploitation: the labor-as-measure and the labor-as-source interpretations. The measure-version (the "standard" interpretation) leads to the modern input-output treatment of LTV. As a descriptive theory, it applies only to a benchmark regime that is time-saturated so that time may be ignored. As a normative theory, it is a just-price theory, an Aristotle-Aquinas interest grumble, that considers just prices or "values" to be the prices in the time-saturated benchmark regime and defines "exploitation" accordingly (so there is exploitation if and only if the interest rate is positive).
The source interpretation leads to the labor theory of property. The point was not that labor created the value of the product, but that Labor created the product itself. "And it is this fairly obvious truth which, I contend, lies at the heart of the Marxist charge of exploitation. The real basis of that charge is not that workers produce value, but that they produce what has it" (Cohen 1981, p. 219). In the assertion that "labor created the value of the product," the phrase "the value of" can be deleted and thrown into the dustbin of intellectual history – and then the source-LTV quickly arrives at the labor theory of property.

The descriptive assertion of the source-LTV as the labor theory of property is that Labor (the workers in the enterprise) create the whole product \((Q, -K, -L)\) as well as the labor services \((0, 0, L)\) which sum to Labor’s product \((Q, -K, 0)\). However, Labor receives legal rights only to the labor services which are sold in the labor contract while the employer appropriates the whole product. The normative side of the theory states that Labor should appropriate what Labor produces, namely the whole product plus the labor which sum to Labor’s product.

Some economists have been quite explicit about the (non-orthodox) property-theoretic interpretation of Marx’s value theory. Thorstein Veblen was never a slave to the standard or orthodox interpretation of any theory. Veblen saw natural rights arguments standing behind the general thrust of Marx’s theory.

By his later training he is an expert in the system of Natural Rights and Natural Liberty, ingrained in his ideals of life and held inviolate throughout.
He does not take a critical attitude toward the underlying principles of Natural Rights. Even his Hegelian preconceptions of development never carry him the length of questioning the fundamental principles of that system. He is only more ruthlessly consistent in working out their content than his natural-rights antagonists in the liberal-classical school.

(Veblen 1952, p. 315)

Veblen sees the claim of Labor's right to the whole product implicit in Marx and traces it to the classical laborists or Ricardian socialists.

Chief among these doctrines, in the apprehension of his critics, is the theory of value, with its corollaries: (a) the doctrines of the exploitation of labor by capital; and (b) the laborer's claim to the whole product of his labor. Avowedly, Marx traces his doctrine of labor value to Ricardo, and through him to the classical economists. The laborer's claim to the whole product of labor, which is pretty constantly implied, though not frequently avowed by Marx, he has in all probability taken from English writers of the early nineteenth century, more particularly from William Thompson.

(Veblen 1952, p. 316)

Recent scholarship would, however, emphasize the influence on Marx of Hodgskin and Bray more than Thompson (see King 1983 and Henderson 1985).

Gunnar Myrdal finds a similar reason behind even Ricardo's use of labor as the basis for his value theory in spite of criticism from Malthus, Say, and Bentham.

The solution of this puzzle may be found in the natural law notion that property has its natural justification in the labour bestowed on an object.

(Myrdal 1969, p. 70)

But the implications of the labor theory inevitably conflict with classical liberalism which fully accepted wage labor.

The most fatal internal criticism of their laissez-faire doctrine is therefore that it contradicts its basic belief that labour is the source of value and property.

(Myrdal 1969, p. 71)

The foundation of the theory is the uniqueness of labor; of all the causally efficacious factors, labor is the only responsible agent.

Man alone is alive, nature is dead; human work alone creates values, nature is passive. Man alone is cause, as Rodbertus said later, whilst external nature is only a set of conditions. Human work is the only active cause which is capable of creating value. This is also the origin of the concept 'productive factor'. It is not surprising that the classics recognized only one productive factor, viz., labour. The same metaphysical analogies that were used to establish natural rights were also used to expound the idea of natural or real value. It is an example of the previously mentioned attempt of the
philosophy of natural law to derive both rights and value from the same ultimate principles.

(Myrdal 1969, p. 72)

Thus the Janus-headed “labor theory” has long served as both a property theory and a value theory – even though orthodox economists only want to see it as a (fallacious) price theory in Marx.

They tend to focus attention on the theory of exchange value [and] neglect its foundations ... Marx was right in saying that his surplus value theory follows from the classical theory of real value, admittedly with additions from other sources. Moreover, Marx was not the first to draw radical conclusions from it. All pre-Marxist British socialist derived their arguments from Adam Smith and later from Ricardo.

(Myrdal 1969, p. 78)

It is time to step back for a moment and consider Marx’s value theory in a larger context.

The ‘naturalness’ of labour as the moral title to what is created by that labour has been a commonplace of political and economic radicalism for three hundred years; and political and economic conservatism has had a continuous struggle to defuse the revolutionary implications of it.

(Ryan 1984b, p. 1)

In the forefront of “political and economic radicalism” has been Marxism and the Marxian labor theory of value and exploitation.

The central point of the labour theory as a theory of exploitation is that labour is the only human contribution to economic activity, and the exercise of labour power should be the only way in which a claim to the net product of a nonexploitative economic system is acquired.

(Nuti 1977, p. 96)

Attempts by Marxists to claim that “None of this, by the way, implies that Marx intended the labor theory of value as a theory of property rights, à la Locke or even Proudhon” (Shaikh 1977, p. 121) are more examples of the “tunnel vision” and dogmatic literalism that has long plagued Marxism.

Our purpose was not to shed any startling new light on the hidden inner meaning of Marx’s doctrines. We sought only to read the labor theory of property in the entrails of Marx’s labor theory of value. In any case, “Marxist scholars have interpreted his doctrines in this way and that. The point however is to change them.” (Nove 1983, p. 60).

MILL ON PROPERTY

John Stuart Mill “thought the tendency towards political and economic democracy was irresistible” (Ryan 1984, p. 151); the vector of history pointed towards democratic worker ownership.
The form of association . . . which if mankind continue to improve, must be expected in the end to predominate, is not that which can exist between a capitalist as chief, and workpeople without a voice in the management, but the association of the labourers themselves on terms of equality, collectively owning the capital with which they carry on their operations, and working under managers elected and removable by themselves.

(Mill 1970, p. 133)

Mill did not use a rights-based argument. He supported economic democracy as a means towards the self-development, autonomy, and self-control of working people. While he did not derive his support for worker ownership from the labor theory of property, he did use a version of the theory.

The institution of property, when limited to its essential elements, consists in the recognition, in each person, of a right to the exclusive disposal of what he or she have produced by their own exertions, or received either by gift or by fair agreement, without force or fraud, from those who produced it. The foundation of the whole is, the right of producers to what they themselves have produced.

(Mill 1970, p. 368)

Mill recognizes that this may seem to conflict with capitalist appropriation—which he describes in remarkably candid terms.

It may be objected, therefore, to the institution as it now exists, that it recognizes rights of property in individuals over things which they have not produced. For example (it may be said) the operatives in a manufactory create, by their labour and skill, the whole produce; yet, instead of its belonging to them, the law gives them only their stipulated hire, and transfers the produce to some one who has merely supplied the funds, without perhaps contributing anything to the work itself, even in the form of superintendence.

(p. 368)

Mill notes that labor requires materials and machinery, the "fruits of previous labor." Then follows a rather curious sentence. "If the labourers were possessed of them, they would not need to divide the produce with any one . . ." The workers are the subject of the sentence. They are appropriating the produce, and if they already owned the inputs, they would not need to divide the produce with anyone. The next step in the argument seems to be that if the workers did not already have all the inputs, then they would have to use some of the revenue from the produce to pay for the fruits of previous labor. That is, the workers would have to pay for the inputs they use up. Thus Mill would seem to be arguing not for capitalist production but for worker-managed firms (that pay their costs). But then the sentence continues:
... but while they have them not, an equivalent must be given to those who have, both for the antecedent labour, and for the abstinence by which the produce of that labour, instead of being expended on indulgences, has been reserved for this use.

(Mill 1970, p. 368)

The remarkable feature of Mill's argument is that he apparently takes it as allowing capitalist production. Yet, the argument only concludes that the producers should not treat the inputs as manna falling from heaven: the workers would have to pay their costs. Mill never gives an argument for capitalist appropriation which he had just described. The "institution as it now exists" is not one where workers appropriate the product they produce and pay for the costs they incur -- but one where the law "transfers the produce to some one who has merely supplied the funds" and gives to the workers "only their stipulated hire."
Misinterpretations of the labor theory of property

NEGLECTING THE NEGATIVE PRODUCT: THE FALLACY OF IMMACULATE APPROPRIATION

These sections gather together a potpourri of misinterpretations propagated by both critics and advocates of the labor theory of property. The modern treatment of LTP differs from the classical treatment in at least two respects:

- the explicit inclusion of the negative product in the whole product, and
- the identification of de facto responsibility as the relevant unique attribute of labor.

Many misinterpretations result from neglecting the negative product. Out of nothing, nothing comes. To appropriate the positive product, the same legal party must appropriate the corresponding negative product. Ignoring the negative product is the fallacy of immaculate appropriation.

The whole product concept can be applied at the most decentralized level at which a complete set of inputs and outputs can be identified—namely at the enterprise level. Enterprises can be vertically integrated (vector sum of whole products), but there is no property theoretical argument for the necessity of that integration.

State socialists advocate complete vertical integration at the level of the state. Their argument is roughly as follows.

Labor is inherently social. Workers in one enterprise use inputs and intermediate goods from a myriad of other factories so “worker ownership” does not make sense in a single enterprise. The workers of an enterprise are not “an island” that alone produce the product of the enterprise. Only ownership by the state in the name of the whole people takes into account the social nature of labor.
This argument ignores the enterprise's negative product. It caricatures the worker-owned enterprise as claiming the outputs without paying for the inputs, and thus the state is pictured as having to subsume and internalize all the enterprises to account for the inputs. However, the enterprise's appropriation of its negative product takes into account the social division of labor: the raw materials and semi-finished goods from the myriad of other firms are paid for to satisfy the input-liabilities.

Marx, for his own reasons, argued that Labor could not receive the whole product.

Marx did, after all, criticize and reject the so-called Ricardian Socialists who put forward in the 1830's and 1840's the doctrine of 'labor's right to the whole product of labour'. Besides, Marx knew perfectly well that workers cannot stake a claim to the whole product even under communism, much less under capitalism: even a communist society will have to reinvest some part of the total product to maintain the capital stock and will have to support the non-working part of the population out of the net product.

(Blaug 1985, pp. 237-8)

The liabilities for the capital stock used-up would be part of the liabilities which the workers would have to bear in addition to appropriating the positive product of an enterprise.

Samuelson criticizes LTP for imputing all the (positive) product to labor. He knows there are costs (liabilities) to be met.

For two centuries socialist critics of the present order have asserted that labor has the right to the full product of society. What price the efficiency of marginal-product distribution if it gives a sizable fraction of the total product to property owners? This, they assert, represents "exploitation" of labor.

(Samuelson 1976, pp. 544-5)

There is no need for these misunderstandings to persist for semantic reasons. The phrase "whole product" is used with two senses:

1 in the naive sense to mean all the produced outputs (the positive product), and
2 in the technical sense to mean all the produced outputs as well as the liabilities for the used-up inputs (i.e., the positive product plus the negative product).

"Whole product" = \[ Q = (Q, -K, -L) \] = all the produced outputs

\[ Q = (Q, -K, -L) \] = all the produced outputs plus all the input liabilities

Figure 5.1 Interpreting the "whole product"
Misinterpretations of the labor theory

Quite often confusion is caused by sliding between the two meanings. The Ricardian socialists hardly expected some other party to pay for all the input liabilities and then for Labor to get the "whole product" in the naive sense of only Q. Thus with just a bit of sympathetic interpretation, one can read the technical sense back into the Ricardian socialists' slogan of "Labour's Right to the Whole Product." Yet critics, ranging from Marx to Samuelson, choose to interpret the slogan only in the naive sense and then criticize its alleged naivété.

These criticisms of LTP also fail to appreciate that the input-liabilities are incommensurate with the produced outputs; the liabilities for the used-up inputs does not cancel some of the ownership of the positive product. If the workers in a labor-managed firm used up 18 gizmos to product 27 widgets, they would appropriate

\[ \text{Labor's product} = (27 \text{ widgets}, -18 \text{ gizmos}, 0) \]

Critics, like Samuelson, who apparently claim that Labor cannot appropriate the full 27 widgets because of the 18 gizmos are mistaken about the structure of property rights and obligations. One legal party can appropriate both the full 27 widgets as assets and the liabilities for the 18 used-up gizmos. One cannot cancel the gizmos against part of the widgets.

Perhaps the critics only mean the banality that the legal party cannot have the value of all the 27 widgets as their net income. That is of course true, and it follows by pricing out the assets and liabilities appropriated by the party. The labor theory of property is not a theory about net income or about income at all; it is a theory about property rights and obligations. In terms of the price-quantity distinction in economics, LTP is a theory about the appropriation of (positive and negative) quantities, not a theory about prices.

"PRODUCING THE MARGINAL PRODUCT" WITHOUT INPUTS:
A NEOCLASSICAL MIRACLE

The ideological interpretation of marginal productivity (MP) theory can be viewed as a hypothetical horizontal separation of an enterprise into "marginal enterprises." If one more unit of labor is used, the marginal product of labor, \( MP_L \), is produced. This argument suffers from the usual flaw of the ideological interpretation of MP theory (i.e., metaphorical property rights and metaphorical responsibility), and, for those reasons, the argument is not an application of LTP. The marginal unit of a non-labor input \( K \) cannot be responsible for "its marginal product" since it is not a responsible agent at all. Instead the workers are responsible for using it up.
In addition, it is technologically absurd to consider the marginal enterprise as a separate enterprise since it pictures, for example, the marginal unit of labor as producing \( MP_L \) units of outputs without using any inputs, i.e., as if the whole product could be \((MP_L, 0, -1)\). That would again be "immaculate production," the neoclassical miracle. Instead of being produced by the marginal unit of labor in a separable subenterprise, the marginal product \( MP \), is the increase in the total output of the whole enterprise when an extra unit of labor is taken on. Moreover, the production process is assumed slightly shifted to a more labor intensive form so that more output can be produced with no extra input \( K \).

**THE EMPLOYMENT CONTRACT AS A "QUITCLAIM DEED"**

There is an old joke about the country farmer who comes to New York and "buys the Brooklyn Bridge" from a con-man. The joke is that the con-man couldn't sell it because he didn't own the Brooklyn Bridge in the first place. But the apocryphal story is not entirely implausible since there are two types of property deeds the farmer could have purchased. There is the *warranty deed* which warrants that the seller holds title and then passes that title to the buyer. There is also the *quitclaim deed* which simply transfers from the seller to the buyer any title which the seller might have had in the property without any warrant that the seller actually had title. The farmer could have purchased from the con-man a quitclaim deed to the Brooklyn Bridge which transferred whatever claim the con-man had to the farmer.

One of the crudest defenses of capitalist appropriation is just to "interpret" the employees as selling the produced outputs to the employer. That "interpretation" would not account for the employer's direct control rights over the employees' labor. And it mistakes the actual property rights. Since the employees in an employment firm do not bear the costs of production (i.e., do not legally appropriate the negative product), it would be another "immaculate appropriation" for them to appropriate the produced outputs and then sell them to the employer. If the employees do not own the outputs in the first place, then they could not sell them to the employer - at least not with a warranty deed.

The idea of a quitclaim deed is therefore used in a refined version to defend the employer's appropriation of the produced outputs in an employment firm. The idea is to "interpret" the employment contract as including a quitclaim deed on the product; the employees sell their labor to the employer along with any property rights they might have in the produced outputs. The employees are not robbed of the fruits of their labor; they voluntarily quit any claim on those fruits in the employment contract.
Responsibility is a double-edged sword. The employees are also de facto responsible for using up the inputs, but they bear none of the costs of those inputs, i.e., none of the legal responsibility for the negative product. Naturally, anybody would like the ability to voluntarily "quit" claims against them, but it is not the debtor who can "forgive" a debt. It is the owner of the used-up inputs who would have to quit any claim against the workers for using up the inputs. To be internally coherent, the quitclaim interpretation of the employment contract must involve a two-way quitting of claims. The employer quits any claim against the employees for the used-up inputs (including "their" labor), and the employees quit any claim on the outputs in favor of the employer. Does this quitclaim interpretation of the labor contract answer the critique of the contract?

This quitclaim interpretation of the employment contract does not add anything to the substance of the contract; it only makes explicit what was otherwise implicit in the contract. For centuries, employers have been legally appropriating the input liabilities and the output assets — without explicitly releasing the workers of charges against them for the inputs and without the workers explicitly quitting any ownership claim on the outputs. All that is part and parcel of selling labor in the employment contract.

When the owner of a van rents out the van, there is no necessity for the van-user to explicitly release the van-owner from the costs of the activities where the van is used or employed, and there is no necessity for the van-owner to explicitly quit any claim on fruits of the activity of the van-user. Such quitclaim clauses could be added to the rental contract, but it is already implied by the rental arrangement.

The employment contract can be viewed both as an instrument to transfer property rights in labor and as an instrument of governance (a limited Hobbesian contract in the workplace). In the latter role, the governing rights of the employer are sometimes explicitly spelled out in a "Management rights clause" specifying all the various management prerogatives. The "quitclaim clauses" considered above would be an analogous explication of the property rights consequences of the contract.

Does the quitclaim analysis offer a defense of the employment contract? Does it affect either the question of de facto responsibility or property rights? The inclusion of the "quitclaim clauses" in the employment contract does not suddenly make de facto responsibility transferable — as witnessed by the criminous employee who certainly desires to quit any claim on the fruits of his labor. The inalienability of de facto responsibility is hardly affected by new quitclaim language in the contract.

Perhaps the quitclaim interpretation is supposed to apply to property rights. The charge against capitalist appropriation is not that the workers give up their property in the outputs without a proper transfer deed (such as a quitclaim deed). The charge is that the workers never have — in the
first place—the property rights in the produced outputs or the liabilities for the used-up inputs. The quitclaim clauses do nothing to address that charge.

But can’t the workers sell their product \( Q \) in exchange for (say) the money \( wL \) and the non-labor inputs \( K \)? They certainly may, but that would be an example of labor-managed production. The workers would then legally appropriate the liabilities for the inputs and thus they would legally appropriate the product \( Q \) which could be sold (with a warranty deed). That is not the scenario envisioned by the quitclaim defense of the employment contract. Indeed, that isn’t an employment contract at all but a contract wherein the workers purchase the inputs and sell the outputs (perhaps in a package deal).

In the quitclaim interpretation, the employees do not sell the outputs \( Q \) after initially claiming them, they give up any initial claim on the outputs in the first place. Similarly, the employer does not sell the inputs \( K \) to the employees but releases the employees from any claim against them for the used-up inputs.

If the quitclaim interpretation does not change the facts about de facto responsibility and does not effect legal transfers of the inputs \( K \) or outputs \( Q \), then what is its appeal? The root of the appeal is voluntariness. The workers are not robbed of the outputs because they voluntarily give up any claim on the outputs, and the employer is not robbed of the inputs because the employer voluntarily releases the employees from any claim against them for the inputs they used up.

But now we have come full circle. Involuntariness was not the charge against the employment contract made by the labor theory of property, democratic theory, or inalienable rights theory. Thus the rebuttal that the workers voluntarily quit these claims and so forth, is not to the point. Voluntariness does not make de facto responsibility (or de facto decision-making) alienable.

ENTERPRISE APPROPRIATION: NOT INDIVIDUAL APPROPRIATION

Another misunderstanding of LTP is the assumption that all appropriation is individual. It is true that many of the Lockean stories are told in terms of a single worker appropriating the fruits of his or her labor. But non-mythical production is typically joint. Production is usually a multi-person undertaking so appropriation should be by Labor, the legal party consisting of all the people working in the enterprise, not by individuals. There would rarely be enough separability in the production process so that individual whole products could be identified. The distribution of the net value produced between the members in a worker-managed firm is determined by their collective decision. No guidance is provided by LTP since it addresses
the question of who is to be the firm, not the question of income distribution between the members of the firm.

One tactic used by LTP critics is to simply assume that the labor theory requires individually discernable products, and then to take the difficulties in that assumption as a difficulty in the theory.

That every one is entitled to the full produce of his labour is assumed as self-evident both by socialists and by conservatives who believe that capital is the result of the savings of labour. However, as economic goods are never the result of any one man's unaided labour, our maxim is altogether inapplicable.

(Cohen 1978, p. 163)

Yet there seems to be no proponent of LTP who thinks appropriation must be individual so the argument is only with a strawman.

LAND AND THE LABOR THEORY OF PROPERTY

The application of the labor theory of property to "land" (economists' term for all non-produced inputs such as natural resources) has been a fertile source of confusions. The application is a negative one.

The essential principle of property being to assure to all persons what they have produced by their labour and accumulated by their abstinence, this principle cannot apply to what is not the produce of labour, the raw material of the earth.

(Mill 1970, p. 380)

No man made the land. It is the original inheritance of the whole species. Its appropriation is wholly a question of general expediency.

(Mill 1970, p. 384)

Any legal claim to land is solely the creature of positive law without any natural foundation in labor.

This "no natural claim" implication of the labor theory of property is commonly confused with the "no value" assertion of the labor theory of value. Land in a pristine state untouched by the hand of labor can, of course, have value. That land (and time) have "no value" has always been one of the most implausible assertions of the theory of labor as a measure of value.

Even though land is not the fruits of anyone's labor, the using up of the services of land and of natural resources is part of the negative fruits of the labor of those who farm or mine the land. Thus LTP implies that they should hold the liabilities for using up the land services or resources. But the labor theory does not determine to whom the liabilities should be owned. In any actual property system, that would be determined by positive law.
"THE LAND TO THOSE WHO WORK IT"

The slogan "The land to those who work it" does not receive unqualified support from LTP. Farmworkers, like all workers, should be self-managed, e.g., in family farms or worker co-operatives, so they will own the positive fruits of their labor and be liable for the negative fruits of their labor. But this does not imply that they should own the land. The absence of any private labor-based claim on land throws the question of land tenure into the public domain. For instance, land users could pay rent to the government with long-term leases. Or there might be a social decision to have private ownership of land with property taxes to tax away the land value not created by the current or prior users (i.e., natural and community-added site value).

Orthodox economics illustrates its penchant to misinterpret labor-theoretic arguments in the treatment given to Henry George and the Single Tax Movement. According to the orthodox view, George's theory was built on the inelasticity of the supply of land. Natural land value should be taxed away because the land owners cannot "dodge" the tax by passing it on to anyone else. This view focuses on a technical detail and misses the real point of the argument. Land is in inelastic supply because "no man made the land"; it is given by Nature. Since no one has a labor claim on the natural value (or the community-added site value), George argued that it should be socially intercepted using a land tax system. The argument was based on the labor theory of property, not the inelasticity of land supply.

"THE FACTORIES TO THE WORKERS"

The slogan "The factories to the workers" also does not receive unqualified support from LTP. There seems to be no general reason to assume that the current workers in a factory are somehow responsible for the factory. It may have been paid for by profits that could have gone to past workers, but there may be little or no overlap between those past workers and the current workers.

There is a related misinterpretation used by some proponents of the labor theory of property as an argument for worker ownership (see Abrahamsson and Bronström 1980). Instead of analyzing the basic capitalist myth of "ownership of the firm," some critics of capitalism accept the myth but argue that the workers have created the firm and thus should own it. This argument has many flaws aside from its use of the firm ownership myth. What is the "firm" used in this argument? Corporations are indeed owned but they are only a means of legally packaging certain real
assets, and there is no reason to always assume that the current workers created those assets or the wealth that purchased those assets. Setting aside all the flaws in this pseudo-LTP argument, it is not an argument for a democratic firm. If the “firm” was awarded to the current workers as their property, then as the workforce turns over, the new workers would be the employees of the “firm” owned by the past workers.

The modern labor theory of property is stated in terms of the product of production (both positive and negative). It argues that labor should appropriate the whole product. In the employment system, the ownership of the product is not determined by the “ownership of the firm” but by who is the last owner of the inputs consumed in production. The basis for capitalist appropriation is not private ownership of the means of production; it is the employment contract which sets up the conventional corporation as the last owner of the labor.

The labor-theoretic critique of capitalist appropriation is thus logically completed by the critique of the employment contract based on the inalienability of labor. With the abolition of the employer-employee relationship and of the whole practice of voluntarily renting human beings, production would be refounded on labor – with labor always hiring capital and with workers appropriating the positive and negative fruits of their labor. That labor-theoretic argument for the democratic firm is thus quite different from the argument that the workers created “the firm” and thus should own it.

LTP GIVES NO CRITIQUE OF ALL PROPERTY INCOME

Property is rightfully owned if it is rightfully acquired ultimately from those who rightfully appropriated it (Nozick 1974). This property could include privately owned means of production such as machines or other capital goods, or it could be financial capital. Property rightfully owned may be rented out in return for rent or interest, or it may be sold. Thus property income may be generated in an economy using labor-based appropriation of property and voluntary transfers.

The “labor theory” is rather often clumsily applied as a critique of property income such as rent or interest. It is said that the property owner does not “earn” the rent or interest by his or her labor so that the income is illegitimate. This sort of muddled reasoning is not an application of LTP. The labor theory of property is a theory about appropriation, and a property owner renting out property is not involved in appropriation but exchange. The property owner is one of the parties to whom the whole product appropriator is liable for the used-up services of the property. Thus rent or interest received on rightfully acquired property does not
conflict with LTP (since no appropriation is involved in that transaction). Some people may have other objections, e.g., Aristotle–Aquinas interest grumbles, but that is unrelated to LTP.

When a worker deposits labor income in a savings account, he or she is exchanging it for a stream of interest payments and the future return of principal. The interest stream and future principal payback are the market equivalent to the present deposited income. There is no need to "earn" that income twice. The objection that the interest payments are unearned by labor is irrelevant; there is no need for them to be based on labor. The interest payments are not the outcome of appropriation but of intertemporal exchange: the present savings deposit in return for the future stream of interest and the principal payback.

But what about interest received on a bond issued by a slave plantation? Isn't that interest illegitimate? It is not the interest per se but the activity of the slave plantation that is illegitimate. The two should not be muddled together in an emotional appeal. The same is true when the enterprise is based on renting people instead of owning people. The problems involved in receiving interest from a capitalist enterprise lie solely in the enterprise itself, not in the interest.

What about dividends and capital gains from share ownership in a capitalist enterprise (or a slave plantation for that matter)? That depends on whether one interprets shareholders as members of the corporation (their formal legal role) or only as holders of glorified variable-income debt securities. With the wide dispersion of infinitesimal shareholders and the resulting separation of ownership and control, shareholders are more like holders of a special sort of debt instrument so dividends would be viewed like interest payments.

When shareholders are, however, viewed in their legal role as the members of the firm, then the activities (renting people in the capitalist firm or owning people in the slave plantation) are their activities. Then the income on the shares is not income from exchange but from appropriation — the appropriation of the positive and negative fruits of other people's labor.

This analysis is based on the distinction between appropriation and exchange. This distinction is not available to those who have accepted the basic capitalist myth of "ownership of the firm." Under that view, there is no appropriation; the rights to the produced output are considered part of the pre-existing property right, "the ownership of the firm." The product rights are considered part of the ownership of capital — as if capital could not be rented out instead of labor being hired in. Thus critics of capitalist production feel compelled to question property income obtained from the ownership of capital. The flaw in their reasoning goes back to accepting the myth that the product rights are part of capital. Once the myth is set
Misinterpretations of the labor theory

aside in favor of a clear understanding of the market mechanism of appropriation, then it is easily seen that no capitalist appropriation is involved in renting out capital in return for interest or rent. If the property claim to the capital is legitimate, there is no need to earn it twice by “earning” the interest or rent.

“PRODUCTIVITY OF CAPITAL OR LAND IS NOT PRODUCTIVITY OF THE OWNER”

The distinction between the productivity of capital and of the capital owner has become a commonplace in current left-wing criticism of capitalism.

In physical terms, the marginal product of the land is simply the amount by which production would decline if one acre were taken out of cultivation. It does not reflect any productive activity whatsoever on the part of the landowner. It does not, therefore, reflect her productive contribution.

(Schweickart 1980, p. 9)

It is one of the points emphasized by the Cambridge, England side in the Cambridge Controversy in Capital Theory of recent decades. The owner of capital rented to an enterprise does not “earn” the marginal product of his capital. This critique is one of the best examples of muddled thinking on the Left. Orthodox economists correctly sense that they have caught their ideological opponents in a snare and they readily agree to the distinction.

Note that the man who owns land does not have to be a particularly deserving citizen in order to receive this rent. A virtuous and poor landowner will be given exactly the same rent by competition as will a wealthy wastrel. It is the productivity of the acre of land that is being paid for, and not the personal merits of the landowner.

(Samuelson 1976, p. 562)

This is a snare for would-be critics both in what they have not challenged (the “productivity” of capital or land) and in what they have challenged (the legitimacy of property income). By not questioning the “productivity” of capital or land, the critics have at least implicitly accepted the animism involved in personifying capital or land as a responsible agent.

By questioning the property income of property owners, the left-wing critics have cast doubt on the whole system of private property. Thus capitalist appropriation, which is based on denying the natural labor basis for private property appropriation, is allowed to parade as a defender of the “natural system of private property.”

The antebellum defenders of American slavery defended it in the name of “private property.” The answer to slavery was not to accept the identification of slavery and private property and then to challenge private property. The answer was to abolish the institution of owning people and
to reconstitute the property system in a way that did not violate those basic human rights.

Today, our economic system of production is based on renting people—the employer-employee relationship. It is also defended in the name of "private property." Luckily for capitalist apologists, many critics of the system had accepted that identification and had called for the abolition of the private property system (except for personal consumer items). Instead of criticizing capitalist production as violating labor-based property appropriation as well as violating people's inalienable right to democracy in the workplace, Marxism allowed capitalism to be identified with both private property and democracy.

RESPONSIBILITY IS NOT "MARGINAL"

When a group of people act jointly, they are de facto responsible for the total difference they make. That difference may be more than the sum of the "marginal effects" of the individual participants. The excess of the whole over the sum of the parts is not a natural event; it is the result of their joint effort.

This can be illustrated with the case of the "marginal murderer." Two people co-operate together to murder a third person. Each empties his gun into the victim who expires. The actions of each by himself would have been sufficient to kill the victim. The marginal productivity of labor was zero. The two are caught and are charged with murder. The marginal murderer contends that the victim would still have been murdered even if he had done nothing so he cannot be guilty of murder. The other person notes that labor is homogeneous; he also is the marginal killer. Thus neither one is guilty of murder; the victim must have expired of natural causes.

The flaw in their reasoning is the assumption that their only responsibility is their marginal effect. Suppose an abundance of homogeneous workers produce a product so that the same product would be produced if one person withdrew. The marginal productivity of labor would be zero, but the product would not be the result of natural causes. The workers would jointly be responsible for the (whole) product.

DE FACTO RESPONSIBILITY IS NOT THE SAME AS ROLE RESPONSIBILITY

"Responsibility" is a notoriously slippery word. There is an abundance of different meanings and shades of meaning. H. L. A. Hart illustrates the point with some "stylistically horrible" prose.
As captain of the ship, X was responsible for the safety of his passengers and crew. But on his last voyage he got drunk every night and was responsible for the loss of the ship with all aboard. It was rumoured that he was insane, but the doctors considered that he was responsible for his actions. Throughout the voyage he behaved quite irresponsibly, and various incidents in his career showed that he was not a responsible person. He always maintained that the exceptional winter storms were responsible for the loss of the ship, but in the legal proceedings brought against him he was found criminally responsible for his negligent conduct, and in separate civil proceedings he was held legally responsible for the loss of life and property. He is still alive and he is morally responsible for the deaths of many women and children. (Hart 1968, p. 211)

In particular, Hart discusses “role-responsibility” (p. 12) which we must differentiate from the notion of de facto responsibility.

In an institution or organization, a person has a role, a job, or some set of specified tasks the individual is supposed to perform. That is the person’s role-responsibilities. The individual would be “deserving” of certain “merits” or “demerits” depending on whether the person fulfilled or fell short of fulfilling his or her “responsibilities.”

These institutionally-defined role responsibilities should not be confused with the notion of de facto responsibility as used in the juridical principle of imputation, i.e., in the labor theory of property. A group of people acting jointly are de facto responsible for the differences they deliberately make – in comparison with what would have occurred had they not acted. For the assignment of de facto responsibility for what they did, it does not matter if the joint action was the group’s “responsibility” or task in some institutional setting. It should also be noted that the question of de facto responsibility is backward-looking or retrospective. The question is “Who did it?” – not what was one supposed to do in an institutional role.

**LTP IS NOT A THEORY OF MERIT OR DESERT**

The labor theory of property is often thought to be a theory of merit or desert; actions deserve certain rewards or punishments. But the attempt to shoe-horn the labor theory into the mould of a merit theory leads to more confusion than clarity.

For instance, it would be confusing to depict LTP as holding that a person should be given the fruits of his labor as a “reward” for producing them. That smacks of a utilitarian explanation whereas LTP is a non-utilitarian deontological theory. The merit theory seems to envision some ethically authoritative measure of the “worth” or “value” of actions; the valuable actions are to be “rewarded” while the value-reducing actions are
Properly to be punished. That would require interpersonal comparisons of “value” or “utility.” Yet LTP provides no such comparisons and is not based on any such comparisons.

Welfare economics based on an imagined “social welfare function” (see Samuelson 1972b) or “social preference ordering” tries to extend the idea of a utility function or preference ordering from the individual to the group or society as if there were a group-mind or social-mind. Such a social-welfare function is clearly incompatible with the autonomy and dignity of individuals, i.e., with treating people as ends-in-themselves (see Nozick 1974 for an excellent contrast between rights theories and utilitarian theories where the latter might occur as an “end-result principle,” e.g., the “bliss point” of welfare economics, and see Hayek 1976).

This idea of LTP as a “merit theory” may arise from confusing de facto responsibility with a person’s role responsibilities in the setting of an institution or organization (see Hayek 1973 on organizations). An institution might have a reasonably well-defined objective function. Fulfilling one’s assigned role responsibility would favorably affect the objectives of the institution so role fulfillment would carry with it certain rewards or merits, while falling short would bring various demerits, penalties, or punishments.

LTP is not such a merit/demerit theory; it is not based on maximizing some value-measure of the consequences of actions. The rationale is not to “reward” people with the positive fruits of their labor or to “punish” them with the negative fruits of their labor. LTP is not a consequentialist theory in the sense that it does not try to justify giving people the fruits of their labor because of the desirable social consequences. As a deontological theory, LTP assets that people ought to legally appropriate the fruits of their labor because they are de facto responsible for those fruits, not because it may encourage or discourage certain socially approved or disapproved actions.

LTP also provides no measure of the “value” of the positive or negative fruits of one’s labor. If one is de facto responsible for producing a widget or for using up or destroying a widget, the theory only implies that one should legally appropriate the produced widget or be legally liable for the used-up widget. It does not determine what those assets or liabilities are “worth.”

CONFUSING INSTITUTIONAL AND NON-INSTITUTIONAL REALITIES

The analysis of institutions requires the prior conceptual differentiation between institutional and non-institutional realities. In economics, an efficient allocation of resources (Pareto optimality) is specified in non-institutional terms so that various institutional outcomes (equilibrium in a
competitive price system) can then be evaluated. Earlier philosophers used the artifice of the "state of nature" not to invoke a return to primativism but to consider a state of affairs independently of institutional specifications. For example, the critical analysis of slavery presupposed the understanding that a slave could be a de facto person (e.g., in a "state of nature") while being a de jure non-person within the institutional setting of slavery. By far the most common form of "happy consciousness" (the uncritical acceptance of the ambient institutions) is simply to accept the institutional realities as the basic underlying reality (e.g., to accept slaves as de facto "non-persons" since that is their legal role).

Property theory, like any other form of institutional analysis, requires a separation of the institutional and non-institutional realities. The "fruits of people's labor" is a non-institutional concept. A particular set of property institutions may or may not secure to people the fruits of their labor. The standard form of happy consciousness in our society is simply to legally interpret whatever accrues to an individual in a legal institutional role as being the de facto "fruits of his labor."

Whatever the employer legally appropriates (within the institutional context of the employment contract and laissez-faire appropriation) is the "fruits of his labor." By virtue of the employment contract operating within the market mechanism of appropriation, the shareholders — no matter how absentee — still legally appropriate the whole product of an enterprise. Therefore, by this view, the whole product is in fact "the fruits of the labor" of the absentee shareholders since they are the natural persons who are the members of a corporation. Also by virtue of the employment contract, the employees get their wages or salaries so those payments are viewed as "the fruits of their labor."

This view that whatever a person "gets" is the "fruits of their labor" illustrates above all else a reluctance to analyze the effects or institutions in contrast to the non-institutional social realities. This "legalistic" view takes the legal norms as the ultimate reality. Positive law defines morality. If the Law declares that a person is guilty of a crime then that is the end of the matter. There is no additional question of whether the person was in fact guilty.

Many of the arguments about the productive contribution of land-owners and capital-owners suffer from a lack of differentiating institutional and non-institutional realities. The question of a person's de facto responsibility for a certain product is a question about non-institutional realities. A person's managerial labor may be necessary for the success of a project and the person's signature (consent) may be necessary to rent the land or capital needed for the project. The two actions are quite different. The managerial work would survive in a non-institutional description of the project, while the necessity of a property owner's consent is only an
institutional requirement. Landlords and capital-owners are not factors of production.

Institutional analysis is not easy. Our purpose is only to call attention to the legalistic view that confounds the distinction between the legal institution and the underlying non-institutional reality. Some activities are so institutionally mediated, e.g., allocating financial capital, that it is very difficult to isolate and describe the underlying non-institutional activity being carried out. Our intent is not to supply some algorithm to decide all grey-area questions about differentiating institutions from underlying non-institutional realities. Nor is that always necessary. The legalistic view results less from any genuine analytical difficulty than from a desire to remove the ambient institutions from the arena of criticism. The best apology is not to defend an institution but to present it as part of the given unquestioned furniture of the universe. Whatever people get through an institution is what they "deserve" to get. Whatever is, is optimal. If the employment system is accepted as part of the taken-for-granted structure of social reality, then whatever the employer gets is the "fruits of his labor."
PART II

Contract
WHAT IS THE EMPLOYER-EMPLOYEE RELATIONSHIP?

Since we contend that the whole capitalism-socialism debate has been wrong-headed, it is incumbent on us to answer the questions:

1. what is the root problem in both capitalism and socialism, and
2. how would the third alternative variously called economic democracy, democratic worker ownership, or universal self-employment solve that problem?

The problem is the employer-employee relationship itself. Both capitalism and socialism (as public enterprise capitalism) have assumed that basic relationship and have debated whether workers should all be employed by the government for "the Public Good" or whether they could also be privately employed "for private greed." Since the employment relation is so pivotal for the negative appraisal of both capitalism and socialism, this chapter gives a preliminary analysis of the employment relation.

The basic normative distinction is between:

1. the democratic worker-owned firm (or self-employment firm) where labor hires capital and the workers are jointly working for themselves, and
2. the employment firm where capital hires labor using the employer-employee relationship and where the equity capital can be privately owned (including employee-owned) or publicly owned by the government.

The difference is the hiring relationship, capital hiring labor or labor hiring capital. Capitalism is capitalist not because it is private enterprise or free enterprise, but because capital hires labor rather than vice-versa. Thus the quintessential capitalist aspect of our economy is neither private property...
nor free markets but is that legal relationship wherein capital hires labor, namely the employer-employee relationship.

There is astonishing false consciousness concerning the employment relationship in our society. This can be illustrated by an experiment conducted with beginning economics students.

First the students are told about the system of chattel slavery where workers are bought and sold as movable property. But just as a house or a car can be bought and sold, so one can also rent a house or a car. Now instead of buying workers as in a slavery system, suppose we consider a system of renting workers. The students are asked if anyone knows an economic system based on the renting of workers. There is usually a puzzled silence. A black student points out that during slack times, plantation slaves were rented out to work as stevedores, as hands in factories (for example, turpentine or sugar mills), or as common laborers. The professor agrees that this happened but notes that it was the exception rather than the rule. We need an example of a whole economic system based on renting people. After another pause, some students offer, “Well, what about feudalism?” The professor responds that feudalism was a system of indirect ownership of workers. Instead of being owned as chattel or movable property, serfs had the security of being attached to the landed estate which was then owned as real property. Thus we still need an example of a system of renting people. After more embarrassed silence and shuffling feet, finally a student, by the process of elimination if by no other logic, offers the answer: “Well, isn’t that sort of like what we have now?”

Yes, the system of renting people is our system, the employer-employee system. Of course, we do not say people are rented; we say people are “hired.” The students would have had no difficulty thinking of an economic system where workers are hired. The difference a word makes! When applied to things rather than persons, the words “rent” and “hire” are synonyms. One could say either “rent a car” or “hire a car” with the only difference being that Americans favor “rent a car” while the British will tend to “hire a car.” But American and British usage agrees that when people are rented, one says “people are hired.”

From an abstract economic-legal viewpoint, the employer-employee relation is the rental relation applied to persons. What do you buy when you rent something? You buy its services, the right to employ or use the entity within certain limits for a given time period. In terms of the stock-flow distinction in economics, to rent the stock is to buy a flow of services from the stock. When one rents an apartment or a car, one buys not the apartment or car itself but some of its services. If one rents a car for three days, one buys three car-days. If one rents an apartment for six months, one buys the services, six apartment-months. Similarly when one rents a person for eight-hours, one buys the labor services of eight man-hours (or
person-hours), i.e., the right to employ or use the person within the limits of the contract for an eight-hour period. The labor market is the market for the renting of human beings.

Of all rental contracts, the employment contract has been the most modified and attenuated by social constraints. Labor legislation and the countervailing power of unions have both worked to mitigate the commodity nature of labor services and to insure that people are rented in a manner as “human” as possible. But all of these socially mitigating circumstances should not be taken as an excuse to obfuscate the basic fact that the employment contract to buy labor by the day, the week, or the year is the contract to hire or rent the person by the day, the week, or the year.

WAGES AS RENTALS

We say that employees are “rented” rather than “hired” to awaken people (like the Economics students) from the dogmatic slumber in which they do not realize they live in an economic system based on the renting of human beings. Often this statement is intentionally or unintentionally misinterpreted as being hyperbole. For instance, the statement might be “embraced” as follows:

Yes, employees are rented and, indeed, we all sell our souls in this system of wage slavery.

This misinterprets the rental assertion as an example of hyperbole like “selling our souls” or “wage slavery.” But by the standard economic notion of a rental contract, the rental assertion is only a statement of fact couched in jarring language so one might see an old reality from a different perspective.

When capital hires labor, the wage or salary payment is the rental payment. One can even say that wages are the rentals paid for the use of a man’s personal services for a day or a week or a year. This may seem a strange use of terms, but on second thought, one recognizes that every agreement to hire labor is really for some limited period of time. By outright purchase, you might avoid ever renting any kind of land. But in our society, labor is one of the few productive factors that cannot legally be bought outright. Labor can only be rented, and the wage rate is really a rental.

(Samuelson 1976, p. 569)

Much of the traditional criticism of the wage contract has centered on the size of the wage payments or human rentals. However, the amount of the wages will play no role whatsoever in our analysis. Indeed, one could imagine an equally dehumanizing relationship where the payment would
go from the employees to the employer. That is, apply the idea of the employment contract to consumption rather than production.

A "CONSUMPTION EMPLOYMENT RELATIONSHIP"

Workers take inputs and add value to produce the outputs. Consumers do the opposite: they take their consumer goods, consume them, and thereby produce scrap or used goods of lower market value. Ordinarily consumptive labor is self-managed: the consumers buy the inputs, make their own consumption decisions, and own the outputs (scrap or used goods).

Consumption could be organized using the employment relationship. Since consumptive labor reduces value, the consumers would have to pay someone to employ them to consume goods. Instead of buying a turkey, consuming it, and owning the scraps, a family unit would pay someone to employ them to consume a turkey. The family would not buy the turkey or own the scraps. The analysis and critique developed here of the employment relation in production can be applied, mutatus mutandis, to this hypothetical consumption employment relation. The essence of the analysis is the role of human beings in the relationship, not the money payments one way or the other.

HUMAN LEVERAGE

Some of the implications of the employment relation can be appreciated by considering the notion of capital "leverage." If the owner of $5,000 can hire or borrow $10,000 and put it all to work in an enterprise, the original $5,000 is called "equity capital" while the borrowed $10,000 is "debt capital" or "loan capital." The borrowing amplifies or magnifies the effects of the equity capital. With only $5,000 invested, $15,000 is put to work. The equity holder gets the profits and losses from three times the equity capital. Suppose the net income before 10% interest on the loan capital is $2,000. Subtracting the $1,000 interest (10% of $10,000) leaves a $1,000 profit on $5,000 equity for a 20% rate of return. If there was no leverage (i.e., all the $15,000 capital was equity capital), then the $2,000 return on the $15,000 capital would be only a 13.3% rate of return (rather than 20%).

<table>
<thead>
<tr>
<th>With leverage</th>
<th>Without leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income before interest</td>
<td>$2,000</td>
</tr>
<tr>
<td>Interest expenses</td>
<td>$1,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$1,000</td>
</tr>
<tr>
<td>Equity investment</td>
<td>$5,000</td>
</tr>
<tr>
<td>Rate of return</td>
<td>1000/5000 = 20%</td>
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</tbody>
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This amplification due to using hired capital is called "financial leverage" (or "gearing" in England). It should be noted that losses are also amplified by leverage. With less leverage, there are less interest expenses and the remaining losses are thinned out over more equity capital.

Who's in, and who's out? Loan capital, like equity capital, is being used in an enterprise, but the suppliers of the loan capital are outsiders to the enterprise. They are creditors of the enterprise, while the suppliers of equity capital are the "insiders" (from the legal or de jure viewpoint). The same considerations can be applied to any resources including "human resources" (to use a popular and telling expression from modern business jargon).

Since human beings may also be rented, there is the phenomenon of human leverage. The net results of many peoples' efforts can count as the results of one person's effort if the one hires the many. The employment relation allows one or a small number of people to "leverage" their enterprise by hiring tens, hundreds, or thousands of other people.

The results of human leverage show up in the income distribution. Some researchers found the income distribution of the highest one percent of the population distinctly shooting off with a different trend than the other 99 percent.

No one would dispute the fact that the wealthy differ from the lower 99 percent in the manner that they accumulate income. While most people are paid by the hour, or the number of widgets they produce, the wealthy frequently accumulate their extra wealth by some amplification process: that process varying from case to case ... Perhaps one of the most common lower-level modes of amplification is for an individual to organize an operation with others working for him so that his income is amplified through the efforts of others (a modest-sized business, for example).

(Montroll 1987, pp. 16-17)

Using income data for 1935-6, the average amplification factor was estimated at 16.8.

This number is not surprising since one of the most common modes of significant income amplification is to organize a modest-sized business with the order of 15-20 employees.

(Montroll 1987, p. 18)

In fact, the business is carried out by all the people working there, but in law it is the enterprise of only the employer. The employees have a legal role like that of an instrument, indeed that of a human lever, working as a means to leverage or amplify the ends of the employer. The employees are not part of the ends of the enterprise. The employer does not act as the representative of the whole group of people working in the firm. The employer acts only in his own name, and the employees are "employed" to that end.
The possibility of human leverage also supplies the simplest and most direct explanation for the prevalence of employment firms in a free enterprise economy which allows the employment relation and where there is a sufficient supply of labor willing to accept the employee's role. The choice of firm structure is exercised by the entrepreneur or entrepreneurial group who organizes the firm. Since (by hypothesis) the firm is expected to be profitable, it is in the self-interest of the organizers to leverage the other people involved in the firm by employing them.

**THE COMPARISON WITH SLAVERY: VOLUNTARINESS**

It is crucial to understand the similarities and differences between the employment system and slavery. When the details are stripped away, there are two important differences (in spite of the rhetoric about "wage slavery"): the voluntariness and the duration of the relationship. In the conventional understanding, slavery was involuntary and the employment relation is voluntary. We accept this standard understanding of the historical facts. However, it is important to see how both assertions have been challenged in various ways. On the one hand, there is a whole school of liberal thinkers who argued that slavery was or could be considered as deriving from voluntary contractual arrangements (e.g., Philmore 1982). On the other hand, there is an old tradition prominently including Karl Marx which argued that the worker's "choice" to sell his or her labor was a Hobson's choice, and that the employment contract was "socially involuntary." But the claim that slavery was voluntary as a matter of historical fact is absurd. And the argument that employment is "socially involuntary" is a rather weak special plea. The labor contract would satisfy any workable juridical notion of voluntariness. The worker, particularly the unionized worker, has considerably more bargaining power than, say, the unorganized consumer who must take price as given.

The involuntariness argument is also not necessary for a critique of the employment contract because voluntariness is a necessary but not a sufficient condition for the juridical validity of a contract. Indeed, if slavery was wrong because it was involuntary, then what about a system of voluntary contractual slavery? In the years prior to the Civil War, there was explicit legislation in six states "to permit a free Negro to become a slave voluntarily" (Gray 1958, p. 527; quoted in Philmore 1982, p. 47). But when slavery was abolished, both involuntary and voluntary slavery was prohibited. The contract to voluntarily sell oneself is no longer considered a juridically valid contract.

We shall argue that the contract to voluntarily rent oneself out, i.e., the employment contract, should also be considered a juridically invalid
contract. The immediate retort is that the abolition of renting people would violate the "freedom of contract." When one thus hears the rhetoric of liberal capitalism, it is important to remember the invalidity of the self-sale contract.

For example, there is Sir Henry Maine's high-minded dictum that the movement of progressive societies has hitherto been a movement from Status to Contract (1861, repr. 1972, p. 100). Yet the abolition of the self-sale contract means precisely that one's social position as a free person unowned by another person is a matter of status and is not a question of contract. Do free marketeers consider the invalidation of the self-enslavement contract as being retrogressive rather than progressive because it moved personal freedom from the realm of Contract to the realm of Status?

Or consider the oft-heard rhetoric about "free enterprise." Several centuries ago, enterprise was based on the freedom to own other human beings. And workers even enjoyed the freedom to sell themselves. Those freedoms have now been abolished. Enterprise isn't as free as it used to be. "Since slavery was abolished, human earning power is forbidden by law to be capitalized. A man is not even free to sell himself: he must rent himself at a wage" (Samuelson 1976, p. 52 (his italics)). This quotation from the predominant liberal capitalist economist of our time is important for several reasons. Samuelson acknowledges a major limitation on the "free enterprise" rhetoric, and he forthrightly recognizes that a person rents himself out in the employment relation. Testimony against one's own interest is particularly valuable. Samuelson is not attacking the employment relation in favor of democratic worker ownership. He is simply giving a no-nonsense description of the employer-employee relation without the usual linguistic sugar-coating involved in saying employees are "hired," "employed," "given a job," or "invited to join the firm."

Given the conventional enthusiasm for the freedom of enterprise to rent human beings, one might expect capitalist philosophers and economists to promote extending these freedoms by revalidating the self-sale contract. Robert Nozick of Harvard University, a leading moral philosopher, has argued on libertarian grounds to allow all "capitalist acts between consenting adults." This includes the contract of political subjugation, the Hobbesian pactum subjectionis, wherein people renounce their democratic rights and voluntarily become the subjects of a ruler or ruling association. A group of people might sell the right to self-government to a "dominant protective association" and an individual might do likewise.

The comparable question about an individual is whether a free system will allow him to sell himself into slavery. I believe that it would.

(Nozick 1974, p. 331)
Conventional economists constantly make social recommendations based on a utilitarian social philosophy that views all rights actually or potentially as marketable property rights (ignoring inalienable personal or human rights) and that views the efficiency gained from market exchange as the primary criterion of institutional choice. As Nobel laureate James Tobin has noted: "Any good second year graduate student in economics could write a short examination paper proving that voluntary transactions in votes would increase the welfare of the sellers as well as the buyers" (Tobin 1970, p. 269). Indeed, conventional economic philosophy implies:

1. that people should be allowed to sell their political votes,
2. that people should further be allowed to individually or collectively sell all their democratic rights in a pactum subjectiosis, and
3. that people should be allowed to sell all their labor in a voluntary self-enslavement contract.

All of these contracts could find willing buyers and sellers among fully informed adults so they should be permitted according to capitalist social philosophy. Yet there is enough social acceptance of the natural rights philosophy descending from the political democratic revolutions of the past that capitalist economists and philosophers usually refrain from actually making such recommendations. Robert Nozick is the exception either because he is more intellectually forthright or perhaps just more fashionably naughty.

**The Comparison with Slavery: Duration and Extent**

In addition to voluntariness, the employment relation is distinguished from the historical master-slave relation by the duration and extent of the relationship. The difference is essentially the difference between renting and buying. Buying a house gives one the right to the entire future stream of services provided by the house, while renting only procures the housing services for a discrete time period. The slave owner owned all of the slave's labor, while the employer only purchases certain labor services over a given time period.

This relation between owning and renting people has been understood at least since antiquity. In the third century, the Stoic philosopher, Chrysippus, held that "no man is a slave 'by nature' and that a slave should be treated as a 'laborer hired for life' ..." (Sabine 1958, p. 150). The comparison between slaves and "hirelings" was commonplace in the South during the antebellum debate over slavery.
Our property in man is a right and title to human labor. And where is it that this right and title does not exist on the part of those who have money to buy it? The only difference in any two cases is the tenure.

(Bryan 1858, p. 10; quoted in Philmore 1982, p. 43)

James Mill expounded on the distinction between buying and renting people from the employer’s viewpoint.

The only difference is, in the mode of purchasing. The owner of the slave purchases, at once, the whole of the labour, which the man can ever perform; he, who pays wages, purchases only so much of a man’s labour as he can perform in a day, or any other stipulated time.

(James Mill 1826, chapter 1, section 11)

If the employment contract is compared not to the historical master-slave relation but to a hypothetical self-sale contract, then the only basic difference is the duration and extent of the two voluntary contracts. Accordingly, a number of classical liberal writers condoned civilized versions of the self-sale contract prior to the actual abolition of all slavery. In John Locke’s influential *Two Treatises of Government* (1690), he would not condone a contract which gave the master the power of life of death over the slave.

For a Man, not having the Power of his own Life, cannot, by Compact or his own Consent, enslave himself to any one, nor put himself under the Absolute, Arbitrary Power of another, to take away his Life, when he pleases.

(Second treatise, section 23)

But once the contract was put on a civilized footing, it would be a rather severe form of the master-servant relationship.

For, if once Compact enter between them, and make an agreement for a limited Power on the one side, and Obedience on the other, the State of War and Slavery ceases, as long as the Compact endures... I confess, we find among the Jews, as well as other Nations, that Men did sell themselves; but, ’tis plain, this was only to Drudgery, not to Slavery. For, it is evident, the Person sold was not under an Absolute, Arbitrary, Despotical Power.

(Second treatise, section 24)

With the exception of Nozick’s libertarian atavism, the self-sale contract has not been a topic of active discussion since the abolition of slavery. Yet the self-sale contract as a sell-labor-by-the-lifetime employment contract has had a curious secret life in economic theory. A capitalist market economy cannot be fully efficient if there are restrictions on trade for any commodities with willing buyers and sellers. By removing the restrictions, trade will make the buyers and sellers better off and efficiency will be improved. There is one basic theorem which is so important in capitalist economics that it is called the “Fundamental Theorem of Welfare
Economics," namely the theorem that a competitive equilibrium in a capitalist economy is allocatively efficient.

If the sale of future-dated labor services was forbidden, the Fundamental Theorem would not hold. A buyer and seller might each be made better off if labor were sold over arbitrary time periods, e.g., by the lifetime. In theoretical models of competitive capitalism, complete future markets are assumed to exist for all commodities including labor. A consumer/worker "is to choose (and carry out) a consumption plan made now for the whole future, i.e., a specification of the quantities of all his inputs and all his outputs." (Debreu 1959, p. 50). In such Arrow-Debreu models (Arrow and Debreu 1954), a consumer/worker is viewed as making a lifetime of labor contracts all at that initial time (not necessarily all with the same employer). Restrictions on the sale of future-dated labor services would be market imperfections precluding the allocative efficiency of competitive equilibrium.

The fundamental efficiency theorem of capitalist economic theory must assume that the self-sale or lifetime labor contract is legally valid, even though the contract is now legally invalid. It is not surprising that capitalist economists absolutely loathe to admit this. One exception is the economist and econometrician Carl Christ who made the point in no less a forum than Congressional testimony.

Now it is time to state the conditions under which private property and free contract will lead to an optimal allocation of resources . . . The institution of private property and free contract as we know it is modified to permit individuals to sell or mortgage their persons in return for present and/or future benefits.

(Christ 1975, p. 334; quoted in Philmore 1982, p. 52)

The efficiency of perfect competition is surely the most thoroughly analyzed and discussed topic in mainstream economics. Yet in the textbooks or literature of the "science" of economics, the author has not been able to find a single other admission that capitalist efficiency requires that contract law be "modified to permit individuals to sell or mortgage their persons in return for present and/or future benefits." In a society allegedly free of thought control, one would expect to find at least one textbook that would mention such a point.

THE LANGUAGE OF THE EMPLOYER-EMPLOYEE RELATION

This preliminary analysis of the employment relation must include consideration of the language of employment because "words tell a story."
We previously noted that a good many people are not even aware that they live in a society based on the renting of human beings. But before we suggest that "The Big Lie" or ideological false consciousness may also exist on this side of the erstwhile Iron Curtain, we should check if people at least know the traditional legal name of the employment relation. Slaves knew they were slaves, but do employees know their legal name? "Employer-employee" is not the traditional name; it is newspeak which has only come into English usage within the last century. Society seems to have "covered up" in the popular consciousness the fact that the traditional name is "master and servant." Without special legal or historical education, one would think "servant" refers only to domestics. But domestic servants are only domestic servants, while all employees are servants in the technical legal sense of the word.

The master-servant language was used by the 18th century Blackstone, but in the nineteenth century it had acquired such negative connotations that it had passed out of common usage. For instance, John Stuart Mill has no standard name for employee/servants in his classic Principles of Political Economy (1848) since the old speak of "servants" was unacceptable but the newspeak of "employees" had not yet been imported from the French. Mill referred to employees as hired "operatives," "workpeople," "labourers," or even "the employed." Even around the turn of this century, the English version "employee" of the French "employé" was not fully accepted. In 1890, Webster's Unabridged Dictionary notes: "The English form of this word, viz., employee, though perfectly conformable to analogy, and therefore perfectly legitimate, is not sanctioned by the usage of good writers."

The traditional language of master and servant is still used today in the area of agency law, the law governing the relationships between principal and agent, and any involved third parties. The relevant distinction is between a servant (i.e., an employee) and an independent contractor. A lawyer or plumber in independent practice is an independent contractor while a lawyer or plumber on the staff of a corporation would be a servant or employee. The Chicago economist, Ronald Coase, quoted from a lawbook to describe the "legal relationship normally called that of 'master and servant' or 'employer and employee'" (Coase 1937, p. 403).

The master must have the right to control the servant's work, either personally or by another servant or agent. It is this right of control or interference, of being entitled to tell the servant when to work (within the hours of service) or when not to work, and what work to do and how to do it (within the terms of such service), which is the dominant characteristic in this relation and marks off the servant from an independent contractor or from one employed merely to give to his employer the fruits or results of his labor.

(Batt 1967, p. 8; quoted in Coase 1937, p. 403)
In addition to not being independent (e.g., not paying for one's inputs), the servant is marked off from the independent contractor by the employer's control over the execution of the work.

An agent could be either a servant or an independent contractor. In agency law, the distinction is quite important for the imputation of legal liability when a third party is injured within the scope of the agent's work. If the agent worked as a servant rather than as an independent contractor, the injured party can also sue the master or employer who would have a "deeper pocket" than the employee. The legal responsibility of the employer is called "strict liability" or "vicarious liability" since the injury to the third party was not actually the fruits of the employer's labor.

Modern labor legislation uses the newspeak of "employer-employee." The continuing use of the traditional "master-servant" language in agency law is not without controversy. Some writers consider the "master-servant" language to be so archaic that it can be used as technical terminology without any undue negative connotations. Other writers disagree.

Another interesting variation in the literature of vicarious liability relates to the language in which the subject is discussed. Justice Holt spoke of "masters" and "servants," which were current coin in 17th century speech. These terms are perpetuated today in many judicial decisions, and in the Restatement of Agency. Students should be familiar with them but should not, we think, acquire the habit of using them. Defenders of the Restatement contend that these words, precisely because they are archaic, are neutral tokens of communication. It is clear, however, that the terms are still alive enough to be offensive to laborers and labor representatives.

(Conrad, et al. 1972, p. 104)

For our purposes it suffices to highlight the social adjustment mechanism involved in the evolution from "master-servant" to "employer-employee." When the social role of being rented acquired excessive negative connotations, society changed the name rather than change the relationship itself. There are other examples of proposed or actual language changes to alleviate social stress. For instance, in the slavery debates before the Civil War, some planters were quite willing to admit that the "master-slave" language could be objectionable so they suggested some newspeak.

Slavery is the duty and obligation of the slave to labor for the mutual benefit of both master and slave, under a warrant to the slave of protection, and a comfortable subsistence, under all circumstances. The person of the slave is not property, no matter what the fictions of the law may say; but the right to his labor is property, and may be transferred like any other property, or as the right to the services of a minor or apprentice may be transferred ... Such is American slavery, or as Mr. Henry Hughes happily terms it, "Warranteeism."

(1860, p. vii)
The "warrantor-warrantee" newspeak for "master-slave" did not take hold since the relationship itself was soon abolished. The same social pressures are at work today. It "sounds bad" to say that people are rented – so one is supposed to say something else.

LABOR HISTORY: SERVUS, SERF, SERVANT

The etymology of the word "servant" is of interest. Western history has seen three general types of economic systems: slavery in ancient times, feudalism in the Middle Ages, and capitalism (private and public) in modern times. The worker's role in this evolution can be traced in the evolution of his name. The Latin word for slave "servus" evolved into the French "serf" (and Italian "servo") under feudalism, which in turn became "servant" under capitalism. If the three-word version of economics is "Supply and Demand," the three-word version of Labor history is "Servus, Serf, Servant."

During the Middle Ages in France and Italy, there were a few slaves, often of Eastern European origin, in addition to the multitude of serfs. The presence of the lowly slaves caused some linguistic dissonance since "serf," "servo" and sometimes even the original "servus" were used to refer to the serf who had a higher station. In this case, language readjusted by renaming the actual servi as "slaves."

By the end of the thirteenth century and perhaps in imitation of the Italians, they were called by a name that recalled the origin of many of them and that gradually slipped from its ethnic meaning to a purely juridical one: slaves, i.e., Slavs.

(Bloch 1975, p. 64)

The disturbing linguistic association of "serf" and "servus" also led to newspeak for "serf."

In order to prevent any misunderstanding and although everyday language, unafraid of confusion with Roman law, continued to use daily the word serf, many notaries henceforth carefully avoided servus, judged inconveniently equivocal, and replaced it in deeds by various synonyms, notably homme de corps.

(Bloch 1975, pp. 63–4)

In the course of its career, the word "servant" has denoted workers from the slave to the modern employee as if its own ontogeny had to recapitulate the servus-serf-servant phylogeny. Although servants are never called "slaves" (except as hyperbole), slaves were often called "servants" in premodern times. Even within recent decades, some dictionaries such as the 1959 Webster's New Collegiate lists "A slave" as a second definition of
"servant." At the same time, lawbooks use "servant" as the technical legal term for the modern employee. Thus the three-word version of labor history could be shortened to one word, "Servant."

**SUMMARY**

Most people who work, work as employees. Yet they do not know that employment is the rental relation applied to persons and they do not know the traditional name of the relationship. The system of social indoctrination has been so successful that the employer-employee relation is not even perceived as something that could be different. "To be employed" has become synonymous with "having a job," to be "unemployed" is to be without work so "employment" has become the same as work. The employment relationship is accepted as part of the furniture of the social universe. We have even described the opposite system without the employment relationship as "universal self-employment" (which is akin to describing the opposite of the slavery system as universal self-ownership).

How could this happen? Part of the answer must be Marxism. Capitalism has been able to define its distinguishing features by the contrast with Marxism. The debate with Marxism has been focused on so many sideline issues that it gives new meaning to the phrase "red herring." Since Marxist socialism models the economy as one big capitalist firm, the worker has the choice of being a cog on a private wheel or a cog on one big public wheel. It is as if slavery apologists had been able to successfully redefine the issue as the choice between public or private slave plantations. By diverting the debate, Marxism has been an absolute godsend to capitalist apologetics. If Marxism did not exist, capitalist ideology would have to invent it.

The capitalism-socialism debate has not only diverted attention away from the renting of human beings, it has allowed capitalism to be positively identified with democracy, equality, justice in property, and treating people as persons rather than things. Yet the employment relation inherently denies all these ideals in the workplace.

Slavery has been abolished both as an involuntary or as a voluntary relationship. But instead of creating a form of enterprise where people are treated as persons rather than things, we only have a system where workers are rented rather than owned. The transition from workers being an owned input to their being a hired input was certainly a moral improvement. But the capitalism-socialism debate has paid little attention to the alternative form of work where the human element is not "employed" at all by public or private employers—where people rent only things rather than the owners of things renting people.
Consider equality. There is a basic equality of rights in the political sphere. But prior to the democratic revolutions, there was a fundamental political inequality between ruler and the ruled where the ruler governed in his own name, and was not selected by and did not represent the ruled. Today in the economic sphere, that same type of authority relationship exists between the master and servant where the employer governs in his own name, and is not selected by and does not represent the employees.

Or consider democracy. The capitalist democracies stands for democracy, but not in the workplace (Dahl 1985). In the next chapter, we will review the non-democratic tradition of liberal thought which founded autocracy on a voluntary contract, the *pactum subjectionis*. With the triumph of the democratic revolutions inspired by the natural rights philosophy of the Enlightenment, that non-democratic liberalism retreated to the capitalist workplace where it has flourished ever since as part of capitalist ideology. The employment contract is the *pactum subjectionis* of the employment firm.

Or consider justice in the private property system. Under capitalism, doesn't everyone get what they produce, the fruits of their labor? We will see quite the opposite, that when labor is hired, the fruits of labor go elsewhere. Labor is the natural basis for the appropriation of newly produced property; the natural “wages” of labor are the fruits. Instead of somehow being the economic system realizing justice in private property, capitalism systematically violates the basic labor principle of private property appropriation. It is again the employment relation which sets up the misappropriation of private property.

In each case, we trace the root cause of the problem to be the renting of human beings, the employer-employee relationship. The alternative to the employment relation is not having everyone employed by the state. It is having everyone working for themselves (individually or jointly). This means restructuring companies so the membership rights are personal rights attached to the functional role of working in the firm. Then there is no human “employment” since working in the firm makes one a member - so people are always jointly working for themselves.
Non-democratic liberalism: the hidden intellectual history of capitalism

NON-DEMOCRATIC ALIENIST LIBERALISM

Liberalism's basic issue: contract or coercion?

It is a remarkable fact about our current intellectual milieu that capitalism is considered to be positively associated with democracy. One reason is the either/or mentality of the capitalism-socialism debate. Since capitalism and socialism are "the alternatives," and since socialism has been so undemocratic, capitalism must represent "democracy."

A deeper reason for the alleged association between capitalism and democracy lies in a basic tenet of classical liberal social philosophy, the tenet that a person's rights and duties in society should be based on voluntary arrangements, not on inherited status. Liberty is the cardinal virtue. Individuals should have the liberty to determine their role in society by means of voluntary contracts. Liberty entails the absence of coercion by other individuals, organizations, or the state, or coercion by a status role imposed from the past. We will use "liberal" in this classical sense which should be juxtaposed to "illiberal" rather than "conservative." Many political conservatives (e.g., Hayek or Friedman) are quite liberal in the classical sense (see Friedman 1962, p. 5, for a discussion of classical liberalism).

A classic statement of this basic liberal theme is Sir Henry Maine's assertion that "the movement of the progressive societies has hitherto been a movement from Status to Contract."

1861, repr. 1972, p. 100). Liberalism, as a social philosophy, has, above all else, emphasized the importance of voluntariness (informed consent free of individual or government coercion). In ancient and medieval societies, the cake of custom had crystallized into hereditary roles, master and slave, lord and serf. Liberal capitalist democracy depicts itself as the outcome of a progressive historical trend to loosen the chains of the past so that each person's role in the
political and economic system is based on explicit or implicit voluntary contractual arrangements.

This is the liberal vision in simple and stark terms. Democracy, or at least the liberal conception of democracy, and capitalism both fit into the vision. The liberal conception of democracy is government based on the consent of the governed, as expressed, for example, in an explicitly or implicitly agreed-upon political constitution. The democratic form of government is thus typically juxtaposed to the hereditary monarchies of the past or the imposed authoritarian regimes of the present. A similar stark juxtaposition is made in the economic sphere.

Fundamentally, there are only two ways of co-ordinating the economic activities of millions. One is central direction involving the use of coercion — the technique of the army and of the modern totalitarian state. The other is voluntary co-operation of individuals — the technique of the market place.

**Coercion or contract?** That is the basic choice according to liberal social thought. Capitalist production is pictured as the economic correlate of democratic government because it is also based on consent, on the web of market contracts between the employment firm and its suppliers and workers.

**Figure 7.1 The liberal vision of institutions**

**EMPLOYMENT: AN “INVOLUNTARY” RELATION?**

Much of the progressive and radical criticism of capitalism has accepted the liberal definition of the issues (“contract or coercion?”), but has
disagreed on the factual question of the voluntariness of the employment contract. This is the involuntariness critique of the employment relation.

The contracts available to an individual will depend, in large part, on the property and resources of that individual. While status in a strict sense is not inherited in liberal society, property is inherited. Moreover, a class-based system of education has made even the subtler intellectual abilities and "human capital" into resources which are inheritable or transmittable along class lines. Hence, it is argued, when one is born with little or no inherited capital (financial or otherwise) and with only one's labor to sell, then the "choice" to be a wage-worker is no choice at all. It is, for all practical purposes, an inherited status.

This involuntariness argument is superficial both in its content and in its presuppositions. It does not criticize the presupposition that the employment contract as a contract for the sale of labor as a commodity would be acceptable if only it were voluntary. If that presupposition were wrong - if the employment contract were invalid even as a voluntary contract - then the whole involuntariness critique would be as pointless and superficial as quibbles about the quality of consent in a self-enslavement contract.

The involuntariness critique is also superficial in its content. Of course, our choices are limited and structured by our social as well as biological inheritance, but our choices may still fall well within any workable juridical definition of voluntariness. As a market contract, the employment contract (particularly a collectively bargained labor contract) offers much more latitude than typical consumer contracts which are just take-it-or-leave-it contracts of adhesion. And the special plea that limited choices amount to "social coercion" is used in attempts to degrade the quality of individual decisions and to justify throwing open the floodgates for open-ended governmental action. If the factors limiting choice are themselves unfair or unjust, then those factors should be specifically addressed by the government or legal system. But that is quite different from the general argument that choices constrained by social circumstances are therefore "socially involuntary."

The involuntariness critique also seems to be used in bad faith by authoritarian socialists since the suggested alternative in fact involves more rather than less coercion. The predetermined or socially involuntary aspects of the employment contract are nowhere more evident than in the "company town" - where there is essentially only one employer (who may well be able to enlist police power). Yet the alternative of state socialism is widely perceived as reorganizing society into one big company town.

Thus the involuntariness critique of the employment contract has, for all but the most doctrinaire, led not to more government ownership but to legislation reducing the one-sidedness and increasing the "fairness" of the contract. Thus progressive liberals sponsor more labor legislation, anti-trust laws, industrial regulation, social welfare legislation, taxation of
inherited property, and improved public education. Such is the well-worn path of modern liberal thought in the capitalist democracies. Modern liberalism does not question the association of democracy and capitalism, and it does not question the basic juridical validity of the employment contract. It strives to increase the fairness and the voluntariness of the contract.

**THE BASIC ISSUE: ALIENABLE OR INALIENABLE HUMAN RIGHTS**

The liberal question of coercion or contract is superficially posed. Here again, Marxism has proved a godsend for liberal capitalism by allowing the debate to stay at the simplistic level of coercion or contract. But voluntariness is not the basic issue. Of course, voluntariness is a necessary condition for any acceptable political or economic system. But this has been accepted in sophisticated political debates within the liberal tradition from at least the late Middle Ages and Renaissance onwards. The proponents of democratic government and the contractarian defenders of traditional non-democratic forms of government both agreed on the criterion of voluntariness — on the foundation of government on the consent of the governed.

What is the basic issue? The real issue is not consent, but whether or not consent can alienate and transfer the right of self-government to some sovereign person or body such as a constitutional monarch, a body of oligarchs, or, in the parlance of modern libertarianism, a "dominant protective association" (Nozick 1974, p. 113). If the rights to self-government may be alienated, then a non-democratic government may be based on the consent of the governed. If, however, the rights to self-government are "unalienable," then "to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed." That is a democratic government where those who govern are the representatives or agents of the governed. Some political philosophers, such as Hobbes, based autocracy on a pactum subjectionis, a contract of subjection, while others saw the social contract as only delegating the right to govern to governors acting as the agents of the governed.

The issue was not coercion or contract. Contract was the common coin of the classical liberal tradition. The basic issue was and is the voluntary alienability versus the inalienability of the right to self-government and self-determination.

This dispute also reaches far back into the Middle Ages. It first took a strictly juristic form in the dispute ... as to the legal nature of the ancient "translatio imperii" from the Roman people to the Princeps. One school explained this as a definitive and irrevocable alienation of power, the other as a mere concession of its use and exercise ... On the one hand from the people's abdication the most absolute sovereignty of the prince might be
deduced... On the other hand the assumption of a mere 'concessio imperii' led to the doctrine of popular sovereignty.

(Gierke 1966, pp. 93–4)

Translatio or concessio; a social contract of submission or a democratic social contract? The same fundamental issue arises for individual rather than collective contracts: whether or not an individual may voluntarily alienate the natural right of self-determination as in a voluntary self-enslavement contract.

THE ALIENIST AND INALIENIST TRADITIONS OF LIBERALISM

"Two hearts beat in the breast" of liberalism. There are two fundamentally different schools of liberalism. Far from being "associated," capitalism resides in one school and democracy in the other. The difference comes in whether people's basic rights are alienable or inalienable so the schools or traditions will be called the alienist tradition and the inalienist tradition of liberal thought.

In the inalienist school, people's basic rights are usually called "natural rights" and they are viewed as personal rights which are inalienable in the sense that the rights may not be alienated even with full, free, and informed consent. A "contract" to alienate these rights would be null and void on natural law grounds - even though such "contracts" might be recognized as "valid" by some systems of positive law. Political democracy is part of the inalienist tradition since it is based on people being endowed "with certain unalienable rights." The inalienist tradition is the democratic tradition of liberal thought.

The alienist school might also use the language of "natural rights" or it might be couched in the terms of utilitarianism. People's basic rights might be viewed as natural rights or solely as utilitarian creations of positive law. The point is that the alienist school views the rights essentially as property rights which are alienable with full, free, and informed consent. Capitalism is part of the alienist tradition since it is based on the employment contract wherein people alienate the right of self-determination over their worktime (i.e., their "property" in their "labor services") to the employer. The alienist tradition is the non-democratic (but not necessarily anti-democratic) tradition of liberal thought.

Modern liberal thought in the capitalist democracies is a curious schizophrenic mixture of the democratic inalienist and the non-democratic alienist traditions. Declarations about the political sphere tend to be drawn from the democratic inalienist tradition while pronouncements about the economy are based on the non-democratic alienist tradition of liberal thought. There is little clear understanding of the two opposite traditions
- and thus political democracy and economic capitalism are thought to be associated together as the political and economic components of a liberal consent-based social order.

Instead of being "associated," political democracy and capitalism lie in the opposing traditions of liberal thought. Each one has its own "associated" form within its tradition. The economic correlate of political democracy (political self-determination) is economic democracy (economic self-employment) realized at the level of the firm as democratic worker ownership. The political correlate of capitalism is the system where the political right of self-determination may be alienated to a ruler or sovereign. The best-known example of such a collective contract is the Hobbesian pactum subjectionis which would establish a constitutional dictatorship. The individual version of that contract would be the self-enslavement or self-sale contract.

Both of the correlates – democratic worker ownership as the economic correlate of political democracy, and constitutional autocracy as the political correlate of capitalist production – are "blind spots" in conventional liberalism. For all that has been written about democracy within the field
of political science, there has been precious little written about applying democratic principles to the workplace (Dahl (1985) being a recent exception which "proves" the rule). Conventional thinkers have been somewhat reluctant to apply their philosophical principles to the political sphere (Nozick being a refreshing honest exception) or to admit to the whole alienist tradition which stands behind their thought. In the next section, we trace the intellectual history of the alienist liberal tradition, the hidden ancestry of capitalist ideology.

THE HIDDEN INTELLECTUAL HISTORY OF CAPITALISM

Introduction: voluntary slavery and voluntary autocracy

The purpose of this section is to put a spotlight on the non-democratic alienist tradition of liberal thought which forms the hidden ancestry of capitalist ideology. This tradition has two principal themes: (1) the founding of non-democratic government on a social contract of subjugation, a pactum subjectionis, and (2) the founding of slavery on a voluntary contractual basis.

Biblical antecedents of alienist themes

The Bible forms a convenient and customary starting point for the intellectual history of the alienist tradition. The Old Testament law was that, after six years of service, any Hebrew slave was to be set free in the seventh year, the year of the Jubilee.

But if he says to you, 'I will not go out from you,' because he loves you and your household, since he fares well with you, then you shall take an awl, and thrust it through his ear into the door, and he shall be your bondman for ever.

(Deut. 15: 16-17; also Exodus 21: 5-6)

Thus voluntary slavery was sanctioned in the Bible.

The Bible also contains the idea of a contract of rulership between a king and a people.

So all the elders of Israel came to the king at Hebron; and King David made a covenant with them at Hebron before the Lord, and they anointed David king over Israel.

(2 Samuel 5: 3)

Just before he died, King David said of his son, Solomon,

he shall come and sit upon my throne; for he shall be king in my stead; and I have appointed him to be ruler over Israel and over Judah.

(1 Kings 1: 35)
Thus the elective kingship became hereditary like property ("my throne") passing from father to son indicating the covenant was an alienation of authority rather than a delegation.

**ALIENIST ELEMENTS IN ROMAN LAW**

Ancient Rome developed detailed laws dealing with slavery. Roman law, as codified in the *Digest* and *Institutes* of Justinian, provided three legal means of becoming a slave:

Slaves either are born or become so. They are born so when their mother is a slave; they become so either by the law of nations, that is, by captivity, or by the civil law, as when a free person, above the age of twenty, suffers himself to be sold, that he may share the price given for him.

(*Institutes* lib. I, tit. III, 4)

In addition to outright contractual slavery, the other two means were also seen as having aspects of contract. A person born of a slave mother and raised using the master’s food, clothing, and shelter was considered as having agreed to a tacit contract to trade a lifetime of labor for these and future provisions. And Hobbes, for example, clearly saw a “covenant” in this ancient practice of enslaving prisoners of war.

And this dominion is then acquired to the victor when the vanquished, to avoid the present stroke of death, covenants either in express words or by other sufficient signs of the will that, so long as his life and the liberty of his body is allowed him, the victor shall have the use thereof at his pleasure . . .

It is not, therefore, the victory that gives the right of dominion over the vanquished but his own covenant.

(*Leviathan* II, chapter 20)

The point is not the factual absurdity of interpreting this as a covenant; the point is the attempt to ground slavery on the liberal basis of consent. An alienist liberal would disagree only on the factual question of what constitutes “consent.” Roman law thus contemplated three legal means of becoming a slave, and all were based on an implicit or explicit contract.

The sovereignty of the Roman emperor was usually seen as being founded on a contract of rulership enacted by the Roman people. The Roman jurist Ulpian gave the classic and oft-quoted statement of this view in the *Institutes* of Justinian (lib. I, tit. II, 6): “Whatever has pleased the prince has the force of law, since the Roman people by the *lex regia* enacted concerning his *imperium*, have yielded up to him all their power and authority.” (quoted in Corwin 1955, p. 4, or in Sabine 1958, p. 171). The American constitutional scholar, Edward S. Corwin, noted the questions which would arise in the Middle Ages about the nature of this pact.
During the Middle Ages the question was much debated whether the lex regia effected an absolute alienation (translatio) of the legislative power to the Emperor, or was a revocable delegation (cessio). The champions of popular sovereignty . . . took the latter view.

(Corwin 1955, p. 4)

It is precisely this question of translatio or concessio – alienation or delegation of the right of government – which separates the alienist and inalienist traditions of liberal thought.

**MEDIEVAL ALIENIST THEMES**

As the idea of grounding rulership on land ownership receded in the Middle Ages, the idea of a contract of rulership became widespread.

Then, when the question about Ownership had been severed from that about Rulership, we may see coming to the front always more plainly the supposition of the State's origin in a Contract of Subjection made between People and Ruler.

(Gierke 1958, p. 88)

The intent of this contractarian thought was at first not to attack undemocratic power but to found it on consent:

In contrast to theories which would insist more or less emphatically on the usurpatory and illegitimate origin of Temporal Lordship, there was developed a doctrine which taught that the State had a rightful beginning in a Contract of Subjection to which the People was party.

(Gierke 1958, pp. 38–9)

In terms of the liberal “coercion or contract” dichotomy, this alienist natural rights tradition was grounded foursquare on contract.

Indeed that the legal title to all Rulership lies in the voluntary and contractual submission of the Ruled could therefore be propounded as a philosophic axiom.

(Gierke 1958, pp. 39–40)

A state of government which had been settled for many years was ex post facto legitimated by the tacit consent of the people. In about 1310, according to Gierke, “Engelbert of Volkersdorf is the first to declare in a general way that all regna et principatus originated in a pactum subjectionis which satisfied a natural want and instinct.” (Gierke 1958, p. 146).

William of Ockham (1290–1349) is sometimes cited as the first to expound the idea of consent-based legitimacy in *The Dialogue* (1343).

Ockham cites as one provision of natural law . . . the requirement that rulers should be elected by consent – probably the first time in the history of
political thought that governmental legitimacy was defined as derived from consent based on natural law... Ockham adds that subjects can relinquish or transfer to others their right of election (he cites the case of the Holy Roman Empire)...

(Sigmund 1971, pp. 56-7)

Tuck (1979) has traced another root of alienist natural rights thought to a seemingly obscure medieval controversy about the meaning of apostolic poverty. Is a monk's right (ius) to use food, clothing, and shelter a property right (a dominium) even though a monk may not sell these commodities? The thinkers who foreshadowed the non-democratic liberal tradition argued that one's right or liberty to use commodities and, broadly, to act in the world, was indeed a property right (a dominium).

In 1402, the Parisian legal theorist, Jean Gerson, treated man's right to act in the world and, indeed, man's right to liberty as property. This led to the conclusion that liberty could also be traded away.

We can see from the history of this movement how the attack on apostolic poverty had led to a radical natural rights theory. If one had property in anything which one used, in any way, even if only for personal consumption and with no possibility of trade, then any intervention by an agent in the outside world was the exercise of a property right. Even one's own liberty, which was undoubtedly used to do things in the material world, counted as property - with the implication that it could, if the legal circumstances were right, be traded like any other property.

(Tuck 1979, p. 29)

A Dominican theologian, Silvestro Mazzolini da Prierio, argued in 1515 that a free man could sell himself into unconditional slavery (see Tuck 1979, p. 49). A Portuguese churchman, Luis de Molina, asserted in 1592 that:

Man is dominus not only of his external goods, but also of his own honour and fame; he is also dominus of his own liberty, and in the context of the natural law can alienate it and enslave himself... It follows... that if a man who is not subject to that law [i.e., Roman law] sells himself unconditionally in some place where the relevant laws allow him, then that sale is valid.

(Molina quoted in Tuck 1979, p. 54)

The influential Spanish scholastic philosopher and jurist, Francisco Suarez, reiterated the basic theme in the alienist concept of natural rights:

nature, although it has granted liberty and dominium over that liberty, has nevertheless not absolutely forbidden that it should be taken away. For... the very reason that man is dominus of his own liberty, it is possible for him to sell or alienate the same.

(quoted in Tuck 1979, p. 56)
Suarez developed the connection between voluntary slavery and the political pactum subjectionis which is a recurrent theme in the alienist natural rights tradition.

If voluntary slavery was possible for an individual, so it was for an entire people... A natural rights theory defense of slavery became in Suarez's hand a similar defense of absolutism: if natural men possess property rights over their liberty and the material world, then they may trade away that property for any return they themselves might think fit...

(Tuck 1979, pp. 56-7)

The feudal relations between lords and vassals or serfs were sometimes seen as contractual. The vassals held a higher station than the serfs.

Actually only gentlemen could be vassals to a lord. The relation was marked by elaborate ceremonies at its beginning (homage) and was always regarded as a mutual relation of give and take, indeed, as a contractual relation.

(Brinton 1950, pp. 211-12)

As an example of a feudal oath from around 920 A.D., a man might say to his lord: "I will be to you faithful and true... on condition that you keep me as I am willing to deserve, and all that fulfil that our agreement was, when I to you submitted and chose your will" (quoted in Barker 1962, p. ix). But scholars disagree about the contractual aspects of medieval serfdom.

While slavery is widely accepted as being an involuntarily achieved status (although there were cases of voluntary entry... in ancient and medieval Europe), other forms of what are sometimes called 'forced labor' are the result of voluntary agreement. Recently economic historians have reopened the discussion of whether European serfdom represented a voluntary exchange – protection for labor services – or whether it was a form of forced labor imposed from above.

(Engerman 1973, p. 44; quoted in Philmore 1982, p. 47)

**Seventeenth and eighteenth century alienist liberalism**

Hugo Grotius (1583–1645) was a pivotal figure in the development of natural rights political philosophy, but he also, in the alienist tradition, viewed man's natural right to liberty as a right which could be transferred with consent.

A man may by his own act make himself the slave of any one: as appears by the Hebrew and the Roman law. Why then may not a people do the same, so as to transfer the whole Right of governing it to one or more persons?

(Grotius 1901, repr. in Morris 1959, p. 89)
He cites some explicit examples.

For if the Campanians, formerly, when reduced by necessity surrendered themselves to the Roman people in the following terms: - 'Senators of Rome, we consign to your dominion the people of Campania, and the city of Capua, our lands, our temples, and all things both divine and human,' and if another people as Appian relates, offered to submit to the Romans, and were refused, what is there to prevent any nation from submitting in the same manner to one powerful sovereign?

(Grotius 1901, pp. 63-4)

Grotius was followed on the Continent by Samuel Puffendorf (1632-94), who, as Rousseau pointed out, continued the alienist tradition of treating liberty as a property right. "Puffendorf says that we may divest ourselves of our liberty in favour of other men, just as we transfer our property from one to another by contracts and agreements" (Rousseau 1973, part II second part).

Thomas Hobbes (1588-1679) made the best-known attempt to found an absolute monarchy or oligarchy on the consent of the governed. Without an overarching power to hold people in awe, life would be a constant war of all against all. To prevent this state of chaos and strife, men should join together and voluntarily transfer the right of self-government to a person or body of persons as an absolute sovereign. This *pactum subjectionis* would be a

*covenant of every man with every man, in such manner as if every man should say to every man, I authorize and give up my right of governing myself to this man, or to this assembly of men, on this condition, that you give up your right to him and authorize all his actions in like manner.*

(Hobbes 1958, p. 142)

In the previous chapter, we saw how one of the fathers of modern liberalism, John Locke, criticized only the self-enslavement contract that gave the power of life and death to the master. A self-sale contract with limited rights for the master was quite acceptable but he would call it "Drudgery" rather than slavery. Like Hobbes, Locke also construed the practice of enslaving the captives in a "Just War" as a *quid pro quo* exchange based on the on-going consent of the captive.

Indeed having, by his fault, forfeited his own Life, by some Act that deserves Death; he, to whom he has forfeited it, may (when he has him in his Power) delay to take it, and make use of him to his own Service, and he does him no injury by it. For, whenever he finds the hardship of his Slavery out-weigh the value of his Life, 'tis in his Power, by resisting the Will of his Master, to draw on himself the Death he desires.

(Second Treatise. §23)
Locke seems to have justified slavery in the American Colonies by interpreting the raids into Africa as just wars and the slaves as the "captives" (see Laslett 1960, §24nn., pp. 325-6).

William Blackstone's codification of common law in his Commentaries (1765) was quite important in the development of English and American jurisprudence. Like Locke, Blackstone rules out a slavery where "an absolute and unlimited power is given to the master over the life and fortune of the slave." Such a slave would be free "the instant he lands in England."

Yet, with regard to any right which the master may have lawfully acquired to the perpetual service of John or Thomas, this will remain exactly in the same state as before: for this is no more than the same state of subjection for life, which every apprentice submits to for the space of seven years, or sometimes for a longer term.

(Ehrlich 1959, p. 72)

**Nineteenth and twentieth century alienist liberalism**

Another interesting case study in liberal intellectual history is the treatment of the American proslavery writers. The proslavery position is presented as being based on illiberal racist or feudal paternalistic arguments. Considerable attention is lavished on illiberal writers such as George Fitzhugh (e.g., Genovese 1971; Wish 1960; Fitzhugh 1960), while liberal defenders of slavery are passed over in silence. For example, Rev. Samuel Seabury (1969, orig. 1861) gave a sophisticated liberal defense of ante-bellum slavery in the Grotius-Hobbes-Puffendorf-Locke tradition of alienist natural rights theory.

From all which it appears that, wherever slavery exists as a settled condition or institution of society, the bond which unites master and servant is of a moral nature: founded in *right*, not in *might*; ... Let the origin of the relation have been what it may, yet when once it can plead such prescription of time as to have received a fixed and determinate character, it must be assumed to be founded in the consent of the parties, and to be, to all intents and purposes, a compact or covenant, of the same kind with that which lies at the foundation of all human society.

(p. 144)

Seabury easily anticipated the retort to his classical tacit-contract argument.

"Contract!' methinks I hear them exclaim; "look at the poor fugitive from his master's service! He bound by contract! A good joke, truly." But ask these same men what binds them to society? Are they slaves to their rulers? O no! They are bound together by the COMPACT on which society is founded. Very good; but did you ever sign this compact? Did your fathers ever sign it? 'No; it is a tacit and implied contract.'

(Seabury 1969, p. 153)
This puts an alienist liberal in the sensitive position of disagreeing with Seabury only on factual grounds. Without a theory of inalienability, an alienist is reduced to arguing on empirical grounds that the implied social contract has "genuine tacit consent," but that the implied slavery contract does not. It is no surprise that most liberal thinkers have preferred to simply ignore these liberal contractual slavery arguments, and to present the issues in simplistic coercion-or-contract terms, involuntary slave labor or free hired labor.

With the success of the political democratic revolutions, this long and venerable non-democratic tradition of liberal thought did not die; it retreated to the private economic sector. There it has thrived ever since as liberal capitalist thought which condones the limited *pactum subjectionis* of the workplace, the employment contract.

The liberal tradition of allowing non-democratic forms of government based on the consent of the governed is brought up to date in the alienist libertarianism of Robert Nozick. The contract of subjection re-emerges from its economic habitat to enter the political sphere in Nozick's work since his ultra-capitalist approach to political theory is the marketplace writ large. Unlike Hobbes, Nozick does not espouse alienating the right of self-government to an absolute sovereign - but only that it should be permitted. Nozick's point is that the basic "framework should be fixed as voluntary" (Nozick 1974, p. 331). An individual should be free to sell himself into slavery or to forswear such contracts. People should be free to contract away the right of self-government to an authoritarian dominant protective association or to enter into democratic protective associations.

*The quandary of capitalist liberalism*

Capitalist liberalism is alienist so that it can vouchsafe the employment contract. But most capitalist liberals do not want to follow Nozick and the whole alienist liberal tradition (outlined above) by permitting a *pactum subjectionis* or a lifetime-labor contract. They want to put their economic foot in the non-democratic alienist camp but put their political foot in the democratic inalienist camp. The Friedmans and Hayeks want to push the free market rhetoric to the hilt when discussing markets for "labor services" and other commodities. But they quickly forget the rhetoric when discussing political democracy so they do not propose free markets in political votes or voluntary contracts of subjugation (individual or collective) - in spite of the obvious free market efficiency arguments for such innovations. That is the quandary of capitalist liberalism. How can this economic-political schizophrenia be made intellectually respectable?

The first strategy is always to ignore the problem. As long as Marxism
conveniently acts as the dancing-bear bogeyman, the debate can be kept at the fairly simplistic coercion-or-contract level (see Friedman 1962) without admitting to any internal contradictions in capitalist liberalism. After all, no one (Nozick?) really argues that contracts of subjugation or self-sale contracts should now be revalidated, so why try to develop arguments against those contracts?

The second strategy is to develop principled arguments against the contracts of subjugation and self-enslavement. The danger in this approach is that if the arguments (e.g., Hegel’s) are drawn from the inalienist natural rights tradition, they may also apply to the self-rental or employment contract. How can one argue that a contract to buy all of a person’s labor is an inherent violation of human rights, but that a contract to rent the person for a few years at a time is an ordinary free market contract? The upshot is that capitalist liberals have not used serious inalienable rights arguments. Instead they have employed an array of ad hoc arguments designed to rule out the subjugation and lifetime-labor contracts, but to permit the self-rental contract. And since hardly anyone really advocates revalidating the subjugation contracts, the ad hoc arguments don’t have to be very sophisticated. Most any trumped-up argument against voluntary slavery will win a quick nod of approval from capitalist liberals.

Only recently has attention turned to these liberal capitalist arguments against contracts of subjugation and self-enslavement – partly as a result of Nozick’s consistent alienist libertarianism. Philmore (1982) and Callahan (1985) have examined a wide range of alienist liberal arguments against these contracts, and they have adequately demonstrated the weaknesses of the arguments. Some of Philmore’s analysis will be outlined here.

John Locke only argued against an extreme form of the self-sale contract which gives the master the power of life and death over the slave (as in Rome). The argument was that a man did not have the right over his own life so he could not sell it to another. Once the master’s rights were limited, Locke renamed it “Drudgery” and condoned the contract.

Modern abolitionist thought dates from Montesquieu, but he gave a rather superficial treatment of the self-sale contract.

Neither is it true that a freeman can sell himself. Sale implies a price; now, when a person sells himself, his whole substance immediately devolves to his master; the master, therefore, in that case, gives nothing, and the slave receives nothing.


Antebellum liberals such as Reverend Samuel Seabury could easily answer the argument.

What is a competent consideration for the labor of the poor if it be not nurture in infancy, maintenance in health, support in sickness and old age,
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and a relief from the uncertainty and mental anxieties inseparable from the lot of those who are compelled to provide for themselves?

(1969, p. 150; quoted in Philmore 1982, p. 45)

A more recent argument against the lifetime-labor contract is based on the doctrine of specific performance in jurisprudence. Courts enforce material damages rather than specific performance (except in rare cases) when a contract has been broken. But this doesn't mean a lifetime-labor contract is "unenforceable." It means that if the "warrantee" wants to reneg on the contract, the legal authorities would only enforce repayment of an appropriate portion of the purchase price (just as the law enforces alimony payments).

Thus, if A has agreed to work for life for B in exchange for 10,000 grams of gold, he will have to return the proportionate amount of property if he terminates the arrangement and ceases to work.

(Rothbard 1962, p. 441; quoted in Philmore 1982, p. 50)

There is nothing inherently wrong with a lifetime contract as evidenced by the till-death-do-us-part marriage contract. The self-sale contract is even more "free market" than the marriage contract since the self-sale contract could be annulled at any time by the mutual consent of the parties.

Another argument is that the lifetime-labor contract should be voided on grounds of paternalism. The proslavery writers enjoyed themselves ridiculing the paternalistic argument against slavery. Why is it "paternalistic" to force the risk adverse owner of human capital to be a hireling selling its labor day by day, never knowing if its livelihood will be eliminated tomorrow, when it could have the security of lifetime employment under "warranteeism"?

Philmore concludes that liberal capitalism offers no serious arguments against the lifetime-labor contract or political contracts of subjugation. The reason is clear.

Contractual slavery and constitutional non-democratic government are, respectively, the individual and social extensions of the employer-employee contract. Any thorough and decisive critique of voluntary slavery or constitutional non-democratic government would carry over to the employment contract - which is the voluntary contractual basis for the free market free enterprise system.

(Philmore 1982, p. 55)

That is correct - perhaps ironically. We shall see that a decisive critique of the contracts of subjugation and self-enslavement is provided by the inalienable natural rights tradition which descends from the Enlightenment, and that the critique also applies to the employment contract.
Many political theorists have taken natural rights to be alienable. The last chapter sketched an intellectual history of the non-democratic alienist liberal tradition which emphasized the transferability of natural rights. That pervasive tradition has tried to reinterpret and appropriate the phrase “inalienable rights” to mean rights which cannot be taken without the consent of the owner. “If rights were viewed as property, then inalienability might mean only that a man must consent to what is done with them” (Lynd 1968, p. 45). Thus theorists professing “inalienable natural rights” could actually be laying the groundwork for slavery and autocracy.

And as Rousseau shrewdly observed, Puffendorf had argued that a man might alienate his liberty just as he transferred his property by contract; and Grotius had said that since individuals could alienate their liberty by becoming slaves, a whole people could do the same, and become the subjects of a king. Here, then, was the fatal flaw in the traditional theories of natural rights.

(Davis 1966, p. 413)

In our own time, Robert Nozick’s opening proclamation, “Individuals have rights, and there are things no person or group may do to them (without violating their rights) (Nozick 1974, p. ix) is often taken as a declaration of inalienable natural rights. But the significance is just the opposite as Nozick goes on to condone both voluntary slavery (p. 331) and voluntarily alienating the right of self-determination to a non-democratic “dominant protective association” (e.g. p. 15). Nozick has no notion of rights that are inalienable in spite of consent.

A right which requires consent to be alienated is not an “inalienable right”; it is a right as opposed to a privilege. Any legal capacity which could be taken away without the consent of the bearer would hardly qualify
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as a “right” at all; it would only be a privilege granted and removable by others. In what follows, “inalienable rights” will, unless otherwise indicated, always mean rights which may not be alienated even with the consent of the holder of the rights.

THE CASE OF THE CRIMINOUS SLAVE: AN EXAMPLE OF INALIENABLEITY

The theory of inalienability presented here will be illustrated with several intuitive examples of inalienability. Examples that illustrate a point in an intuitive and paradigmatic fashion are called “intuition pumps.” When analyzing the employment system, analogies with slavery can provide powerful intuition pumps. We have not been socialized into accepting slavery as part of the furniture of the social universe so we should be able to see it dispassionately and objectively.

A legal system of chattel slavery is but one example of a legal system of a system that legally treated persons as non-persons or things. The ethical condemnation of the system should be based not on utilitarian considerations about how well or poorly the slaves were treated but on that fundamental contradiction or mismatch between the slave’s legal role as a thing and the underlying fact of the slave’s personhood.

Did the legal system really believe that slaves were in fact not persons, or was it an official pretense or fiction? The fraudulent nature of the legal system was openly realized when the slaves committed criminal wrongs. For instance, an antebellum Alabama court asserted that slaves “are rational beings, they are capable of committing crimes; and in reference to acts which are crimes, are regarded as persons. Because they are slaves, they are . . . incapable of performing civil acts, and, in reference to all such, they are things, not persons.” (Catterall 1926, p. 247). The pretense of the slave’s thinghood was the basis for the economic system of slavery. But that pretense served no purpose when slaves stepped outside the appointed role and committed crimes.

The slave, who is but ‘a chattel’ on all other occasions, with not one solitary attribute of personality accorded to him, becomes ‘a person’ whenever he is to be punished!

(Goodell 1853, p. 309)

The “talking instrument” in work becomes the person in crime.

There are two contradictions here which should not be confused:

1 the formal “inconsistency” in a legal system that treats the same individual legally as a thing in normal work and legally as a person when committing a crime (in the diagram, the formal inconsistency is trying to fit the same peg in both a round hole and a square hole), and
the substantive contradiction in a legal system that accepts a de facto person as fulfilling the de jure role of a thing (in the diagram, the substantive contradiction of trying to fit the square peg in the round hole).

The merely formal inconsistency could be resolved by always legally treating a slave as a thing, e.g., by treating a criminous slave like an errant beast of burden that caused an injury.

The problem of the two contrasting legal roles for the self-same slave is different from the substantive inconsistency between the legal role of the non-criminous slave and the factual status of the slave as a person. The legal-role/legal-role contrast is highlighted not to register any moral complaint but to point out the system's self-incriminating testimony about the factual-status/legal-role mismatch for the non-criminous slave. In a court of law, testimony against one's own interests will tend to have the most credibility. In the case of the criminous slave, the legal system of slavery revealed the bankruptcy of its own juridical foundations; it acknowledged that the slave was in fact a responsible person in spite of the slave's usual legal role as a thing.

Sir Henry Maine asserts that "the movement of the progressive societies has hitherto been a movement from Status to Contract" (1861, repr. 1972, p. 100), so let us progress to the case where the slave's legal role resulted from a self-enslavement or self-sale contract. That would not change the essentials of the case. The voluntary contractual slave, like the involuntary slave, would still be legally treated as a person when charged with a crime, and would still embody the fundamental contradiction between the legal role of the non-criminous (contractual) slave and the slave's factual status as a person.
OUTLINE OF THE THEORY OF INALIENABLENESS

Here is the core of the theory of inalienability. A person cannot in fact by consent transform himself or herself into a thing, so any contract to that legal effect is juridically invalid – even though it might be “validated” by a system of positive law (e.g., the antebellum South). A right is inalienable (even with consent) if the contract to alienate the right is inherently invalid. The self-enslavement or self-sale contract is an old example of such a contract, while the self-rental or employment contract is a current example.

In general, any contract to take on the legal role of a thing or non-person is inherently invalid because a person cannot in fact voluntarily give up and alienate his or her factual status as a person. I can in fact give up and transfer my use of this pen (or computer) to another person, but I cannot do the same with my own human actions – not for a lifetime and not for eight hours a day. The “square peg” can consent to fit into the “round hole” but it nevertheless does not fit. Yet a legal system can “validate” a contract treating human activity as an alienable commodity, and the system can also pretend that obedient co-operating workers “fulfill” the contract – until the revealing moment of unlawful activity. That is, the legal system can pretend that the “square peg” fits into the “round hole.” This argument is called the de facto inalienability argument since it is based on the factual inalienability of essential human characteristics such as responsibility and decision-making.

THE CASE OF THE TORTIOUS SERVANT

When an employee or servant commits a tort out of negligence, the employer or master can be held liable. The controversy in the field of agency law surrounding this “vicarious liability” of the employer affords us another illuminating example of the peculiarities of the employer-employee relationship. Justice Oliver Wendell Holmes Jr. outlined the usual norm of imputing or assigning legal responsibility to the de facto responsible party – a norm which emerges as the labor theory of property when applied to property appropriation.

I assume that common-sense is opposed to making one man pay for another man’s wrong, unless he actually has brought the wrong to pass according to the ordinary canons of legal responsibility, – unless, that is to say, he has induced the immediate wrong-doer to do acts of which the wrong, or, at least, wrong, was the natural consequence under the circumstances known to the defendant.

(1952, p. 101)
But in the doctrine of respondeat superior, the master may be held liable for the negligence of a servant even if the wrongful act was not commanded by the master and the master exercised due caution in hiring and instructing the servant. The servant's act is manifestly not the master's act, so the master is not de facto responsible for the act. The assignment of legal responsibility to the master does not follow the usual canon of legal responsibility so it is called "vicarious liability" or "strict liability." The controversy over vicarious liability is not as live today as in the past due to workers' compensation insurance. But there are several points of interest both in what is said and in what is not said by the jurists commenting on vicarious liability.

We begin by reviewing the legal responsibility of the employer and the employee in normal lawful work. Employees bear no legal responsibility for the positive and negative results of their actions within the scope of their employment. The employer bears all the responsibility. Employees are "employed" as if they were instruments which serve as "perfect conductors" transmitting the responsibility back to the employer. When the employer is a corporation, the natural persons who legally fill the employer's role are the members or owners of the company, the shareholders. Absentee shareholders, particularly in a corporation with publicly traded shares, have only a notional connection with the productive process in the corporation. Yet the shareholders are the final residual claimants in the corporation; they have the ultimate legal responsibility for the positive and negative results of the lawful actions of the hired hands and heads of the people (managers and workers) working in the firm.

What happens when an employee commits a negligent tort? As one would expect from the case of the criminous slave, the tortious servant emerges from the cocoon of non-responsibility metamorphosed into a responsible human agent.

That is to say, although it is contrary to theory to allow a servant to be sued for conduct in his capacity as such, he cannot rid himself of his responsibility as a freeman, and may be sued as a free wrong-doer. This, of course, is the law to-day.

(Holmes 1952, p. 79)

An employee may be sued for a tort or civil wrong and "being an employee" is not a defense or shield against legal responsibility for wrongful actions.

The law also allows the victim to sue the employer or master, although the plaintiff cannot collect damages twice. If the employer is found legally liable, then it is only liability in a "strict" legal sense since the master was presumed not to be de facto responsible. Justice Holmes attacked strict liability - "I therefore assume that common sense is opposed to the fundamental theory of agency" (1952, p. 102) - because it violated the
usual juridical principle of assigning legal liability in accordance with de facto liability, a liability established strongly by intentional action or weakly by negligent behavior. Others supported vicarious liability because the employer has a "deeper pocket" and because liability for employee negligence should be part of the costs of modern business enterprise (e.g., "The Basis of Vicarious Liability" in Laski 1921).

There has been such a focus on the employer's liability that one is apt to forget the employee's liability.

We have noticed that students sometimes slip into the fallacious assumption that because the employer is liable, the employee is not. This idea is wholly false. The law of agency, which makes employers liable, does not repeal the law of torts, which makes negligent individuals liable. (Conrad et al. 1972, p. 168)

The employee, after all, is the de facto responsible person.

Perhaps the most astonishing aspect of the vicarious liability debate is the complete failure to apply the "ordinary canons of legal responsibility" to the normal employment relation. Jurists are perturbed when legal liability is assigned to the employers who have no de facto responsibility. But there is not a word about the fact that the employees are jointly de facto responsible, together with a working employer, for the results of normal lawful work, and yet the employees have zero legal responsibility for the results of those actions. The employer has all the legal responsibility for the positive and negative results of the employees' actions within the scope of lawful employment. No one in the debate notices that the employment relation seems to "repeal" the ordinary canons of legal responsibility.

No deep analysis of the sociology of knowledge is required to fathom this blind spot in legal analysis. The basic social institutions structure the horizons of thought. The application of the ordinary canon of legal responsibility would reveal an inherent flaw in the employment relation - a result clearly beyond the pale of responsible jurisprudential analysis in an economic civilization based on that relationship.

EMPLOYEES VERSUS INDEPENDENT CONTRACTORS

Normative principles such as the ordinary canon of legal responsibility (a.k.a. the labor theory of property) and the principle of democratic self-determination all converge to attack the institution of renting human beings, namely the employer-employee relationship. The alternative to employment is (individual or joint) self-employment. That is, the alternative to the private or public enterprise employment firm is the democratic business enterprise where working in the firm qualifies one for membership in the firm.
The smallest examples of democratic businesses are independent business-people operating without the benefit of hired labor. If those independent operators produce and/or sell a tangible appropriable product, there is no possibility of considering them as employees of their customers. When one buys a pumpkin from a farmer, there is no possibility of taking the farmer as one’s employee.

When the product, however, is not a separate, tangible, and appropriable commodity, then the possibility does arise of confusing the independent contractor with the employee. The two legal roles are fundamentally different in theory even though some grey-area cases can arise in practice. It will be useful to review the distinction which is particularly important in agency law since the customer is not vicariously liable for the negligent torts of an independent contractor.

The legal role of the independent contractor does not violate democratic principles or the labor theory of property. The independent contractor self-governs his or her work. Indeed, the “control test” (testing non-self-government) is one of the most important legal tests used to distinguish employees from independent contractors. Ronald Coase quotes from a legal reference book in his classic article on the nature of the (employment) firm:

The master must have the right to control the servant’s work, either personally or by another servant or agent. It is this right of control or interference, of being entitled to tell the servant when to work (within the hours of service) and when not to work, and what work to do and how to do it (within the terms of such service) which is the dominant characteristic in this relation and marks off the servant from an independent contractor, or from one employed merely to give to his employer the fruits of his labour. In the latter case, the contractor or performer is not under the employer’s control in doing the work or effecting the service; he has to shape and manage his work so as to give the result he has contracted to effect.

(Batt 1929, p. 6)

The individual independent contractor is self-managing so that legal role does not violate the principle of democratic self-determination.

The independent contractor does not alienate or transfer control over his or her actions. The employee sells his capacity to work during a certain time period, or, in Marxian terms, his labor power; the employer controls the execution of the services. An independent contractor is not rented by the customer; only a certain service or effect is sold. This is particularly confusing because the word “hired” is sometimes applied to independent contractors as well as to employees. When someone “hires” a lawyer in independent practice, that lawyer is an independent contractor. If a corporation hires a lawyer onto its legal staff, that lawyer is an employee of the corporation.
The independence of the role of independent contractors means that they legally appropriate the positive and negative fruits of their labor. They appropriate and sell the positive fruits, typically an intangible service or effect (e.g., repairing a faucet or painting a house). They also directly bear their costs (appropriate the negative fruits of their labor) even though the costs are passed on to the customers as part of the price of the product. For instance, an independent house painter might present the homeowner with a bill itemizing so many hours of labor and so many gallons of paint. But the homeowner has not purchased the painter's labor as an employer; the painter has simply itemized the labor and paint to "justify" the price of the entire paint job.

**THE IDENTITY FICTION**

The case of the tortious servant also gives us the occasion to examine some of the legal fictions surrounding the employer–employee relationship. We saw in the case of slavery how jurists could be quite explicit in describing the slave as having the legal role of a thing (for lawful activities). Such candor is the exception. There are more subtle ways to legally treat a person as a non-person.

One legal strategy to deny an individual's legal personality is to "identify" the individual with another person. The baron-feme relationship established by the coverture marriage contract exemplified the identity fiction in past domestic law. A female was to pass from the cover of her father to the cover of her husband; always a "feme covert" instead of the anomalous "feme sole." The identity fiction for the baron-feme relation was that "the husband and wife are one person in law" with the implicit or explicit rider, "and that one person is the husband." A wife could own property and make contracts, but only in the name of her husband.

For the employment relation, the identity fiction states that "the master and servant are considered as one person" or "the act of the servant is the act of the master." The identity fiction expresses an older mode of legal thought about the employment relation; it is not needed to understand or explain the employment relation in modern terms. But it does catch the sense of the employee's instrumentality. Within the scope of lawful employment, an employee does not have the legal role of a responsible person. The employer has all the legal responsibility for the results of the acts of the employees so "the acts of the servants are the acts of the master." A variation on the identity fiction is given by the phrase: *Qui facit per alium facit per se* (that which is done through another is done oneself). This also captures the instrumental role of the employee. The employer "acts through" the employees.
For the sake of legal clarity, it is unfortunate that the identity fiction is also applied to situations where no fiction is appropriate and it is quite unnecessary. The master–servant relation is usually defined to be a subset of the principal–agent relation (hence the name “agency law”) so that a blue-collar production worker is technically an “agent.” But an independent contractor, such as a lawyer in private practice, can also be an agent. When a lawyer acts as a properly authorized agent to negotiate a contract, the principal is also said to “act through” the agent.

A principal, however, “acts through” an independent lawyer in quite a different sense than an employer acts through, say, a production worker. The lawyer conveys information and can perform symbolic legal acts (e.g., signing a contract) for the principal. The direct physical act of an independent contractor would, however, never count as the direct physical act of the principal. As Justice Holmes observed, “the precise point of the fiction is that the direct act of one is treated as if it were the direct act of another” (1952, pp. 111–12). Therefore the identification fiction is not required to account for the relationship between a principal and an independent contractor as agent — even though sloppy habits of legal thought might apply identification language to that case.

The identity fiction only has a role when the legal personality of an individual (e.g., an employee or a feme covert) is “subsumed” under the legal personality of an alien legal party (“alien” in the sense that the individual is not included in the legal party). What is the alternative to the employment contract or to any other contract to alienate and transfer control over certain of one’s activities such as the now-abolished self-enslavement contract or the coverture marriage contract? The alternative is membership — so the individual is not alien to the redefined broader legal party. For instance, the alternative to coverture is marriage as a type of domestic partnership. Each spouse is an equal partner and can make contracts for the partnership. The alternative to the employment contract is the democratic firm (also a type of generic “partnership”) where work gives membership. In a democratic firm, there is identification without fiction; the worker/member is a part of the firm.

The case of the tortious servant has given us the opportunity to make a number of points. It allowed us to introduce the distinction between employees and independent contractors. It also showed how the identity fiction was used in the legal conceptualization of relationships which depersonalized certain individuals by identifying them with another individual or an alien legal party (of which they are not a part). Historical examples include the master–slave, baron–feme, and employer–employee relationships.

The overall theme of this chapter is inalienability. The employee contracts into a legal role where some other alien party has all the legal
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responsibility for the results of the employee’s lawful actions. The ordinary
canon of assigning legal responsibility in accordance with de facto respons-
ability is violated. But when the employee commits an unlawful act such as
tort or civil wrong, the law sees no point to insulating the employee from
that responsibility. The employee is said to have stepped outside the
employee’s role. Then the usual legal canon applies and the employee may
be sued for the tort. In de facto terms, the employee is, if anything, more
responsible for the fruits of the perfectly deliberate and intentional actions
of lawful work than for an unintentional but negligent tort. That capacity
for de facto responsibility is in fact inalienable. The law pretends it has
been alienated. The law pretends the act of the servant is the act of the
master so long as the pretense is not abused by unlawful actions.

THE CASE OF THE CRIMINOUS EMPLOYEE

The unique property of labor, namely responsible agency, is not factually
transferable. The case of the criminous employee is another parable or
“intuition pump” which illustrates that key idea in the theory of inalien-
ability. Suppose that an entrepreneur hired an employee for general services
(no intimations of criminal intent). The entrepreneur similarly hired a van,
and the owner of the van was not otherwise involved in the entrepreneur’s
activities. Eventually the entrepreneur decided to use the factor services
he had purchased (man-hours and van-hours) to rob a bank. After being
catched, the entrepreneur and the employee were charged with the crime.
In court, the worker argued that he was just as innocent as the van owner.
Both had sold the services of factors they owned to the entrepreneur.
“Labor Service is a Commodity” (Alchian and Allen 1969, p. 469), as one
can learn from economics texts. The use the entrepreneur makes of these
commodities is “his own business.”

The judge would, no doubt, be unmoved by these arguments. The judge
would point out it was plausible that the van owner was not responsible.
He had given up and transferred the use of his van to the entrepreneur,
so unless the van owner was otherwise personally involved, his absentee
ownership of the factor would not give him any responsibility for the
results of the enterprise. Absentee ownership of a factor is not a source of
responsibility (a point which should not be forgotten in our later discus-
sion of marginal productivity theory in economics).

The judge would point out, however, that the worker could not help but
be personally involved in the robbery (unless he, per impossible, was totally
unaware of what he was doing, or rather as an economist might say, of
what was being done with his man-hours). Man-hours are a peculiar com-
modity in comparison with van-hours. The worker cannot “give up and
transfer" the use of his own person, as the van owner can the van. Employ­
ment contract or not, the worker remained a fully responsible agent
knowingly co-operating with the entrepreneur. The employee and the
employer share the de facto responsibility for the results of their joint
activity, and the law will impute legal responsibility accordingly.

All who participate in a crime with a guilty intent are liable to punishment.
A master and servant who so participate in a crime are liable criminally, not
because they are master and servant, but because they jointly carried out a
criminal venture and are both criminous.

(Batt 1967, p. 612)

It should be particularly noted that the worker is not de facto respon­
sible for the crime because an employment contract which involves a crime
is null and void. Quite the opposite. The employee is de facto responsible
because the employee, together with the employer, committed the crime
(not because of the legal status of the contract). It was his de facto respons­
ibility for the crime which invalidated the contract, not the contractual
invalidity which made him de facto responsible. The commission of a crime
using a rented van does not automatically invalidate the van rental con­
tract. The legality or illegality of a contract cannot somehow create de
facto responsibility that would not otherwise exist.

Defenders of the Received Truth about the employment system will
have much difficulty understanding this argument. They might take the
legal superstructure as the reality, and thus they would lose sight of the
underlying factual situation. It is as if one identifies guilt and innocence
with what is decided in a court of law (i.e., with legal guilt or innocence).
Such a "legalistic" viewpoint ignores the factual question of whether the
defendant was de facto responsible for the accused act. It is a miscarriage
of justice when there is a mismatch between legal and factual responsibility,
.i.e., when an innocent person is found legally guilty or when a guilty person
is found legally innocent.

A similar neglect of the underlying factual reality is involved in the
standard argument that "responsibility" is determined by the employment
contract (when only legal responsibility is so determined).

Employees voluntarily give up their responsibility for the products of their
labor in the employment contract. There is no inconsistency involved in
holding the "criminous employee" responsible because he is not really an
employee. A contract involving the commission of a crime is null and void,
so he stepped outside of the employment contract when he committed the
crime. In the democratic firm, the workers don't give up their responsibility
to an employer: they are jointly self-employed. Thus it is quite proper in that
case for them to have the ownership of the product, but not in the case of
a normal capitalist firm.
That argument stays at the legal level of responsibility and does not touch the question of the underlying factual responsibility. The point is that de facto responsibility is not transferable; the non-criminous employee in a normal firm is just as de facto responsible as the criminal. It might be helpful to (roughly) translate the above argument into pegs-and-holes language.

Square pegs consent to fit into round holes in the employment contract. There is no inconsistency involved in holding the criminous peg responsible (i.e., being in the square hole) since he was not really in the round hole. By committing the crime, he stepped outside the round hole and thus fit in the square hole. In the democratic arrangement, the square pegs do not agree to fit in the round holes, so it is quite proper in that case for them to be in the square holes—but not in the normal capitalist arrangement (where they have agreed to be in round holes and have not stepped outside by committing crimes).

"Consent" does not improve the fit of the square peg in the round hole. The point is that the square peg does not fit into the round hole regardless of whether it is legally agreed to or not.

It is again helpful not to confuse

1 the formal "inconsistency" in a legal system that treated the same individual legally as a thing (e.g., in normal work) and legally as a person when committing a crime, and

2 the substantive contradiction in a legal system that accepts a de facto person as fulfilling the de jure role of a thing (e.g., the employee in normal work).
By rendering the criminous employment contract null and void, the law escapes the formal "inconsistency" of having an individual simultaneously in the legal role of a responsible person and in the legal role of an employed instrument. That keeps the bookkeeping straight at the legalistic level.

The problem is not with the imputation of legal responsibility to the criminous employee. That is a correct assignment since the worker was de facto responsible together with the entrepreneur for the results of their joint activity. The problem is with normal work when the employment contract is treated as being "valid." When the "venture" being "jointly carried out" is non-criminal, the employee does not suddenly become an instrument like the van. The worker is still jointly de facto responsible, but then the employer gets all the legal responsibility. The problem is that substantive contradiction in the normal employment relation wherein a de facto responsible person has the legal role of a "non-responsible" instrumentality being "employed" by the employer.

Those who place great stock in the voluntariness of the labor contract should heed these examples of inalienability. The criminous employee would most certainly voluntarily alienate his responsibility for the fruits of his labor, i.e., for robbing the bank. He would love, for once, to be legally treated as just an instrument employed by the employer. But the law says no. The law would not validate such a contract, and yet, with no hint of personal involvement, there is no reason to invalidate the van owner's contract. Why the difference? Does the law arbitrarily decide to validate some contracts and to invalidate others? No, the difference is quite clear. The van owner can in fact give up and alienate the use of his van; the worker cannot do the same with his person. It is that factual inalienability and non-transferability of the responsible agency of human action (a.k.a. labor services) that is the foundation of the de facto theory of inalienable rights.

THE CASE OF THE PART-TIME ROBOT

The example of a person who functioned as a part-time robot is another intuition pump to illustrate the de facto inalienability argument. Since the argument is based on the facts about human nature, we might assume that science fiction technology can modify human nature enough to defeat the argument.

Suppose that it were possible to electronically implant a small computer in a person's brain so that by flipping a switch the individual was "taken over" and "driven" by the computer under the control of an external user or employer. When in the robot mode, the individual would have no ability to deliberately terminate or even influence his or her "actions" (or rather
behaviors). When the computer was externally switched off, the individual would regain conscious control and be able to act in the usual deliberate and responsible manner. One could vary the example by imagining some drugs that would temporarily turn a person into a part-time zombie, but we will stick to the high-tech imagery of a computer-driven part-time robot.

The part-time robotization would change human nature to make it safe for the employment system. The person as a part-time robot would not be de facto responsible for the positive or negative fruits of “its” services. The person as a part-time robot would not have decision-making direct control over “its” services. Those labor-services would be de facto transferable like the services of a van – so the legal validation of the employment contract for the transfer of those robot services would not be an institutionalized fraud.

The example of the part-time robot is illuminating from another viewpoint. Since the employment contract fits the part-time robot without involving any fraud, that means the employment contract applied to ordinary persons treats them as if they were such part-time robots within the scope of their employment. That is, the employment contract imputes zero legal responsibility to the employees for the positive or negative fruits of their labor as if they were part-time robots employed by an employer. In short, renting people treats them as if they were things.

THE INALIENABLE OF DECISION-MAKING

The inalienability of de facto responsibility is central to the labor theory of property and to the analysis of the employment contract as it affects the property relations of the firm. But the labor theory of property is only one leg of the analysis of the employer–employee system and of the alternative of democratic worker ownership or universal self-employment. The other leg is democratic theory. It analyzes the employment firm and the democratic or self-employment firm as governance systems, and it views the employment contract in the employment firm as an instrument of governance.

The general point of the de facto inalienability analysis is that a person’s factual status as a person is unchanged by consent or contract. Hence any legal contract to take on the legal role of a non-person or thing cannot be fulfilled and is inherently null and void. The law can only pretend that certain appropriate behavior “fulfills” the contract – and that pretense is dropped when the person commits a crime.

The intuition pumps of the criminous slave, the tortious servant, the criminous employee, and the part-time robot have illustrated the argument by focusing on responsibility, the central theme in the labor theory of
property. The inalienability argument can also be illustrated by focusing on decision-making, the central theme in democratic theory.

The employment contract does not "short-circuit" or bypass an individual's decision-making capacity just as it does not bypass the person's responsible agency. The employee is inexorably a co-decision-maker just as he or she is inexorably co-responsible for the results of voluntary joint activity with the employer. For instance in the bank robbery example, the entrepreneur may well have taken the initiative to rob the bank. But the employee participates in the robbery as a (by assumption) conscious voluntary human activity. Thus the employee must have also made the decision to participate in that activity. "Taking orders" to do X is only another way of deciding to do X.

The van owner, by way of contrast, can in fact alienate the decisions about the specific uses of the van. In the example of the part-time robot, the person qua person has the role of the van-owner, and the part-time robot has the role of the van. The entrepreneur makes the decision to use the van to rob a bank rather than, say, to move furniture, and the van owner is not involved in that decision. Both the employee and the van owner alienate the legal control rights over the specific uses of their man-hours and van-hours (within certain limits) in their respective rental contracts. The difference is at the factual level, not the legal level. The van owner can in fact give up any involvement in those specific use decisions; the employee cannot. The legal relationship of hiring an entity (i.e., buying the entity's services) may be applied without any inherent fraud to the hiring of a van (or part-time robot); it cannot be similarly applied to hiring a responsible human being.

In a joint or social human activity such as most production processes, individual responsibility may be difficult or impossible to determine, and individual decision-making may be equally infeasible. Responsibility is joint, and decision-making needs to be co-ordinated, often around a unified center. How then should a joint human activity be organized recognizing that all human participants are de facto co-responsible and de facto co-decision-makers? There needs to be a unified legal party to be legally responsible for the results of the joint activity and to be the locus of unified decision-making authority. The employment firm provides a unified legal entity for the joint human activity of production, but it legally denies the employees' co-responsibility and their co-decision-making (for lawful activities). It is not "their business."

The alternative to employment is membership in a jointly self-employed group or team. The alternative to the non-responsible instrumental role of the employee is not individual legal responsibility (since it is a joint activity) but membership in the unified legal party that is legally responsible for the results of the joint activity. Thus the analysis focusing on responsibility
leads to the notion of the democratic worker-owned firm, a firm where the members are the people working in the firm. The analysis of decision-making leads to the same conclusion. The employment contract legally alienates decision-making just as it legally alienates responsibility — even though both are factually inalienable. The alternative to alienating (translatio) decision-making is the delegation (concessio) of decision-making authority to a unified center such as the management in a democratic firm. Then the decisions are made for and in the name of those who are managed. Thus the alternative to non-democratic management in the employment firm is not the chaos of individual decision-making but democratic management which unifies and co-ordinates decision-making using authority delegated from those who are managed. By delegating that authority and ultimately accepting and ratifying the decisions in action, the workers are jointly (not individually) self-governing their activities in a democratic firm.

SUMMARY

In part I our focus was on property. One major thrust of the argument was that the employment system was not based on some alleged property right "the ownership of the firm" but on a contract, the employer-employee contract. Another major thrust was the question of property appropriation — not in some mythical original state of society — but in normal production activities. Here again we found that appropriation in production was determined not by "the ownership of the firm" but by the pattern and direction of the hiring contracts — by who rents what or whom. And the key to the institutional arrangement where some people legally appropriated the fruits of other people's labor is the specific rental contract for human beings, the employment contract.

In part II we thus quite naturally carry the investigation about property over into questions of contract. The conventional wisdom is that the fundamental question about contracts is voluntariness. "Consent or coercion" is the question. Slavery was wrong because it was involuntary. Autocracy was wrong because it was not based on "the consent of the governed." Yet we found this view to be superficial — perhaps deliberately — from both the historical and intellectual viewpoints. This consent-or-coercion viewpoint served the ideological interests of the employment system since the employment contract is voluntary. Even Marxism obligingly accepted the consent-or-coercion framework and argued that hired labor was sociologically involuntary due to the maldistribution in the ownership of the means of production.

The consent-or-coercion framework is not only inadequate for the analysis
of the employment system; it is inadequate to analyze slavery and political autocracy as well. There was a sophisticated liberal natural rights defense of both slavery and autocracy based on the alienability of natural rights with consent. The contractual basis for these systems was argued to be explicit or implicit self-enslavement contracts and political pacts of collective subjugation (pactum subjectionis). Modern liberalism has displayed a studied inattention to this alienist liberal tradition of supporting slavery and autocracy since that tradition revealed the central inadequacy of the simplistic consent-or-coercion framework.

The liberal consent-based argument for allowing slavery and autocracy was countered by a theory of inalienable rights that developed out of the Reformation and Enlightenment. A history of that inalienable rights theory is outlined in the following chapter. In this chapter, the essentials of the theory are presented with the expository assistance of four intuition pumps: the criminous slave, the tortious servant, the criminous employee, and the part-time robot.

The de facto theory of inalienability is based on the brute facts of human nature; a person's factual status as a person is unchanged by consent or contract. Thus a contract to take on the legal role of a thing is impossible to fulfill and is juridically null and void. A system of positive law can nonetheless interpret certain actions by the person as "fulfilling" the contract. Such a contract amounts to a legally-sponsored fraud - a fraud that is always revealed when the person commits a crime. Then the law removes the fiction of non-responsibility appropriate for the role of a thing. The law holds the person legally responsible for the results of the de facto responsible criminous actions.

These abstract arguments about the jurisprudential categories of persons and things are rendered a bit more concrete with the intuition pumps. The case of the criminous employee is the most relevant to the current institutional milieu of the employment system. An entrepreneur rents a van and hires a person for general purposes. When the entrepreneur uses the hired services to engage in normal business activities (e.g., moving furniture), neither the van owner nor the employee has any legal responsibility for the revenues or costs of that activity.

Suppose, however, that the entrepreneur uses the hired services to rob a bank. When caught, the situation changes drastically for the employee but not for the van owner. The employee is in effect immediately promoted to the status of junior partner and must share in the legal liability for the criminous enterprise. If the van owner had no personal involvement and was only the absentee owner of the rented van, then he would again have no legal responsibility for the enterprise.

The fundamental difference in the treatment of the employee and the van owner arises from the difference in the de facto alienability of the two
types of services. A person can in fact voluntarily give up and transfer the possession and use of a thing such as a van. A person cannot in fact so the same with his or her own self. The law pretends that the obedient non-criminious employee fulfilled the contract for the transfer of labor – a pretense that is dropped when the actions are criminous. Such a simple intuition pump illustrates the core of the de facto theory of inalienability – a theory with a long history, to which we now turn.
An intellectual history of inalienable rights theory

INTRODUCTION

The earlier intimations of the de facto theory of inalienability have not descended to modern times as a coherent theory. We must try, as a task of intellectual archeology, to reassemble the scattered remains of earlier insights. In searching the rubble of intellectual history for the notion of inalienable rights, we are looking for intimations of theory, not declarations. Often political and legal theorists will declare that certain rights are or should be inalienable without offering any theory to justify the declaration. Often the phrase "inalienable rights" is used simply to mean rights which are considered very important or fundamental. Such assertions are, by themselves, of little interest in an intellectual history of inalienable rights theory.

Ethical arguments are not just expressions of subjective taste such as whether or not one likes anchovies. There are factual components which can often be the heart of the controversy. For instance, an ethical condemnation of a person for doing X involves both the normative judgment that X is wrong as well as the factual judgment that the person in fact did X.

The de facto inalienability argument sketched above has an important factual component. A right based on one's personhood (the status of being a person) is inalienable even with consent because the fact of personhood is not thereby changed. We search for the intrusion of this factual element in our historical survey of inalienable rights theory.

STOIC ANTECEDENTS

Our history begins with a watershed in the development of political and ethical thought, the break of the Stoic School away from the world-view of Aristotle. As always, the matter can be best illustrated by considering the question of slavery. For Aristotle, slavery was based on "fact"; some
people were "talking instruments"—marked for slavery "from the hour of their birth." Treating them as slaves was no more inappropriate for Aristotle than treating a donkey as an animal. The Stoics held the radically different view that no one was a slave by their nature; slavery was an external condition juxtaposed to the internal freedom of the soul. Instead of the inequality between the citizens of the city-state and the barbarians outside, the Stoics saw a fundamental equality of all men in the City of the World. All men were equal because all participated in Reason.

It would be a mistake to read the full doctrine of inalienable rights back into Stoic thought; only some antecedents can be found. A principal ingredient in the analysis of inalienability presented here is the substantive contradiction between a slave's legal status as a non-person and the slave's factual status as a person. "In summary, then, slavery has always embodied a fundamental contradiction arising from the ultimately impossible attempt to define and treat men as objects" (Davis 1975, p. 82). An appreciation of this contradiction can be found in various forms in the thought of the Stoics.

Chrysippus challenged Aristotle's notion that some people were slaves by nature. By virtue of their rational and social nature, Cicero saw all men as equal under the *jus naturale*. Sabine found in the Stoics an anticipation of the Kantian theme to treat all humans as persons rather than as things.

Even if he were a slave he would not be, as Aristotle had said, a living tool, but more nearly as Chrysippus had said, a wage-earner for life. Or, as Kant rephrased the old ideal eighteen centuries later, a man must be treated as an end and not as a means. The astonishing fact is that Chrysippus and Cicero are closer to Kant than they are to Aristotle.

(Sabine 1958, p. 165)

Seneca further developed the idea of external bondage and internal freedom of the soul.

It is a mistake to imagine that slavery pervades a man's whole being; the better part of him is exempt from it: the body indeed is subjected and in the power of a master, but the mind is independent, and indeed is so free and wild, that it cannot be restrained even by this prison of the body, wherein it is confined.

(Seneca, *De beneficiis*, III, 20, quoted in Cassirer 1963, p. 103)

In spite of the legal role of the slave as an instrument employed by another person, the mind of the slave is *sui juris*.

THE REFORMATION AND THE INALIENABLE FREEDOM OF CONSCIENCE

One of the golden threads running through the history of inalienable rights theory is the de facto inalienability argument applied to the freedom
of thought and judgment or, in the religious context, to the freedom of conscience. In the spirit of the example of the criminous employee, an individual’s powers of judgment cannot in fact be short-circuited and alienated so that his or her decisions and beliefs are determined by an external authority. At best (or rather, at worst), a person can only make his or her own decisions by always accepting the judgments of another.

An early anticipation of this version of the de facto inalienability argument can be found in the Stoic doctrine that while the body of the slave was in chains, the slave’s mind or soul was *sui juris*, e.g., Seneca’s doctrine that only the body is enslaved and that the “inner part cannot be delivered into bondage” (quoted in Davis 1966, p. 77). This theme was emphasized by Martin Luther and became a basic tenet of the Reformation. Secular authorities who try to compel belief can only secure external conformity.

Besides, the blind, wretched folk do not see how utterly hopeless and impossible a thing they are attempting. For no matter how much they fret and fume, they cannot do more than make people obey them by word or deed; the heart they cannot constrain, though they wear themselves out trying. For the proverb is true. “Thoughts are free.” Why then would they constrain people to believe from the heart, when they see that it is impossible? (Luther 1942, p. 316)

Luther was explicit about the de facto element; it was “impossible” to “constrain people to believe from the heart.”

Furthermore, every man is responsible for his own faith, and he must see it for himself that he believes rightly. As little as another can go to hell or heaven for me, so little can he believe or disbelieve for me; and as little as he can open or shut heaven or hell for me, so little can he drive me to faith or unbelief. Since, then, belief or unbelief is a matter of every one’s conscience, and since this is no lessening of the secular power, the latter should be content and attend to its own affairs and permit men to believe one thing or another, as they are able and willing, and constrain no one by force. (Luther 1942, p. 316)

Spinoza captured the inalienability aspects of the argument. In modern times, inalienability has often been interpreted to mean simply that a right was basic or could not be alienated without consent. But Spinoza interpreted inalienability to mean “even with consent.” Consent cannot transfer away the mind’s *sui juris* capacity.

However, we have shown already ... that no man’s mind can possibly lie wholly at the disposition of another, for no one can willingly transfer his natural right of free reason and judgment, or be compelled so to do. For this reason government which attempts to control minds is accounted tyrannical, and it is considered an abuse of sovereignty and a usurpation of the rights of subjects, to seek to prescribe what shall be accepted as true, or rejected
as false, or what opinions should actuate men in their worship of God. All these questions fall within a man's natural right, which he cannot abdicate even with consent.

(Spinoza 1951, p. 257)

Some people are willing to take the opinion of an authority as sufficient evidence to make their decision – but that is still their decision.

I admit that the judgment can be biased in many ways, and to an almost incredible degree, so that while exempt from direct external control it may be so dependent on another man’s words, that it may fitly be said to be ruled by him; but although this influence is carried to great lengths, it has never gone so far as to invalidate the statement, that each man’s understanding is his own, and that brains are as diverse as palates.

(Spinoza 1951, p. 257)

This argument would later be developed (see below) by Francis Hutcheson of the Scottish Enlightenment – who in turn influenced Thomas Jefferson and the inalienable rights doctrine expressed in the American Declaration of Independence.

INALIENABLE RIGHTS AND THE FRENCH ENLIGHTENMENT

Montesquieu

Inalienable rights theory developed in opposition to the non-democratic alienist liberal tradition that founded slavery on some form of contract and erected autocracy on a real or implied pactum subjectionis. Modern antislavery thought had its roots in Montesquieu who cited and argued against the three justifications of slavery in Roman law: (1) voluntary self-enslavement, (2) prisoners of war, and (3) slave parentage. While proslavery writers found traces of contract in the rationale based on war captives and slave parentage, the first rationale of a voluntary contract is most relevant to the development of inalienable rights theory. Montesquieu tried to develop an argument that such a contract was invalid.

Neither is it true that a freeman can sell himself. Sale implies a price; now, when a person sells himself, his whole substance immediately devolves to this master; the master, therefore, in that case, gives nothing, and the slave receives nothing. . . . If liberty may be rated with respect to the buyer, it is beyond all price to the seller. The civil law, which authorizes a division of goods among men, can not be thought to rank among such goods a part of the men who were to make this division. The same law annuls all iniquitous contracts; surely then it affords redress in a contract where the grievance is most enormous.

(Montesquieu 1912, book XV, chapter II, pp. 283–4)
The important point is that Montesquieu argued for the invalidity of the self-sale contract so that the right to freedom would be inalienable. Philmore notes that Blackstone uses a similar argument and then shows the inadequacies in the argument.

This *quid pro quo* argument is, at best, a shallow legalism (and, at worst, just a special plea). The *quid pro quo* in the warrantee contract is a lifetime guarantee of food, clothing, and shelter (or equivalent money income) in return for the lifetime right to one's labor services.

(Philmore 1982, p. 49)

**Rousseau**

In *The Social Contract*, Rousseau repeats Montesquieu's argument. "For him who renounces everything no indemnity is possible" (1950, p. 9). This is fine rhetoric, but Rousseau admits that "a man who becomes the slave of another does not give himself; he sells himself, at the least for his subsistence . . ." (1950, p. 8).

In the earlier *Discourse on the Origin of Inequality*, Rousseau hints at the de facto inalienability argument and even appeals to the example of the criminous slave.

Puffendorf says that we may divest ourselves of our liberty in favour of other men, just as we transfer our property from one to another by contracts and agreements. But this seems a very weak argument. For in the first place, the property I alienate becomes quite foreign to me, nor can I suffer from the abuse of it; but it very dearly concerns me that my liberty should not be abused, and I cannot without incurring the guilt of the crimes I may be compelled to commit, expose myself to become an instrument of crime.

(1950, pp. 258-9)

This form of the de facto inalienability argument is echoed in *The Social Contract*. "To renounce liberty is to renounce being a man, to surrender the rights of humanity and even its duties . . . Such a renunciation is incompatible with man's nature; to remove all liberty from his will is to remove all morality from his acts" (1950, p. 9). Garry Wills notes that Burlamaqui (1747) develops a similar argument that "one can never alien one's power to act morally, since that would give one's master the ability to deny response to humane duty" (Wills 1979, p. 216).

**The Encyclopedia**

Denis Diderot's *Encyclopedia* (published between 1751 and 1772) was the summa of the French Enlightenment. The article entitled "Esclavage" appeared in an early volume, and it restated the superficial antislavery arguments of Montesquieu. However, in 1765 in the article "Traité des
Negrès” signed by Chevalier de Jaucourt, there appeared what David Brion Davis has termed “one of the earliest and most lucid applications to slavery of the natural rights philosophy, (which) succeeds in stating a basic principle which was to guide the more radical abolitionists of the nineteenth century” (1966, p. 416). De Jaucourt makes the far-reaching statement that: “Men and their liberty are not objects of commerce; they can be neither bought nor sold nor paid for at any price.” He then continues:

There is not, therefore, a single one of these unfortunate people regarded only as slaves who does not have the right to be declared free, since he has never lost his freedom, which he could not lose and which his prince, his father, and any person whatsoever in the world had not the power to dispose of. Consequently the sale that has been completed is invalid in itself. This Negro does not divest himself and can never divest himself of his natural right; he carries it everywhere with him, and he can demand everywhere that he be allowed to enjoy it. It is, therefore, patent inhumanity on the part of judges in free countries where he is transported, not to emancipate him immediately by declaring him free, since he is their fellow man, having a soul like them.

(Gendzier 1967, p. 230)

After the publication of The Problem of Slavery in Western Culture, Davis discovered “that de Jaucourt had merely copied someone else’s words” (1971: 583). The author was a Scotsman so Davis concludes: “It is clearly a mistake to attribute this radical antislavery position to the rationalism or secular humanitarianism of the French Enlightenment” (p. 586).

**INALIENABLE RIGHTS IN SCOTTISH AND ENGLISH ENLIGHTENMENT THOUGHT**

**George Wallace**

The author of the radical antislavery doctrine used by de Jaucourt was an obscure Scottish jurist, George Wallace (or Wallis). Wallace asserted that: “Men and their liberty are not in commercio; they are not either saleable or purchaseable.” He then continues:

For these reasons, every one of those unfortunate men, who are pretended to be slaves, has a right to be declared free, for he never lost his liberty; he could not lose it; his prince had no power to dispose of him. Of course, the sale was ipso jure void. This right he carries about with him, and is entitled every where to get it declared. As soon, therefore, as he comes into a country, in which the judges are not forgetful of their own humanity, it is their duty to remember that he is a man, and to declare him to be free.

(Wallace 1760, pp. 95–6)

Wallace’s statement illustrates the interplay between de facto and de jure elements, an interplay that is central to understanding the de facto
inalienability argument. When he declares that the slave has “never lost his liberty; he could not lose it,” that refers to the slave’s de facto retention of his free will and decision-making capacity (as recognized, for example, in the example of the criminous slave). Yet the law can declare a slave purchase contract as valid, and take a slave’s obedience as fulfilling the contract to be a chattel. Since the slaves remain de facto human agents in the de jure role of a thing, they are only “pretended to be slaves” by the legal authorities (at least until the slaves commit crimes).

Rousseau also caught some of the same interplay between the de facto and de jure aspects of the institution of slavery.

As then, to establish slavery, it was necessary to do violence to nature, so, in order to perpetuate such a right, nature would have to be changed. Jurists who have gravely determined that the child of a slave comes into the world a slave, have decided, in other words, that a man shall come into the world not a man.

Wallace’s inalienability argument has been echoed by the modern Kantian philosopher, George Schrader. Other people by their existence make a demand on us to acknowledge and treat them as persons rather than as things. “This is a demand, incidentally, which no man can forfeit by his own volition. No man can, for example, by selling himself as a slave make himself not to be a person” (Schrader 1960, 64). As Wallace noted, there is an element of pretense in the relationship since the slaves remain de facto persons.

The relationship of master and slave which assumes this to be possible is founded upon a double deception. The slave fools himself no less than he fools the master: both fool themselves as well as each other. A man remains a man no matter what his condition in the world. He may not demand in any verbal way that he be treated as a man; in fact, he may even recommend that his humanity be disregarded. But the fact that he continues to exist as a man entails that his claim upon us as a human subject has not been removed...

No man can actually make himself or another to be merely a slave; he can only make play the role of a slave. It is not difficult to exhibit the deception and bad faith involved in such a relationship.

(Schrader 1960, p. 64)

It is the analogous pretense, deception, bad faith, and fraud that is involved in the modern contract to rent rather than own other human beings.

Reformation influences in sixteenth and seventeenth century British thought

The full recognition of the inalienable right to liberty of conscience was the result of the Reformation. Luther and Calvin were hardly democrats
themselves; they supported the suppression of the anabaptist movements and the peasants' revolts of their day. "Modern Democracy is the child of the Reformation, not of the Reformers." (Gooch 1959, p. 7) The democratic promise of the Reformation was slowly revealed as it developed in political opposition (unlike Luther and Calvin) as by John Knox and George Buchanan in Scotland or in France by Languet or whoever was the author of the Huguenot tract Vindiciae contra tyrannos.

A multitude of religious and secular groups including the Puritans, Independents or Congregationalists, Levellers, and Quakers developed the democratic impulse in England during the seventeenth century. In the Putney Debates, the Levellers foreshadowed many of the principles of modern democratic theory and even the current debates about worker ownership - such as the issue of whether the franchise in a state or in a firm should be based on property rights or on personal rights.

Ernst Cassirer has nicely summarized the democratic heritage of seventeenth century thought using a general form of the de facto inalienability argument.

There is, at least, one right that cannot be ceded or abandoned: the right to personality. Arguing upon this principle the most influential writers on politics in the seventeenth century rejected the conclusions drawn by Hobbes. They charged the great logician with a contradiction in terms. If a man could give up his personality he would cease being a moral being. He would become a lifeless thing – and how could such a thing oblige itself – how could it make a promise or enter into a social contract? This fundamental right, the right to personality, includes in a sense all the others... There is no pactum subjectionis, no act of submission by which man can give up the state of free agent and enslave himself. For by such an act of renunciation he would give up that very character which constitutes his nature and essence: he would lose his humanity.

(Cassirer 1963, p. 175)

For a clearcut statement of the de facto inalienability argument, e.g., as applied to liberty of conscience, and for the background to Wallace’s radical antislavery doctrine, we turn to the Scottish Enlightenment in the early eighteenth century.

Francis Hutcheson and Thomas Jefferson

Who was the proximate source of the de facto inalienability argument in the Scottish Enlightenment? Much evidence points to Francis Hutcheson, a teacher of Adam Smith and one of the leading moral philosophers of the Scottish Enlightenment. Hutcheson is important for another reason. The Declaration of Independence is one of the highpoints in the praxis of the inalienable rights tradition. "We hold these truths to be self-evident. That
all men are created equal, that they are endowed by their creator with certain unalienable rights; that among these are life, liberty & the pursuit of happiness . . ." The conventional scholarly view has been that "Jefferson copied Locke" (Becker 1958, p. 79). But as we have seen, Locke had no serious theory of inalienability, and he in fact condoned a limited voluntary contract for slavery which he nicely called "Drudgery."

In Garry Wills' important study, Inventing America, he reinvented Jeffersonian scholarship concerning the intellectual roots of the Declaration of Independence. Wills convincingly argued that the Lockean influence was more indirect and even to some extent resisted by Jefferson, while Hutcheson's influence was central and pervasive. Of direct interest here, "Jefferson took his division of rights into alienable and unalienable from Hutcheson, who made the distinction popular and important" (Wills 1979, p. 213). Despite some ambiguity, Hutcheson was "one of the prime sources of antislavery thought" (Davis 1975, p. 263) and he used a version of the de facto inalienability argument so he may well have contributed to the radical doctrine developed by Wallace.

In Hutcheson's An Inquiry into the Original of Our Ideas of Beauty and Virtue (1725), he first distinguished between alienable and inalienable rights. The de facto inalienability argument is developed in Hutcheson's influential A System of Moral Philosophy (1755).

Our rights are either alienable, or unalienable. The former are known by these two characters jointly, that the translation of them to others can be made effectually, and that some interest of society, or individuals consistently with it, may frequently require such translations. Thus our right to our goods and labours is naturally alienable. But where either the translation cannot be made with any effect, or where no good in human life requires it, the right is unalienable, and cannot be justly claimed by any other but the person originally possessing it.

(1755, p. 261)

Hutcheson appeals to the de facto inalienability argument in addition to utility. He contrasts de facto alienable goods where "the translation of them to others can be made effectually" with factually inalienable faculties where "the translation cannot be made with any effect." Hutcheson goes on to show how the "right of private judgment" or "liberty of conscience" is inalienable.

Thus no man can really change his sentiments, judgments, and inward affections, at the pleasure of another; nor can it tend to any good to make him profess what is contrary to his heart. The right of private judgment is therefore unalienable.

(pp. 261–2)

Hutcheson pinpoints the factual nontransferability of private decision-making power. In the case of the criminous employee, we saw how the
employee ultimately makes the decisions himself in spite of what is com-
manded by the employer. Short of coercion, an individual's faculty of
judgment cannot in fact be short circuited by a secular or religious authority.

A like natural right every intelligent being has about his own opinions,
speculative or practical, to judge according to the evidence that appears to
him. This right appears from the very constitution of the rational mind which
can assent or dissent solely according to the evidence presented, and naturally
desires knowledge. The same considerations shew this right to be unalienable:
it cannot be subjected to the will of another: tho' where there is a previous
judgment formed concerning the superior wisdom of another, or his infal-
libility, the opinion of this other, to a weak mind, may become sufficient
evidence.

(1755, p. 295)

Echoing Spinoza, Hutcheson notes that accepting the judgment of an
authority claiming "infallibility" is only another way for a "weak mind" to
make a judgment. A religious vow of obedience by a layperson, priest,
monk, or nun can no more short-circuit an individual's facility of judgment
and decision-making than can a slavery contract, an employment contract,
or a military oath (be it German, Japanese, or American).

As a linguistic sidelight, the final draft of the Declaration of Independence
used the word "unalienable" while Jefferson's draft used "inalienable"
which has become the modern usage.

Normal English usage of Jefferson's time - e.g., in the work of Francis
Hutcheson - was 'unalienable' rights. This is what either Congress or the
broadside's printer substituted for Jefferson's 'inalienable.' Jefferson may
have had French usage (e.g., by Burlamaqui) in mind, or the Latin root.

(Wills 1979, pp. 370-1)

Richard Price

In this survey of inalienable rights theory, we are searching for the factual
element of the de facto inalienability argument. Staughton Lynd in his
excellent study Intellectual Origins of American Radicalism has highlighted
precisely this feature in Hutcheson's thought and in the work of the
Dissenters such as Richard Price.

When rights were termed 'unalienable' in this sense, it did not mean that
they could not be transferred without consent, but that their nature made
them untransferrable.

This was a proposition peculiarly congenial to Dissenting radicalism. For
it freedom of conscience was inseparable from moral agency.

(1969, p. 45)

Richard Price (1723–91), a dissenting Presbyterian minister from Wales,
was a well-rounded thinker with contributions in moral philosophy, political
theory, economics, and mathematics in addition to more religious endeavors. With the outbreak of the American Revolution, Price courageously published a work, *Observations on the Nature of Civil Liberty*, which sided with the Americans’ claim “that Great Britain is attempting to rob them of that liberty to which every member of society and all civil communities have a natural and unalienable title” (1771, part I, repr. Peach 1979, p. 67). This and later works by Price earned him the respect and admiration of the American revolutionaries. Tom Paine in *The Rights of Man* launched his famous attack on Burke’s *Reflections on the Revolution in France* by noting that “a great part of (Burke’s) work is taken up with abusing Dr. Price (one of the best-hearted men that lives) . . .” (repr. Dishman 1971, p. 167).

Price build his political theory on “that principle of spontaneity or self-determination which constitutes us agents or which gives us a command over our actions, rendering them properly ours, and not effects of the operation of any foreign cause” (1776, part I, section I, repr. Peach 1979, pp. 67–8). He divides liberty into its physical, moral, religious, and civil components but “there is one general idea that runs through them all, I mean the idea of self-direction, or self-government” (in Peach 1979, p. 68). Any contract pretending to transfer the right of a people’s self-determination to another state would be non-binding.

Neither can any state acquire such an authority over other states in virtue of any compacts or cessions. This is a case in which compacts are not binding. Civil liberty is, in this respect, on the same footing with religious liberty. As no people can lawfully surrender their religious liberty by giving up their right of judging for themselves in religion, or by allowing any human beings to prescribe to them what faith they shall embrace, or what mode of worship they shall practise, so neither can any civil societies lawfully surrender their civil liberty by giving up to any extraneous jurisdiction their power of legislating for themselves and disposing their property.

(pp. 78–9)

Price’s tract naturally raised a furor of opposition so in 1777, he wrote *Additional Observations on the Nature and Value of Civil Liberty* to clarify his positions and answer his critics. Again the different types of liberty were squarely grounded on

the general idea of self-government. The liberty of men as agents is that power of self-determination which all agents, as such, possess. Their liberty as moral agents is their power of self-government in their moral conduct. Their liberty as religious agents is their power of self-government in religion. And their liberty as members of communities associated for the purposes of civil government is their power of self-government in all their civil concerns.

(1777, part I, section I, repr. Peach 1979, p. 136)
In earlier chapters, we noted that there are two opposing natural rights traditions, the alienist and the inalienist traditions. Lynd points out that Price contributed directly and indirectly to the American debates over slavery in the late eighteenth and nineteenth centuries.

Then it turned out to make considerable difference whether one said slavery was wrong because every man has a natural right to the possession of his own body, or because every man has a natural right freely to determine his own destiny. The first kind of right was alienable: thus Locke neatly derived slavery from capture in war, whereby a man forfeited his labor to the conqueror who might lawfully have killed him; and thus Dred Scott was judged permanently to have given up his freedom. But the second kind of right, what Price called "that power of self-determination which all agents, as such, possess," was inalienable as long man remained man. Like the mind's quest for religious truth from which it was derived, self-determination was not a claim to ownership which might be both acquired and surrendered, but an inextricable aspect of the activity of being human.

(Lynd 1969, pp. 56–7)

Lynd precisely summarized Price's statement of the de facto inalienability argument as the heart of the inalienist tradition of natural rights theory.

INALIENABLEITY IN GERMAN IDEALISM

Immanuel Kant

Immanuel Kant acknowledged that "every man has inalienable rights which he cannot give up even if he would..." (1974, p. 72).

Nor can a man living in the legal framework of a community be stripped of this quality by anything save his own crime. He can never lose it, neither by contract nor by acts of war (occupatio bellica), for no legal act, neither his own nor another's, can terminate his proprietary rights in himself.

(1974, p. 61)

But why? The explanation might be based on Kant's notion of proprietary right derived from intentional possession by one's will.

Owning is a matter of a human will taking possession; it therefore already excludes slavery as a possible form of property: persons cannot be owned...

What defeats the appropriation of a person is that he is necessarily occupied by his own will.

(Ryan 1982, p. 57)

This theme was even more central to Hegel's treatment of property and inalienability.
According to some modern Hegel scholarship, principally the work of David MacGregor (1984), Hegel developed a version of the labor theory of property, and it was central to his social philosophy. It is appropriate that Hegel should develop treatments of both the labor theory of property and the de facto inalienability argument since both theories are part of the same conceptual whole. Hegel's integrated development will be sketched here.

The entire theory presented in this book is based on the differentiation between persons and things. For instance, a voluntary contract is inherently invalid if it puts a person, temporarily or permanently, in the legal role of a thing. In the employment contract, the legal machinery for hiring or renting a thing is applied to persons. The actions of persons are legally treated as transferable commodities like the services of things. This mentality has become part of the fabric of our economic civilization, although it is most obvious to our dulled sensitivities in such fashionable fields as "human capital theory" or "human resource management."

How are human actions relevantly and fundamentally different from the services of things? The answer can be expressed in different vocabularies depending on the purpose at hand. To differentiate mental activity and machine computation, the notions of intentionality and semantics (as opposed to syntax) are appropriate (see Searle 1983). In law and in economics, the notion of responsibility differentiates human actions or labor from the services of things. For Hegel, the differentiating characteristic of human action was ideality.

Ideality refers to theoretical and practical activity, the effort through which men and women create their ideas and translate them into concrete reality. The notion of ideality is best illustrated by a relation familiar to everyone: work...

Work is a social relationship—a collective enterprise—whereby nature is subordinated and made a means to the diverse ends of men and women. Precisely because labour transforms natural objects into instruments and expressions of human will, work is also a chief aspect of the transcendental, creative quality of consciousness.

(MacGregor 1984, p. 13)

Intentional human action intervenes in a natural causal chain to create a certain difference, and the action is responsible for the difference it makes. The action initiated the causal sequence that leads to the contemplated result.

Human thought and purposive activity—ideality—constitute the energy which links subject and object of labour into the unity of the product... What this means is that thought as the design or purpose of the human subject is
brought into reality as a product of labour through the machine- or tool-assisted activity of the worker on the object of that activity. Hegel makes this concept of human thinking activity the programmatic basis of his whole philosophy...

(MacGregor 1984, p. 90)

The embodying of one's will in things through purposive human activity or labor is the basis of appropriation.

A person has as his substantive end the right of putting his will into any and every thing and thereby making it his, because it has no such end in itself and derives its destiny and soul from his will. This is the absolute right of appropriation which man has over all 'things'.

(Hegel 1967, §44)

Property is actualized will. "But I as free will am an object to myself in what I possess and thereby also for the first time am an actual will, and this is the aspect which constitutes the category of property, the true and right factor in possession" (§45). In spite of what strikes modern ears as abstruse metaphysical jargon, Hegel is developing a version of the labor theory of property.

If property originates as the embodiment of will (i.e., the fruits of labor), then certain things are not eligible for appropriation since they already embody another human will.

Since property is the embodiment of personality, my inward idea and will that something is to be mine is not enough to make it my property; to secure this end occupancy is requisite... The fact that a thing of which I can take possession if a res nullius is... a self-explanatory negative condition of occupancy...

(§51)

In becoming a person, an individual in effect takes possession of himself or herself, and thus becomes ineligible for appropriation by others. "It is only through the development of his own body and mind, essentially through his self-consciousness's apprehension of itself as free, that he takes possession of himself and becomes his own property and no one else's" (§57). Although Hegel waivered in applying the argument to all people, it provided the fundamental argument against slavery.

The alleged justification of slavery... depend(s) on regarding man as a natural entity pure and simple, as an existent not in conformity with its concept... The argument for the absolute injustice of slavery, on the other hand, adheres to the concept of man as mind, as something inherently free.

(Remark to §57)

This anti-slavery argument provides more than just a critique of involuntary slavery. To voluntarily alienate something, we must be able to
withdraw our will from it — to in fact vacate it and turn it over to the use of another person (like the services of a van).

The reason I can alienate my property is that it is mine only in so far as I put my will into it. Hence I may abandon (derelinquere) as a res nullius anything that I have or yield it to the will of another and so into his possession, provided always that the thing in question is a thing external by nature. (§65)

But alienation clearly cannot be applied to one’s own personality. “Therefore those goods, or rather substantive characteristics, which constitute my own private personality and the universal essence of my self-consciousness are inalienable and my right to them is imprescriptible” (§66). An individual cannot in fact vacate and transfer that responsible agency which makes one a person.

The right to what is in essence inalienable is imprescriptible, since the act whereby I take possession of my personality, of my substantive essence, and make myself a responsible being, capable of possessing rights and with a moral and religious life, takes away from these characteristics of mine just that externality which alone made them capable of passing into the possession of someone else. When I have thus annulled their externality, I cannot lose them through lapse of time or from any other reason drawn from my prior consent or willingness to alienate them.

(Remark to §66)

This is, to our knowledge, one of the clearest statement of the de facto inalienability argument in the history of Western philosophy.

In the application of the de facto inalienability argument, Hegel showed himself to be a man of his time. The divergence between a philosopher’s personal convictions and his arguments is perhaps too little studied. Convictions can diverge from arguments in both directions. Rational arguments can fall far short of strongly held convictions (e.g., Marx), and philosophers of timid conviction can fail to trace out the full implications of their own arguments.

Hegel’s theory went much farther than his convictions (or social milieu) would allow; he had to downplay the implications. Having taken possession of one’s responsible capabilities and thus taken away “that externality which alone made them capable of passing into the possession of someone else,” a person cannot alienate them for eight hours a day any more than for a lifetime. The de facto inalienability argument applies as well to the employment contract as to the lifetime labor contract. Yet Hegel hardly wanted to present a structural critique of the institution of wage labor (far deeper than Marx’s later exploitation theory) so Hegel quickly added some metaphysical doubletalk in an attempt to defuse the argument.
Single products or my particular physical and mental skill and of my power to act I can alienate to someone else and I can give him the use of my abilities for a restricted period, because, on the strength of this restriction, my abilities acquire an external relation to the totality and universality of my being...

The relation here between myself and the exercise of my abilities is the same as that between the substance of a thing and its use... It is only when use is restricted that a distinction between use and substance arises. So here, the use of my powers differs from my powers and therefore from myself, only in so far as it is quantitatively restricted. Force is the totality of its manifestations, substance of its accidents, the universal of its particulars. (§67)

In case the purpose of Hegel's remarks was not clear, one of the original editors added an explanation culled from Hegel's lectures: "The distinction here explained is that between a slave and a modern domestic servant or day-labourer" (Hegel 1967, p. 241).

SOME MODERN DEVELOPMENTS

Inalienability: an Achilles' Heel of law-and-economics

We traced, in an earlier chapter, the intellectual history of the non-democratic alienist wing of liberal thought. In modern times, that wing has re-emerged dressed in the garb of neoclassical economics as the new field of "law-and-economics" (L&E). The mathematical formalism and intellectual prestige of modern economics has given L&E tremendous momentum. It takes a theory to kill a theory, and legal scholars have had no comparable theory to stem the invasion of efficiency-based economic arguments into jurisprudence. Like "syphilis in Hawaii," L&E has sweep through the law schools of America - creating much resentment but meeting no antidote.

There is an antidote - democratic theory, the labor theory of property, and the de facto theory of inalienability - to name some of the ingredients in the cure. But the cure is worse that the disease for those legal scholars who see no fraud in the contract to rent human beings, who see no theft in the employer's appropriation of the whole product, and who see no flaw in the alienation of the "private" right of self-determination in the employment contract. Thus the battle staggers on - the one side pressing forward to conquer new territory, the other side holding back unable or unwilling to take the measures necessary to halt the invasion.

Our purpose in this section is to record some of the thrusts and parries concerning "inalienability" in this controversy surrounding law-and-economics. It is useful to distinguish between L&E as an insightful analysis of some legal phenomena, and L&E as a comprehensive efficiency-based
approach to jurisprudence. The former more modest approach could be called "soft L&E" while the latter (represented by Judge Richard Posner) is "hard L&E." The issue of inalienability, better than any other issue, reveals the intellectual hubris in "hard law-and-economics," i.e., L&E taken as a complete approach to jurisprudence. Efficiency arguments (applied to institutionally-defined acts) and inalienability arguments are like oil and water: they do not mix (see "Voluntary Acts between Know-ledgable Consenting Adults" in the next chapter for a deeper analysis). If there are two or more willing parties for an institutional transaction without externalities, then efficiency demands that the transaction be permitted.

There are, however, certain voluntary transactions between consenting adults which are outlawed. These prohibitions are an intellectual embar-rassment to anyone who takes law-and-economics as a new jurisprudence – rather than an informative analysis of a limited range of legal transactions. Leaving aside Posner's market for babies (Landes and Posner 1978) since it directly involves third parties (the babies), standard examples are voluntary self-enslavement contracts or contracts to sell personal or political rights such as voting rights.

Efficiency seems to require that future-dated labor be just as alienable as current labor. A contract to sell all one's future labor "rump and stump" (up to retirement) would be a modern civilized form of the old self-enslavement contract. Yet that is currently outlawed. Thus the crown jewel of neoclassical economics (including law-and-economics), the (first) fundamental theorem of welfare economics ("A competitive equilibrium is allocatively efficient"), must assume that the legal system has been "modified to permit individuals to sell or mortgage their persons" (Christ 1975, p. 334).

Efficiency similarly requires that personal and political rights be alienable.

Perhaps the clearest example is the vote in a democratic polity. The modern democratic ethic excludes property qualifications, obvious or disguised, for the suffrage. Votes are not transferable; buying or selling them is illegal, and the secret ballot makes such contracts unenforceable. In some countries, indeed, citizens are penalized simply for not voting. Any good second year graduate student in economics could write a short examination paper proving that voluntary transactions in votes would increase the welfare of the sellers as well as the buyers.

(Tobin 1970, p. 454)

What is an advocate of hard L&E to do? Intellectual consistency would require arguing for permitting voluntary self-enslavement contracts or contracts to alienate political rights – following the admirable example of Harvard's Professor Robert Nozick. But discretion seems to be the better part of intellectual valor. L&E enthusiasts are willing to accept the flimsiest
arguments against vote-selling or slavery contracts in order to push these skeletons back into the closet.

The modern L&E literature on inalienability begins with Calabresi and Melamed’s seminal article “Property Rules, Liability Rules, and Inalienability: One View of the Cathedral” (1983 (orig. 1972)). Representing an only "semi-hard L&E" position, Calabresi and Melamed want to argue against contracts to sell oneself into slavery. Yet the best argument they can find is that moralistic third parties will be unhappy at the knowledge of such transactions. “If Taney is allowed to sell himself into slavery, or to take undue risks of becoming penniless, or to sell a kidney, Marshall may be harmed, simply because Marshall is a sensitive man who is made unhappy by seeing slaves, paupers, or persons who die because they have sold a kidney” (p. 64). The state could leave Marshall free to bribe Taney not to do it, but there might be other similar “Marshalls” who would freeload (i.e., not come forward with their share of the bribe) so that market solution would be suboptimal. Or the state could require Taney and his master to compensate the Marshalls for their unhappiness but, as with any subjective externalities, it is difficult to find an “acceptable objective measurement.” In addition, pseudo-Marshall freeloaders could feign moralistic aversion to slavery to share in the compensation. “The state must, therefore, either ignore the external costs to Marshall, or if it judges them great enough, forbid the transaction that gave rise to them by making Taney’s freedom inalienable” (p. 64). Such law-and-economics arguments make for amusing intellectual exercises, but one must question whether Calabresi, Melamed, or anyone else really thinks such reasons account for the invalidity of self-enslavement contracts.

The whole argument can be repeated for any subjective external effects. People of impeccable taste (Marshall) take great umbrage at pink plastic flamingos in other people’s front yards (Taney’s). It is not the plastic flamingos themselves that create the externality, but their unsightliness. Invisible plastic flamingos would be alright. Similarly, it is the knowledge of the slavery contract that spreads outward, like smoke, to cause the externality. Perhaps the optimal solution is to allow the efficiency-enhancing slavery contracts but to outlaw the “indecent exposure” of such contracts to the public.

Moreover, it is hard to believe that plastic flamingos are allowed and slavery contracts are disallowed simply because of the relative magnitude in the two cases of the Marshalls’ unhappiness in some subjective utilitarian metric. In a society where people were more tolerant of slavery such as the antebellum American South, should voluntary slavery contracts have been allowed (as they indeed were in antebellum times)?

Our purpose is not to criticize L&E arguments based on social cost and benefit analysis. The criticism is only of such arguments applied to basic
inalienable rights involved in slavery contracts or selling political votes. There is a wide range of alienability restrictions with pragmatic rationales based on social cost analysis. For instance, there is no question that game birds or water drawn from a western river are bona fide transferable commodities (unlike human responsibility or decision-making). But the sale of these commodities might well be restricted or prohibited to prevent the over-exploitation of common resource pools.

Susan Rose-Ackerman picked up the inalienability theme from Calabresi-Melamed and applied it to property rights (1985). She developed a useful taxonomy of various kinds of inalienability and noted that many entitlements are associated with functional roles. We previously noted that if a right is associated with a functional role, then the right would not be alienable. Those who qualify do not have to "buy" the right, and those who "bought" the right might not have the qualifying role. That is not an inalienability argument since it does not determine why the right should be assigned to a functional role in the first place instead of being an alienable property right. An inalienability argument would have to answer that prior question.

Rose-Ackerman presented many of the pragmatic arguments used in L&E (e.g., common pool problems, imperfect information, free rider problems, and prisoner dilemma situations) to support restrictions on the transfer of certain otherwise transferable commodities. However, our focus is only on inalienability arguments applied to "inalienable rights." Here she notes that political vote-selling would be incompatible with the ideals of citizenship in a modern democracy. That is not an effective argument given the long and venerable tradition of non-democratic liberalism that viewed the right of self-determination as being quite alienable and given that our present economic system is based on voluntarily alienating that right in the workplace.

Rose-Ackerman’s paper was answered by the Chicago legal theorist, Richard Epstein, who felt she was overly restrictive (1985). Epstein addresses but ultimately fails to answer one of the embarrassing questions facing hard L&E. How can L&E plausibly account for the almost complete freedom in buying and selling voting corporate shares and also account for the complete prohibition on buying and selling political votes?

Epstein sets aside the argument that political vote-selling would allow the rich to exploit the poor. He notes that vote-selling was prohibited even when the property franchise prevented the poor from voting at all.

In addition, it is difficult to see why exploitation should occur. Between a buyer and seller of votes there is no obvious externality, and no reason why the poor vote holder could not command a fairly attractive sum for the vote in question, especially when rival factions are bidding for control.

(p. 989)
Epstein develops his own somewhat bizarre argument against vote-selling based on a rather strained analogy between an oilman's exploitation of a common oil pool and a political official's access to the public treasury. With vote-selling, takeover artists could heavily leverage their acquisition of votes and then, once in office, supposedly raid the common pool of public monies to pay off the debts.

If vote selling were fully legal, there would be no reason to limit sales to ones for hard cash, for individuals could make (secured) promises to make payments from the public treasury after election. Vote buyers would finance their purchases out of the pockets of third parties. Prohibiting the sale of votes is thus a low-cost way of preventing these extreme forms of abuse.

(pp. 987-8)

It is difficult to understand this argument since no one has suggested the hypothetical repeal of the laws against the theft of public monies. Moreover, Epstein is making these arguments not in 1885 but in 1985 when political campaigns without vote-selling are still multi-million dollar extravaganzas. There seems to be little historical basis for the notion that the prohibition of vote-selling will stop politicians from trying to raid the public purse anyway. That's why there are already laws against officials paying their campaign debts with "payments from the public treasury after election."

Here again, it is difficult to believe that L&E enthusiasts take these as serious arguments against political vote-selling or slavery contracts. They seem more like suggestions on the order of "Let's just accept this argument against vote-selling or voluntary slavery so we can move on to less embarrassing topics where L&E reasoning is more plausible."

Aside from the tellingly weak L&E arguments about inalienable rights, most of the modern literature on the topic has been unremarkable. For instance, the only recent book-length philosophical treatise on inalienable rights (Meyers 1985) shows no awareness of the classical de facto inalienability arguments as in Hutcheson (in spite of Wills 1979), Richard Price (in spite of Lynd 1969), or even Hegel.

A modern use of the de facto inalienability argument

The de facto theory of inalienable rights is not hidden. The "intuition pump" of the criminous employee is an example of de facto inalienability that is "intuitively obvious to the most casual observer." It is the full implications for the "employment contract" itself that are rarely understood; the de facto responsible actions of an ordinary employee are just as de facto non-transferable as the actions of the criminal.

The recent work of the legal scholar Randy Barnett on contractual
remedies and inalienable rights (1986) provides an excellent modern illustration of the (partial) use of the de facto inalienability argument. Traditional legal theory affords the remedy of monetary damages for the breach of a contract. Except in very limited circumstances, the courts will not enforce the specific performance of a breached contract. Professor Barnett argues that the restrictions against enforcing specific performance should apply only to labor contracts, and that other breached contracts should be specifically enforced by the courts. The interesting point is that Professor Barnett uses the de facto inalienability argument to exclude specific performance of labor contracts because labor is de facto non-transferable!

One of the roots of the de facto inalienability argument was the Enlightenment critique of the voluntary slavery contract. Barnett quotes Rousseau ("Such a renunciation is incompatible with man's nature") to buttress his assertion that there "would appear to be something morally defective about a theory that failed to hold a competent person responsible for his actions simply because that person had consented to shift responsibility to another" (p. 187). It is not clear if Professor Barnett realizes the implications for the employment contract in the employment firm wherein the employees consent to shift legal or de jure responsibility for the results of their actions to the company.

Professor Barnett does clearly see that human actions are not de facto transferable. We can only agree to co-operate with others; we cannot transfer or alienate the de facto control over our voluntary actions.

If rights are enforceable claims to control resources in the world and contracts are enforceable transfers of these rights, it is reasonable to conclude that a right to control a resource cannot be transferred where the control of the resource itself cannot in fact be transferred. Suppose that A consented to transfer partial or complete control of his body to B. Absent some physiological change in A (caused, perhaps, by voluntarily and knowingly ingesting some special drug or undergoing psychosurgery) there is no way for such a commitment to be carried out.

(p. 188)

Professor Barnett also correctly contrasts this de facto inalienability of intentional human actions with the de facto transferability of bona fide commodities.

What is my house or car could equally well be your house or car. But bodies are different from other kinds of things. What is my body cannot in any literal sense be made your body. Because there is no obstacle to transferring control of a house or car (of the sort that is unavoidably presented when one attempts to transfer control over one's body), there is no obstacle to transferring the
right to control a house or car. But if control cannot be transferred, then it is hard to see how a right to control can be transferred.

(p. 189)

Professor Barnett’s admirable rendition of the classical de facto inalienability arguments is only slightly marred by his apparent inclusion of the independent contractor (IC) as “selling services” like the employee. However in spite of that misleading language about “selling services,” the independent contractor does not sell the control of his or her actions. That is precisely the point of the traditional “control test” used to differentiate independent contractors from servants. The IC is a self-employed businessperson who produces, appropriates, and sells an intangible product, an effect, a job. The IC retains decision-making control over the execution of the work process and has the legal responsibility for the end result. Since the relationship does not purport to transfer that responsibility or decision-making, the contract between a genuine independent contractor and the customer does not run afoul of the de facto inalienability theory.

Professor Barnett correctly concludes that “the services of the employees cannot be the subject of a valid contract because such services consist of the employees’ exercise of their inalienable rights” (p. 199). But he apparently interprets this to mean only that if the contract is breached, then the employee would only be liable for money damages. The courts should not try to enforce specific performance since labor is non-transferable.

We previously observed how Hegel’s use of the de facto inalienability contract against the voluntary slavery contract carried Hegel further than he wanted. Hegel resorted to some transparent doubletalk to avoid applying the critique to the employment contract. Professor Barnett is in a similar quandary. The conclusion to Barnett’s argument seems to be stronger than he is willing to draw. If labor is really de facto non-transferable as he has so forcefully argued, then the conclusion is that the contract to legally transfer labor is invalid from the outset – not just that the contract should not be specifically enforced when it is “breached.”

The contract to legally transfer labor never is fulfilled by the de facto transfer of labor. An employee can at most co-operate together with a working employer. This de facto responsible co-operation – which earns the criminous employee a trip to jail – is interpreted as “fulfilling” the contract to legally transfer labor (when no crime is involved). It is only the withholding of this responsible co-operation that is interpreted as “breaching” the employment contract.

Professor Barnett has in fact splendidly restated the de facto inalienability analysis which shows the inherently fraudulent and invalid nature of the institution of renting or hiring human beings. The whole machinery of a
contract to legally transfer the right to temporarily control the use of a rented entity cannot in fact be applied when the entity is a responsible person. To legally validate such a labor contract and to interpret responsible co-operation as "fulfilling" the contract to transfer labor is only to perpetrate a fraud on an institutional scale.
10

Misinterpretations of the de facto theory of inalienable rights

OVERVIEW

There are a number of common misunderstandings of the de facto inalienability argument. For example, it is possible to misunderstand the point of the case of the criminous slave particularly when stated in contractual terms. A contract which involves the commission of a crime is not enforceable and is null and void. Hence when a contractual slave committed a crime, he or she voided the contract and thus stepped outside of the contractual role of a thing. Thus the legal system could without any actual inconsistency or embarrassment hold the person legally responsible for the crime. There is a right and proper legal reason to move the square peg from the round hole to the square hole.

This point is quite correct but irrelevant to the substantive mismatch, the contradiction between the legal role of the non-criminous contractual slave and factual status of the person (the square peg not fitting in the round hole in the first place). Obviously the non-criminous slave was not in fact a thing that (who?) suddenly blossomed into personhood when he, she, or it detoured into crime. The non-criminous contractual slave had the factual status of a person just as the criminous slave. The real issue is the factual-status/legal-role mismatch for the contractual slave (square peg/round hole mismatch). When a legal system recognizes such a contract as valid, then the legal system is adopting a pretense or fiction.

There always seem to be other misunderstandings of the inalienability argument.

Surely you are arguing that the self-sale contract is invalid because the worker is paid too little. What adequate compensation can there be for a lifetime of labor? Freedom is priceless so there can be no real quid pro quo in a self-sale contract.
That is a complete misunderstanding of the de facto inalienability argument, an argument which never considers the terms of the contract. The argument is similarly independent of assertions that slaves or servants were or are mistreated, overworked, and exploited. The mistreatment arguments are only qualitative variations on the more quantitative underpayment argument. The underpayment analysis of the self-sale contract is as superficial as the official Marxist argument that the problem with renting human beings is that they are not paid the full value of the labor they actually perform.

Another misunderstanding concerns the role of voluntariness in the inalienability analysis.

Surely you are arguing that a self-sale contract is invalid because it is really involuntary in spite of the surface characteristic of formal consent. Look at the historical examples. Fearing the example set by free blacks, there was agitation in several slave states in the years immediately preceding the Civil War to require that free blacks select a master and voluntarily resubmit to slavery or else leave the state (see Franklin 1969; Gray 1958). Any such re-enslavements would hardly pass muster as “voluntary contracts.”

The analysis is totally independent of the historical question of the degree of involuntariness in the self-sale contracts of the past. The de facto inalienability critique assumes a perfectly voluntary contract. An involuntary “contract” would be a fortiori null and void.

If “the problem” with historical self-sale contracts was their involuntariness, then the presupposition is that the contract would be acceptable if it were genuinely voluntary. Because if the contract embodied some deeper flaw that would render it invalid even if perfectly voluntary, then there is no need to consider degrees of historical voluntariness. Yet the alienist liberal tradition that reached its apogee in Nozick’s acceptance of voluntary self-sale contracts (1974, p. 331) sees no deeper flaw, and thus it focuses on voluntariness.

The mirror-image of this liberal superficiality is the official Marxist fallback argument that the wage labor contract is socially involuntary. If the labor-theory-of-value argument that wage workers are exploited because they are paid too little is found unconvincing, then perhaps one will accept the backup argument that the contract is socially involuntary because workers born with only their labor power to sell have no other real choice.

Yet another misunderstanding of the argument concerns the rationality of the contract.

Surely you are arguing that a self-sale contract is invalid because no rational person would enter into such a contract. Only a person not
in possession of their faculties would agree to the contract, and a contract by a legally incompetent person is invalid.

Again, the de facto inalienability argument makes no presumption about which contracts are considered "rational" or "irrational" by the standards of the day.

Surely you are expressing a value judgment that a self-sale contract should be invalid, and thus that the right to self-determination should be inalienable.

The de facto inalienability argument is rooted in facts - not in value judgments. It is a fact that I can voluntarily alienate the use of this writing instrument (my pen or my computer), and it is a fact that I cannot do the same for my own personal actions. To use the language of the employment contract, I am inexorably the "employer" of my intentional actions (a.k.a. "labor services"). I can at most agree to co-operate with other people, and then we are jointly responsible for the results. Yet the contractual framework for the sale and transfer of a commodity is applied to human labor as it is applied to pens and computers. The law pretends that the responsible co-operation of the employee with the employer "fulfills" the contract for the transfer of labor. The employer enjoys the sole de jure responsibility for the (positive and negative) results of the human actions.

But the legal fiction of the transferred labor must not be abused for the commission of a crime. Then the fiction is set aside in favor of the facts. The worker whose labor was sold by the lifetime or by the hour is now recognized as co-responsible with the master for the results of their joint activity. The instrument in work is promoted to a partner in crime.

A MISUNDERSTANDING OF THE CRIMINOUS EMPLOYEE EXAMPLE

One of the principal intuition pumps of de facto inalienability theory is the criminous employee example. There is not one but two "inconsistencies," and they should not be confused;

1. the formal or legalistic inconsistency of treating the same person legally as a thing (e.g., in the normal employee's role) and legally as a person (e.g., when committing a crime), and

2. the substantive inconsistency in a legal system that accepts a de facto person as fulfilling the de jure role of a thing (e.g., the employee in normal work).

These inconsistencies could be restated using the analogy of the square peg (de facto person), the round hole (legal role of a thing), and the square hole (legal role of a person).
In terms of the hole/peg analogy, one should not confuse:

1. the **formal or legalistic inconsistency** of treating the same peg as fitting in both a round hole and a square hole, and

2. the **substantive inconsistency** in a legal system that accepts a square peg as fitting in the round hole.

It is argued that once the employer and employee commit a crime (or conspire to do so), they step outside of and invalidate the employment contract. They become partners carrying out a joint venture, and the law treats them both as being legally responsible for the results of their actions. Thus there is no legal inconsistency in treating the criminous ex-employee as being legally responsible. That is correct, and that was not the point of the example of the criminous employee. The fact that the criminous activity invalidates the employment contract does indeed keep the legal bookkeeping straight.

The substantive inconsistency is the point of the criminous employee example. The employee does not suddenly burst into personhood when committing a crime and then lapse into automatism in normal work (e.g., as in the hypothetical part-time robot example). The person is just as much de facto responsible for non-criminous work as for committing a crime in co-operation with the employer. It is a factual point, not a legal point. The example of the criminous employee forcefully brings this fact to light.

The foundation of the legal framework for the employment system is the legal validation of the employer–employee contract, the acceptance of the employees’ de facto responsible co-operation with their employer as fulfilling the labor contract. It is an institutionalized fraud. There is no testimony about this fraud as telling as the testimony of the legal system itself in the case of the criminous employee. In order to hold the employee

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**Figure 10.1 Two legal roles of the employee**

- **Employee as de facto person**
- **Criminious employee**
- **Normal employee**
- **Legal role of a person**
- **Legal role of a thing**
legally responsible for his or her de facto responsible actions, the legal system has to render that employment contract null, void, and invalid. That is the correct juridical response, and we have only argued that it should be extended to all employment contracts. People should always be held legally responsible for the positive and negative results of their de facto responsible actions, and thus the employment contract should always be considered null, void, and invalid.

**DE FACTO INALIENABLEITY THEORY AS A “VALUE JUDGMENT”**

Economists are much more comfortable about a normative argument if they can label it as a “value judgment” — as in “I hate pink plastic flamingos.” Then the interpretation of the de facto inalienability argument is as follows.

Everyone has a right to their value judgments. You think that pink plastic flamingos should be banned, that anchovy pizzas should be banned, and that employment contracts should also be banned. There are already laws against selling various items (e.g., certain controlled drugs, rare animals, and dangerous firearms), and you are expressing the value judgment that labor should also be made non-transferable.

That is a misunderstanding of the de facto inalienability argument. Controlled drugs, rare animals, and dangerous firearms are all de facto alienable and transferable. The de facto inalienability argument was never used as an argument against the legal sales of those items (see Rose-Ackerman 1985 for some of the arguments). Labor is different. It is not a value judgment that labor is de facto inalienable and non-transferable; that is an empirical factual judgment. If true, then the legal contract to transfer that which is inherently non-transferable would be fraudulent. There is a value judgment involved here, namely that inherently fraudulent contracts should not be legally validated. But the Defenders of the Received Truth would rather not defend the employment contract by taking issue with that value judgment.

**“INTERPRETING” EMPLOYEES AS INDEPENDENT PRODUCERS**

One strategy for the defense is simply to “reinterpret” the employment contract in some more palatable form — as if the contract was putty that could be remolded at will. For example, let’s “say” the workers are selling their outputs instead of their labor. However, that is not the way the employment firm is legally structured. In order to sell their outputs, the workers must first own them, and that requires paying for the inputs. One
could also "say" the workers bought the inputs – but that is only more "flapping one's wings in the void" – so let's try another tack.

Another flight of fancy is to "interpret" all employees as independent producers of labor. The labor services themselves are "interpreted" as the only fruits of their labor, so in that sense the workers can be "said" to produce, own, and sell the fruits of their labor. In terms of the stylized model, the labor services $L$ are taken as the only fruits of the workers' labor; the tangible product $Q$ is taken as being produced by the employer who set up all the contracts. The basic idea is to sever – at the level of legal interpretation – the connection between the performance of the labor $L$ and the production of the product $Q$. The employees produce only $L$, while the employer produces $Q$.

Independent producers pay for their own inputs. Thus to continue the "reinterpretation," one must also sever the connection between performing $L$ and using up the non-labor inputs $K$. Let us "say" the employer uses up $K$. The only activity the employees are performing is the production of the labor services $L$, and they do pay for the food, clothing, and shelter involved in producing that labor.

Independent producers also have direct control of their services. Therefore, let us "reinterpret" the employment relationship as not involving authority.

To speak of managing, directing, or assigning workers to various tasks is a deceptive way of noting that the employer continually is involved in renegotiation of contracts on terms that must be acceptable to both parties. Telling an employee to type this letter rather than to file that document is like my telling a grocer to sell me this brand of tuna rather than that brand of bread. I have no contract to continue to purchase from the grocer and neither the employer nor the employee is bound by any contractual obligations to continue their relationship.

(Alchian and Demsetz 1972, reprinted Puterman 1986, p. 112)

Thus each employee is interpreted as an independent self-employed job shopper producing either typing-labor or filing-labor according to what the customer wants.

This continuous renegotiation view of the labor contract goes back to John R. Commons.

The labor contract is not a contract; it is a continuing renewal of a contract at every successive moment, implied simply from the fact that the laborer keeps at work and the employer accepts his product... (The employee) does not own the job – his employer is under no duty to keep him – he owns the liberty to be continuously bargaining with his employer to be kept on the job by virtue of continuously delivering a service which the employer continuously accepts, thereby impliedly renewing continuously the contract.

(Commons 1968, pp. 285–6)
This is true of any at-will rental contract, such as an at-will lease of an apartment, so it does not address the specific critique of the labor contract.

The important part of the Alchian–Demsetz argument is not the point about continuous renegotiation but the reinterpretation of the employment relation as a non-authority relation like a contract with an independent producer. The customer is not in an authority relationship with the grocer. The typing-labor or filing-labor is the only product of the worker that the employer decides to buy (like the can of tuna or the loaf of bread). The worker produces and sells that labor in a made-to-order fashion in his or her labor-job-shop.

This interpretation of the labor contract can be stated using our description of Labor's product.

\[
\text{Labor's product } = (Q, -K, 0) = (Q, -K, -L) + (0, 0, L)
\]

Whole product + Labor

The interpretation of the employees as independent producers of labor, in effect, makes an incision and cuts the causal connection between the labor \((0, 0, L)\) and the whole product \((Q, -K, -L)\). The workers are pictured as only producing and selling the labor \(L\); the whole product is produced by the employer. Like the watchmaker who assembles the watch so that it will run correctly, the employer makes all the right contracts for \(L\) and \(K\) so that the whole product \((Q, -K, -L)\) will be produced as the result.

This independent-producer interpretation of the employee's role looks, at first, like a novel theory, but it turns out to be only an ingenious and elaborate restatement of the conventional theory. The usual theory is that the employees sell the labor \(L\) as a commodity, and that the employer employs the labor \(L\) and the other inputs \(K\) to produce the product \(Q\). The problem with the theory never was its legal coherence; it hangs together beautifully. The problem was at the factual level. Labor did not fit the mold of a transferable commodity; labor services are not transferable like a can of tuna, a loaf of bread, or the services of an apartment or a van.

Take, for example, the idea of severing the connection between performing the labor \(L\) and producing the product \(Q\). There are times when an individual wants to be severed from the results of his actions. For instance, the hired killer does not want responsibility for the fruits of his labor. That even shows in the language; he is a "trigger-man." The hired killer bears no personal animus against the victim; he is only hired to "pull the trigger." He would like to sever the labor — "pulling the trigger" — from the resulting murder. But the facts cannot be so easily "reinterpreted." He together with the "entrepreneur" is de facto responsible for the murder.

In contrast, consider the de facto transferable services of a truck or van. A van and its owner can be parted. The services of the van can be severed from the owner and de facto transferred into the employment of another
The van user's employment of the van is not an authority relation over the will of the van owner. If the van owner chooses to continue the at-will rental contract when the van user chooses to use the van to go shopping for a can of tuna instead of going to mail a letter, then the van owner is, in effect, supplying the van user with tuna-shopping-van-services rather than letter-mailing-van-services.

If labor services could in fact be similarly severed and de facto transferred into the employment of another person, then there would be no de facto inalienability critique of the contract. But that is not the case. The imaginative restatement of the employee as an independent producer of labor does nothing to change those facts.

“VOLUNTARY ACTS BETWEEN KNOWLEDGEABLE CONSENTING ADULTS”

Liberalism, and particularly libertarianism, argues that at least a prima facie case can be made for allowing any voluntary acts between knowledgeable consenting adults. Does the de facto inalienability argument rule out any such voluntary acts between consenting adults? The (surprising) answer is “No” (at least not at the underlying non-institutional level).

Understanding this answer requires a keen appreciation of the difference between the institutional (de jure) overlay and the underlying non-institutional (de facto) realities. The de facto inalienability argument does not rule out the de facto transfer of labor since it takes that to be impossible in the first place. What it rules out is the institutional overlay of the employment contract superimposed on the reality where labor has in fact not been transferred. What the argument excludes is at the institutional level, not at the underlying non-institutional level. It forbids the legal validation of an inherently unfulfillable contract. It does not forbid any non-institutionally described voluntary acts between knowledge consenting adults.

Nozick pointedly uses the expression “capitalist acts between consenting adults” (1974, p. 163). The adjective “capitalist” is institutional so Nozick is not simply advocating for allowing voluntary acts between knowledgeable consenting adults. He is arguing for certain institutional superstructures to be laid over those voluntary acts. Nozick, with admirable consistency, argues not only for “capitalist acts” but also for the slavish acts involved in the voluntary self-sale contract (p. 331) – as if there were no problem for a person to de facto fit the legal role of a non-person. The abolition of the employment contract, like the abolition of the self-sale contract, does not infringe on the freedom to make (non-fraudulent) contracts; it only restricts the “freedom” to make inherently unfulfillable and naturally invalid contracts.
The employment contract is, like the self-sale contract was, a subtle fraud vouchsafed by the legal system itself. Yet the point about "voluntary acts" can be illustrated by considering a simple fraud. There are widgets and cheap pseudo-widgets, and it is difficult to tell them apart. A buyer B legally buys a widget from the seller S and pays its price, but S transfers a pseudo-widget to B to "fulfill" the contract. There is a mismatch between the legal transfers and the factual transfers. In this case, there are two ways to restore a transfer matching:

- change the factual transfers - S furnishes a genuine widget to replace the pseudo-widget - or,
- change the legal transfers - rewrite the legal contract as a contract to buy a pseudo-widget - which may or may not be agreeable to B.

The point is that there is no fraud involved if B knowingly agrees to the rewritten contract to buy the pseudo-widget for the same money (the price of a real widget).

If the same de facto transfers could be carried out with no fraud involved, then what is the point of a fraud? The point is that - without the fraud - the defrauded party would very likely not agree to the same de facto transfers. For example in a democratic firm, Labor might not want to make a gift of the profits to Capital.

What in fact is ruled out by the prohibition against frauds? No voluntary acts between knowledgeable consenting adults are prohibited. It is the mismatch between the legal transfers and the factual transfers to fulfill the contract that is prohibited. In the example, the voluntary act of knowingly exchanging the price of a genuine widget for a pseudo-widget was not prohibited. While the de facto inalienability argument does not rule out any voluntary acts between knowledgeable adults, it does rule out "capitalist acts between consenting adults." The employment contract involves a transfer mismatch. But, since labor is de facto non-transferable, there is only one way to remedy the mismatch, namely rewrite the legal transfers in some fulfillable form.

Consider the simple model of the employment firm involving the parties Labor and Capital. In the non-institutional factual description of the transfers, the non-labor inputs $K$ and a sum of money $M$ (e.g., the wages $wL$) are factually transferred from Capital to Labor, and Labor produces the outputs $Q$ and factually transfers them away (say) to Capital.

Let us now rewrite the contracts to fit these realities of "capitalist production," and let us further suppose that both parties knowingly agree to these new contracts. Then there would be no fraud. What do we have? Not an employment firm, but an example of worker-managed production possibly with transactions at non-market prices. The non-labor inputs $K$ have been legally purchased by Labor from Capital, and the outputs $Q$
have been legally appropriated by Labor and sold to Capital. The net payment $M$ goes from Capital to Labor. If the transfers were at market prices then $M = pQ - rK$, but parties may knowingly agree to exchanges at non-market prices. Or such non-market transactions can be interpreted as a market transaction followed by a voluntary gift.

For instance, Labor could knowingly agree to buy $K$ and sell $Q$ all for the net payment of the money $M = wL$. That, in effect, is the market transaction with the net payment $M = pQ - rK$ followed by the voluntary gift of the profits $pQ - rK - wL = \pi$ from Labor to Capital. And that, in effect, is what the fraudulent employment contract induces Labor to do in conventional production. In a democratic firm, if the workers want to knowingly donate their profits to Capital or any worthy cause, they are free to do so.

These points serve to mark the non-consequentialist nature of the de facto inalienability critique of the employment contract. With a different legal overlay, the same de facto transfers could knowingly and voluntarily take place without involving any fraud. This also serves to emphasize that there is no inherent conflict between the de facto inalienability argument and allocative efficiency or Pareto optimality (applied to non-institutionally specified states of affairs).

In a simple garden-variety fraud, it is presumably always possible to ascertain that the de facto transfer does not correspond to the agreed-to legal transfer, e.g., to tell the difference between a pseudo-widget and the genuine article. The “beauty” of an institutionalized fraud like the employment contract is that there is no de facto transfer that fulfills the contract: in effect, there is no genuine widget to contrast with the pseudo-widget. The pseudo-transfer of labor (i.e., voluntary co-operation with the employer) has been accepted for centuries by the legal authorities themselves as fulfilling the contract. The “discovery” of the fraud thus requires extensive analysis together with heavy use of intuition pumps like the case of the criminous employee to see that labor is not de facto transferable after all. And any responsible scholar and respected business person –
being embedded in the institutions of the employment system - has every incentive not to make that discovery.

VOLUNTARILY FOLLOWING ORDERS

The analysis has emphasized the property structure of production, but the same remarks can be applied, mutatis mutandis, to the parallel governance structure of production. In the employment relation, the worker W decides to do X because the employer or boss B says to do X. Here again, the problem does not lie in the factual reality of W choosing to do what B says; the problem lies in the legal overlay.

In the employment relation, the reality, namely a rather one-sided form of voluntary co-operation between autonomous decision-making individuals, is legally interpreted as B "employing" W with B as the sole decision-maker. B is the "head," W is the "hand." The head makes the decision and then employs the hand to carry out the decision. The hired hand is the conductor of B's intentions, the instrument of B's will; it has no "head" of its own.

In terms of the legal transfers between W and B, the employment contract transfers the use-rights over W's time, the direct control rights over W's services, to the employer B. It is a transfer, not a delegation, of decision-making authority. But the factual transfers cannot match that legal transfer. Short of some part-time robot concoction, W remains the de facto decision-maker over W's actions. All W can do is to voluntarily co-operate with B by deciding to do as B says.

The facts cannot be changed to eliminate the mismatch (science fiction aside); human decision-making capacity is not de facto transferable. The legal contract should be rewritten in a non-fraudulent form to fit the facts. The legal relationship between W and B is then one of delegation, not an alienation or transfer of decision-making capacity. W and all of W's colleagues in the work process (including B) are the decision-makers; B acts as their delegate or representative. B's decision initiatives are taken in the name of the whole group, in the name of the governed. When the workers decide to do X because the boss B says to do X, that would legally as well as factually be their decision - even when X is not a crime.

Similar remarks apply to vote selling. The inalienability critique argued against W being permitted to sell his or her vote to B so that it became B's vote. There was no inalienability critique of W casting W's vote as B says. That may indicate what Hutcheson called a "weak mind" but it would not pretend to alienate the de facto inalienable capacity for decision-making.

Would the abolition of the employment contract impair workers' freedom? Workers would not be prevented from performing the same
(non-institutionally described) voluntary acts as before, namely deciding to do what B says. But criminals are today denied the "contractual freedom" to voluntarily contract into the legal role of an instrument, the de jure role of a non-decision-making non-responsible tool employed by the employer. With the abolition of the employment contract, that "contractual freedom" would also be denied to all de facto responsible decision-making persons.
PART III

Property and Contract in Economics
PROPERTY FALLACES IN CAPITAL THEORY

Appropriation in capital theory

Economic theory has neglected appropriation. A recognition of the peculiar and distinctive nature of appropriation (e.g., that it is not a return to a factor) has direct implications for some of the most controversial parts of economics such as capital theory. In recent decades, there has been the “Cambridge Controversy in Capital Theory” between the conventional neo-classical economists of Cambridge, Massachusetts and the neo-Keynesian, neo-Ricardian, and neo-Marxian economists of Cambridge, England. This controversy did clarify some matters, but it failed to shed much new light on the basic concepts of capital theory since both sides accepted the Fundamental Myth that the ownership of the product is attached to the ownership of the means of production. Some economists condoned and some condemned the “private ownership of the means of production.” But without an appreciation of appropriation, neither side understood that the right to the product is not included in that ownership. The whole product is not pre-owned at all; it is appropriated. This chapter sketches in a non-technical manner the implications of property appropriation for capital theory.

The imputation fallacies of capital theory

Broadly speaking, economic resources have two types of uses, “active” and passive.

During the seventeenth and early eighteenth centuries, as capitalism developed, an important distinction began to be made between money which was “passively” utilized (by lending it out at interest, or using it to buy a
A resource is used passively when it is sold or rented out in return for some market price or rental. A resource is used "actively" when, instead of being evaluated directly on the market, it is used up in production, usually along with other resources. Then the liabilities for the used-up resources and the rights to any produced assets are appropriated.

Appropriation is involved in the active use, not in the passive use of resources. Difficulties arise in the conventional treatment of the active case, since economic theory tends to ignore appropriation. The economic return in the active case is not just the value of the original resource but the extra value of the appropriated property. But the total return in the active case is mistakenly imputed only to the original resource, as if the ownership of the appropriated property were already included in ownership of the original resource. Property which is appropriated cannot be previously owned; otherwise it could not be appropriated. The extra value of the appropriated property (e.g., the whole product) is not a return to the original resource. In the context of the laissez faire appropriation mechanism it is a return to the contractual role of being the hiring party, the last legal owner of the used-up resources.

Appropriation is neglected because the right to the whole product is treated as if it were part of a pre-existent property right. In the Marxist view of the capitalist economic system, the pre-existent property right is the "ownership of the means of production." In neoclassical capital theory, the pre-existent right is the ownership of a capital asset. Property appropriated in the future can have a present value (which could be zero) but it cannot have a present owner, since otherwise it could not be appropriated in the future. The primary imputation fallacy in capital theory is the "capitalized value" definition.

THE CAPITALIZED VALUE OF AN ASSET

To illustrate fallacies involved in capital theory, we will use an extremely simple example. A capital good yields $K$ units of capital services (machine-years) per year. Each year workers perform the labor $L$ which uses up the capital services $K$ and produces the output $Q = f(K, L)$. The list or vector giving the positive and negative results of the year's production process is the production vector or

$$\text{Whole product} = (Q, -K, -L)$$
Let $P$, $R$, and $W$ be the unit prices of the outputs, capital services, and labor services respectively so the value of the whole product is the profit:

$$\pi = \text{Profit} = \text{Market value of whole product} = PQ - RK - WL$$

If $r$ is the constant interest rate, then a future value $FV$ at the end of one year has the present value $PV = FV/(1 + r)$. Suppose the capital good only yields $K$ units of capital services for two years with no maintenance and then has no salvage value. Thus the net present value of the services yielded by the capital good is $RK/(1 + r) + RK/(1 + r)^2$. The capital good has a current competitive price $C$. Arbitrage between the two possibilities of renting the capital good (buying the services $K$) or buying it will equalize the price of the good with the present value of the rental payments:

$$C = \frac{RK}{(1 + r)^1} + \frac{RK}{(1 + r)^2}$$

Market cost = Capitalized value of rental stream

The capitalized present value of the profit $\pi$ from each year's operations is:

$$\Pi = \frac{\pi}{(1 + r)^1} + \frac{\pi}{(1 + r)^2}$$

One of the basic concepts of capital theory is the notion of the capitalized value of an asset. The definition is usually stated in a rather general fashion; owning the asset "yields" a future income stream and the discounted present value of the income stream is the capitalized value of the asset. But there are quite different ways in which "owning an asset" can "yield" an income stream. There are the "active" and the passive uses of capital. The capitalized value concept is unproblematic in the passive case where the income stream is the stream of rentals (net of maintenance) plus the scrap value. The capitalized value of that stream is, under competitive conditions, just the market cost $C$ of the asset. Bonds and debentures provide similar examples of income streams generated by renting out or loaning out capital assets, i.e., by the passive use of capital.

Capital theory would be somewhat less controversial if it stuck to such examples of hired-out capital. However, the capitalized value definition is also applied to the quite different active case where, instead of hiring out the capital, labor is hired in, a product is produced and sold. In the example, the annuals net proceeds to the capital good owner acting as the employer are:

$$PQ - WL = \pi + RK$$
The present value of the stream of net proceeds is then called "the capitalized value $V$ of the capital asset" as if to impute all the net proceeds to the capital asset:

\[
\text{Capitalized value of the capital asset} = V = \frac{PQ - WL}{(1 + r)^1} + \frac{PQ - WL}{(1 + r)^2}
\]

The net proceeds $PQ - WL$ can, however, be analyzed into the stream of implicit rentals $RK$ on the capital assets plus the profits $\pi$ which are the value of the future appropriated whole products (Ellerman 1982, chapter 12).

\[
V = \frac{PQ - WL}{(1 + r)^1} + \frac{PQ - WL}{(1 + r)^2} = \left[ \frac{RK}{(1 + r)^1} + \frac{RK}{(1 + r)^2} \right] + \left[ \frac{\pi}{(1 + r)^1} + \frac{\pi}{(1 + r)^2} \right] = C + \Pi
\]

Thus the so-called "capitalized value $V$ of the capital asset" is actually the market price of the capital asset $C$ plus the present value $\Pi$ of the property appropriated in the future. The rentals are the return to the capital asset; the property assets and liabilities underlying the profits are the whole products which are the return to the contractual role played by the capital owner (when the capital is used actively). The rights to the whole products are not part of the rights to the capital asset; whole products are appropriated.

The capitalized value definition overlooks appropriation. One might then think that by purchasing the asset or the "means of production," one is thereby purchasing the outputs and the net proceeds -- so there is no need to appropriate the outputs.

When a man buys an investment or capital-asset, he purchases the right to the series of prospective returns, which he expects to obtain from selling its output, after deducting the running expenses of obtaining that output, during the life of the asset.

(Keynes 1936, p. 135)

This is incorrect. In fact one thereby purchases only the asset. Any further return will depend on one's contracts. If one rents out the asset and sells any scrap, then one receives only the rental-plus-scrap income stream. If, instead, one hires in labor, bears the costs of the used-up labor and capital services, and claims and sells the outputs, then one receives the net proceeds mentioned by Keynes. In each case, one owned the asset. The difference lies in the pattern of the subsequent contracts. By making the contracts so that one was the hiring party, one could additionally appropriate the whole
product each time period with its positive or negative value. The capitalized value definition fallaciously imputes the value of the appropriated whole products to the capital asset rather than to the contractual role played by the capital owner.

The yield rate of a capital asset

Another example of assigning the whole product to the capital asset is involved in the notions of "marginal efficiency of capital" or "net productivity of capital." Under competitive conditions, the market interest rate would discount the stream of net rentals and scrap back to the market cost of a capital asset. When the capital asset is used actively then some other discount rate $p$ will discount the stream of net proceeds back to the market cost of the asset.

$$C = \frac{PQ - WL}{(1 + p)^1} + \frac{PQ - WL}{(1 + p)^2}$$

Such a discount rate $p$ is sometimes called an "internal rate of return" or "average rate of return over cost." However, it is also presented as the "yield rate" of the capital asset and then it is called the "marginal efficiency of capital" (Keynes 1936, p. 135) or the "net productivity of capital" (Samuelson 1976, p. 600). Unlike Keynes, Professor Samuelson is careful to call it a "net productivity" since it isn't a marginalist concept at all. The problem is that he calls it the "net productivity of capital." This usage presents the value of future appropriated whole products as if it were part of the return to owning the capital asset when in fact it is the return to having the contractual role of being the hiring party.

For instance, at the rate of return $p$, the return on the capital cost $C$ after one year is:

$$(1 + p)C = (\pi + RK) + \frac{PQ - WL}{(1 + p)^1}$$

which includes the profit $\pi$ in addition to the rental $RK$. Taking out $\pi + RK$, the remaining return after two years is

$$(1 + p)[(1 + p)C - (\pi + RK)] = \pi + RK$$

which again includes the profit $\pi$ in addition to the rental $RK$. Thus considering $p$ as the rate of return to the capital cost $C$ again implicitly imputes the profits and the underlying appropriated whole products to the capital asset with the cost $C$.

Thus the problem with the "net productivity of capital" is that it fallaciously imputes the return to the capital-owner's social role (being the hiring party) to the capital asset itself.
The quasi-rent of a capital asset

Yet another method of imputing the whole product and its value, the profits, to capital is the "quasi-rent doctrine." In a genuinely competitive model, all factors including the services of fixed plant and equipment would have a competitively determined price. Capital assets would have a competitive rental. In conventional microeconomics, it is held that capital assets might "earn" a short run "quasi-rent" due to the short run inelasticities of supply in capital assets. But short run inelasticities do not require a special notion of "quasi-rents" in addition to the usual competitive rentals. Short term competitive rentals reflect such scarcities, and thus the short run rental might be higher than the rental in the longer term.

The quasi-rent doctrine is another example of the penchant in conventional economic theory to fallaciously impute the profits to capital. The value of the appropriated whole product, the profit $\pi$, is added to the machine's competitive rental $R_Q$, and the result is dubbed the "quasi-rent earned by the machine" (Stonier and Hague 1973, p. 328).

The passive and "active" uses of capital

There is a pattern here. Capital has a passive use and an active use. Thus capital theory will always have a pair of concepts associated with capital, one concept derived for the passive case and one concept for the active case. The value concept associated with the active case includes the concept for the passive case plus the value of the whole product (the profits) which is appropriated by the capital owner in the active case.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Passive case</th>
<th>Active case</th>
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<td>Value of capital assets</td>
<td>Market cost $C$</td>
<td>Capitalized value $V = C + \Pi$</td>
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<td>Yield on capital value</td>
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<td>Capital asset rental</td>
<td>Market rental $RK$</td>
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The difference between the passive and active case is the appropriation of the whole product, which is the return to a contractual role, not a return to the capital. But conventional capital theory neglects appropriation, and imputes the whole product and its value, the profits, to capital.

The retreat to the zero-profits case

One traditional reason for the neglect of the entire question of the appropriation of the whole product is that it doesn't matter, for the purposes of
price theory, if attention is restricted to zero-profit perfectly competitive equilibrium.

Remember that in a perfectly competitive market it really doesn't matter who hires whom: so have labor hire 'capital,' . . .

(Samuelson 1957, p. 894; repr. Samuelson 1966, p. 351)

Under constant returns to scale and statical conditions of certainty, it is immaterial which factor hires which . . . Labor as much hires capital goods and land as capital hires labor and land.

(Samuelson 1967, p. 114; repr. Samuelson 1972a, p. 27)

The zero profit condition also occurs in capital theory where it hides the imputation of the whole product.

When the assignment of the whole products to the capital assets is challenged, the all-too-typical response is that it really doesn't matter because in perfectly competitive equilibrium the pure profits are zero. In that instance, Professor Samuelson can claim to have demonstrated the "EQUALITY OF CAPITALIZED VALUE AND REPRODUCTION COST" (Samuelson 1961, p. 42; repr. 1966, p. 309), i.e., the equality of V and C in our example. Similarly, a prominent capital theorist shows that the competitive "equilibrium price of a one-year-old machine in terms of 'costs'" is equal to the "present discounted value of the future net output which a one-year-old machine can produce" (Burmeister 1974, p. 443).

In this special case, the fallacious imputation of the whole product to capital is a moot point from the value theoretic viewpoint since the whole products then have zero value. In property terms, the imputation is as incorrect in that case as in general. A property vector is not the zero vector even when its market value is zero. And, of course, the capital theoretic definitions of capitalized value or net productivity are by no means restricted to the competitive model in the economics and finance literature.

Professor Samuelson asserts that "capital goods have a 'net' productivity" (1976, p. 661) (while the other factors have only a marginal productivity), as a "technological fact" (1976, p. 600). It is a clear-cut case where the social role of Capital as the hiring party in capitalist society is presented as a technological characteristic of capital goods.

Professor Samuelson's dictum that the cash value of a doctrine is in its vulgarization applies not only to Marxism but also to the fallacious imputations of neoclassical capital theory. For instance, in a book entitled The Capitalist Manifesto, one reads that "The essence of property in productive wealth is the right to receive its product" (Kelso and Adler 1958, p. 210). The return to property is its rental or selling price. The product, i.e., the whole product, must be appropriated.

The recent controversies in capital theory did not get to the root of the
Property and contract in economics

matter because they remained at the value theoretic level. The root of the problem in capital theory is that it presents the return to Capital's market role (being the hiring party) as resulting from the technical and legal characteristics of capital goods. The whole product is presented as part of the "net productivity of capital" or "marginal efficiency of capital" and the legal rights to the whole product are presented as part of the "ownership of the means of production." In that regard, capital theory uses a high-brow version of the Fundamental Myth.

PROPERTY FALLACIES IN COMPETITIVE EQUILIBRIUM THEORY

"Ownership" in the theory of the firm

When the appropriation of the whole product is implicitly considered in the theory of the firm, the pattern, as in capital theory, is to construe the right to the whole product as being part of a pre-existent property right. In its commonest form, this property right is called the "ownership of the firm." We have defined the word "firm" to be the party who ends up appropriating the whole product:

"firm" = "whole product appropriator"

The identity of the firm (in this technical sense of whole product appropriator) is determined not by some pre-existent property right such as the so-called "ownership of the firm," but by who hires what or whom. Firmhood is a contractual role, not a property right.

Economists sometimes use a rather abstract version of the "ownership of a firm." Technical production possibilities are represented by a production function, a production set, or a "production-opportunity locus" (Hirshleifer 1970, p. 124), and then economists speak of the "owners" of these technical possibilities, e.g., the "owners of the productive opportunity" (Hirshleifer 1970, p. 125). There is, however, no such ownership of a production function.

Indeed, how should we define an 'entrepreneur'? It seems that he is not just a capital-owner, or one who has the right of disposal over capital. He is not simply a manager, because as such he could be counted among the employees. He could be said to be the party who gets the net profits. But for what? This is a very old subject of debate. Perhaps the best way out is to define the entrepreneur as the "owner of a production function". In this way he has some sort of exclusive right. Nobody else can use his production function.

(Haavelmo 1960, pp. 209-10)

The answer to Haavelmo's "for what?" question is that the net profit is not the return to an already owned piece of property. The profits are the value
of the whole product, the whole product is appropriated, and, via the market mechanism of appropriation, the whole product is appropriated by the last owner of the used-up inputs. Since economics overlooks appropriation, Haavelmo can only conceive of the profit income as a return to some existing property. Since the inputs have already been accounted for, he has to postulate the "ownership of a production function."

Neoclassical economics' lack of attention to property theoretic "details" is illustrated by the postulation of this peculiar "ownership" of a mathematical description of technically possible production opportunities such as a production function or production set. If one wishes to use the metaphor of appropriating the whole product as "trading with Nature," then one should realize that there are no "owners" (Hirshleifer 1970, p. 20) of the production set of possible trades with Nature. There might be the ownership of certain specialized inputs, such as proprietary technical information, but that is only the ownership of inputs to the production opportunity, not the "ownership" of the productive opportunity itself.

The notion of "ownership of a production set" is often intended as an abstract version of the ownership of a corporation. But, as we have seen, a corporation is an owner of certain inputs such as physical and financial capital. The legal process of incorporation does not magically convert the ownership of a capital asset into the ownership of the production set of net product vectors which could be produced using that capital asset.

For instance, if a person owns a widget grinder, that is the ownership of an input or factor of production. The person is a factor supplier, a supplier of a stream of capital services $K$ of the widget grinder. Suppose the person then incorporates a corporation which issues shares to the person in return for the widget grinder. Then the person indirectly owns the widget grinder (i.e., owns the corporation which owns the grinder). Clearly this legalistic repackaging of the widget grinder ownership does not change anything in the argument about the non-ownership of firmhood. The identity of the firm is still determined by whether the owner of the capital asset (in this case, the corporation) hires out the asset or hires in labor.

Yet many economists suddenly consider the incorporated person as the owner of the set of production vectors which could be produced using the widget grinder. Instead of being considered a factor supplier, the person — now embodied as the corporation — has suddenly become a "firm" — a factor demander (demanding the complementary set of inputs to be used along with the widget grinder). The legal possibility of someone leasing the widget grinder from the corporation cannot even be represented in the economists' model of supply and demand schedules since the machine has been subsumed into the shape of the production set. Far from being so prosaic, economists have mystically interpreted the process of incorporation as a transubstantiation — the miraculous transformation of the ownership of
a machine into the “ownership” of the production set of net output vectors that can be produced using the machine.

Often property theoretic reasoning about corporations is distorted by tautological formulations.

A corporation has the ownership of what it produces, of its product. It doesn’t need to “appropriate” its product.

That is only a truism by the meaning of “its product.” But what determines whether a given set of outputs produced using the corporation’s machinery and buildings is “its product” or the product of some other party? That depends on the direction of the hiring contracts. If the corporation had leased out the plant and machinery (e.g., a widget grinder), the outputs would not be “its product.” Alternatively, if the corporation had hired in a complementary set of inputs, then it would be in the legal position of the hiring party. By bearing the costs of production, it could lay legal claim to the outputs which thus become “its product.” Hence truisms about a corporation owning “what it produces” or “its product” do not contradict the thesis that the appropriation of the outputs (and input liabilities) is determined by the direction of the hiring contracts.

The Arrow-Debreu model: decreasing returns and positive profits

In the early models of perfectly competitive equilibrium, constant returns to scale in production was assumed. This assured zero economic profits in equilibrium, so from the viewpoint of value theory, it was immaterial who was the firm, i.e., who appropriated the whole product vector (since it had zero net value).

In 1954, Professors Kenneth Arrow and Gerard Debreu published a paper (Arrow and Debreu 1954) in which they claimed to show the existence of a competitive equilibrium under the general conditions of non-increasing returns to scale, i.e., decreasing or constant returns to scale. Under decreasing returns to scale, there would be positive economic or pure profits. Hence the Arrow-Debreu model alleges to show the existence of a perfectly competitive equilibrium with positive economic profits. This result has now become part of the Received Truth in economics; Arrow and Debreu have each received the Nobel Prize in Economics.

The common metaphysical argument for universal constant returns to scale must be addressed before considering decreasing returns to scale. The argument is that if one doubles all the factors relevant to production, then the outputs will double. If not, then some relevant factor was not doubled. This argument, as stated, does not seem to be falsifiable. The argument is then applied to production functions in an economic model (quite a different matter). If doubling the inputs in a production function
yields double the outputs, the function exhibits constant returns to scale. By Euler's Theorem in Calculus, there are zero profits in competitive equilibrium (see any microeconomics text).

The fallacy in the "universal constant returns" argument is the application of the general metaphysical argument to a production function in a competitive model. The general argument says "doubling everything doubles the outputs" but the application to the production function says "doubling the input variables doubles the outputs." The inputs in a production function do not represent everything that might be scarce and relevant to production. Indeed, in an economic model, the inputs have market prices associated with them so they represent exclusively owned marketable commodities that may be bought and sold on input markets. "Everything relevant to production" includes a myriad of other scarce factors affecting production such as: (1) commonly owned property or public goods (public roads, free parking, public parks, and such), and (2) unowned natural factors (air, river water, rainfall, sunlight, wind, oceans, and such).

The proposition that doubling just the exclusively owned inputs (the production function inputs) will double the outputs is a robustly empirical proposition and may well be false. The presence of scarce but not exclusively owned factors may introduce decreasing return to scale in the marketable inputs, and the latter is all that is required to have decreasing returns to scale in an economic model. Accordingly, Arrow and Debreu mention such a justification for decreasing returns to scale in their original article (see the mention of "free rationed goods" in Arrow and Debreu 1954, p. 267).

Hidden marketable inputs in a competitive model?

Since the whole product vectors can have a positive value in the Arrow-Debreu model, the model had to face the question as to how these vectors got assigned to people. McKenzie (1981), Koopmans (1957, p. 65), and others have interpreted the Arrow-Debreu model as assigning production sets to specific parties by postulating "hidden factors" owned by the parties. But this compromises the model in a number of ways (see Ellerman 1982, chapter 13; or McKenzie 1981). Firstly, there are no non-marketable privately owned input services, and Arrow and Debreu have identified none. The hidden factors which might justify decreasing returns are not privately owned (e.g., commonly-owned or unowned natural factors). The existence of unowned or commonly-owned factors does not account for the assignment of production sets to specific parties.

Professors Arrow and Hahn try to replace "not marketable" with "not marketed." But it is incoherent to simply assume that "not all inputs are, in fact, marketed" (Arrow and Hahn 1971, p. 61) when the production sets are first being specified.
For any vector $y$, let $y^M$ and $y^p$ be the vectors formed by considering only the marketed and private components, respectively. For the firm, assume that the private components are given: ... From the viewpoint of the study of markets, only the vector $y^M$ is relevant.

(Arrow and Hahn 1971, p. 61)

Arrow and Hahn then restrict the whole product or production vectors to their “marketed” components, and leave the “private” components implicit in the shape of the production sets (all prior to the determination of any equilibrium prices). But whether or not an input is marketed or held for reservation uses will depend on the equilibrium configuration of prices (which are hardly known when production sets are first being specified).

The Arrow-Hahn tactic in not only methodologically incoherent; it could be inconsistent with the other assumptions. As Burmeister has pointed out: “A formulation which assumes that certain markets do not exist is incomplete and, more importantly, it may be inconsistent with profit maximization” (Burmeister 1974, pp. 414–15).

Suppose an economic reform was instituted in Russia where some inputs were traded on free markets with factory managers instructed to maximize profits, but other inputs were designated as “not marketed” and were not exposed to market forces. Western economists would be quick to point out that if some factors were hidden from exposure to scarcity-reflected market prices, then there could no assurance that an equilibrium would be allocatively efficient. Any “efficiency theorem” the Russians might derive would be bogus due to the existence of the non-marketed hidden factors that are not exposed to market signals. Unfortunately, economists seem to forget this critical but rather elementary insight when Arrow and Hahn use the same tactic and then claim to prove the “efficiency” of their model (p. 110).

**Hidden fixed factors in a competitive model?**

What about fixed factors which are not marketed in order to reap the short-run quasi-rents over and above the long-run competitive rentals? Doesn’t the ownership of these fixed factors determine the identity of firms, the assignment of production sets to legal parties? Physical plants and installed capital equipment are examples of fixed factors while direct labor and materials are variable factors. The time horizon needed to change plant size and install new capital equipment projects those changes into the intermediate or long run. In the interim, the owner of the fixed factor might earn a quasi-rent over the long-run competitive rental. Or at least that is the standard view.

This standard fixed factor argument contains a multitude of errors. “Free entry” in a competitive model does not require construction of new physical
facilities. If there are economic profits then a higher rental can be offered for the existing facilities. The physical or technical fixity of factors does not make them legally fixed or legally immobile. Fixed factors can be and are leased in the short-run.

Hicks uses a version of the fixed factor argument based on resource specificity.

In addition to factors acquired on the market, an enterprise may also make use of factors provided by the entrepreneur himself. If these factors are such that they could be sold (if not employed in the business), then their market prices must be debited to the costs of the enterprise. If, however, they cannot be used in any other way than in the business, they do not give rise to costs, and need not (indeed cannot) be reckoned on the debit side of the firm's account.

(Hicks 1946, p. 79)

Hicks seems to be confusing the technical immobility which results from resource specificity with legal immobility. But specialized plant, equipment, and resources can be rented where they stand. Any model which does not allow that possibility does not model a competitive economy. Free entry does not require the long run construction of new physical facilities. Offer a higher rental for the existing facilities. The very same technical production process can be carried out under quite different legal auspices by rearranging the hiring contracts. Specialized factors are not "hidden" from such "takeover bids."

Returning to the general fixed factor argument, a comparison of short-run "quasi-rents" with long-run competitive rentals is a comparison of short-run apples and long-run oranges. The relevant point of comparison for short-run quasi-rents is with short-run competitive rentals which would reflect the short-run inelasticity of supply of fixed factors. As noted above, the efficient allocation of resources requires revealing the services of a fixed factor in the production set so those inputs will be exposed to the guidance of their market price, the short-run competitive rental. If the fixed factor was not hired out and the quasi-rent was below the short-run rental, the factor owner could do better by hiring it out. If the quasi-rent was the same as the short-run competitive rental, then we are back to the zero-profit model.

Thus we assume the quasi-rent is greater than the short-run competitive rental of the fixed factor. We may assume no other hidden privately-owned inputs; otherwise the above argument would just be repeated for them. Thus the difference between the quasi-rent and the competitive rental is the economic profit. Doesn't the higher quasi-rent on the fixed factor account for why the factor owner hires in a complementary set of inputs and undertakes production — instead of hiring out the factor at the competitive rental?
No – that strategic behavior would violate the assumption of competitive \textit{price-taking} behavior by factor owners. Price-taking factor owners sell their factor to the market at the given price. A factor supplier can be both the seller and buyer of a commodity if both actions are consistent with price-taking behavior at the market price. The owner of the fixed factor has both the roles as the seller and buyer of the services of the fixed factor. The market price of those services is the given parametric short-run competitive rental. But once those services are offered on the market at the competitive rental, the alleged assignment of the production set to the fixed factor owner is lost. Any party could hire the fixed factor as well as the complementary inputs and reap the profits. Thus the competitive rental would be bid up; it could not be an equilibrium price.

Hence the fixed factor ploy fails, for several reasons, to account for the assignment of production sets to legal parties. If the factor services are not exposed to market forces, then the behavior of the factor owner may be inconsistent with the maximization assumptions. Once the factor is exposed to the market and the assumption of competitive price-taking behavior is enforced on the factor owner, the association of the production set with the factor owner is lost.

There is another interesting use of the fixed-factor ploy that might be mentioned. It is used to hide monopolistic power in a so-called “competitive” model. The conventional concept of monopoly power applied to input markets is like “justice” defined by the victors; it only applies to the vanquished. Conventional theory defines that a resource owner is \textit{monopolistic} if the owner can affect the selling price of the resource, e.g., if the owner sells to a downward sloping demand curve. But it is only the losers in the hiring conflict who hire out their resource. The winner cannot be monopolistic in the sense of manipulating the selling price of his resource since he does not hire out his resource at all. He is the hiring party.

If one hundred workers join together in a labor union to hire themselves out at a higher price, that is a combination in restraint of trade, a market imperfection, a monopolistic lump in the competitive soup. But if a hundred times as many capital owners pool their resources in a “capital union” called a \textit{joint stock company}, then that is treated in conventional economics as a single producer. The combined capital owners are not being “monopolistic” because they have no designs to jack up the price of their capital services. Indeed, their purpose is not to hire out capital at all. The purpose of the capital union is to hire in labor and the complementary factors, to undertake production, and to sell the outputs. All the input and output markets actually represented in the conventional microeconomic model might be competitive.

Microeconomic models in the Marshallian tradition try to assign production functions to certain pre-selected individuals by awarding them a
local monopoly on certain factors conveniently left implicit in the shape of the production functions. The model is still called "competitive" since the markets explicitly represented are competitive. The monopoly power of the specialized factor is used behind the scenes to win the hiring conflict and thus to completely eliminate the market in the monopolized factor. Such a model is hardly competitive, and it only appears so because the conventional notion of monopolistic market power is designed to apply only to the losers in the hiring conflict. In a genuinely competitive model, all resource owners supply their resources to the market at the going price – and thus resource ownership does not itself decide who is to be the firm.

**Hidden Indivisible Factors in a Competitive Model?**

Professor McKenzie interprets the Arrow-Debreu model as being based on indivisible hidden factors, but sees no reason to treat those factors differently from the marketed factors.

I conclude that whatever resources are brought together to comprise the 'unmarketed' resource base of the firm are most reasonably treated symmetrically with other resources. Most goods in the real world are indivisible, so the competitive model is an approximation to reality, but the entrepreneurial resources, or firms' special resources, seem to be no more nor less subject to these reservations than other goods or resources.

(McKenzie 1981. p. 838)

But this issue is not divisibility; it is marketability. Indivisible resources are rentable. Indivisible corporate resources, such as factories, can be and are leased out to other parties who could then exploit production opportunities using those resources as inputs. Thus indivisibility is irrelevant in the first place to the question of assigning production sets to legal parties. Moreover, if the competitive rental on the indivisible factor leaves no profit, then we are back in the zero-profit model.

**Hidden factors in the Arrow-Debreu model?**

The hidden factors ploy does not solve the problem of assigning production sets to economic agents. Also Arrow has explicitly ruled out hidden factors in the Arrow-Debreu model. In the following passage, Arrow contrasts the Arrow-Debreu model with a model by McKenzie (1954 or 1959) which used constant returns to scale.

The two models differ in their implications for income distribution. The Arrow-Debreu model creates a category of pure profits which are distributed to the owners of the firm; it is not assumed that the owners are necessarily the entrepreneurs or managers...
In the McKenzie model, on the other hand, the firm makes no pure profits (since it operates at constant returns); the equivalent of profits appears in the form of payments for the use of entrepreneurial resources, but there is no residual category of owners who receive profits without rendering either capital or entrepreneurial services.

(Arrow 1971, p. 70)

Arrow explicitly states that “pure profits” are distributed to “the owners of the firm,” and that, in contrast, the McKenzie model does not have this “residual category of owners who receive profits without rendering either capital or entrepreneurial services.” Thus the Arrow-Debreu model has a “residual category” of people who receive profits without supplying hidden inputs in the form of “capital or entrepreneurial services.” They are the alleged “owners” of the production sets.

Property rights in the Arrow-Debreu model

The key to assigning production sets to legal parties in the Arrow-Debreu model lies not in ad hoc and incoherent assumptions about non-marketed, fixed, or indivisible hidden factors. The key lies in the assumed structure of property rights, and that brings us back to the theme of property appropriation.

The Arrow-Debreu model assumes there are “owners of the firm,” i.e., that there is a property right such as the “ownership” of the production sets of technically feasible whole product vectors. The train of reasoning is that production sets represent the production possibilities of “firms” and “firms” are identified with corporations which, of course, are owned by their shareholders.

The property theoretic error can be pin-pointed in the Arrow-Debreu model. Shareholders do indeed own corporations, but corporations do not own production sets. There is no problem in assuming that the ith consumer owns “a contractual claim to the share \( a_{ij} \) of the profit of the jth production unit (Arrow and Debreu 1954, p. 270) where “production unit” is a corporation. The problem comes in the assumption that for “each production unit j, there is a set \( Y_j \) of possible production plans” (p. 267). In a private enterprise capitalist economy, there is no such property right as the ownership of production sets of feasible whole product vectors.

In the Arrow-Debreu model each consumer-resourceholder is endowed prior to any market exchanges with a certain set of resources and with shares in corporations. But, prior to any market activity, ownership of corporate shares is only an indirect form of ownership of resources, the corporate resources. It is the subsequent contracts in input markets which will determine whether a corporation, like any other resource-owner, successfully exploits a production opportunity by purchasing the requisite inputs and appropriating the whole product.
The Arrow-Debreu model mistakes the whole logic of appropriation. The question of who appropriates the whole product of a production opportunity is not settled by the initial endowment of property rights. It is only settled in the markets for inputs by who hires what or whom. In other words, the determination of who is to be the “firm” (the whole product appropriator) is not exogenous to the marketplace: it is a market-endogenous determination. This adds a new degree of freedom to the model which can only be ignored in the special case of zero economic profits when it doesn’t matter (for price theory) who is the firm. This new degree of freedom eliminates the possibility of a competitive equilibrium with positive economic profits, e.g., with decreasing returns to scale in some production opportunity.

Production arbitrage in a competitive economy

There is no mathematical error in the Arrow-Debreu model. The model assumed a property right that in fact does not exist. By assuming that production possibilities are “owned,” the Arrow-Debreu model does not allow anyone but the “owner” to demand the requisite inputs. Thus well-defined input demand schedules can be determined. But in a free enterprise capitalist economy, anyone can bid on the inputs necessary for some technically feasible production opportunity. In such an economy, production, the conversion of inputs into outputs, can be seen as a form of arbitrage, production arbitrage, between input markets and output markets.

Traditionally, arbitrage is thought of as an exchange operation, e.g., in currency markets. But if the price of Chicago wheat exceeds the price of Kansas City wheat plus the transportation costs, then the operation of buying inputs (Kansas City wheat plus transportation services) and selling the outputs (Chicago wheat) would still be called “arbitrage.” If the price of a good one period in the future exceeds the current price plus storage costs, then “a sure profit could always be made by the time arbitrage, so to speak, of buying the commodity currently – borrowing, if necessary – and reselling one period later” (Fama and Miller 1972, p. 62). But in general equilibrium models such as the Arrow-Debreu model where commodities are differentiated by spatial and temporal location, transportation and storage are examples of production. As more characteristics of the inputs, besides spatial and temporal location, change in the production process, there is no magic dividing line which suddenly prevents the production arbitrage of buying all the requisite inputs and selling the outputs.

It is this concept of arbitrage applied to production itself, the concept of production arbitrage, which “kills” the Arrow-Debreu notion of a pure-profits equilibrium. When there is a sufficient price differential between input and output markets to allow positive profits, then potential production
arbitrageurs (entrepreneurs) can attempt to reap those profits by purchasing the required inputs, bearing their costs as the inputs are consumed in production, claiming the produced outputs, and then selling the outputs. The demand for the inputs to profitable arbitrage opportunities in a frictionless economy can no more be modeled than can the demand for free money.

This critique of the Arrow-Debreu is the diametrical opposite of the usual criticisms that the idealized frictionless model does not fit the real world. The production arbitrage critique is particularly effective in the idealized model. Naturally, such a grand arbitrage operation would be difficult in the real world economy, but it is quite possible in the frictionless idealized model of perfect competition. There is no small irony here. The Arrow-Debreu "proof" of the existence of competitive equilibrium with positive economic profits is based on assuming a non-existent property right which rules out a certain form of arbitrage - a form of arbitrage that is perfectly possible in an idealized frictionless capitalist economy. Models that live by the sword of arbitrage must also be prepared to die by it.

How can the Arrow-Debreu model be repaired to obtain competitive equilibria with positive profits? It cannot be. A competitive equilibrium is not possible when there are profitable arbitrage opportunities, e.g., profitable production opportunities. Production arbitrageurs would bid up input prices. A competitive equilibrium is not possible in the situation which Arrow and Debreu attempt to model, a competitive capitalist economy with some production opportunities exhibiting decreasing returns to scale.

Some neoclassical economists are reconsidering the Arrow-Debreu model. Indeed, in reviewing a book about Nicholas Kaldor, Professor Frank Hahn (of Arrow and Hahn 1971) seems to be having second thoughts.

[Kaldor insisted] that perfectly competitive general equilibrium only made sense under constant returns. To economists brought up on Arrow-Debreu this seems plainly wrong. Constant returns are not assumed.

(Hahn 1988, p. 1746)

Citing modern work by McKenzie and others that does not assume the identity of firms to be given prior to market activity, Hahn concludes that Kaldor was "substantially right" (p. 1746).

This recognition restores a certain symmetry between increasing and decreasing returns to scale. A competitive equilibrium is not possible at a point of increasing returns to scale because no one wants to be the firm (negative profits). A competitive equilibrium is not possible at a point of decreasing returns to scale because everyone wants to be the firm (positive profits). General equilibrium for a competitive capitalist economy is only possible in the special case of constant returns to scale where (by assumption) no one cares who is the firm (zero profits).
An elementary game theoretic version of the argument

A simple game-theoretic model demonstrates the point. There are three resource owners who can sell their resources on the market for the amounts A, B, and C. However, if any two of them combine in a coalition to undertake a production project, the revenue to the coalition is their factor values plus the positive profits \( \pi \). Any proposed coalition of two factor owners to undertake production can be broken up by the third factor owner offering one of the parties in the coalition a better deal. And any proposed distribution of the profit \( \pi \) amongst all three can be bettered by two of them acting independently of the third. There is no equilibrium in this situation.

In terms of game theory, the sum of the payoffs to any coalition and the complementary coalition is constant at \( A + B + C + \pi \) so it is a constant-sum game. When \( \pi \) is positive, that total payoff is greater than the sum of the individual payoffs \( A + B + C \), so the game is said of be essential, otherwise inessential. A distribution of the total payoff \( A + B + C + \pi \) between the players is a core distribution if there is no coalition which could better the lot of the players in that coalition. A competitive equilibrium in an economic model would have to represent a core distribution; otherwise some subset of economic agents would upset the equilibrium.

The game described above is an essential constant-sum game, and all such games have no core distributions, i.e., have an empty core (e.g., Luce and Raiffa 1957, p. 195). There are many other interpretations of this type of game, but the simplest is the dollar-division game. Give a dollar to three players and let them divide it as they wish so long as a majority agrees to the division. In the previous game, the profits \( \pi \) represent the dollar. And that is the game-theoretic essence of the production arbitrage argument against the possibility of a profitable competitive equilibrium.

Consider any proposed competitive equilibrium in a private enterprise capitalist economy where there are positive pure profits in some production opportunities. That economy can be modeled by a dollar-division game, and those profits are the “dollar.” Since production sets are not “owned” and since the profits are a return to the contractual role of being the hiring party, any party forming a new coalition of resource suppliers can attempt to appropriate (the whole product whose value is) the profits, the “dollar.” The proposed contracts in a profitable opportunity cannot represent an equilibrium because a potential production arbitrageur could use some of the profits to offer better terms to some of the resource suppliers.

A profitable competitive capitalist economy is a dollar-division game. All dollar-division games, as essential constant-sum games, have an empty core so there can be no competitive equilibrium with positive profits. The theorem that essential constant-sum games have an empty core can be restated as the theorem: if a constant-sum game has a non-empty core, then
it is inessential. That is the game-theoretic argument that if a capitalist economy does have a competitive equilibrium, then it is with zero profits.

The indeterminacy of firmhood in competitive markets

For the last several decades, the Arrow-Debreu model has been Received Truth in mathematical economics. Its collapse back to the constant returns case is a major example of the impact on economic theory of an appreciation of the nature and structure of property appropriation. The reason for its failure, which was uncovered by the analysis of appropriation, was the market-endogenous determination of "firmhood," of who is to appropriate the whole product and thus be the firm. Yet it is doubtful the guardians of Received Doctrine will openly admit that positive pure profits are incompatible with a genuine competitive equilibrium. In the short-run, Received Theory will continue to support the Arrow-Debreu model based on a hodge-podge of ad hoc and logically incoherent assumptions about hidden (non-marketed, fixed, or indivisible) factors or non-existent property rights to the ownership of production sets.

The extra degree of freedom, the market-endogenous determination of firmhood, cuts much deeper into Received Competitive Doctrine than just the Arrow-Debreu model. It changes the very conception of how competitive markets operate outside of the universal constant returns case – from an orderly process of equilibration to a game-theoretically indeterminate struggle. In addition to the highbrow Arrow-Debreu model, this holds for the lowbrow Marshallian partial "equilibrium" models used in current textbooks which show short-run pure profits.

The conventional theory is that there are two basic types of economic agents, consumer-resourceholders and "firms." The consumer/input-owners supply inputs to the input markets and demand outputs on the output markets. The firms play the opposite role of demanding inputs on input markets and supplying outputs to output markets. The flow of commodities from the consumers as input suppliers to the firms and the flow of products back to the consumers (with the money flows in the opposite direction) are represented in the familiar circular flow diagram.

The conventional picture assumes that firmhood is determined prior to market activity. The resource owners are lined up on one side and the "firms" are supposedly lined up on the other side of the input markets. But this is not the case in a free enterprise capitalist economy. It is not legally predetermined that an input owner is a supplier of inputs rather than a demander of a complementary set of inputs. In particular, it is not legally predetermined that a capital owner (corporate or not) is a labor demander rather than a capital supplier. Prior to the market contracts, corporations are just other input owners. Any resource owner, corporate or otherwise,
may aspire to be a "firm" in the technical sense of "whole product appropriator" by attempting to purchase the complete set of inputs to a productive opportunity. Prior to market contracts, legal parties are not associated with production sets, so input demand and output supply schedules are not well-defined.

The customary analytical machinery of resource owners having input supply schedules and "firms" having input demand schedules prior to market activity incorrectly represents the structure of the market process. The identity of the firms (parties who will appropriate the whole products) is only determined at the end of the game-theoretically indeterminate market process, not at the beginning. Firmhood is also indeterminate in the special case of universal constant returns, but that indeterminacy does not affect income distribution (no profits) and at least the market (as opposed to firm) supply and demand curves are determinate in that case.

Figure 11.1 Standard circular flow diagram
Under the impact of production arbitrage, the indeterminacy of firmhood leads to the breakdown of the conventional firm supply and demand schedules in competitive markets. And the possibility of production arbitrage was revealed by understanding the mechanism of property appropriation in a private property free enterprise economy.
THE BASIC TENETS OF MARGINAL PRODUCTIVITY THEORY

We have now developed enough concepts to critically analyze both marginal productivity (MP) theory and the standard liberal “critique” of the theory. The partial derivatives of production functions (i.e., “marginal productivities”) can be used in a bare-bones analytical theory of input demand in a competitive capitalist model. That piece of applied mathematics would by itself be no more controversial than the symmetrical analytical theory of input supply. But marginal productivity theory has been a center of intense ideological controversy (unlike the theory of input supply). Why? Because of the interpretation added to the bare-bones mathematics which claims to show that each factor gets what it produces in the competitive capitalist model. That is the “marginal productivity theory” analyzed here. That MP theory has two central and highly stylized tenets about the competitive capitalist (single product) firm:

1. that each unit of a factor (as the marginal unit) produces the marginal product of the factor, and
2. that each unit of a factor gets its marginal product in the competitive imputation.

Thus the competitive capitalist model operates according to what Professor Milton Friedman calls the “capitalist ethic”: “To each according to what he and the instruments he owns produces” (Friedman 1962: 161–2). One must be careful to separate the descriptive question of whether the so-called “capitalist ethic” is satisfied in the competitive capitalist model (given its assumptions) from the normative question of whether that principle ought to be satisfied. Friedman takes it as a matter of descriptive economic theory that the competitive capitalist model does satisfy the principle and hence the appellation “capitalist ethic.” But even given all the factual
assumptions of the competitive capitalist model, both the above tenets are descriptively false. Both tenets are based on metaphors.

The first tenet, that each unit produces its own marginal product, is based on the animistic personalization of non-human factors of productions as "agents" using the pathetic fallacy, e.g., Friedman's reference to "what . . . the instruments he owns produces." A unit of a non-human factor does not "produce" its marginal product because it does not produce at all. It is used in production by human beings carrying out the productive process.

The second tenet, that each unit gets its marginal product, is based on the distributive shares metaphor. A hired factor owns no share of the product; the residual claimant appropriates the whole product. The income paid to a factor-supplier represents not a share in the product but only the satisfaction of the liability for the used-up factor, a liability which is part of the whole product appropriated by the residual claimant.

Note that this analysis and critique of MP theory has nothing to do with whether the competitive model in fact applies to reality. Both the central tenets of the theory are false (as just explained) even in the competitive model.

Friedman's "capitalist ethic" is that each factor owner should metaphorically "get" what he or his factors metaphorically "produce." By using one metaphor to justify another metaphor, the "capitalist ethic" can make a perfectly clean break with reality. The non-metaphorical facts are that labor is the de facto responsible agent of production, that labor is de facto responsible for both the positive and negative results of production (the whole product), and that one party legally appropriates the whole product.

PRIMAL MYTHS AND DUAL MYTHS

There is a dual or inverse mythology that can be used to provide an ideological interpretation of marginal cost theory. Instead of using the active-inputs view to picture the inputs as responsible agents producing the positive product (first tenet), use the active-outputs view to picture them as agents using up the inputs (i.e., producing the negative product). Instead of imputing to each input "what it produces" (second tenet), impute or charge to each output "what it uses up." In value terms, each unit of the output would be charged the marginal cost and, indeed in competitive equilibrium, the price of the output is equal to marginal cost (P = MC). Thus one might say "each output buyer is liable for what his commodity used up."

These dual or inverse metaphors are faulty for the same reasons as the primal or original metaphors. Outputs are not responsible for using up the inputs; the people who work in the firm are the ones who perform the responsible human actions that use up the inputs in the course of
producing the outputs. And the legal liabilities for the used-up inputs are not assigned to the outputs or consumers. By the market mechanism of appropriation, those liabilities are laissez faire appropriated by the last owner of the used-up inputs—all of which is a technical way of saying the costs lay where they fall unless a court reassigns them. The last owner of the inputs thereby gets the legal claim on the appropriable outputs which, in turn, are sold to the consumer.

Our point in outlining these inverse metaphors is not to add to the conventional inventory of "stories" but to subtract from it. The original and inverse stories cancel out. The output-buyers do not use up the inputs anymore than the input-sellers produce the outputs. The workers both use up the inputs and produce the outputs. And the output-buyers do not appropriate distributive shares in the negative product anymore than the input-sellers appropriate shares in the positive product. Both the positive and the negative product, i.e., the whole product, is appropriated by the same legal party, the party who is thereby called the "firm."

We have throughout emphasized the algebraic symmetry (positive and negative) in property theoretic reasoning in general and in the concept of the whole product in particular. The inverse myths giving an ideological interpretation of marginal cost theory show that the same symmetry is present in price theory. That ideological interpretation is not prominent in the capitalist literature since the charge against the system is the charge of "exploiting labor" and thus the main focus is on interpreting MP theory.

THE STANDARD "CRITIQUE" OF MP THEORY

Liberal economists are much concerned to show how they transcend the "naive productivity ethics" embodied in some presentations of MP theory. But the standard liberal "critique" of MP theory (e.g., Thurow 1975, appendix A) does not attack either of the basic tenets. The standard critique is based on essentially two points:

- MP theory does not account for the initial personal distribution of property or other prices that determine each person's "share of the product" and
- the perfectly competitive model is far from applicable to the real world.

Economists point out that MP theory gives no account whatever of the original personal distribution of factor ownership. Thus MP theory, coupled with a theory of input supply and product prices, can at best only give an account of the functional distribution of income, not the personal distribution of income. In the same vein, critics of conventional capital theory
point out that owning capital is not a productive act so the product of capital should not be confused with the product of the capitalist.

Secondly, MP theory is almost totally non-operational. The many gaps between the idealized competitive model and the real world include:

- non-competitiveness of real markets,
- disequilibrium states,
- extreme measurement problems to determine marginal productivities,
- indivisibilities,
- informational imperfection of markets, and so forth.

The point is that this standard critique is thunderously silent about criticizing the first and second tenets of MP theory (that each unit of a factor produces its marginal product, and that each unit gets its marginal product).

Thus it is that economists can be in comfortable conformity with the core ideological content of the theory while at the same time striking an outward posture of "criticizing" marginal productivity theory. Economists who deny that the product of capital is the product of the capital owner have missed the point. The point is that capital itself does not "produce" at all; capital is used by Labor to produce the outputs. We show below how Labor produces the marginal product of capital.

MARGINAL PRODUCTIVITY THEORY AS A COUNTERFEIT LABOR THEORY OF PROPERTY

Professor Friedman’s capitalist ethic - "To each according to what he and the instruments he owns produces" - is clearly an attempt to generalize the Lockean principle that each person should reap the fruits of his labor. It is precisely this use of MP theory as a reinterpreted fruits-of-one’s-labor (and instruments) doctrine that has made it so ideologically powerful and controversial.

The development of MP theory as a counterfeit labor theory of property can be followed in remarkable detail. For instance, in view of the equivalence between the labor theory of property and the juridical norm of imputation, the labor theory of property can be expressed in two vocabularies, that of property appropriation and that of responsibility imputation. Accordingly, MP theory imitated the labor theory by using precisely those two vocabularies. John Bates Clark (1899) was the "marginalist Locke" who developed MP theory using the vocabulary of property appropriation, and Friedrich von Wieser (1889) developed MP theory using the other vocabulary of responsibility imputation. The basic idea is to picture each factor as "producing" its marginal product. Is that what each factor "gets"?
When a workman leaves the mill, carrying his pay in his pocket, the civil law guarantees to him what he thus takes away; but before he leaves the mill he is the rightful owner of a part of the wealth that the day's industry has brought forth. Does the economic law which, in some way that he does not understand, determines what his pay shall be, make it to correspond with the amount of his portion of the day's product, or does it force him to leave some of his rightful share behind him? A plan of living that should force men to leave in their employer's hands anything that by right of creation is theirs, would be an institutional robbery - a legally established violation of the principle on which property is supposed to rest. (Clark 1899, pp. 8-9)

In competitive equilibrium, each factor price is the value of its marginal productivity. Hence, Clark concludes that each factor "gets" the share of the product it "produces" in competitive equilibrium; to labor the fruits of labor, to capital the fruits of capital, and to land the fruits of land. In this manner, Clark and later MP theorists have brilliantly attempted to co-opt the labor theory of property and to harness it in the defense of competitive capitalism.

The development of the ideological interpretation of MP theory using the vocabulary of responsibility and imputation was due to Friedrich von Wieser. Wieser's contribution is remarkable because he is one of the few conventional economists who admitted in print that of all the factors of production, only labor is de facto responsible. Thus the imputation of legal responsibility in accordance with de facto responsibility will go back through the instruments solely to the human agents.

The judge . . . who, in his narrowly-defined task, is only concerned with the legal imputation, confines himself to the discovery of the legally responsible factor - that person, in fact, who is threatened with the legal punishment. On him will rightly be laid the whole burden of the consequences, although he could never by himself alone - without instruments and all the other conditions - have committed the crime. The imputation takes for granted physical causality . . . If it is the moral imputation that is in question, then certainly no one but the labourer could be named. Land and capital have no merit that they bring forth fruit; they are dead tools in the hand of man; and the man is responsible for the use he makes of them. (Wieser 1889, pp. 76-9)

These are astonishing remarks. Wieser at last sees the explanation of the old radical slogans "Only labor is creative" or "Only labor is productive," which even the classical laborists and Marxists could not explain clearly. The fact that only labor could be legally or morally responsible did not, however, lead Wieser to question capitalist appropriation. Wieser's response to his insights exemplifies what passes for moral reasoning among many economists and social theorists in general. Any stable socio-economic system
will provide the conditions for its own reproduction. The bulk of the people born and raised under the system will be appropriately educated so that the superiority of the system will be "intuitively obvious" to them. They will not use some purported abstract moral principle to evaluate the system; the system is "obviously" correct. Instead the moral principle itself is judged according to whether or not it supports the system. If the principle does not agree with the system, then "obviously" the principle is incorrect, irrelevant, or inapplicable.

The usual juridical principle of imputing responsibility, which recognized that only labor could be responsible, was clearly not relevant to the tasks facing capitalist economics. The usual notions would apply to merely judicial questions about the capitalist property system, whereas economists are concerned with the deeper economic questions of price theory. Capitalist apologetics would require a new notion of "economic imputation" in accordance with another new notion of "economic responsibility". "In the division of the return from production, we have to deal similarly... with an imputation — save that it is from the economic, not the judicial point of view" (Wieser 1889, pp. 76). By defining "economic responsibility" in terms of the animistic version of marginal productivity, Wieser could finally draw the conclusion demanded by his calling: to show that competitive capitalism "economically" imputes the product in accordance with "economic" responsibility.

Metaphors are like lies; one requires others to round out the picture. The Clark-Wieser theory uses one metaphor to justify another metaphor. Each factor's metaphorical responsibility for producing a share of the product is used to justify each factor's metaphorical property share in the product. By justifying one metaphor with another metaphor, capitalist apologetics can "slip the surly bonds" of reality and soar freely in the metaphorical void. It is the actual property relations of capitalist production, i.e., the employer's appropriation of the whole product, that need to be judged, and the notion of responsibility relevant to the structure of legal property rights is the normal non-metaphorical juridical notion of responsibility that is used every day from "the judicial point of view."

Moral philosophers understand the difference between the actions of persons and the services of things. Can they see MP theory as a bogus imitation of the labor theory of property?

Accepting the marginal productivity theory of distribution, each factor of production receives an income according to how much it adds to output (assuming private property in the means of production). In this sense, a worker is paid the full value of the results of his labor, no more and no less. Offhand this strikes us as fair. It appeals to a traditional idea of the natural right of property in the fruits of our labor. Therefore to some writers the precept of contribution has seemed satisfactory as a principle of justice.

(Rawls 1971, p. 308)
Instead of differentiating MP theory from the labor theory of property, Rawls merely goes on to repeat the standard liberal critique of MP theory as not accounting for the background distribution of factors and the forces of supply and demand affecting prices.

The marginal product of labor depends upon supply and demand. What an individual contributes by his work varies with the demand of firms for his skills, and this in turn varies with the demand for the products of firms. An individual's contribution is also affected by how many offer similar talents. There is no presumption, then, that following the precept of contribution leads to a just outcome unless the underlying market forces, and the availability of opportunities which they reflect, are appropriately regulated.

(Rawls 1971, p. 308)

The ideological hegemony of MP theory is evidenced by the fact that a leading moral philosopher such as John Rawls never questions the central tenet of MP theory that competitive capitalism would realize the "precept of contribution." Rawls only fusses about the background conditions which he feels limit the applicability of the precept of contribution.

MARGINAL PRODUCTS WITHOUT APOLOGY: LABOR PRODUCES THE MARGINAL PRODUCT OF CAPITAL

The concept of marginal productivity is a very useful analytical notion that needs to be rescued from the animistic-active and engineering-passive interpretations so that it can be understood in a manner consistent with the fact that persons act and things don't. One does not have to treat persons as things or things as persons in order to trace out the logic of resource allocation (the forte of neoclassical economic theory).

Consider, for example, the "marginal product of a shovel" in a simple production process wherein three workers use two shovels and a wheelbarrow to dig out a cellar. Two of the workers use two shovels to fill the wheelbarrow which the third worker pushes a certain distance to dump the dirt. The marginal productivity of a shovel is defined as the extra product produced when an extra shovel is added and the other factors, such as labor, are held constant. The labor is the human activity of carrying out this production process. If labor was held "constant" in the sense of carrying out the same human activity, then any third shovel would just lie unused and the extra product would be identically zero.

"Holding labor constant" really means reorganizing the human activity in a more capital intensive way so that the extra shovel will be optimally utilized. For instance, all three workers could use the three shovels to fill the wheelbarrow and then they could take turns emptying the wheelbarrow. In this manner, the workers would use the extra shovel and by so doing
they would produce some extra product (additional earth moved during the same time period). This extra product would be called the “marginal product of the shovel,” but in fact it is produced by the workers who are also using the additional shovel. In the workers’ new whole product, the positive product is expanded by the extra output and the negative product is expanded by the utilization of the services of an extra shovel.

Let the four components of the property vectors be as follows:

\[(\text{Cubic yds per day, shovel-days, wheelbarrow-days, man-days})\]

Before adding the third shovel, suppose the three workers use the two shovels and the wheelbarrow to move 10 cubic yards of earth in a day. The day’s whole product vector produced by Labor is

\[(10 \text{ Cu.yds, } -2 \text{ shovel-days, } -1 \text{ wheelbarrow-day, } -3 \text{ man-days})\]

By reorganizing the work process to utilize a third shovel, the three workers move 12 cubic yards a day. Hence the new whole product produced by Labor is

\[(12 \text{ Cu.yds, } -3 \text{ shovel-days, } -1 \text{ wheelbarrow-day, } -3 \text{ man-days})\]

Labor’s extra product is:

\[(2, -1, 0, 0) = (12, -3, -1, -3) - (10, -2, -1, -3)\]

Labor’s extra positive product is \((2, 0, 0, 0)\), the extra two cubic yards, and Labor’s extra negative product is \((0, -1, 0, 0)\), the used-up shovel-day. The ratio of Labor’s extra positive product of 2 cubic yards over Labor’s extra negative product of 1 shovel-day gives the “marginal product of a shovel” in physical terms, two cubic yards per shovel-day.

It is only an animistic metaphor to picture each factor as “producing” its marginal product. Capital does not “produce” its marginal product. Capital does not “produce” at all. Capital is used by Labor to produce the output. When capital is increased, Labor produces extra output by using up the extra capital. The “marginal product of capital” is the ratio of Labor’s extra positive product over its extra negative product.

The point can also be illustrated using more abstract notation with three-component vectors representing (output, capital services, labor services). Prior to adding the extra capital services \(\Delta K\), the workers produced the

\[
\text{Original Labor's product} = (Q, -K, 0)
\]

\[= (Q, -K, -L) + (0, 0, L)\]

\[= \text{Orig. whole product} + \text{Labor services}\]

Then the extra capital services \(\Delta K\) is added and the labor process represented by \(L\) is reorganized in a more capital intensive to optimally utilize
the capital services $K + \Delta K$ to produce the new outputs $Q + \Delta Q$. Then the workers produce the new Labor's product:

$$= (Q + \Delta Q, -K - \Delta K, 0) = (Q + \Delta Q, -K - \Delta K, -L) + (0, 0, L)$$

$$= \text{New whole product} + \text{Labor services}$$

The increment to Labor's product is:

$$\text{New Labor's product} - \text{original Labor's product}$$

$$= (Q + \Delta Q, -K - \Delta K, 0) - (Q, -K, 0)$$

$$= (\Delta Q, -\Delta K, 0)$$

Labor additionally produced the extra output $\Delta Q$, which is called the "marginal product of the capital services" $\Delta K$, as a result of using up the extra capital services $\Delta K$. In short, Labor produced the marginal product of capital (and used up the extra capital services).

In the shovel example, the workers additionally produced the "marginal product of the shovel" by using up the services of one more shovel. The factual non-metaphorical description of the "marginal product of the shovel" has exactly the same implications for MP theory in its role as a non-ideological theory of input demand. If the value of their extra positive product exceeded the value of their extra negative product, then it would be profitable (other things being equal) to use the extra shovel.

If a shovel could be rented for $1 a day and the removal of a cubic yard of earth was worth $0.75, then the value of Labor's extra positive product ($2 \times 0.75 = $1.50) exceeds the cost of Labor's extra negative product ($1) so it would be worthwhile to rent the shovel. In this manner, the concept of marginal productivity can be understood in an analytically useful fashion while recognizing a basic fact of the social sciences that people act and things don't.

"RESPONSIBILITY" IN CONVENTIONAL ECONOMICS: A FOOTNOTE ON IDEOLOGY

The debate surrounding "the labor theory" in economics provides a fascinating illustration of the role of ideology in the social sciences. Orthodox economists earnestly try to understand the labor theory (or, at least, portray themselves that way). Why should so many people adopt the labor theory which singles out just one input, labor, as the only productive or creative input? What is so special about labor? Economists have a terrible time answering that question - not because the answer isn't obvious - but because the obvious answer is not ideologically acceptable.

The answer - that only human actions (a.k.a., labor services) can be responsible - is quite easy to understand. It is not an obscure esoteric fact that only humans can be responsible, and that tools, no matter what their
causal efficacy, cannot be responsible for anything. When explained, students have no trouble understanding it – even children can grasp the point. College students can even understand that burglary tools are not responsible for a share of the burglary even though they have positive marginal productivity.

But economists seem to have a “professional blind spot.” Look at the explanation given for the “labor theory of value” in the economics texts of our day. This author has not been able to find a single economics textbook which makes the point about the unique responsibility of human actions in contrast to the causal efficacy of the services of things. Not one.

For instance, William Baumol is a neoclassical economist who, over the years, has made a serious attempt to sympathetically understand and interpret Marx’s labor theory of value and exploitation. Yet when it comes to the point most fundamental in a “labor theory” to specify what is relevantly unique about labor, Baumol can only say that labor is the only “human” or “social” input.

The point of the value theory may than be summed up as follows: goods are indeed produced by labor and natural resources together. But the relevant social source of production is labor, not an inanimate land.

(Baumol 1974, p. 59)

Marx emphasized that labor is not the only useful factor of production. However, he did argue that it is the only useful factor of production contributed by human society. In this sense he considered it necessary to define all value and, therefore, all surplus value (profit, interest, and rent) as something that is produced by labor.

(Baumol and Blinder 1982, p. 775)

One might readily agree that in some sense labor is the only human or social input, but Baumol gives no shred of explanation how that would make labor into the only “creative” or “productive” factor or into the sole source of the value of the product. The point is not to find some unique attribute of labor, e.g., labor services are the only services performed by featherless bipeds. The point is to determine if labor has some unique attribute relevant to the analysis and/or critique of capitalist production.

Economists are puzzled at how anyone could think that labor was the only “productive” agent overlooking capital, land, and time. Even if capital can be dissolved into past labor, there is still land including all natural resources and time. Proponents of the labor theory of value “seemed to deny that scarce land and time-intensive processes can also contribute to competitive costs and to true social costs…” (Samuelson 1976, p. 545). What could those proponents possibly have meant? Fortunately, the advance of modern economic science allows contemporary economists to discover the existence of land and time as scarce and efficacious factors
and thus to advance beyond those early economists who thought that labor was the only "productive" factor.

Contemporary texts have a studied ignorance of the fact that labor is the only responsible agent of production. They ignore the possibility that the early radical proponents of the "labor theory of value" (e.g., the so-called Ricardian socialists) may well have meant "productive agent" in that sense of "responsible agent." "Responsibility" is the "R-word" that cannot be used in contemporary economics. The unique responsibility of labor is unmentioned in contemporary texts. The reason cannot be the "subtlety" of the notion since the non-responsibility of burglary tools in spite of their causal effectiveness is understandable by any intelligent person. The reason cannot be simple ignorance since, as the previous quotation from Wieser shows, the unique responsibility of labor has been explicitly pointed out in the capitalist literature (a century ago). Economists should also be aware of it from their general background knowledge.

Perhaps orthodox economists recognize the unique responsibility of labor but consider it an irrelevant characteristic—like workers being featherless bipeds. That position is difficult to sustain since neoclassical economists themselves formulate the basic problem of distribution as a problem of *imputation*—the problem of *ascribing* or *attributing* the product to the various factors. In fact, it was Wieser who introduced the word "imputation" (*Zurechnung*) and who considered it the problem of determining "economic responsibility." All this is viewed through the distorting lens of the distributive shares metaphor (seeing the product as being divided) and the pathetic fallacy (seeing causal efficacy as responsibility). But when economists formulate the question of distribution using metaphors of "imputation," "attribution," "ascription," and "economic responsibility," then it is difficult for them to plausibly assert the irrelevance of the non-metaphorical notion of responsibility used every day in the legal system.

The simple truth is that orthodox economics ignores the unique de facto responsibility of labor because it is an ideologically unacceptable fact.
Marxian value theory, MP theory, and the labor theory of property

MARXIAN VALUE THEORY

The one commodity model

A simple corn-with-labor input-output model (e.g., von Weizsacker 1971) is used in this chapter to present and analyze the modern treatment of the Marxian labor theory of value and exploitation. There is one produced good, corn, and homogeneous labor. The input-output technology for each enterprise is specified by:

\[ A = \text{number of \textbf{bushels of seed corn} per bushel of harvest corn, and} \]
\[ a = \text{number of \textbf{hours of labor} needed per bushel harvest corn} \]

A firm’s \text{gross output} of \( X \) bushels of corn requires \( AX \) bushels of seed corn as an input and \( L = aX \) hours of labor. For simplicity (not realism), it is assumed that no other scarce inputs are required. For the technology to be viable, it is assumed that \( A < 1 \), i.e., less than a bushel is needed to grow a bushel. It takes one time period, called a “year,” for the labor \( L = aX \) to produce the output \( X \) by using up the inputs \( AX \). The inputs are required at the beginning of the year and the outputs are available at the end of the year.

Let \( p^* = \text{money price of corn per bushel}, \) let \( w = \text{money wage rate (at year-end)}, \) and let \( r = \text{rate of interest for the year}. \) Wages are paid at the end of the year while corn inputs are purchased at the beginning of the year. The capital outlay per unit output is \( p^*A \). If that capital is deposited in a savings account, it will compound to \((1 + r)p^*A\) at the end of the year. That is the passive use of capital. Alternatively, if the capital is used “actively” by being invested in production, then one unit of output will be produced (no uncertainty), sold for \( p^* \), and then Labor is paid the wage \( w \). In a perfectly competitive model with no uncertainty, capital can be switched freely between the passive and active uses, so competitive arbitrage
will enforce equality in equilibrium between the passive return of \((1 + r)p^*A\) and the active return of \(p^* - wa\):

**Competitive equilibrium condition:** \(p^* = wa + (1 + r)p^*A\)

Solving for the equilibrium price yields:

\[
p^* = wa[1 - (1 + r)A]^{-1}
\]

Dividing through by the money wage rate \(w\) expresses the price \(p = p^*/w\) in terms of the numeraire of labor:

\[
p = p^*/w = a[1 - (1 + r)A]^{-1}
\]

**Marxian labor theory of value and exploitation**

After more than a century of analysis and interpretation, Marxian economics has arrived at a precise modern formulation of a Marxian labor theory of value and exploitation (e.g., Morishima and Seton 1961; Okishio 1963; Morishima 1973; Wolfstetter 1973). It is this modern theory that is analyzed here. The theory stands by itself. We are not concerned here with the question of whether or not this "Marxian labor theory of value and exploitation" represents "what Marx really meant."

There are several ways to state the definition of the Marxian labor value \(v\) of a unit of corn. From the neoclassical viewpoint, it is the equilibrium price of a unit of corn if the interest rate ("rate of profit") is zero. The equilibrium price (in terms of labor) was

\[
p(r) = a[1 - (1 + r)A]^{-1}
\]

so we have

\[
\text{Marxian labor value} = v = p(0) = a[1 - A]^{-1}
\]

There is also the "net product" definition. Given the gross product \(X\), the required seed corn was \(AX\) so the **net product** is defined as \(Y = X - AX\) (note how the definition subtracts seed corn from harvest corn "as if" there was no time difference). Then the Marxian labor value \(v\) could be defined as the labor necessary to produce one unit of net output. If net output \(Y = 1 = X - AX\), then the required gross product is

\[
X = [1 - A]^{-1}
\]

so the required labor is

\[
v = a[1 - A]^{-1}
\]

The "historical" definition is based on the summation of all the labor directly and indirectly embodied in a unit of corn (assuming constant technology throughout the past). One unit of corn requires the direct labor of
a units. It required the seed corn A which required the labor aA. The seed corn A also required the seed corn AA, which required the labor aAA, and so forth. Summing the labor

\[ v = a + aA + aA^2 + aA^3 + \ldots = a[1 + A + A^2 + A^3 + \ldots] \]

\[ = a[1 - A]^{-1} \]

(\text{using the formula for the geometric series to evaluate the sum for } 0 < A < 1). Note that this definition adds together labor from different time periods "as if" there was no time difference. All the definitions of labor value are equivalent (see Wolfstetter 1973 for yet another equivalent definition).

Each unit of labor is paid the money wage $w$ so the physical wage in terms of corn is the

\[ \text{Wage-basket} = z = w/p^\ast = 1/p \]

One could think of Labor as being paid $z$ bushels per unit of labor. When a worker expends one unit labor, the payment is the wage-basket $z$ with the Marxian value (or "labor content") $vz$. This is called the

\[ \text{Necessary labor} = \text{paid labor} = vz \]

The remainder is called the

\[ \text{Surplus labor} = \text{unpaid labor} = 1 - vz \]

The ratio of surplus labor over necessary labor is the

\[ \text{Marxian rate of exploitation} = e = (1 - vz)/vz \]

Morishima (1973, see Ellerman 1983 for a proof in the simple one commodity model) proves the:

\textbf{Fundamental Marxian Theorem (FMT).} The rate of exploitation $e$ is positive if and only if the rate of interest $r$ is positive.

Hence the Marxian theory concludes that Labor is exploited if the rate of interest or rate of profit is positive.

\textit{Analysis of Marxian exploitation theory}

\textit{Some misconceptions.} There are a few frequent misinterpretations of Marxian exploitation theory which must be mentioned first. The Marxian theory is not a bargaining power theory; the setting is a perfectly competitive model. Marx wrote extensively about the inequalities of the marketplace, but he wanted to criticize capitalist production itself, not just monopolistic imperfections. Hence he set out to expose exploitation in competitive capitalism, and the modern formulation preserves that competitive setting.
Marx also tried to relate the exploitation analysis to the workplace power relationship of the employer over the workers. In spite of the rhetoric which usually accompanies presentations of the modern theory, the role of power relations did not survive in the modern reformulation. No assumptions about power relations were made in the input-output model, yet the presence of Marxian exploitation can still be derived. Hence the modern result does not depend on power relationships. The veneer of rhetoric about "the capitalist forcing the workers to work longer than it takes to produce their labor-power" (wage-basket z) only obscures the real basis for the exploitation result.

*Analysis of Marxian value.* The definition of Marxian value \( v \) systematically neglects the effect of time – an effect registered by the interest rate. Time puts a difference on commodities. As any farmer could testify, having corn available to plant at planting time is quite different from having the otherwise identical corn at harvest time. The seed corn and harvest corn are economically distinct – like "apples and oranges." One unit of a commodity at time \( t \) is equivalent to \( 1 + r \) units at time \( t + 1 \) in the sense that the market will trade one for the other (at constant prices). For example, the loan market trades $1 for $(1 + r)$ a year from now. The Marxian value definition treats the units of labor (or corn) at different times as being the same (so they can be meaningfully added together), and thus the definition implicitly treats the interest rate as being zero.

Consider the net product definition of Marxian value \( v \). The definition of the net product \( y = X - AX \) assumes that the beginning-of-the-year inputs \( AX \) are commensurate with the end-of-the-year outputs \( X \) so that the former can be subtracted from the latter to arrive at the net product. However, the difference \( X - AX \) is as meaningful as the difference "4 apples minus 3 oranges." The inputs \( AX \) are equivalent to \( (1 + r)AX \) units at the end of the year, so the time-corrected net product in terms of commodities timed with outputs is:

\[
y(r) = X - (1 + r)AX
\]

When the corrected net product \( y(r) \) is equal to 1, the gross output is:

\[
X = [1 - (1 + r)A]^{-1}
\]

Then the time-corrected Marxian value of a bushel of corn is:

\[
v(r) = a[1 - (1 + r)A]^{-1}
\]

in terms of beginning-of-the-year labor – which is precisely the price \( p(r) \) of a bushel of corn in terms of labor.

It is also possible to apply the time correction to the "historical" definition of Marxian value since that definition adds to labor performed
in different time periods. If one bushel of corn is produced at year's end, then all the past embodied labor can be transformed into the equivalent beginning-of-the-year labor before being summed. The labor \( aA \) performed \( n \) years before the beginning of the current year is equivalent to \( a(1 + r)^n A \) units of labor at the beginning of the year. Hence the corrected historical definition of Marxian value is:

\[
\begin{align*}
  a + a(1 + r)A + a(1 + r)^2A^2 + \ldots \\
  = a\left[1 + (1 + r)A + (1 + r)^2A^2 + \ldots\right] \\
  = a\left[1 - (1 + r)A\right]^{-1} \\
  = v(r) = p(r)
\end{align*}
\]

(assuming that \((1 + r)A < 1\)) which is the same as the corrected net product definition.

What is the difference between the Marxian value \( v \) and the competitive market price \( p(r) \)? The difference is that Marxian value definition ignores time. Time is registered by the interest rate in the model. The uncorrected Marxian value \( v \) is \( p(0) \) — the price when the interest rate is zero, and the corrected Marxian value \( v(r) \) is identical with the price \( p(r) \).

What happens to “exploitation” under the time correction? The time-corrected necessary labor contained in the wage-basket \( z \) paid for one unit of labor is:

\[
v(r)z = p(r)z = 1
\]

so the surplus labor is \( 1 - v(r)z = 1 - 1 = 0 \). Hence the exploitation result vanishes under the time correction.

**Marxian value theory as a just-price theory.** The Fundamental Marxian Theorem \((e > 0 \text{ if and only if } r > 0)\) is often interpreted as showing the exploitation is the hidden inner meaning of the charging of interest. Our results indicate that precisely the opposite is the case; the charging of interest is the hidden inner meaning of “exploitation.”

The modern formulation of the Marxian labor theory of value and exploitation is in fact a just-price theory. It takes as a normative benchmark the time-saturated regime where the rate of interest (called the “rate of profit”) is zero. It evaluates the transactions of the actual economic regime (where \( r \) is positive) at the benchmark prices. It finds that the workers receive less in the actual regime than they would in the benchmark regime; that difference is precisely the “exploitation.” Of course, Marx did not intend or desire the theory to be only a just-price theory. But that is one of the ways a theory might fail. When finally worked out in a detailed and consistent form, the theory might fall far short of the original expectations.

Let \( r \) be the positive interest rate in the actual regime, so \( p(r) \) is the actual price of a bushel of corn in terms of the numeraire of labor. Since the price
of labor in terms of labor is always unity, \( p(r)z = 1 \) so the real wage-basket \( z = z(r) = 1/p(r) \) is also a function of \( r \).

**Figure 13.1** Price-wage tradeoff \( p(r)z(r) = 1 \)

In the benchmark regime where \( r = 0 \), the just price of corn is \( \nu = p(0) \) the Marxian value of a unit of corn. The just wage, which "represents the real wage rate that would prevail if there was no exploitation" (Morishima 1973, p. 54), is:

\[
\text{Just wage} = z^* = z(0) = 1/p(0) = 1/\nu = [1 - A]/a
\]

= Net product per unit labor

As the interest rate \( r \) moves from zero to a positive value, the price of labor, the real wage \( z(r) \), decreases so labor-sellers are worse off in the actual regime in comparison with the benchmark regime. How much worse off? In selling the labor \( L = aX \), the workers would receive \( z^*L \) in the benchmark regime and they receive \( zL \) in the actual regime. The difference is:

\[
[z(0) - z(r)]L = z^*L - zL = ([1 - A]/a - z)aX = X - AX - zL
\]

= Net product - wage corn

= Surplus product

Thus the so-called "surplus product" is just the difference between the "just corn wages" and the actual corn wages for the labor \( L \). And the benchmark value of that wage differential in terms of labor is:

\[
p(0)[z(0) - z(r)]L = (1 - \nu z)L = \nu(X - AX) - \nu zL
\]

= total surplus labor

In the (hypothetical) transition from the benchmark to the actual regime, the economic position of labor-sellers worsened, and that is precisely the "Marxian exploitation." The difference in the wage-bill is the "surplus product" in terms of corn and the difference is the "surplus labor" in terms of labor.
The same sort of "exploitation" analysis could be applied to any price change. Here is an apple selling example. Suppose in the benchmark situation,

*Benchmark prices* 10 apples = 1 bushel of corn

But in the actual situation, the price of apples dropped relative to corn.

*Actual prices* 15 apples = 1 bushel of corn

Suppose the apple owner sells 300 apples in return for $300/15 = 20$ bushels of corn. Let us "pierce the veil" of this competitive market transaction to "reveal its inner nature." In return for the 20 bushels, the apple seller first gives up 200 apples. The 200 apples have the same "value" as the 20 bushels (i.e., "value" = benchmark prices). Everything seems fair and square. The 200 apples were "paid for" by the 20 bushels. But then the apple seller is "forced to alienate" an additional 100 apples which is "appropriated as a surplus" by the corn-owner without any further corn payment in return. These extra 100 apples are the "unpaid" apples. In terms of corn, the corn-owner gave up 20 bushels to receive the "value" of 30 bushels so the surplus appropriated by the corn-owner represented 10 bushels of corn.

![Figure 13.2 "Exploitation" analysis of apple price change](image)

The ratio of the unpaid apples to the paid apples is $100/200 = 0.5$ so there is a 50 percent rate of exploitation. "Beneath the facade" of the market transaction, we have revealed the "exploitation" of the apple seller by the "forced alienation" of the surplus apples.

Marxian exploitation theory applies this same methodology to the labor contract. It clearly has nothing to do with workplace power relations. The time-saturated benchmark regime defines the "just prices." The just interest rate is zero, the just corn price per bushel is $v$, and the just wage is
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$z^* = 1/v$. In the hypothetical transition from the zero-interest benchmark model to the actual model, time enters as a scarce resource commanding a positive price (the positive interest rate). The price $p(r)$ of corn in terms of labor is a monotonic increasing function of $r$:

$$p(r) = a[1 - (1 + r)A]^{-1} = a[1 + (1 + r)A + (1 + r)^2A^2 + \ldots]$$

so there is more labor for the same corn, i.e., less corn for the same labor, than in the benchmark model. Where, say, 200 units of labor may have previously traded for 20 bushels, it now takes 300 units of labor to buy 20 bushels of corn. The first 200 units of labor have the same “value” (= benchmark price) as 20 bushels of corn, so the last 100 units of labor represent “unpaid labor” (at benchmark prices). Thus there is “exploitation” if and only if the interest rate is positive. That “Fundamental Marxian Theorem” may “be considered as the heart and soul of Marxian philosophy...” (Morishima 1973, p. 6).

The modern Marxian labor theory of value and exploitation has nothing to do with workplace power relations, with wage labor, or even with capitalist property relations. It turned out to be a pre-liberal Aristotle–Aquinas “interest grumble” dressed up in Marxian garb.

A COMPARISON OF MP THEORY AND THE LABOR THEORY OF PROPERTY

Marginal productivity theory

A simple corn-and-labor input-output model was used above to present and analyze the modern Marxian labor theory of value and exploitation. The same underlying technology is now used to present and analyze marginal productivity theory. Then all three theories (LTV, MP theory, and LTP) are compared in the same setting.

Marginal productivity (MP) theory claims that under competitive conditions: (1) each worker produces his or her marginal product; (2) each worker receives the value of his or her marginal product; and (3) thus each worker gets what he or she produces. A similar result would hold for each other factor.

The first difficulty in representing this argument in the corn-and-labor model is that the technology does not allow substitution between capital (seed corn) and labor. If labor is increased with no extra capital, there is no change in output (isoquants are right-angles with this Leontief technology). Hence we must define the marginal net product of labor (the classic treatment of MP theory with fixed coefficients is Georgescu-Roegen 1935). We add an extra unit of labor and simultaneously add as much extra capital as is needed by the labor. Then we charge the extra capital against
the increase in product. The net increase in output will be the marginal (net) product of labor.

One extra unit of labor (with enough extra capital) will produce 1/a extra units of output. The extra capital (seed corn) needed by 1/a units of output is A/a units of capital. One must be careful not to directly compare beginning-of-the-year corn (seed corn) with year-end corn (harvest corn) since they are separated by a time period. The market will exchange one unit of corn now for \((1 + r)\) units of corn at the end of the year. Hence the extra \(A/a\) bushels of seed-corn is equivalent to \((1 + r)A/a\) bushels of harvest corn. Charging the extra seed-corn against the extra product yields the:

\[
\text{Marginal net product of labor} = \text{MNPL} = \frac{1}{a} - (1 + r)\frac{A}{a} = \frac{1 - (1 + r)A}{a}
\]

Multiplying through by the money price of seed corn \(p^*\) yields

\[
\text{Value of the marginal net product of labor} = \text{VMNPL} = p^*\text{MNPL} = \frac{wa[1 - (1 + r)A]}{a} = w
\]

Value of the marginal net product of labor = wage

Thus the market value of the marginal net product of labor is equal to the wage rate so MP theory implies that each worker "gets what he produces." The use of the interest rate is necessary in the marginal productivity conditions when the input and output differ by a time period (e.g., see the Wicksell conditions in Samuelson 1937, p. 495).

**Analysis of marginal productivity theory**

*The shared pie picture.* The labor theory of property is a property theory, not a price theory. It is perfectly compatible with marginal productivity (MP) theory as a price theory (or any other price theory). However, MP theory has a central ideological role that far overshadows its price-theoretic function. That broader role is to show that each factor would "get what it produces" under competitive capitalism. In that role, MP theory does conflict with the labor theory of property. The conflict is not at the normative level; there is little disagreement that Labor should get what Labor produces. The questions are the factual questions of what Labor produces and what Labor gets.

Conventional economics imposes a certain preconceived "picture" on the firm, the picture of each factor supplier getting a certain distributive
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share of the output. Any remainder goes to a "residual claimant." This **distributive shares or "shared pie" picture** is a complete misrepresentation of the structure of property rights in a firm. One party legally appropriates 100 percent of the outputs, the positive product. The other legal parties who supply inputs appropriate 0 percent of the outputs. How can this be? How can one party appropriate 100 percent of the product when there are other scarce factors? Because that same party also appropriates 100 percent of the negative product, i.e., bears all the liabilities for the used-up inputs. The so-called "residual claimant" in fact claims the whole product. Thus the actual structure of property rights in production is one of complete asymmetry, not the symmetry of the distributive shares picture.

In the example, the gross output of harvest corn is the sum of the wage-bill plus the seed-corn (expressed in terms of harvest corn):

$$X = zL + (1 + r)AX$$

It is tempting to picture Labor as getting one share of the product with the seed-corn owner getting the other share. Labor is pictured as appropriating "Labor's share of the product" $(zL, 0, 0)$ and the seed-corn owner as appropriating "Capital's share of the product" $((1 + r)AX, 0, 0)$. There is no additional residual left for the residual claimant.

The actual structure of property rights is totally different. Hired labor appropriates no share of the product. The residual claimant, far from getting "nothing," appropriates the whole product $(X, -AX, -L)$. Instead of being a co-claimant of the product, Labor is the party to whom the whole product appropriator is liable for the liability $-L$. That liability is satisfied by the corn-wage payment $(zL, 0, 0)$ in return for the labor $(0, 0, L)$. The distributive shares picture is false as a description of property relations, not as a description of value relations. Whether Labor appropriates the "share of the product" $(zL, 0, 0)$ or receives $(zL, 0, 0)$ as a wage payment, Labor still ends up with the income $zL$. Indeed there may be many different sets of property relations which yield the same set of value relations. For example, reverse the hiring relation. Let Labor buy the seed-corn (on credit) rather than the seed-corn owner hire Labor. Then Labor would appropriate the whole product $(X, -AX, -L)$ and would net the Labor product $(X, -AX, -L) + (0, 0, L) = (X, -AX, 0)$. The liability $-AX$ is satisfied with the payment of $((1 + r)AX, 0, 0)$ so Labor would again end up with the same value $X - (1 + r)AX = zL$.

The two firms, one capitalist with Capital hiring Labor and the other a labor-managed firm with Labor hiring capital, are diametrically opposite in the structure of property rights (and in the structure of management control rights).

In this model (Figure 13.3), the opposite property structures yield the same value relations. Labor and Capital have the same net income under
each structure. The difference is property theoretic, not price theoretic. MP theory is not a property theory. It does not address property theoretic questions. It could not show that Labor appropriates what it produces because, in fact, hired-Labor appropriates none of its product. It is only in a metaphorical sense that Labor "gets" a share of the product (e.g., in the wage payment).

**Animism in MP theory.** It is only an animistic metaphor to picture each factor as "producing" its marginal product. Capital does not "produce" its marginal product. Capital does not "produce" at all. Capital is used by Labor to produce the output. When capital is increased, Labor produces extra output by using up the extra capital. The "marginal product of capital" is the ratio of Labor's extra positive product over its extra negative product.

Neoclassical marginal productivity theorists are fond of observing that the theory applies symmetrically to any factor, e.g., "You can switch the roles of labor and land" (Samuelson 1976, p. 543). Why can't one do the same in the labor theory of property? Why not define the "corn product" \((X, 0, -L)\) as the product of the corn input \(AX\)? In this "corn theory of property," the corn "produces" \((X, 0, -L) = (X, -AX, -L) + (0, AX, 0)\), but the corn-supplier is only paid for the corn-input \((0, AX, 0)\) while some other party receives the difference \((X, 0, -L) - (0, AX, 0) = (X, -AX, -L)\) which is the whole product.

The difficulty with this "corn theory" lies in a concept noticeably absent from the neoclassical vocabulary, the concept of responsibility. Persons have the capacity for responsible agency; things don't. The only services which
can be responsible for producing the whole product are the services of human beings, not the services of capital, land, or other commodities. That is why there is a labor theory of property, not a corn, land, or capital theory of property.

But what about the owners of the corn, capital, or land? They have the capacity for responsible agency. If a land-owner, for example, worked as a manager in an enterprise, then he or she would qualify for that reason as part of the responsible party Labor, not by reason of the land ownership.

**Summary criticism of MP theory.** The analysis of MP theory given here must be differentiated from the common “criticisms” of MP theory. MP theory is often criticized on the grounds that the actual economy is uncompetitive, that marginal products are difficult to measure, or that it does not justify the original distribution of factor ownership. These common arguments are often taken as “refuting” MP theory. Yet they really don’t touch the core assertion of the theory, the assertion that competitive capitalism would allocate to “each according to what he and the instruments he owns produces” (Friedman 1962, pp. 161–2). It is this core assertion which is incorrect.

The ideological importance of MP theory lies in the attempt to show that each factor “produces” its marginal product and that each factor “gets” its marginal product under competitive capitalism. These are not normative assertions. They are factual assertions – which are false. A non-human “agent of production” does not “produce” its marginal product, except in an animistic metaphorical sense. And each hired factor does not “get” a property share of the product, except in the metaphorical sense of the distributive shares picture.

What are the facts unadorned by metaphorical property relations or animism? In a capitalist firm, the facts are that Labor produces the whole product and that Capital gets it. Recognition of those facts does not conflict with the nonideological analytical use of marginal productivity concepts in price theory.

**Property analysis of capitalist production**

Let “Labor” be the legal party consisting of all those who work together in a given productive enterprise (regardless of their legal role as employees or working employers). Then Labor is de facto jointly responsible for using up the inputs and for producing the outputs. That is, Labor is de facto responsible for producing the negative product and the positive product, i.e., for producing the whole product. The whole product represents the positive and negative fruits of the labor of the people working in the productive enterprise.
From the legalistic viewpoint, it is the "firm" as a legal party which bears
the legal liability for the used-up inputs and which appropriates the pro-
duced outputs. Hence the juridical principle (i.e., the labor theory of
property) implies that Labor should be the firm, i.e., that the firm should
be a self-employment firm or a democratic worker-owned firm (see
Ellerman 1990).

These arguments can now, for purposes of comparison, be stated in the
simple corn-and-labor model. Harvest corn and seed corn should be treated
as economically distinct commodities. Hence we must use lists or vectors
with at least two components:

\[(\text{Harvest corn}, \text{seed corn})\]

In the productive enterprise, Labor performed the intentional human actions
represented as the labor \(L = aX\). These actions used up the inputs \(AX\) and
produced the outputs \(X\) of the firm. Hence the assets and liabilities pro-
duced by Labor are:

\[
\text{Labor's product} = (X, -AX)
\]

The labor \(L = aX\) is the human activity of producing \((X, -AX)\). But
neoclassical economics performs the major conceptual transformation of
depicting the human activity of producing \((X, -AX)\) as another "input" in
the production process. For the purposes of comparison, that conceptual-
ization of labor is adopted here. Our vectors must be expanded to three
components to allow for the labor component:

\[(\text{Harvest corn}, \text{seed corn}, \text{labor services})\]

In addition to producing \(X\) by using up \(AX\), the workers are also con-
strued as producing and using up the labor services \(L\). This yields the three
dimensional version of

\[
\text{Labor's product} = (X, -AX, -L) + (0, 0, L) = (X, -AX, 0)
\]

Since the \(-L\) and \(+L\) cancel out (when the vectors are added component-
wise), the net result for Labor's product is the same as before.

By construing the human activity of production as an input used up in
production, we arrive at the vector version of the

\[
\text{Whole product} = (X, -AX, -L) = (X, 0, 0) + (0, -AX, -L) = \text{positive product} + \text{negative product}
\]

The analysis of capitalist production can now be concisely stated. We
have seen that Labor is in fact responsible for producing (what has been
called)

\[
\text{Labor's Product} = (X, -AX, -L) + (0, 0, L) = \text{whole product} + \text{labor commodity}
\]
Yet Labor only receives title to the labor commodity \( L \) which was sold in return for the wages. Labor also produced the whole product, but it was legally appropriated by the employer. That is, the employer sustained the costs for the used-up inputs \( AX \) and \( L \), and the employer acquired title to the produced outputs \( X \), so the employer appropriated both the negative and positive product, i.e., the whole product.

**The market mechanism of appropriation**

Labor produced the whole product, but the employer appropriated it. Thus capitalist production represents "an institutional robbery – a legally established violation of the principle on which property is supposed to rest" (Clark 1899, pp. 8–9). How can this happen? Do the legal authorities claim that workers are instruments devoid of responsible agency?

A legal trial (e.g., a property damage suit) can be viewed as an institutional attempt to apply the labor theory of property in its form as the juridical principle of imputation. The trial attempts to ascertain the de facto responsible party so that party can be assigned the de jure responsibility. When no illegality is involved, the legal authorities do not intervene so they make no judgment at all about the de facto responsibility of the workers in normal production. There is a *market mechanism of appropriation* which takes over when the law does not intervene. It is a laissez-faire mechanism: let the costs lay where they fall, and then let the party who has borne the costs claim any appropriable outputs.

The employer had purchased (or already owned) the seed corn \( AX \) and the labor \( L \). They were not resold, so when those inputs were used up in production, the employer "swallowed" those costs. That is the laissez-faire appropriation of the negative product. Then the same party, the employer, has the legally defensible claim on the outputs \( X \). In that manner, the employer laissez-faire appropriated the whole product \( (X, -AX, -L) \).

**A COMPARISON OF THE THREE THEORIES**

Three theories concerning the role of Labor under capitalist production have been sketched: marginal productivity theory, the Marxian labor theory of value and exploitation, and the labor theory of property. The principal conclusions are summarized in Figure 13.4. It should be particularly noted that each theory agrees that Labor should get what Labor produces. The theories each have a different conception of what Labor in fact produces and what Labor in fact receives. These are factual questions.

Our purpose has been to compare three theories about the role of Labor in capitalist production. Most political economic debate during the last century has been between neoclassical value theory (represented by MP
<table>
<thead>
<tr>
<th></th>
<th>Marginal productivity theory</th>
<th>Marxian labor theory of value and exploitation</th>
<th>Labor theory of property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor produces</td>
<td>Marginal net product (X - (1 + r)AX)</td>
<td>Net product (X - AX)</td>
<td>Labor product ((X, -AX, 0))</td>
</tr>
<tr>
<td>Labor receives</td>
<td>Value of MNP of (L) (= p^*) [1 - (1 + r)A]X = (waX = wL)</td>
<td>Labor value of wage-baskets (vzL)</td>
<td>Labor ((0, 0, L)) which is sold for (wL)</td>
</tr>
<tr>
<td>Therefore labor</td>
<td>gets what labor produced</td>
<td>is exploited out of the surplus labor (v(X - AX) - vzL)</td>
<td>Produces but does not appropriate ((X, -AX, 0) - (0, 0, L)) = ((X, -AX, -L)) = whole product</td>
</tr>
</tbody>
</table>

**Figure 13.4 Comparison of the three theories**

Theory) and Marxian value theory. This clash of value theories has not reached the fundamental issues which have to do with property rights, not prices. Hence the two theories have been analyzed from the viewpoint of the labor theory of property.

In its precise modern form, Marxian value theory has emerged as a not particularly insightful "just-price" theory expressing a Marxian version of the old Aristotle–Aquinas interest grumble. Even if one takes it seriously as a just-price theory, it is not a critique of the institution of wage labor but only a critique of unjust wage rates, i.e., the "exploitative" wage rates corresponding to positive rates of profit.

Marginal productivity theory has a proper analytical use. But it is also used as an engine of capitalist apologetics to show that each factor "gets what it produces" in competitive capitalism. But we found this view to be based on two metaphors, the distributive shares picture and the pathetic fallacy. It completely misrepresents the structure of property rights in production as well as the responsible agency (or lack of it) of the various factors of production.

The labor theory of property is a very old theory. But it is also new to political economic debate, a debate which has focused on value theoretic issues for well over a century. Our purpose has been only to present this "old theory" in simple, precise, and modern terms so that it may be compared and contrasted with the Marxian labor theory of value and the neoclassical marginal productivity theory.
SEPARATING INSTITUTIONAL AND NON-INSTITUTIONAL REALITIES

Fundamental to clear thinking and rigorous results in political economy is the separation of institutions from the underlying non-institutional realities. John Stuart Mill used a version of the separation when he contrasted the non-institutional production of wealth with the institutional distribution of wealth.

The laws and conditions of the production of wealth partake of the character of physical truths. There is nothing optional, or arbitrary in them. Whatever mankind produce, must be produced in the modes, and under the conditions, imposed by the constitution of external things, and by the inherent properties of their own bodily and mental structure...

It is not so with the Distribution of Wealth. That is a matter of human institution solely.

(Mill 1970, pp. 349-50)

Mill’s treatment of the production of wealth should not leave the impression that the non-institutional realities could be adequately described using solely the concepts of engineering and the natural sciences. Notions like de facto individual welfare or preferences (described by economists’ utility functions), de facto responsibility, de facto possession of goods, and de facto consent are all part of non-institutional (i.e., “de facto”) realities that would not be captured using solely the concepts of engineering and the natural sciences.

A clearer differentiation has been developed in neoclassical economics. The basic notion of allocative efficiency (or Pareto optimality) is specified in non-institutional terms using goods, preferences, and technical possibilities but without mentioning property rights or prices: “A social state is allocative efficient if it is not technically possible to make someone better
off in terms of their own preferences without making someone else worse off." This does not assume some state of nature with no institutions such as property rights or market prices. "Efficiency" is simply specified without presupposing any particular institutional arrangement so that differing institutions can be evaluated according to their efficiency.

The neoclassical notion of a "competitive equilibrium" (CE) is a quintessentially institutional notion specified in terms of property rights, competitive markets for the transfer of property rights, and the (implicitly assumed) market mechanism of appropriation for the birth and death of property rights. The crown jewel of neoclassical microeconomics is the Fundamental Theorem of Normative Economics which shows that under certain assumptions (mainly that there are no externalities), a competitive equilibrium is allocative efficient. This theorem is a paradigm for clear thinking in political economy. It separates the institutional notion (CE) from the non-institutional notion (efficiency) and then relates them in the Fundamental Theorem.

Economic models tend to be rather abstract but that is not necessary for a clear separation of the institutional and non-institutional realities. Non-institutional descriptions can be quite specific. People can be specified by name, machines by serial numbers, and land by location without assuming any particular institutions of legal rights or property rights. This conceptual separation is necessary to understand the flaw in the Fundamental Myth.

Consider a productive operation being carried on currently under the auspices of an employment firm OldCo. What rights give the OldCo corporation the management rights over the workers and the ownership of the product? Develop a non-institutional description of the same productive operation by specifying the people by name, the machines by serial numbers, and so forth. That process could then be organized in a number of institutional frameworks; the workers could be slaves, private employees, state employees, or members of a democratic firm.

Consider now the original framework with the OldCo corporation owning the means of production, i.e., owning the machines with certain serial numbers and the specified buildings and land. However, suppose that those capital goods are leased out to another corporation NewCo, and that NewCo hires the named workers. Then the same non-institutionally specified production operation is being carried on, but OldCo does not have management rights over the production process and does not appropriate the whole product of the process. Yet OldCo still owns the means of production. Thus it was not OldCo's ownership of the means of production that gave it the management rights and product rights in the original arrangement. That is why the Fundamental Myth is indeed a myth.

The word "firm" was used as a technical term to specify the legal party
which ended up legally appropriating the whole product of the non-institutionally specified production process:

"Firm" = Whole product appropriator

In that sense of the word, we saw there was no such thing as the "ownership of the firm" in the capitalist property system even thought there is the ownership of corporations such as OldCo. The identity of the firm is contractually determined as the last legal owner of the inputs consumed in the production process. That legal party voluntarily appropriates the negative product (the liabilities for the used-up inputs) and thus has the legally defensible claim on the positive product (the produced outputs). That legal party also holds the management rights by virtue of its ownership of the input services employed in production, e.g., the employees' labor services.

The phrases "de facto" or "factual" are used as technical terms to describe the non-institutional realities as in the expression "de facto responsibility." The phrases "de jure" or "legal" are used as technical terms to describe the institutional realities as in "legal responsibility":

De facto = factual = non-institutional
De jure = legal = institutional

There is one more level of complication. In addition to the factual and legal concepts, there is the legal view as to what the facts are. For instance, a jury obviously does not determine the facts; a jury determines what the legal system will take to be the facts of the matter.

The imputation principle is to assign legal responsibility in accordance with de facto responsibility. However, the legal system can only assign legal responsibility in accordance with what the legal system takes to be the facts about de facto responsibility. There will be a miscarriage of justice when the facts turn out to differ from the "official" legal view of the facts, e.g., when the jury's decision was in error about the facts.

In a similar manner, the legal contract for the transfer of goods or services is to be fulfilled by the de facto transfer of the goods and services in question. However, the legal system will take the contract as being fulfilled upon completion of what it legally views as the de facto transfer of the goods or services. There is a similar miscarriage of justice when the facts of the transfer differ from the legal view of the facts. Such a miscarriage occurs on a system-wide institutional scale in the employment contract. The legal system legally views the de facto responsible cooperation of the employees with the employer as the de facto transfers fulfilling the legal contract for the sale of the (de facto nontransferable) labor services – unless that co-operation breaks the law – in which case the legal view of the "de facto transfers" is rather different.
The analysis uses a simple stylized description of a production operation that, suitably interpreted, is quite general. Consider a production process where the workers (all who work in the process) by performing the labor services $L$ use up the capital services $K$ and produce the product $Q$ during a certain time period. Each of $L$, $K$, and $Q$ could itself be a list or vector with a large number of components. For instance, $K$ stands for all the non-labor inputs such as raw materials and semi-finished parts as well as the services of capital goods and land. The labor services $L$ include the services of all workers including managers working the production process.

The simplest description will require consideration of two legal parties: Labor consisting of all the people (managers and other workers) who work in the firm performing the services $L$, and Capital consisting of the suppliers of $K$. It is not assumed that Labor is self-consciously organized as a legal party. In terms of people, Labor is the de facto firm. This is clear, for example, in the business literature describing the realities of a firm.

Consider the following from standard managerial accounting textbook. An organization can be defined as a group of people united together for some common purpose. A bank providing financial services is an organization, as is a university providing educational services, and the General Electric Company producing appliances and other products. An organization consists of people, not physical assets. Thus, a bank building is not an organization; rather, the organization consists of the people who work in the bank and who are bound together for the common purpose of providing financial services to a community.

This description of the de facto firm could be contrasted with the de jure firm, the legal members of a company such as General Electric. In the conventional corporation, they are the shareholders abstractly represented here as Capital, the suppliers of the capital $K$. When one reads in the business pages about General Electric having its annual meeting, that is the meeting of the de jure members of GE, the shareholders. The de facto members of GE have a "meeting" every working day.

The same distinction between the de facto firm and the de jure firm was pointed out in 1944 by Lord Eustace Percy.

Here is the most urgent challenge to political invention ever offered to the jurist and the statesman. The human association which in fact produces and distributes wealth, the association of workmen, managers, technicians and directors, is not an association recognised by the law. The association which the law does recognise – the association of shareholders, creditors and directors – is incapable of production and is not expected by the law to
perform these functions. We have to give law to the real association and withdraw meaningless privilege from the imaginary one.

(quoted in Oakeshott 1988)

This contrast between the underlying facts and the superimposed institutions is fundamental to the analysis of production in the employment system.

To represent commodities, lists or vectors will be used with the three components in the following order:

(Outputs, Capital services, Labor services)

The production vector for the time period is the

\[ \text{Whole product} = (Q, -K, -L) \]

The employment-based organization of the production operation will be represented by Capital hiring the workers (including managers), i.e., buying the labor services \( L \) in the employment contract from Labor.

The property theoretic analysis of production compares what each party is de facto responsible for with what each party is legally responsible for, i.e., with what each party legally appropriates. In terms of de facto responsibility, only human actions, herein called "labor," can be de facto responsible for anything - regardless of the causally efficacy of the capital services \( K \). The same people may perform labor services as a part of the party Labor and also be part of Capital owning the capital services \( K \). Since only Labor can be de facto responsible, Labor produces what we have called

\[ \text{Labor's product} = (Q, -K, 0) = (Q, -K, -L) + (0, 0, L) \]

\[ \text{Whole product} + \text{Labor} \]

which is the sum of the whole product and the labor services \( L \). Since any work performed by the capital owners would have been counted as a part of the labor \( L \), the party Capital (as capital suppliers) is de facto responsible for neither producing outputs nor using up inputs. Capital (qua capital suppliers) is absentee with respect to production.

In terms of legal responsibility, Labor sells \( L \) but did not buy \( L \) from any other party so Labor was considered legally responsible for creating \((0, 0, L)\), i.e., Labor legally appropriates \((0, 0, L)\). Capital purchased or already owned \( K \) and purchased \( L \) but did not resell those inputs consumed in production, so Capital legally appropriated the liabilities \(-K\) and \(-L\) for those inputs. Moreover, Capital sold the outputs \( Q \) but did not buy those outputs from any other party, so Capital legally appropriated the outputs \( Q \). Thus in total, Capital legally appropriated the whole product \((Q, -K, -L)\).

The juridical principle of imputation (i.e., the labor theory of property in juridical garb) is that legal responsibility is to be assigned in accordance
with de facto responsibility. When the two notions agree, that is a matching, in particular a responsibility-matching. It is a miscarriage of justice when the two notions diverge, i.e., when the legal responsibility is assigned to a non-responsible or innocent party, or when the legal responsibility is not assigned to the de facto responsible party. That is a responsibility-mismatch, or in the context of production, a production-mismatch. Table 14.1 calculates the de facto-minus-legal responsibility mismatch involved in the employment firm for both the parties of Labor and Capital.

Table 14.1 Analysis of appropriation in capitalist production

<table>
<thead>
<tr>
<th>Analysis of appropriation</th>
<th>Capital</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>De facto responsible for</td>
<td>(0, 0, 0)</td>
<td>Labor’s product</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Q, -K, 0)</td>
</tr>
<tr>
<td>Legally responsible for</td>
<td>Whole product</td>
<td>Labor commodity</td>
</tr>
<tr>
<td></td>
<td>(Q, -K, -L)</td>
<td>(0, 0, L)</td>
</tr>
<tr>
<td>Production mismatch:</td>
<td>Minus whole product</td>
<td>Whole product</td>
</tr>
<tr>
<td>de facto – legal responsibility</td>
<td>-(Q, -K, -L)</td>
<td>(Q, -K, -L)</td>
</tr>
</tbody>
</table>

The differences can be computed. Labor produced Labor’s product but only received the legal responsibility for the labor services $L$, so Labor produced but did not receive the whole product. Capital, on the other hand, was absentee with respect to production so it did not, qua Capital, produce anything but it legally appropriated the whole product. Thus Capital legally appropriated but did not produce precisely what Labor produced but did not legally appropriate – the whole product.

No prices were mentioned or used in the analysis. No assumptions were made about markets being competitive or non-competitive, or being in equilibrium or not.

EXCHANGE IN THE EMPLOYMENT SYSTEM: PROPERTY THEORETIC ANALYSIS

The private property system, employment-based or not (i.e., with hired labor or not) is intimately tied together with the system of contracts. Indeed, it is best to think of it as a system of property-and-contract instead of just as a property system. Even the changes in property rights in production are geared to exchange (i.e., voluntary contracts) by the market mechanism of appropriation. The hiring party, the legal party who hires or already owns all the inputs used up in production, voluntarily appropriates the negative product and thus has the legally defensible claim on the positive product.
Production is also geared to exchange at the factual or de facto level. The people de facto responsible for using up the inputs in production will be the last people to have de facto possession of those inputs. Similarly, the people de facto responsible for producing the product will have the first people to have de facto possession of those outputs.

Production is geared to exchange at both the legal and factual levels. In this section, we analyze the legal and factual exchanges involved in the capitalist production. In the next section, we develop the Fundamental Theorem of Property theory which states that if there is a legal/factual mismatch in production, then it must show up as a legal/factual mismatch in exchange.

Prices must now be mentioned since they are involved in the money part of market exchanges. Let \( w \) be the unit wage so the wages and salaries are \( wL \). Let \( p \) be the unit price of output so the revenue is \( pQ \). Let \( r \) be the price per unit of capital services (i.e., the unit rental rate) so the market value of the capital services is \( rK \). The profit per period in the production operation at those prices is

\[
\pi = pQ - rK - wL = \text{Value of the whole product}
\]

The legal transaction between Capital and Labor is assumed to be the employment contract. Labor voluntarily sells the labor services \( L \) to Capital in return for the wages \( wL \).

![Diagram of Employment Contract](image)

Figure 14.1 Legal transaction: employment firm

It should be noted that legal transfers do not refer to transfers between points in physical space but between legal parties. It is not as obvious but the same is true of de facto transfers.

De facto or factual transfers of commodities refer to transfers in the de facto possession and direct control of the goods and services between people. For instance, the de facto transfer in the possession and control of ordinary commodities like food fulfills the contracts for the legal transfers of those commodities. The purchased food is transferred from seller to buyer, and the purchase price is transferred in the opposite direction.

It should be carefully noted that the commodity does not have to move
in physical space to be de facto transferred. When a person buys a house and then takes factual possession of the house, the house is not moved in physical space. Changes in possession take place in “possession space.” The “points” in possession space are people – often grouped together as parties such as Labor and Capital. When the new houseowner goes to the house in physical space, the house goes to the owner in possession space. Thus both legal transfers and de facto transfers are transfers between people or groups of people.

Labor is de facto non-transferable between people; human actions always remain in the de facto possession and direct control of the actor. Employees can only co-operate together with managers. Deciding to voluntarily obey a command to do \( X \) is only another way of deciding to do \( X \). The employee remains de facto responsible for his or her actions together with the cooperating employees and managers.

Since Labor in fact uses up the capital services \( K \), those services must be first de facto transferred into the possession of Labor. As in the previous example of the homeowner and house, the workers would move in physical space to take possession of the capital goods and other inputs used in production. But that constitutes the transfer in possession space of those non-labor inputs \( K \) into the hands of the workers. In short, when the workers go to the factory in physical space, the (use of the) factory goes to the workers in possession space. In our stylized example, we will assume that the non-labor inputs \( K \) start with the party Capital (although even that minimal role for Capital is not too plausible when the capital-owners are the absentee shareholders of a large corporation).

Since Labor in fact produces the outputs \( Q \), those commodities are first in the de facto possession and direct control of Labor. The outputs \( Q \) are then de facto transferred away to the buyers. To keep our stylized example simple, we will assume that the outputs \( Q \) are de facto transferred back to Capital who, in turn, could transfer them to the buyers. The example could be easily modified by having another party, the Market, with the workers directly transferring to the Market – but nothing essential would be added by that extra complication.

The one part of the legal transaction between Capital and Labor that is de facto fulfilled is the transfer of the wages \( w_L \). In summary, the non-labor inputs \( K \) are factually transferred from Capital to Labor, while the outputs \( Q \) are factually transferred in the opposite direction. The transfer of \( +K \) from Capital to Labor can be formally represented as the transfer of \(-K\) in the opposite direction. Thus the property vector \((Q, -K, 0)\) is de facto transferred from Labor to Capital, while the wages \( w_L \) are transferred from Capital to Labor.

A legal contract that was only partially fulfilled by factual transfers is a breached contract or a fraudulent contract, and factual transfers without
any corresponding legal transfers are externalities, conversions, or thefts. The system of contracts functions properly when all legal transfers or contracts are fulfilled by the corresponding factual transfers and when all factual transfers are covered by legal transfers. That state of affairs is the property-theoretic notion of "equilibrium" and it will be called a transfer-matching (between the legal and factual transfers). A divergence between the factual and legal transfers is a transfer-mismatch.

There is no mismatch on the wages part of the employment contract. The mismatch occurs in the property vectors. Labor factually transfers \((Q, -K, 0)\) to Capital, and legally transfers \((0, 0, L)\) to Capital so the property factually but not legally transferred from Labor to Capital is

\[
(Q, -K, 0) - (0, 0, L) = (Q, -K, -L) = \text{Whole product}
\]

**Table 14.2 Analysis of capitalist exchanges**

<table>
<thead>
<tr>
<th>Analysis of capitalist exchanges</th>
<th>From Labor to Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>De facto transferred</td>
<td>((Q, -K, 0))</td>
</tr>
<tr>
<td>Legally transferred</td>
<td>((0, 0, L))</td>
</tr>
<tr>
<td>Transfer mismatch: de facto – legal transfers</td>
<td>(\text{Whole product})</td>
</tr>
<tr>
<td></td>
<td>((Q, -K, -L))</td>
</tr>
</tbody>
</table>

The wage transfers are not shown in table 14.2 since no mismatch is involved in the wage payments. If desired, the vectors could have a fourth component for money. The de facto transfer from Labor to Capital would be \((Q, -K, 0, -wL)\) and the legally transferred vector would be \((0, 0, L, -wL)\). The factual-minus-legal mismatch would still be the whole product: \((Q, -K, -L, 0)\).

There is an interesting contrast between this property theoretic analysis and Marx's analysis of capitalist production. Marx misunderstood how production and exchange fit together in the capitalist system. If something was fundamentally amiss in the sphere of production (as Marx thought),
it would show up in the sphere of exchange. Marx took great pride in his alleged analysis of exploitation in production in spite of equals being exchanged for equals in the "sphere of exchange."

The sphere of circulation or commodity exchange, within whose boundaries the sale and purchase of labour-power goes on, is in fact a very Eden of the innate rights of man.

(Marx 1977, p. 280)

Marx's sarcasm is misplaced. We have already seen in a previous chapter how Marx's analysis of production in the labor theory of value and exploitation came to nought. Marx was also wrong in his acceptance that the employment contract satisfies "the innate rights of man." Even the most "bourgeois" conception of innate rights would not tolerate fraudulent contracts, and yet that is where the employer-employee contract stumbles. It pretends to alienate what is de facto inalienable so when it is validated by a system of positive law it is only a legalized fraud.

Marx accepted what he should have rejected (e.g., the Fundamental Myth and the labor contract as consonant with the innate rights of man), and Marx rejected what he should have accepted (e.g., private property ultimately based on labor appropriation, and non-fraudulent market exchanges).

THE FUNDAMENTAL THEOREM OF PROPERTY THEORY

Production is geared to exchange - both at the legal and factual levels. The party who is legally responsible for the whole product is the party who is the last buyer of the inputs and the first seller of the outputs. The party who is de facto responsible for the producing the whole product is the last possessor of the inputs and the first possessor of the outputs.

If there is a mismatch of legal and de facto responsibility in production or consumption then there has to be a mismatch between the legal and de facto transfers in exchange. That is the

Fundamental Theorem of Property theory (FTPT)

A responsibility mismatch implies a transfer mismatch

The theorem can also be stated in the positive form: A transfer matching implies a responsibility matching.

The theorem is about the proper functioning of the laissez-faire mechanism of appropriation. To verbally state the proof of the theorem we must characterize the mechanism in more precise terms and be clear about the underlying factual assumptions. The laissez-faire mechanism relates legal transfers and legal responsibility for the used-up inputs and the produced
outputs (the whole product). The mechanism defines the party that is legally responsible for the used-up inputs and the produced outputs as the party that is the last legal transferee or buyer of the used-up inputs and the first legal transferor or seller of the produced outputs.

On the factual side, there is "no action at a distance" in possession space. Thus the party de facto responsible for using up the inputs and producing the outputs must also be the last de facto transferee and possessor of the inputs as well as the first de facto possessor and transferor of the outputs. If inputs could be destroyed accidentally (no responsible party) or outputs produced accidently then the reverse might not be the case. Therefore we, by assumption, restrict attention to non-accidental deliberate human activity. Hence the last (respectively, first) possessor of the inputs (outputs) must also be the party de facto responsible for using up the inputs (producing the outputs).

The FTPT says that under these assumptions, a transfer matching implies a responsibility matching. A transfer matching means that all legal transfers of certain commodities are fulfilled by the transfer in the de facto possession of the said commodities (no frauds) and all de facto transfers are covered by legal transfers (no externalities). Thus a transfer matching implies that the last legal transferee of the inputs is also the last de facto possessor of the inputs and that the first legal transferor of the outputs is the first de facto possessor of the outputs. But in view of the laissez-faire mechanism of appropriation and the factual assumptions (no action at a distance and no accidents), that means the party legally responsible for using up the inputs and producing the outputs is the party de facto responsible for using up the inputs and producing the outputs, i.e., a responsibility matching.

In outline form, the argument is:

Party legally responsible for used-up inputs (which by laissez-faire mechanism)
= last legal buyer of inputs (which by transfer matching)
= last de facto possessor of inputs (which by the factual assumptions)
= party de facto responsible for using up inputs

and similarly for the outputs. Thus in the presence of the laissez-faire mechanism and the factual assumptions, a transfer matching implies a responsibility matching. (This proof can be easily formalized using vectors and graph theoretical machinery.)

The Fundamental Theorem of Property theory is the key to understanding the market mechanism of appropriation. Markets are concerned with exchanges between legal parties whereas appropriation takes place in the non-exchange activities of production and consumption. The FTPT shows that if the market contractual mechanism functions in a juridically correct manner (i.e., all legal contracts are fulfilled by the corresponding
de facto transfers, and all de facto transfers are covered by voluntary contracts), then laissez-faire appropriation will satisfy the juridical principle of imputation (i.e., the matching between legal and de facto responsibility). In other words, the market mechanism will not violate the labor theory of property (juridical imputation principle) if all contracts are fulfilled in a non-fraudulent manner and there are no ownership externalities (all factual transfers covered by voluntary contracts).

The property theoretic analysis of capitalist production and exchange is the main case in point. There was a responsibility mismatch in production and, accordingly, there was a corresponding transfer mismatch in exchange. The factual-minus-legal responsibility mismatch for Labor was the whole product. The analysis of exchange yielded the corresponding result. The factual-minus-legal transfer away from Labor was also the whole product.

The employment system thus violates the natural system of private property and contract. The whole product is misimputed in production, and that misimputation is set up by a naturally fraudulent contract in the marketplace.

**PRODUCTION AND EXCHANGE IN THE SELF-EMPLOYMENT SYSTEM**

Since labor is de facto non-transferable, the facts cannot be changed to fit the capitalist legal system (without changing human nature). To set matters aright, the legal system must take "Man as the Measure" and fit the legal contracts to the de facto transfers involved in production. The non-labor inputs $K$ de facto transferred to Labor should also be legally transferred to Labor in return for their value $rK$ (so Labor hires capital), and the outputs should be legally sold by Labor for their value $pQ$. In other words, if the contractual machinery is fitted to human nature, then human beings would no longer be rented. Under the natural system of private property and contract, Labor would always hire capital and sell the outputs so all firms would be democratic firms where the insiders (workers including managers) are jointly self-employed.

The previous example can be modified to illustrate the operation of the system of private property and contract with democratic firms. Labor buys the non-labor inputs $K$ from Capital for $rK$. For simplicity, we will assume that Labor also sells the outputs back to Capital in return for their market value $pQ$. Thus the property vector legally transferred from Labor to Capital is $(Q, -K, 0)$ in return for the net payment $pQ-rK$.

The factual transfers of non-monetary property are the same as before since labor was not de facto transferable. The monetary factual transfers are the same as those legally transferred for the democratic firm.

With the democratic firm, there is a transfer matching between the legal
Figure 14.3 Legal transaction: self-employment firm

Figure 14.4 Factual transaction: self-employment firm

Table 14.3 Analysis of appropriation under self-employment

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<thead>
<tr>
<th>Analysis of appropriation under self-employment</th>
<th>Capital</th>
<th>Labor</th>
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<tr>
<td>De facto responsible for</td>
<td>(0, 0, 0)</td>
<td>Labor's product</td>
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<tr>
<td>Legally responsible for</td>
<td>(0, 0, 0)</td>
<td>Labor's product</td>
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<tr>
<td>Production mismatch: de facto - legal responsibility</td>
<td>(0, 0, 0)</td>
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and factual transfers. Hence, by the FTPT, there is a responsibility matching in the productive operations. In other words, the market mechanism of imputation will correctly impute legal responsibility in accordance with de facto responsibility.

Labor is de facto responsible for producing what has been called Labor's product, \((Q, -K, 0)\). In the democratic firm, Labor is the last buyer of the non-labor inputs \(K\) so Labor laissez-faire appropriates the liability \(-K\). Labor is the first seller of the produced outputs \(Q\) so Labor also laissez-faire appropriates the assets \(Q\). Thus the market mechanism of imputation imputes Labor's product to Labor yielding the responsibility matching.

Economic democracy or universal self-employment is the natural habitat of the system of private property and contract. The legal contracts can be
fulfilled in a non-fraudulent manner and when all de facto transfers of commodities are also covered by voluntary contracts, then the market will automatically impute legal responsibility for the assets and liabilities created in production and consumption in accordance with the natural principle of responsibility, i.e., the labor theory of property. That is how the natural system of private property and contract should function.
Conclusions

REDEFINING THE GREAT DEBATE

This is a post-socialist book. That is, the book is written in the intellectual landscape that presupposes the collapse of socialism. The traditional capitalism–socialism Great Debate is over; markets and private property have triumphed.

In that intellectual milieu, this book examines the institutions of property and contract that prevail in the western market economies. Does that type of economy represent an ideal free of structural flaws? Are the only economic problems left the non-structural problems of implementing otherwise sound principles? Does the structure of the western-style private property market economy satisfy all basic natural rights? Is there some new "Great Debate" that should emerge in this post-socialist landscape—or are the only remaining questions those of technique and implementation?

Our approach to these questions should by now be clear. The capitalism–socialism debate was ill-posed from the beginning. It is as if the slavery debate in the eighteenth and nineteenth centuries was presented as the choice between the private and public ownership of slaves. The real choice should have been posed between any ownership of slaves (private or public) and the universal condition of self-ownership. In a similar manner, the recent debate between private and public employment (capitalism or socialism) was ill-posed. The real choice is between the employment relation (private or public) and the universal condition of (individual or joint) self-employment in the workplace.

Universal self-employment means work without the employer–employee relation. Everyone is individually or jointly working for themselves in their place of work. Economic self-employment is the natural correlate of political self-determination or political democracy. Thus universal self-employment is sometimes referred to as "economic democracy" (although the phrase is also used vaguely to mean economic populism).

Some examples of self-employment are well known in western market
economies such as proprietorships, family farms, and owner-operated small businesses. Some firms for the most part constitute joint self-employment with a fringe or periphery of hired labor. Professional partnerships (e.g., legal, architectural, medical, or engineering) consist of a core of jointly self-employed partners with a periphery of non-partners—some on the partnership track while others are in a permanent underclass of hired labor (e.g., secretaries).

Worker co-operatives are a more exotic form of joint self-employment in western market economies—the Mondragon co-operatives in the Basque region of Spain and the Italian co-operative leagues are some of the better examples. In England, there are a number of “industrial partnerships” that fit the joint self-employment model (e.g., John Lewis, Scott Bader, and Baxendale Industries). In recent decades, many American firms have set up employee stock ownership plans or ESOPs. The current workers of a company are the members or participants in the ESOP trust. The ESOP may own any percentage of the company from a token ten percent to complete one hundred percent ownership. With at least majority ownership, ESOPs can be seen as examples of firms wherein people are working jointly for themselves (see Ellerman 1990).

With some generosity of interpretation, even the large Japanese and perhaps German firms can be seen as evolving towards a self-employment model. From the formal legal viewpoint, these firms have absentee ownership, not insider ownership. But the force of this outside ownership is largely dissipated either by the dispersion of shares on the stock market or by rolling ownership back into a broader group of insiders such as the Japanese keiretsu. Management considers itself responsible to stakeholders rather than just stockholders, and the primary stakeholders are the insiders such as the long-term employees.

Just as there are some mixed and ambiguous examples of joint self-employment in market economies, so some ambiguous hybrids have evolved out of the socialist economies. By far the best-known example was the Yugoslav self-managed firm. Yugoslav self-management was remarkably successful as a quasi-privatization and marketization that genuinely destroyed the centralized ministries of traditional socialism. But moving to a full system of joint self-employment would mean enforcing a “hard budget constraint” (bearing one’s own liabilities to the point of bankruptcy) and allowing individualized property rights to retained profits in the self-managed firms, not to mention multi-party democracy in the political sphere. Instead of any self-responsibility for jobs, Yugoslav “self-managing” workers had jobs protected by government enforced high severance pay (e.g., two years’ salary). Instead of having real bankruptcy, the self-managed firms floated in a sea of easy and inflationary credit supplied by the local and federal governments. Moreover, the socialist legacy meant that the firms
had the capital structure of non-profit companies. Any retained earnings became social property with no individual claims. Thus instead of some form of joint self-ownership, the Yugoslav self-managed firm ended up as a decentralized type of social ownership.

It is also clear that it is well-nigh impossible for a Marxist socialist system to evolve smoothly to a market system of universal self-employment. As with government or military employment in the West, one of the main virtues of real existing socialism was security - job security plus a cocoon of medical, housing, educational, and other social services. For that reason alone, there could be no smooth transition to a hard budget constraint operating in a rough-and-tumble market environment. Moreover, Marxism was dedicated to abolishing "private ownership of the means of production." Yet joint self-employment is not only compatible with private property; only universal self-employment is compatible with people getting the fruits of their labor - the natural basis for private property appropriation.

It is thus almost impossible to expect a smooth transition to universal self-employment from the Left - starting with Marxist socialism. A smooth transition from the Right - from a private market-based employment system - is more plausible. With the collapse of socialism, a revolutionary transformation to a market-based system of universal self-employment may be possible in the post-socialist countries (instead of just rebounding to a system of private employment). That is one of the larger questions in our time of profound economic and political transformation in the post-socialist world. But for the self-employment option to be understood, the Great Debate must be clearly redefined.

The analogy with a private-public slavery debate is relevant. With the economic and ideological collapse of a system of public slave ownership, the defenders of private slavery are not about to let their moment of victory be stolen by suddenly redefining the choices to include a "third way," the abolition of the master-slave relationship in favor of universal self-employment. In quite the same fashion, the defenders of the private employment system are not about to let their moment of triumph over socialism be destroyed by allowing serious consideration of a new third option, the abolition of the employer-employee relationship in favor of universal (individual or joint) self-employment in the workplace. Red-baiting is too much of a temptation. Defenders of the Faith associate self-employment with "self-management" or "worker control" which, in turn, is associated with socialism. Thus the ideal is to counter the self-employment option by associating it with socialism which has already been thrown into the dustbin of history. Redefining the Great Debate will therefore not be easy in the post-socialist intellectual milieu since it will mean jettisoning the investment of the private employment system in defining the Great Debate as the choice between private or public employment.
At the heart of the system of private employment is a "property right" that is not a property right. It is only a specific contractual arrangement protected by barriers of high transactions costs. This "property right" is the so-called "ownership of the firm." To review the argument, we might use the notions of the de facto firm and the de jure firm. In a business enterprise, there is a specific set of people using specific machines, office equipment, and premises to produce some product or perform some service.

This is what Lord Eustace Percy called the "human association which in fact produces and distributes wealth, the association of workmen, managers, technicians and directors..." (quoted in Oakeshott 1988). It is the "de facto firm." The legal system recognizes a de jure firm superimposed on the de facto firm. The legal party which owns the produced outputs (and thus receives the revenues), is liable for the used-up inputs (and thus pays the expenses), and has the legal rights of positive discretionary control over the work activity, is called the "de jure firm."

The point about the non-existence of the "ownership of the firm" is that there is no property right that connects the de jure firm with a given de facto firm. The de jure firm does not "own" the de facto firm — even though certain specific assets (machines, buildings, and land) used in the de facto firm might be owned by the legal party operating as the de jure firm. The connection is contractual, not via property rights. With a rearrangement of the contracts (e.g., a contract reversal between Capital and Labor) would change the de jure firm but not the de facto firm. The same de facto firm would then be operating under the auspices of a different legal party, i.e., a different de jure firm. In the real world, it is very difficult and costly to rearrange these contracts. When it happens, it is usually in distressed businesses that might otherwise fail. Thus the alleged "ownership of the firm" is in fact only a contingent contractual arrangement. But the contractual fact-pattern is so protected by barriers of transactions and other costs that it has the appearance of a "property right." The interpretation of the contractual arrangement as a property right is what we called the Fundamental Myth of our current property system.

The importance of the non-existence of the "ownership of the firm" may not at first be obvious. One clear consequence is that going from an employment system to self-employment does not mean abolishing "sacred property rights"; it means a different contractual arrangement (which is analyzed in detail in part II). In terms of property, transcending the Fundamental Myth allows the question of property appropriation to emerge in the context of the business enterprise. Appropriation has both a descriptive and normative side.

On the descriptive side, we found that there is a simple and basic...
mechanism of appropriation built into the private property system which we called the “laissez-faire mechanism of appropriation.” When property is used up, consumed, or otherwise destroyed, there must be some implicit or explicit mechanism to assign the legal liability for those losses. In a small percentage of cases, a court of law intervenes to try to ascertain the de facto responsible party and to assign or impute the de jure responsibility to that party. But in almost all cases of used-up or consumed property, there is no legal intervention so the laissez-faire mechanism or the “invisible judge” takes over. A laissez-faire mechanism can render only one judgment: the invisible judge can only say “Let it be.” This means that the legal responsibility for the used-up property is in effect imputed to the last legal owner of said property.

A closely related question is the assignment of the initial property rights to newly produced property. But the laissez-faire mechanism also covers that case. Just as expenses are matched against revenues in accounting, so at the level of the underlying property rights (see Ellerman 1982), used-up inputs can be matched against produced outputs. The party that laissez-faire appropriates the liabilities for the used-up inputs has the legally defensible claim on the produced outputs.

The descriptive question about property appropriation is answered by the laissez-faire mechanism. The normative question is: “To whom should the legal responsibility for the used-up inputs and the produced outputs be assigned?” If production was an accidental phenomenon then there might be some controversy about the imputation of the legal responsibility (since “No one was responsible”). But the production of goods and services is well within the realm of deliberate and intentional human activity. The legal principle for the imputation of the results of deliberate actions is clear from the cases where the law does intervene to hold a trial. The legal principle of imputation is to assign the de jure or legal responsibility to the de facto responsible party. The purpose of a trial is to legally ascertain who is the de facto responsible party so that legal responsibility may be assigned.

At this point, our investigation joined up with the tortured history of the labor theory of property. This theory has always been confused with, and, after Marx, eclipsed by the labor theory of value. Yet when cleansed of any connection with the labor theory of value, the labor theory of property emerged as nothing more nor less than the legal principle of imputation applied to the question of appropriating property assets and liabilities.

The most controversial application of the legal imputation principle (i.e., the labor theory of property) is to the business enterprise. In every enterprise, there is a certain set of insiders (managers and workers) who are the people actively involved in carrying out the operations of the enterprise. They are the members of the de facto firm. Their operations were abstractly
characterized as "using up certain inputs to produce certain outputs." The normative question of appropriation is to whom should be imputed the legal liabilities for the used-up inputs and the legal responsibility for and ownership of the produced outputs. The standard legal principle of imputation answers "the insiders" – the people working in the enterprise who used up the inputs and who produced the outputs. They should legally appropriate the positive and negative fruits of their labor. The members of the de facto firm should be the members of the de jure firm; they are then jointly self-employed, bearing their own costs and receiving their own revenues. That is the property-theoretic argument for universal (individual or joint) self-employment in the workplace.

The recognition that the labor theory of property is the legal imputation principle expressed in property language served to answer many of the long-standing questions about "the labor theory." In particular, the old question "Is labor peculiar?" or "In labor in some sense the only creative factor?" can finally be answered. Labor is not uniquely "productive" in the sense of being the only causally efficacious factor. But labor is the only responsible factor. Things (as opposed to persons) can be productive (in the sense of being causally efficacious) but they cannot be responsible.

The recognition of this simple fact that "only labor is responsible" greatly elucidates the ideology and dogmatism that has characterized both sides of the capitalism-socialism debate. The fact that Marxists have never been able to grasp and explain the point is perhaps not too surprising. Marx missed the point, and, after Marx, the genetic code of Marxist thought was fixed. Mutations on such a basic issue had no survival value in the Marxist environment.

The real disappointment is with the orthodox economic thinkers who claim to be so free of ideological blinders. The unique responsibility of labor was clearly pointed out, for example, by Friedrich von Wieser, one of the early developers of marginal productivity theory at the end of the nineteenth century. Yet he passed over the point quickly and only interpreted it to mean that the usual notion of de facto responsibility in the law should be replaced in economics by a metaphorical notion of "economic responsibility" (marginal productivity). After von Wieser, the point seems to have been entirely lost in the economics literature. Any school child knows that only persons instead of things can be responsible - that only burglars and not burglary tools can be responsible for a burglary. Yet the author has not been able to locate a single economics text which mentions the point - even though almost all texts have some supposedly earnest discussion of the hoary old "labor theory" based on that peculiar and archaic view that only labor was in some sense "creative." That makes it more difficult to see orthodox economics as being in the disinterested pursuit of truth.
Since the labor theory of property has been so thoroughly ignored or misinterpreted, we spent a chapter reviewing the role of the theory in Locke, Hegel, the Ricardian socialists, Marx, and J. S. Mill. Two points of interest might be recalled. Following C. B. MacPherson, we argued that Locke was not a Lockean. Locke was not an advocate of the labor theory of property that has always been read into his work. In our terminology, Locke was simply describing the operation of the laissez-faire mechanism of appropriation in a primitive state of society where labor was the only privately owned factor. In such a situation, the last owner of the used-up inputs that were not commonly owned (namely, labor) would have the legally defensible claim on the produced outputs. In that sense, a person would have the legal claim on the fruits of “one’s labor” (i.e., the labor he owned, not the labor he performed). The interpretation of “one’s labor” to mean the labor one owned rather than the labor one performed was called “Locke’s pun.”

Locke’s point that the produced outputs should be appropriated by the same party that bears the liability for the used-up inputs is correct but trivial. The normative question of appropriation is the question of who should appropriate both the output-assets and the input-liabilities, i.e., who should appropriate the whole product. If a certain party is designated to appropriate the whole product according to some criterion (such as de facto responsibility), and if the liabilities for the used-up inputs were at first borne by another party, then the liabilities would have to be reassigned along with the output-assets to the correct party. The fundamental theorem of property theory asserts that, under certain standard conditions, the laissez-faire mechanism imputes the whole product to the party that is correct according to the usual legal principle of imputation. As is detailed in part II, the contract to rent human beings (the employment contract) structurally violates those standard conditions.

Another point of interest in the intellectual history of the labor theory of property is how the theory survived under disguise in many of the treatments of the labor theory of value. The Ricardian socialists developed the LTP explicitly as a property theory even though they also harbored value theoretic ambitions. After Marx, the labor theory of value held the dominant position. But there were always two very different strands in the labor theory of value — labor as the measure of value and labor as the “source” of value. The failure of the labor-measure theory is well known. We argued, however, that the labor-source theory was in fact a veiled and confused version of the labor theory of property, and thus was not a theory of value at all.

In the last chapter of part I, we turn to a survey of misinterpretations of the labor theory of property. This survey should be put in context by reiterating a relevant point about the sociology of knowledge. Consider a
Defender of the Faith comfortably situated (in both work and thought) within the private employment system. What is the Defender's likely response when confronted with a well-reasoned critique of the system? If the Defender accepts the critique of renting human beings in favor of the self-employment ideal, then there is an unsavory choice. If he or she acts on the critique and espouses the self-employment alternative, then the person will be rejected by the status quo like an alien microbe. The person becomes a pariah. As an alternative, the person could accept the critique but not act on it—so the person becomes a cynic and a hypocrite. Thus being against renting human beings forces one into the choice of being a pariah or a hypocrite. Therefore, quite aside from any intellectual merits in the arguments, there are strong if not overwhelming social and practical reasons to reject any critique of the employment system. People will leap at any analysis or interpretation that maintains the comforting Faith and that reaffirms the Happy Consciousness.

Only this powerful inertia of the employment system can explain the amazing variety and mind-numbing persistence of the misinterpretations of the labor theory of property and of the de facto theory of inalienability (part II). For instance, no matter how often one repeats, ad nauseam, in words and in symbols that the input-liabilities are included in the whole product, there will always be some Defenders of the Faith who will smugly point out that Labor cannot simply appropriate "the whole product" when there are scarce and costly inputs to be considered. Or no matter how often one reiterates that all entrepreneurs, working employers, and other managers are included in the party called "Labor," some Defenders will always question how one can think that only "workers" are responsible. And no matter how often one repeats that self-employment can only be "joint" in the (multi-person) self-employment firm, some people will always ask, "How can each person just be individually working for themselves in a firm?"

In spite of this counsel of despair, we tried in chapter 5 to dispel some of the more common misunderstandings of the labor theory of property—and some of the fallacious modes of thought used to defend the employment system. Without repeating all the arguments and explanations here, we might emphasize a most common fallacy, namely, the failure to differentiate an institutional arrangement from the underlying non-institutional realities. On this score, one has some hope for optimism with economists since they are aware of the fundamental theorem of normative economics that presupposes a clear differentiation between the institutional notion of a competitive equilibrium and the non-institutional notion of an allocatively efficient (or Pareto optimal) state. Without knowledge of that paradigmatic example of clear thinking in social theory, the "intelligent reader" or "person in the street" has a harder time to separate institutional and non-institutional notions.
A more accessible example concerns the peasant farmer who needs both land and the consent of the landlord to raise his crop. But the consent of the landlord is only an institutional requirement while the land itself would be just as necessary in a non-institutional description of the farmer's activities. Failure to differentiate institutional and non-institutional realities is part of the Happy Consciousness. The core of the Happy Consciousness is the uncritical acceptance of the ambient institutions as being part of the given furniture of the social universe. Whatever the property owners or employers get within the system is the "results of their efforts," the "fruits of their labor."

**CONTRACT**

In part II, we turn to questions of contract. Some of the main results in part I, such as the non-ownership of the firm and the laissez-faire mechanism of appropriation, show that contracts are an integral part of the property system. In particular, the appropriation of the whole product of a business enterprise is determined by contracts via the laissez-faire mechanism, not by the "ownership of the firm."

There is one contractual relationship, the employer-employee relation, that is as central to the present economic system as was the master-slave relation in the system of the antebellum American South. Yet here again we found stunning false consciousness. When people live in an economic civilization founded on renting human beings, then the people might at least know it. But there is such a well-developed system of paraphrases, metaphors, and euphemisms that a simple bald-faced description like "renting people" finds little comprehension.

It is of some interest that only certain human activities are organized using the employment relation. When human actions are applied to economic goods, if economic value is added to the resources, that would be called "production" while "consumption" would best describe the value-subtractive activities where the end-products have less value than the original "inputs." The employment relation is mostly applied to production, not to consumption.

From the legal viewpoint, there could be a consumption employment relation. Instead of buying the inputs (consumer goods), self-managing the consumption process, and owning the less valuable end-products, a consumer would pay a consumption-employer to employ the consumer to consume the goods. Instead of buying a watermelon, eating it, and owning the rinds, a person would pay someone else to "employ" them to consume a watermelon. The employer would buy the inputs, manage the consumption activity, and appropriate the end-products. In our society, self-employment
in consumption is taken for granted while self-employment in production is more the exception to the rule. It might also be noted that the critique of the employment relation based on the labor theory of property and on the de facto inalienability of responsibility applies equally to employment in both production and consumption.

Another sphere of astonishing false consciousness is in the formulation of the basic social question as "consent or coercion" - so that the employment system can be presented as the economic parallel of political democracy (both being based on consent). This entails a remarkably selective reading of political theory in general and of the democratic theory developed out of the democratic revolutions of the eighteenth and nineteenth centuries in particular. Since Antiquity, there have been attempts in varying degrees to claim that non-democratic regimes were based on the "consent of the governed." In some cases, it was claimed that the consent was evidenced by long-standing political stability and was sealed by the prescription of time. Some political philosophers, such as Thomas Hobbes, urged that consent be expressed in an explicit pactum subjectionis. Through implicit or explicit social contracts, the people were seen as alienating any right of self-determination to the sovereign. Within this alienist liberal tradition, the superficial modern appeals to government based on the consent of the governed would have little force for democracy. The history of this much-neglected non-democratic tradition of liberal (i.e., consent-based) thought was reviewed at chapter length.

Consent has long been the common coin of sophisticated liberal arguments for both non-democratic and democratic forms of government. The basic social question is thus not "consent or coercion" but the question of whether or not consent could alienate the basic human right of self-determination. The alternative to alienating a right is to delegate it to another person who can then act as a representative or delegate. In the Middle Ages, the question was formulated as translatio (to alienate) or concessio (to delegate).

The pactum subjectionis was an alienation or translation of the basic rights from the people to the sovereign; he did not rule as their representative or delegate. The same holds for the employment contract in the workplace. It alienates the rights of management of the employees from them to the employer; the employer is not the representative or delegate of the employees. The employer does not manage in the name of those who are managed.

The counter-arguments to contracts of subjection and individual self-enslavement contracts were developed under the banner of "inalienable rights" within the inalienist tradition of liberal thought. Yet even this development has been curiously muted or truncated. Inalienability arguments might be too robust and have "unwanted" applications. A critique of the political pactum subjectionis has to be contained so that it does not also
apply to the economic employment contract. Inalienability arguments against selling all one's labor in the self-enslavement contract must be tamed so they do not apply to the contract to sell one's labor in a more piecemeal fashion. Thus liberal thought, living within the employment system, has always been deeply ambiguous about the notion of inalienable rights.

Some ultra-liberals or libertarians, such as Robert Nozick, have tried to gut the notion of inalienable rights by interpreting it to mean a right that may not be alienated without consent (which is only a right as opposed to a privilege). Nozick has no concept of a right that is inalienable even with consent, and thus Nozick endorses both a self-sale contract and a pactum subjectionis with a "dominant protective association." But the typical liberal treatment of inalienability is not so consistent as Nozick's analysis. "Inalienable rights" has become an empty slogan that can be selectively applied where it is comfortable, not a genuine theory that might have unwanted and embarrassing applications.

There is, however, a theory of inalienable rights that has descended in western thought from the Stoics through the Reformation and Enlightenment down to modern times. The theory is based on the facts of human nature. Anyone can understand the theory who can understand that a hired killer is still a murderer even though he sold his labor. A person cannot in fact alienate and transfer the "use of his own services" (decisions and actions) the way a person can in fact alienate the use of a thing. I can transfer a truck or van to you so that you can use it in a manner independent of me. You will be solely de facto responsible for the results of using the machine. Yet I cannot similarly alienate my own services. It is not that I "should" not: I cannot. It is a fact of human nature, not a normative judgment. I can at most agree to co-operate with you, in which case we are jointly de facto responsible for the results of our actions.

The basic point was illustrated with a number of "intuition pumps" such as the case of the criminoso employee. In that example, an employer rented a van and rented a person for general services. In the course of normal activities, the employer used his "input services" to rob a bank. Upon being caught, the employee as well as the employer were charged with the crime. The van-owner was not so charged as he had no personal involvement in the enterprise; he had only the institutional role of owning the van. An attempt by the employee to argue that he was as innocent as the van-owner would force the legal system to explicitly recognize that labor is not de facto alienable like the services of a thing.

This de facto theory of inalienable rights was outlined in chapter 8. Since the theory (as opposed to the language) of inalienable rights has, in spite of its simplicity and obviousness, been almost entirely neglected in modern thought, we again spent a chapter (chapter 9) recalling the intellectual history of these ideas. If that tradition was to be represented by one sentence, then perhaps Luther's pithy statement would be appropriate.
As little as another can go to hell or heaven for me, so little can he believe or disbelieve for me; and as little as he can open or shut heaven or hell for me, so little can he drive me to faith or unbelief.

This religious doctrine of the liberty of conscience was transmuted, largely in Scotland and France, into the political doctrine of inalienable rights of the Enlightenment. Thomas Jefferson was influenced by the Scottish philosopher Francis Hutcheson's presentation of the de facto inalienability theory, and Jefferson injected the language of inalienable rights into the mainstream of western political thought and practice. Once the theory is again brought to light, the social forces that pressed to neglect it in the first place will then work to sustain misunderstandings and misinterpretations of the theory. Two misunderstandings, one superficial and one rather subtle, might be recalled here. Several intuition pumps (criminous slave, tortious servant, and criminous employee) all involve a person who occupies the legal role of a thing and who breaks the law. The response of the legal system is to remove the fiction and to legally treat the individual as a responsible person.

One common and somewhat superficial response to these intuition pumps is to claim that there is no legal inconsistency involved here (as if that were the problem). For instance, the employee was only "protected" from responsibility for the results of his actions when he operated within the scope of the employment contract. To be legal, such a contract could not contemplate illegal acts such as robbing a bank. Hence when the employee robbed the bank, he detoured or stepped outside of the employee role and acted only as a private individual. Hence the law was being quite consistent in treating him as a normal responsible person acting individually or in concert with others to rob a bank.

That is a fine legalistic argument, but it misses the original point. The point of the intuition pumps was not that the person should always be legally treated in the same way. The point was that the de facto person never did fit the legal role of a thing in the first place. That fiction was highlighted by the sudden reversal in legal treatment of the self-same person when the actions broke the law. This point was illustrated using the analogy of a square peg not fitting in a round hole. This analogy is based on the following identifications:

"square peg" = de facto person,
"round hole" = de jure role of a thing, and
"square hole" = de jure role of a person

The intuition pumps highlight cases where the fiction that the square peg fits the round hole is dropped, and the square peg is straightaway reassigned to the square hole where it fits. The problem is not whether or not the sudden switch is legally justified. The problem is that the square peg never fit the round hole in the first place.
A set of deeper misunderstandings of inalienability theory result from inattention to the differentiation between institutional and non-institutional realities. Since the de facto inalienability argument is based on (non-institutional) facts, it could never forbid any (non-institutional) voluntary transaction that could actually take place. What the theory criticizes are institutional superstructures based on factual impossibilities (e.g., legal contracts to alienate de facto responsibility). This point can be illustrated by considering the law against fraudulent conveyances.

Consider a contract wherein the buyer B contracts to buy a widget from the seller S. B pay the price of a widget but receives in return a worthless but similar-looking pseudo-widget. This is a simple fraud forbidden by the law on frauds. But does the law really forbid any non-institutionally described “voluntary acts between consenting adults?” No, it does not. If B voluntarily agreed to pay a widget price and to receive only a pseudo-widget in return, then no fraud would have been committed. Why would a fraud be committed against B if the same transaction in favor of S could take place without fraud? For the simple reason that B would probably not consent. The point of the fraud was to get agreement to a widget contract (the institutional reality) but to substitute a different factual performance (delivery of a pseudo-widget). It is that mismatch between the institutional superstructure (contract) and the non-institutional or factual reality that is ruled out in the statute against frauds.

There is always a mismatch between the legal contract for the sale of labor and the factual non-transferability of labor. If the contracts were rewritten to match the facts, then all business enterprises (like all criminal conspiracies) would be legally constituted as jointly self-employed partnerships. The financial end-result of the employment firm is that the employer receives the profits, the value of the whole product. There is nothing wrong with that end-result if obtained voluntarily without fraud. The members of a jointly self-employed partnership are always free to donate their profits to a charity or to a person who might have otherwise been their employer. But they might not be so charitable. The point of the employment firm is that it obtains that end-result without consent on the part of the employees. The employees do not own the profits to give away so their consent to a profit giveaway is legally irrelevant. The whole product is legally appropriated by the employer in the first place.

**PROPERTY AND CONTRACT IN ECONOMICS**

Capital theory contains some of the simplest examples of biased and fallacious reasoning in economics. Suppose proponents of the self-employment ideal assumed an institutional setting where Labor was the
residual claimant, and then they defined the "yield" or "productivity" of labor to include the profit that Labor received as the residual claimant. Defenders of orthodox economics would be quick to seize upon the special assumption— that the profit return to the residual claimant was a return to Labor. Yet the analogous assumption for Capital is routinely made in capital theory with not a sound heard from the guardians of scientific reasoning in economics. Concepts such as the "capitalized value of a capital asset" and the "yield of a capital asset" are defined under the assumption that the owner of the asset is the residual claimant. The return to the capital owner in that role is counted as part of the "yield" or "productivity" of the capital asset itself.

The property fallacies in the theory of the firm are also rather simple to understand— given an appreciation of the contractual determination of firmhood. The determination of who is to be the firm by who hires what or whom in input markets adds an extra market-endogenous degree of freedom to economic theory. That extra degree of freedom forbids competitive equilibrium in the case of positive profits. In the presence of positive pure profits in a productive opportunity, an arbitrageur could offer slightly higher prices to input suppliers and thus take over production with slightly lower but still positive profits. Hence there could not be a competitive equilibrium with positive profits in any productive opportunity.

The argument just given is not terribly profound or deep; it assumes only the barest knowledge of economic behavior in the idealized competitive model. Yet for over a third of a century, the pinnacle of received truth in economic theory has been the Arrow-Debreu model which purports to show the possibility of competitive equilibrium with positive pure profits.

There has been much facile criticism of the Arrow-Debreu model on empirical grounds. But the real point is that the model fails at the conceptual level to model an idealized competitive private enterprise economy. The modelling error is property-theoretic. Arrow and Debreu misinterpret the ownership of a corporation as the "ownership of a firm." Prior to resolving the contractual question of who hires what or whom in input markets, owning a corporation is only an indirect way to own economic resources. Inputs owned by a corporation could be hired out (in which case the corporation is not the firm) just as a complementary set of inputs could be hired in. Any proposed equilibrium with positive profits could be upset by arbitrageurs bidding up input prices. Yet Arrow and Debreu do not allow such arbitrage in their model of a so-called competitive private enterprise economy. Each productive opportunity is "owned" by a corporation and only that corporation is allowed to demand the inputs necessary for the productive opportunity.

The key to understanding the modeling error in the Arrow-Debreu model is seeing that corporations are input-owners that can hire out their inputs
just as well as hire in complementary inputs. The inability of the economics profession to apply this simple reasoning to the Arrow-Debreu model for over a third of a century provides a striking example of intellectual intimidation. The simplest conceptual errors are protected if wrapped in enough higher mathematics and backed by enough professional prestige.

Another tactic used to block arbitrage, aside from the "firm = corporation" misidentification, is to postulate a "hidden factor" in each profitable opportunity—like a speck of dirt in each oyster to produce a pearl. But if each profitable firm must be jerry-rigged with a hidden epicycle, then the model has become an intellectual shambles. Since each hidden factor is hidden from market forces, there is no assurance that profit is maximized or that the factor is efficiently utilized. If socialist economists in the past tried to prove the efficiency of some socialist-market hybrid with certain non-marketed factors, they would immediately receive a stern lecture from western economists. How could efficient utilization of the resources be obtained if they were not exposed to market forces? Yet the same western economists turn around and routinely "prove" the Pareto optimality of competitive equilibrium in models with hidden factors (e.g., Arrow and Hahn 1971).

Moreover, since the hidden inputs are arbitrarily assumed to be unmarketable (to block arbitrage), the pretense that the model has competitive markets for all inputs is not plausible. Perhaps future generations of economic theorists, less beholden to current orthodoxy, can glean some amusement from the contemporary attempts to prop up a purported "competitive equilibrium" by using various devices to prevent (!) rather than encourage competitive arbitrage.

The important implication for equilibrium theory is the market-endogenous nature of firmhood in any economy where all inputs are marketable. In such an economy, there be no competitive equilibrium with positive pure profits. A competitive equilibrium can only exist in the case of universal zero profits where firmhood is a matter of economic indifference (and where there are no non-economic aspects of firmhood).

The market-endogeny of firmhood changes the concept of the market process. The received notion of the market process is an orderly interaction between consumer-resourceholders on the one hand and "firms" on the other hand where the interaction is on two fronts, input markets and output markets. But if the "firms" are not given at the outset of the market process, then there is in general a game-theoretically indeterminate struggle over "who hires what or whom" in input markets—a struggle that is only determinate in the pinpoint special case of universal zero profits.

Property theory was applied to capital theory and general equilibrium theory to show some of the property fallacies in received orthodox economics. But now we turn to marginal productivity (MP) theory which
has an interpretation that directly competes with the legal imputation principle (labor theory of property). MP theory has a proper role as a theory of input demand in analytical economics. Our analysis is of the Clark-Wieser interpretation of MP theory which attempts to show that "each factor gets what it produces" in capitalist competitive equilibrium. The controversy is not over the normative question of whether or not each factor should get what it produces; that is agreed upon by both sides to the controversy. The question is the descriptive-analytic question within the theoretical model of competitive capitalism of whether or not "each factor gets what it produces."

The Clark-Wieser interpretation is based on two tenets:

1. that each unit of a factor produces the marginal productivity of the factor, and
2. that each unit of a factor gets its marginal productivity in the competitive imputation.

Each tenet turns out to be metaphorical. The first tenet is based on the pathetic fallacy (active-inputs view). Things are metaphorically endowed with the responsible agency that is in fact a unique attribute of persons. But machines (for example) do not "produce" a part the product in the sense of having responsibility. Machines are used by people to produce the product, and the people are also responsible for using the machines.

The second tenet is based on the distributive shares metaphor which pictures the product as being imputed to the various factor suppliers. But that is not the shape of the legal imputation which takes place in production. The legal imputation, via the laissez-faire mechanism, assigns all the positive product as well as all the negative product (input-liabilities) to the same legal party who would thereby be called the "firm."

By reinterpreting both responsibility and property rights at a metaphorical level, the Clark-Wieser version of MP theory entirely avoids actual property-theoretic questions. It is a flight of fancy that gives no account of the actual pattern of responsibility (where only persons can be responsible) nor of the actual pattern of property appropriation (the whole product appropriated by the same party). Here again the response of defenders of orthodox economics is of interest. Many economists have been so enamored of seeing things as "producing" a part of the product that they are reluctant to recognize the unique responsibility of persons. It is as if the social sciences should be seen as a branch of physics which would be "marred" by any basic differentiation between persons and things. Moreover, they shun the "superficial legalistic" facts about the actual imputation of property rights and liabilities in favor of the "deep" metaphor of distributive shares. When "deep metaphors" are favored over "superficial facts" then it is not difficult to judge whether science or ideology is in command.
Conclusions

Before leaving MP theory, it may be of interest to recall the dual metaphorical interpretation. Instead of animating the inputs (active-inputs view), animate the outputs with responsible agency (active-outputs view) and picture them as using up the inputs. Will each unit of an output be charged for the liabilities it produces? Each unit of output, as the marginal unit, is pictured as using up the inputs whose cost is the marginal cost. In the competitive firm, the marginal cost is equal to the market price of each unit of output, so indeed each unit of output (or its buyer) is charged for the liabilities it creates. The dual metaphor "works" too.

The dual treatment of producing and imputing the negative product is just as metaphorical as the original Clark-Wieser treatment of producing and imputing the positive product. Things produced as outputs or used as inputs are not responsible agents, and both the positive and negative products are appropriated by the one legal party who has the contractual role of being the firm.

Imitation is the sincerest form of flattery. By trying to pose as a counterfeit imputation principle, Clark-Wieser MP theory has always paid a silent tribute to the labor theory of property. We have seen that the labor theory of property can be formulated in two parallel languages: the fruits-of-one's-labor language of property theory and the responsibility-language of the legal imputation principle. MP theory recognized the parallel languages by imitating both. John Bates Clark was the marginalist Locke who imitated the fruits-of-one's-labor language while Friedrich von Wieser independently developed the interpretation of MP theory imitating the language of the legal imputation principle. It is heartening to see support for the principle that people should get what they produce, and one must hope that this support will not wane when the principle is applied without the benefit of metaphors.

There were always two strands in the labor theory of value, labor as the measure of value and labor as the source of value. The labor-source theory was essentially a confused and ill-formulated version of the labor theory of property. While some property theoretic overtones can be found in (read into?) Marx, he focused on developing the labor-measure theory. That theory has been logically completed in recent years using the machinery of input-output theory. This theory gives a treatment of "capitalist exploitation" so it was necessary to analyze this modern Marxian labor theory of value and exploitation (in chapter 13). The results were surprising and amusing. This modern theory turned out to be the old scholastic idea that charging interest is exploitative dressed up in the heavy garments of Marxist jargon. The fundamental Marxist theorem (in the modern theory) states that the rate of exploitation is positive if and only if the rate of interest is positive. Marxists interpret this as showing that the "deep inner meaning" of charging interest is exploitation. We showed that
the meaning was the reverse; the "deep inner meaning" of this notion of Marxian exploitation is simply the charging of interest. Hence the modern logical completion of Marx's exploitation theory ends up as an interest grumble. It leaves untouched the analysis and critique of capitalist property relations since that would require a property theory. Marx sent only a value theory to do the job of a property theory.

In chapter 13, the simplest corn-and-labor input-output model is developed to allow a precise comparison of MP theory, modern Marxian value theory, and the labor theory of property all within the same model. With all the theories presented in one model, it will perhaps be more difficult to misunderstand the labor theory of property or to confuse it with the labor theory of value.

The fundamental theorem of property theory, presented in chapter 14, pulls together the institutional and non-institutional elements of property theory to describe what might be called the "natural system of property and contract." The laissez-faire mechanism of appropriation is an institution that like any institution might function correctly or incorrectly (according to some given principle) depending on the circumstances. Given the legal principle of imputation, when would the laissez-faire mechanism satisfy that norm?

The question of correctly assigning legal responsibility for accidents, where by assumption there is no de facto responsible party, is moot, so we restrict attention to deliberate human activities. Moreover, the laissez-faire mechanism used contracts between parties to assign legal responsibility to parties. Hence we must explicitly assume the connection; a party cannot be de facto responsible for consuming or producing a good without de facto possessing the good. That was called the "no-action-at-a-distance principle."

Under these assumptions, The FTPT states that a matching of de jure and de facto transfer of goods between parties will imply that de jure responsibility is laissez-faire assigned to parties according to de facto responsibility. That is, the legal imputation principle will be implemented by the laissez-faire mechanism of appropriation if all legal transfers between parties are fulfilled by de facto transfers (i.e., all contracts are fulfilled) and that all de facto transfers between parties are covered by de jure transfers (i.e., no ownership externalities).

The FTPT describes the operation of what Adam Smith would call the "system of natural liberty." But one of our main themes was that today's private enterprise market economies are structurally different from that natural system. Today's market economies are flawed by one basic fraudulent contract, a contract for the de jure transfer of labor when there can be no matching de facto transfer of labor. Thus in an economy dominated by the employment contract (herein called the "employment
system”), the laissez-faire mechanism will malfunction. The whole product is produced by one party ("Labor") but is laissez-faire misappropriated by another party, the employer.

To arrive at the natural system of property and contract, the contract to de jure transfer that which is de facto non-transferable would have to be abolished. That is, the whole system of renting human beings in the employer–employee relation would have to be replaced by a system where everyone was (individually or jointly) working for themselves in the workplace. Self-employment in business is the economic parallel of political self-determination or democracy.
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