

The Great Domain of Cost-Plus: The Waste Production Economy

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But over and above this we must take into account all the labour that goes to sheer waste,—here, in keeping up the stables, the kennels, and the retinue of the rich; ... there, again, in forcing the consumer to buy what he does not need, or foisting an inferior article on him by means of puffery, and in producing on the other hand wares which are absolutely injurious, but profitable to the manufacturer. What is squandered in this manner would be enough to double the production of useful things....

—Pyotr Kropotkin, *The Conquest of Bread*

The rent is too damn high.

—Jimmy MacMillan

Historically, given land of normal fertility, a work-week averaging twenty hours over the course of a year was sufficient to support a family of subsistence producers on those rare occasions when they were not overburdened with taxes and rents. Naturally, it has been a central aim of privileged classes throughout history to prevent this state of affairs from occurring.

The Times of November 1857 contains an utterly delightful cry of outrage on the part of a West-Indian plantation owner. This advocate analyses with great moral indignation—as a plea for the re-introduction of Negro slavery—how the Quashees (the free blacks of Jamaica) content themselves with producing only what is strictly necessary for their own consumption, and, alongside this 'use value', regard loafing (indulgence and idleness) as the real luxury good; how they do not care a damn for the sugar and the fixed capital invested in the plantations, but rather observe the planters' impending bankruptcy with an ironic grin of malicious pleasure, and even exploit their acquired Christianity as an embellishment for this mood of malicious glee and indolence. They have ceased to be slaves, but not in order to become wage labourers, but, instead, self-sustaining peasants working for their own consumption.¹

To prevent such outrages, the propertied and employing classes have resorted to all sorts of artificial property rights and artificial scarcities to control producers' access to land and capital, so that in return for access to the means of production and subsistence they would be compelled to work to support someone else in addition to themselves.

Those on the libertarian right frequently argue that people work less because of higher taxes. The shorter average work weeks and long vacations in Europe most decidedly stick in their craw. For example Will Wilkinson, in seeking an explanation for the fact that Europeans work so many fewer hours per year than Americans, speculated:

My wild guess at the story is that Europeans like to work just as much as anyone else if it pays. Taxes become extremely progressive due to the influence of the european [sic] left and the demand they fueled for welfarist programs of "social justice." Taxes went way up. With tax rates so high, hours of work became worth rather less than hours of leisure, so economically rational folks worked less. Working less became a norm, and was integrated into various conceptions of the "national character." This, in turn, along with bad thinking by the unions, led to caps on working hours.

So, my hypothesis is: europeans [sic] don't really appreciate leisure more, they're just taxed too much. If their taxes went down (and hour caps removed), people would start working more. They would complain about terrible Americanization, but they'd still work more. Soon enough, the norms would change, more folks would work more, growth would increase, and they'd do better at funding all those "social justice" programs.²

1 Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)* (Penguin Books, 1973), pp. 325-326.

2 Will Wilkinson, "Who Likes Leisure?" *The Fly Bottle*, November 8, 2004 <http://web.archive.org/web/20050311193336/http://www.willwilkinson.net/flybottle/archives/2004/11/who_likes_leisu.html>.

Such people, apparently, have never heard of the backward-bending supply curve for labor—the tendency to substitute leisure for increased income as the rate of pay increases. The historical evidence is that people do indeed prefer, on the whole, to work less when their wages increase. Therefore it makes perfect sense from the employer's standpoint to extract more labor from people by reducing the share of their output that they keep, and by compelling them to support idle rentiers in addition to themselves.

E. P. Thompson quotes some indignant observations on the indolence of laborers by a contemporary observer in 1681:

When the framework knitters or makers of silk stockings had a great price for their work, they have been observed seldom to work on Mondays and Tuesdays but to spend most of their time at the ale-house or nine-pins... The weavers, 'tis common with them to be drunk on Monday, have their head-ache on Tuesday, and their tools out of order on Wednesday. As for the shoemakers, they'll rather be hanged than not remember St. Crispin on Monday... and it commonly holds as long as they have a penny of money or pennyworth of credit.³

It should be no surprise that lamentations over short hours and unwillingness to work have come mostly from the employing classes and their ideological sycophants. And to repeat, their chief method for enforcing longer hours has been to lower the remuneration of labor and raise the cost of self-employed production, so that laborers must work longer and harder for the same level of subsistence. Indeed, the literature from the period of the Enclosures in Britain is full of complaints from the propertied classes that the only way to get enough work out of the laboring classes was to close off the possibility of comfortable subsistence through self-provisioning.⁴

...[I]t is the interest of all rich nations, that the greatest part of the poor should almost never be idle, and yet continually spend what they get.... Those that get their living by their daily labour... have nothing to stir them up to be serviceable but their wants which it is prudence to relieve, but folly to cure.... [Mandeville, *Fable of the Bees*]

...[To enforce industry and temperance it was necessary] "to lay them under the necessity of labouring all the time they can spare from rest and sleep, in order to procure the common necessities of life." [1739 pamphlet]

That mankind in general, are naturally inclined to ease and indolence, we fatally experience to be true, from the conduct of our manufacturing populace, who do not labour, upon an average, above four days in a week, unless provisions happen to be very dear.... The labouring people should never think themselves independent of their superiors.... The cure will not be perfect, till our manufacturing poor are contented to labour six days for the same sum which they now earn in four days. ["Essay on Trade and Commerce" (1770)]

...[E]very one but an idiot knows that the lower classes must be kept poor, or they will never be industrious. [Arthur Young, 1771]

So contrary to Wilkinson, it's at least as plausible that Americans work harder because their pay has remained stagnant for forty years, and "taxation" in the form of productivity gains being diverted upward to cowboy CEOs and coupon-clippers has compelled the average American to work harder to

3 E. P. Thompson, "Time, Work Discipline, and Industrial Capitalism," *Past and Present* 38:1 (1967), p. 72.

4 All quotes are from Kevin Carson, *Studies in Mutualist Political Economy* (Booksurge, 2007), pp. 124-125 (where I provide more detailed citations).

get the same level of income.

A recurring theme, from the Enlightenment on, has been the radically reduced work week that would be necessary to support the average person if production were organized efficiently and the producing classes didn't have to work to support the idle in addition to themselves.

Although I can't track it down I recall reading, as a child, an essay in my father's anthology of *Poor Richard's Almanack* in which Franklin described how the work day could be shortened to four or five hours by eliminating waste and irrationality.

In 1913 Pyotr Kropotkin estimated the labor time necessary to produce the actual food, clothing and housing that the average working family consumed at around 150 half-days' labor a year. The average worker's additional labor-time went either to waste or directly harmful production, or to supporting parasitic consumption by the privileged classes.⁵

Bob Black's widely reproduced 1985 essay "The Abolition of Work" covered similar ground, arguing both for the elimination of waste production and for the combination of work wherever possible with play.

Only a small and diminishing fraction of work serves any useful purpose independent of the defense and reproduction of the work-system and its political and legal appendages. Twenty years ago, Paul and Percival Goodman estimated that just five percent of the work then being done—presumably the figure, if accurate, is lower now—would satisfy our minimal needs for food, clothing, and shelter. Theirs was only an educated guess but the main point is quite clear: directly or indirectly, most work serves the unproductive purposes of commerce or social control. Right off the bat we can liberate tens of millions of salesmen, soldiers, managers, cops, stockbrokers, clergymen, bankers, lawyers, teachers, landlords, security guards, ad-men and everyone who works for them. There is a snowball effect since every time you idle some bigshot you liberate his flunkies and underlings also. Thus the economy implodes.⁶

A number of scholarly writers have dealt with the scale of waste production in the economy in recent years. Edward Wolff, in *Growth, Accumulation and Unproductive Activity*, classifies economic activity as either productive or unproductive. Waste output includes the portion of the economic surplus which is absorbed by the unproductive "surplus class" (essentially the rents on artificial property I write about below), and unproductive activities (activities which "use labor power but produce no directly usable output...").⁷ Wolff's main shortcoming is that his entire survey of waste production is sector by sector, with entire sectors being assigned either to the "productive" or "unproductive" category. It is almost completely silent on waste in the form of suboptimal allocation of resources or waste of inputs *within* an industry. Many production inputs are necessary, in some quantity, for production, but are used wastefully. Wolff classifies an entire industry as "productive" if its output has use value, no matter how wastefully production is organized.

The Overburdened Economy, by Lloyd Dumas, directly addresses the area in which Wolff is most deficient: waste *within* industries or sectors of the economy (for example administrative overhead within a business firm). He distinguishes "contributive" from "non-contributive" activity within the production process. To be contributive, an activity must be "part of a process that results in the production of a good or service that has inherent economic value," and must also "perform a function

5 Peter Kropotkin, *The Conquest of Bread* (New York: Vanguard Press, 1926), pp. 87-94.

6 Bob Black, "The Abolition of Work" (1985) <<http://www.zpub.com/notes/black-work.html>>.

7 Edward N. Wolff, *Growth, Accumulation, and Unproductive Activity* (Cambridge, London, New York, New Rochelle, Melbourne, Sydney: Cambridge University Press, 1987), p. 3.

necessary to the efficient operation of that process.” Activities which meet the first test but not the second are “neutral” (the expansion of administrative overhead is his premier example), and eliminating the waste from them is “simply a matter of an efficiency adjustment.” On the other hand activities which fail both tests are “distractive,” and require eliminating the process itself and shifting elsewhere all resources wasted in it.⁸

Dumas also makes a clear connection between such waste and the externalization of cost. Wasteful spending on management featherbedding occurs, he suggests, because of “a discrepancy between the value of an activity or output to the decision maker who authorizes its purchase and its value to those who actually pay the price.”⁹ “[A]s long as the value of expansion exceeds its costs from *their* [management's] perspective, they will continue to expand the bureaucracy.”¹⁰

But while Dumas is good on Wolff's weak point of waste from internal inefficiencies within the productive process, he also neglects Wolff's strong point: unproductive consumption by the privileged classes. The enormous portion of the economy made up of artificial scarcity rents on land, capital and “intellectual property” goes largely unremarked on.

Finally, Douglas Dowd, in *The Waste of Nations*, elaborates on Dumas' central theme of non-contributive activity. He includes entire sectors of the economy that fall under the heading of Dumas' “distractive activities,” like the military-industrial complex. But he also focuses heavily on neutral or distractive functions in the civilian economy like all those associated with push distribution: high-pressure marketing, mass advertising, planned obsolescence, brand-name markups, purely cosmetic model changes and product differentiation, etc. His examples range from the ninety percent of toothpaste price made up of marketing costs to the \$800 of a 1939 Chevy's \$950 market price that didn't reflect actual production costs.¹¹ Dowd also points to the waste from lower productivity of labor, as a result of the incentive problems in a hierarchical enterprise.¹² Dowd's biggest shortcoming is his overly narrow definition of “production costs” and his failure to distinguish productive from unproductive distribution costs. He lumps all the costs of “marketing and distribution” into a single category of waste, without distinguishing the waste transportation resulting from subsidies to economic centralization from the necessary transportation which would be necessary to move goods to the point of consumption in even the most efficient economy.

It is not my purpose, given the time and space constraints of a quarterly research paper, to examine the waste economy on the same level of details as these writers. My intent, rather, is to provide a comprehensive overview that synthesizes all their strong points, to include areas of waste production that all of them overlook, and to supply an analytical framework based on free market principles.

Waste from Artificial Scarcity Rents

A major part of our labor goes to support unproductive consumption by holders of artificial property rights: “the consumption of use values by the surplus class” to which Wolff referred.

8 Lloyd Dumas, *The Overburdened Economy: Uncovering the Causes of Chronic Unemployment, Inflation, and National Decline* (Berkeley, Los Angeles, London: University of California Press, 1986), pp. 53-54, 57.

9 *Ibid.*, pp. 42-43.

10 *Ibid.*, pp. 66-67.

11 Douglas Dowd, *The Waste of Nations: Dysfunction in the World Economy* (Boulder and London: Westview Press, 1989), pp. 64-65.

12 *Ibid.*, p. 70.

In an environment of uncoerced exchange between equals, exchanges tend to involve comparable amounts of effort or disutility on both sides. The reason is that human beings, by nature, are utility maximizers; when the effort required in exchange for someone else's product significantly exceeds the effort of producing it there will be a corresponding effect on enough "make or buy" decisions at the margin to increase the number of people competing to provide the product and thereby drive down its price. When all market transactions are free and unconstrained, there will be a shift of labor at the margins from occupations where remuneration is low relative to effort to those where it is higher. Privilege is a way of increasing the effort or disutility required from one party in order to provide rents or unearned income to the other. When the employer of labor is a monopsonist, she can target wages to the amount needed to get workers to bring their services to market, and appropriate the surplus as a rent.

According to Wolfgang Hoeschele, scarcity generation is tied up with violence: "Throughout history, whoever controlled the means of violence could use it to create a bottleneck between people and the fruits of their own labor, making the latter scarce." He points, as examples, to "blackmail payments collected by a mafia, and rents imposed on peasants by feudal landowners."¹³ But "property as such," he argues, "does not result of some at the expense of other" or "create scarcity." Whether or not it does "depends vitally on the specific nature of the property rights involved."¹⁴

Where scarcity is natural and property rights reflect that state of affairs, they may be a source of mutual benefit rather than zero-sum relations. For example, an unregulated open access regime, by failing to tie the price of consumption to the cost of regenerating resources, may lead to depletion. Both regulated commons and private property tied to actual use are ways of assigning economic costs to resource extraction and equitably distributing the highest possible sustainable yield.¹⁵ Private property in arable land, in the form of family farms, can minimize scarcity by fully internalizing both costs and output—while ownership "by a large collective organization (a cooperative, commune, state farm, or corporation)" can result in serious inefficiencies.¹⁶

It's important, therefore, to distinguish natural from artificial property rights. Natural property rights *reflect* scarcity where it naturally exists; artificial property rights *create* scarcity. Natural property rights secure the individual's right to *her own* labor product; artificial property rights enable the holder to collect tribute from the labor product of *others*. Natural property rights entitle the holder to a return to his *contributions* to production; artificial property rights entitle the holder to collect a toll for not *obstructing* it.

Social regulations and commercial prohibitions, as Thomas Hodgskin said, "compel us to employ more labour than is necessary to obtain the prohibited commodity," or "to give a greater quantity of labour to obtain it than nature requires," and put the difference into the pockets of privileged classes.¹⁷ Artificial property rights are "the power of throwing the necessity to labour off [one's] own shoulders... by the appropriation of other men's produce," and "[t]he power... possessed by idle men to appropriate the produce of labourers...."¹⁸

¹³ Wolfgang Hoeschele, *The Economics of Abundance: A Political Economy of Freedom, Equity and Sustainability* (Surrey, England: Gower Publishing Limited, 2010), p. 28.

¹⁴ *Ibid.*, p. 32.

¹⁵ *Ibid.*, p. 33.

¹⁶ *Ibid.*, p. 37.

¹⁷ Thomas Hodgskin, *Popular Political Economy: Four Lectures Delivered at the London Mechanics' Institution* (London: Printed for Charles and William Tait, Edinburgh, 1827), pp. 33-34.

¹⁸ *Ibid.*, pp. 30, 237.

Artificial property rights also make it possible to collect tribute for the "service" of *not* obstructing production. As John R. Commons observed in *Institutional Economics*, the alleged "service" performed by the holder of artificial property rights, in "contributing" some "factor" to production, is defined entirely by her ability to obstruct access to it. Her "productive services" consist of not preventing production by others.

Such privileges, Maurice Dobb argued, were analogous to a state grant of authority to collect tolls, (much like the medieval robber barons who obstructed commerce between their petty principalities):

Suppose that toll-gates were a general institution, rooted in custom or ancient legal right. Could it reasonably be denied that there would be an important sense in which the income of the toll-owning class represented "an appropriation of goods produced by others" and not payment for an "activity directed to the production or transformation of economic goods?" Yet toll-charges would be fixed in competition with alternative roadways, and hence would, presumably, represent prices fixed "in an open market...." Would not the opening and shutting of toll-gates become an essential factor of production, according to most current definitions of a factor of production, with as much reason at any rate as many of the functions of the capitalist entrepreneur are so classed to-day? This factor, like others, could then be said to have a "marginal productivity" and its price be regarded as the measure and equivalent of the service it rendered. At any rate, where is a logical line to be drawn between toll-gates and property-rights over scarce resources in general?¹⁹

By the standard rules of J.B. Clark's marginal productivity theory, whatever the cost of tolls added to the final price of finished goods would be the "marginal productivity" of the toll gates, and that portion of the price of goods would reflect the toll gate owner's "contribution" to production.

Thorstein Veblen made a similar distinction between property as capitalized serviceability, versus capitalized disserviceability. The latter consisted of power advantages over rivals and the public which enabled owners to assign economic value to the magnanimous act of allowing production to occur without interference.²⁰ Among the less academically inclined, I believe it's called "protection money."

In *The Conquest of Bread*, Kropotkin described the enormous increases in productivity brought about by the scientific-technical revolution, which enable a single farmer or textile worker to feed and clothe hundreds.

Truly, we are rich—far richer than we think; rich in what we already possess, richer still in the possibilities of production of our actual mechanical outfit; richest of all in what we might win from our soil, from our manufactures, from our science, from our technical knowledge, were they but applied to bringing about the well-being of all.²¹

To "utilize this high productivity of labor..." Kropotkin argued, "Society must itself take possession of all means of production."²²

But that's what market competition does: it socializes, for the benefit of all, the productivity increases created by technical progress. If the means of production are not themselves socialized, in a

19 Maurice Dobb, *Political Economy and Capitalism: Some Essays in Economic Tradition*, 2nd rev. ed. (London: Routledge & Kegan Paul Ltd, 1940, 1960), p. 66

20 Thorstein Veblen, *The Place of Science in Modern Civilization and other Essays*, p. 352, in John R. Commons, *Institutional Economics* (New York: Macmillan, 1934), p. 664.

21 Kropotkin, *The Conquest of Bread*, pp. 2-3.

22 *Ibid.*, p. 88.

free market their productivity is in effect socialized by competition. Artificial property rights enable the privileged to appropriate productivity gains for themselves, rather than allowing their benefits to be socialized through market competition. It is only through artificial property rights that privileged sellers can charge consumers in proportion to their increased utility, despite the decreased cost of supplying the good.

The privileged classes use assorted artificial property rights to appropriate for themselves the increased output resulting from improvements in productivity, and (as Kropotkin put it) “appropriate to-day two-thirds of the products of human labour, and then squander them in the most stupid and shameful way.”²³ “[A]ll that enables man to produce and to increase his power of production has been seized by the few.”²⁴

Capitalism—as opposed to free markets—is indeed about “private property rights,” as its apologists argue. But it’s not about legitimate private property—the right to possess the fruits of one’s own labor and things acquired by peaceful trade with others.

Rather, “private property rights” under capitalism are about ownership of the right to control access to natural opportunities. Every state grant of power to control the conditions under which other people may undertake productive activity is a source of illegitimate rent. As Kropotkin summed it up:

In virtue of this monstrous system, the son of the worker, on entering life, finds no field which he may till, no machine which he may tend, no mine in which he may dig, without accepting to leave a great part of what he will produce to a master.... His father and his grandfather have toiled to drain this field, to build this mill, to perfect this machine.... But their heir comes into the world poorer than the lowest savage. If he obtains leave to till the fields, it is on condition of surrendering a quarter of the produce to his master, and another quarter to the government and the middlemen.²⁵

In every case, the person who would apply her labor, energy and skills to the earth and its natural resources is forced to pay tribute for the right to produce, and to work to feed an unproductive parasite in addition to herself. And in every case, the privileged classes of landlords, usurers and other extortionists seek to close off opportunities for self-employment because such opportunities make it too hard to get people to work for them on profitable terms. So long as wage employment faces unfettered competition from self-employment, economic exploitation is impossible.

Artificial property in land includes all absentee titles to land which is vacant and unimproved, as well as all titles vested in the heirs or assigns of the original holder of such a title at the expense of the first occupier and user and her heirs and assigns. Both feudalism (property claims and the imposition of rent against those who have already homesteaded a piece of land by their own labor), and land engrossment (the preemption of vacant and unimproved land by someone who doesn't actually use it, and the subsequent collection of tribute from the rightful first homesteader), are utterly invalid as bases for title to land.

Artificial property enables the landlord to collect tribute for not obstructing access to vacant land, so that as a precondition for the right to labor the laborer must support a parasitic rentier in addition to herself. The original productive power of land is a free gift of nature. It would therefore have no exchange value, unless it were monopolized by one who sat on top of it without using it herself, and

²³ *Ibid.*, p. 3.

²⁴ *Ibid.*, p. 7.

²⁵ *Ibid.*, p. 8.

charged tribute for allowing others to put it to use.

As described by Thomas Hodgskin, such artificial property in land results in irrationality by requiring productive resources to be capable of supporting a rentier in addition to the laborer supporting herself off it before it can be brought into use at all:

It is... evident, that the labour which would be amply rewarded in cultivating all our waste lands..., were all the produce of labour on those lands to be the reward of the labourer, cannot obtain a sufficiency to pay profit, tithes, rent, and taxes....²⁶

Writing on Henry George's defense of interest, Benjamin Tucker noted George's failure to see that “capital in the hands of labor is but the utilization of a natural force or opportunity,”

just as land is in the hands of labor, and that it is as proper in the one case as in the other that the benefits of such utilization of natural forces should be enjoyed by the whole body of consumers.

The truth in both cases is just this,—that nature furnishes man immense forces with which to work in the shape of land and capital, that in a state of freedom these forces benefit each individual to the extent that he avails himself of them, and that any man or class getting a monopoly of either or both will put all other men in subjection and live in luxury on the proceeds of their labor.[I]n practical economic discussion rent stands for the absorption of the advantages of land by the landlord, and interest for the absorption of the advantages of capital by the usurer.²⁷

The ability to charge monopoly rents on capital results both from state interventions that reduce competition in the supply of credit, and on interventions that artificially increase the need for capital by inflating capital outlays required for production.

With capital as with land, Hodgskin wrote, the higher the capital outlay required to undertake production, the higher the burden the producer must be able to bear before being allowed to work.

the labourer is not allowed to work, unless, in addition to replacing whatever he uses or consumes, and comfortably subsisting himself, his labour also gives a profit to the capitalist...: or unless his labour produces a great deal more... than will suffice for his own comfortable subsistence.... This... is... completely the principle of slavery, to starve the labourer, unless his labour will feed his master as well as himself....²⁸

And elsewhere: “Infinite are the undertakings which would amply reward the labour necessary for their [commercial enterprise and manufacturing industry] success, but which will not pay the additional sums required for rent, profits, tithes, and taxes.”²⁹

The markup charged by oligopoly firms is another form of rent. Competition is a sucker's game. What we really have in its place is a sector of several hundred oligopoly firms at the commanding heights of the economy, which are able to pass their costs on to the consumer as a markup through administered pricing. In other words, unlike the free market—which socializes productivity benefits—monopoly capitalism socializes costs (while privatizing profits, of course). Geoff Olson writes:

26 Thomas Hodgskin, “Letter the Eighth: Evils of the Artificial Right of Property,” *The Natural and Artificial Right of Property Contrasted* (London: B. Steil, 1932) <http://oll.libertyfund.org/index.php?option=com_staticxt&staticfile=show.php%3Ftitle=323&layout=html>.

27 Benjamin R. Tucker, “Economic Hodge-Podge,” in Tucker, ed., *Instead of a Book, By a Man Too Busy to Write One*. Gordon Press facsimile of Second Edition (1893, 1972), pp. 204-205.

28 Hodgskin, *Popular Political Economy*, pp. 51-52.

29 Hodgskin, “Letter the Eighth,” *The Natural and Artificial Right of Property Contrasted*.

...It's intriguing that mainstream media always trots out competitiveness whenever the indefensible needs defending. Whether it's an argument for the minimum wage, a celebration of corporate merger, or applause for a superstar CEO's golden parachute, we're told it's really about us being more competitive as a city, province, nation, trading bloc, etc.

...[But if] this is the case, why do we find relatively little direct competition at the highest levels of business? What of the interlocking boards of major corporations, in which the same names crop up over and over?

Once you get past mom and pop businesses, the North American economic landscape is mostly an "oligopoly."...

Those at the top have little to gain from direct competition. They and their parents hail from the same prep schools, head for the same golf courses, and subscribe to the same journals. Their interactions are usually more country club than cutthroat. With a multigenerational game this good, the plutocrats have plenty of reasons to convince everyone else to keep fighting among themselves, by pushing the glorious virtues of competition through foundations and media outlets. In fact, their continuing comfort depends on it.³⁰

An FTC study cited by the Nader Group in 1972 estimated that the oligopoly markup amounted to around 25% of existing prices, in markets where the four largest firms controlled 40% or more of an industry's sales.³¹ A classic example is Paul Goodman's description of the automobile market, where "[t]hree or four manufacturers control the... market, competing with fixed prices and slowly spooned-out improvements."³²

Of all the forms of artificial property and legal privilege in existence, the one most indispensable to corporate power in today's economy is probably "intellectual property."

A large portion of the price of most goods and services consists of embedded rents on "intellectual property." Tom Peters, in *The Tom Peters Seminar*, argued that the cost of materials probably accounted for some \$60 of the total price of his new Minolta camera, and that he paid "the rest, about \$640, for its intellect..." He went on to celebrate the portion of economic value made up of "intellect" and "imagination."³³ Whether Peters' estimate is typical for the portion of the price of manufactured goods made up of rents on IP is doubtful. But in an economy with no property rights in software and product design, with competition unrestricted by "intellectual property" claims of any kind, *whatever* portion of a product's price was made up of rent on the ownership of designs or ideas—as opposed to labor and materials—would evaporate overnight.

IP is a major legal support to oligopoly, since so many cartels were stabilized by the exchange or pooling of patents between the major players in various industries (e.g. G.E. And Westinghouse in home appliances, the Bell Patent Association as the basis for AT&T, RCA as a patent pooling

30 Geoff Olson, "Social Darwinist competition leads to Ik-y mess," *The Vancouver Courier*, July 20, 2007

<<http://www.canada.com/vancouvercourier/news/opinion/story.html>>

31 Mark J. Green, with Beverly C. Moore, Jr., and Bruce Wasserstein, *The Closed Enterprise System: Ralph Nader's Study Group Report on Antitrust Enforcement* (New York: Grossman Publishers, 1972), p. 14.

32 Paul Goodman, *People or Personnel*, in *People or Personnel and Like a Conquered Province* (New York: Vintage Books, 1963, 1965), p. 58.

33 Tom Peters, *The Tom Peters Seminar: Crazy Times Call for Crazy Organizations* (New York: Vintage Books, 1994), pp. 10-12.

arrangement for the major radio producers, etc.).³⁴

If IP were abolished, there would be no legal barrier against many small companies producing competing modular components or accessories for the same platform, or even big companies producing modular components designed for interoperability with other companies products. That means that IP is an important legal bulwark not only for planned obsolescence, but also for a business model based on selling cheap platforms and then charging an enormous markup to a captive market for accessories. If you've ever remarked on how expensive toner cartridges or glucometer testing strips are, you can thank “intellectual property” for it.

It's odd that the so-called “Free Trade Agreements” promoted by so many professed “free traders” focus so disproportionately on provisions for stricter enforcement of patents and copyrights. IP plays exactly the same protectionist role for global corporations that tariffs did for the old national industrial economies. Patents and copyrights are barriers, not to the movement of physical goods, but to the diffusion of technique and technology. The one, as much as the other, constitutes a monopoly of productive capability. “Intellectual property” enables the transnational corporation to benefit from the moral equivalent of tariff barriers, regardless of where it is situated. In so doing, it breaks the old link between geography and protectionism. With an American tariff on a particular kind of good, the corporations producing that good have a monopoly on it only within the American market. With the “tariff” provided by a patent on the industrial technique for producing that good, the same corporations have an identical monopoly in every single country in the world that adheres to the international patent regime. “Intellectual property,” just as much as the tariff, is a form of protectionism in that it restricts the right to produce a given good for a particular market area to a privileged class of firms.

The most important practical effect of all these forms of artificial property rights and artificial scarcity is to erect a toll gate in the way of your ability to transform your energy and skills directly into use-value. In every case, the effect is to require more hours of labor, more capital expenditures, and more overhead to be serviced, than a given unit of output would require for purely technical reasons.

Capitalism as we know it is a system of extracting rents from artificial scarcity and artificial property rights. It can only survive by criminalizing genuine economic freedom. As “property rights” are defined under capitalism, competition—in Nina Paley's words—is theft. Here's the dialog between the characters in one of Paley's cartoons:

MIMI: Copying a song instead of buying a copy is stealing!

EUNICE: Doing for yourself what you could pay someone else to do is stealing!

BOTH: Competition is theft!³⁵

In all cases, the mechanism of exploitation—unequal exchange in all its guises—results from the intrusion of power into the market. As Hoeschele argues,

systems of exchange provide greater abundance for all partners only if the goods and services they exchange have required similar amounts of labor to produce. This is the case when neither of the exchange partners enjoys power over the other.... Whenever power relationships systematically skew an exchange relationship, the ensuing exchange creates scarcity for one of the partners and a disproportionate profit for the other.³⁶

34 See Kevin Carson, “Intellectual Property: A Libertarian Critique” Center for a Stateless Society Paper No. 2 (Second Quarter 2009) <<http://c4ss.org/wp-content/uploads/2009/05/intellectual-property-a-libertarian-critique.pdf>>.

35 Nina Paley, “Stealing,” *Mimi and Eunice*, July 28, 2010 <<http://ninapaley.com/mimiandeunice/2010/07/28/stealing/>>.

36 Hoeschele, *The Economics of Abundance*, p. 50.

The price of just about everything we consume is riddled with embedded rents on artificial property rights. To quote Kropotkin:

Let us take cloth, for example, and add up all the tribute levied on every yard of it by the landowners, the sheep owners, the wool merchants, and all their intermediate agents, then by the railway companies, mill-owners, weavers, dealers in ready-made clothes, sellers and commission agents, and we shall get then an idea of what we pay to a whole swarm of capitalists for each article of clothing.³⁷

But, he continued, if all the idle rentiers were deprived of their tribute and forced to work for a living—in other words, if the laborer were freed from the burden of feeding them in addition to herself—the hours of labor for the average worker could be drastically reduced.

When we take into account how many, in the so-called civilized nations, produce nothing, how many work at harmful trades..., and lastly, how many are useless middlemen, we see that in each country the number of real producers could be doubled. And if, instead of every 10 men, 20 were occupied in producing useful commodities, and if society took the trouble to economize human energy, those 20 people would only have to work 5 hours a day without production decreasing.³⁸

Waste from Guard Labor

Murray Bookchin argued, in the Introduction to *Post-Scarcity Anarchism*, that the management of scarcity, the control of access to scarce resources, was the “historic rationale” for most forms of hierarchy and authoritarianism.³⁹

That really stands to reason. Most of the authoritarian institutions in our society, and most positions of authority within their hierarchies, ultimately derive their power from the threat “Do as I say if you want to get fed and keep a roof over your head.”

In addition, the power of hierarchies results from the fact that exercising power is the primary occupation (and often avocation as well) of those running them, while those on the outside can participate in decision-making only during what little time they are able to extract from their limited leisure after working at their jobs and attending to family concerns and recreation. Comparative scarcity entails a greater amount of labor time required to procure the necessities of life, and a resulting shift in comparative advantage to those administering the hierarchies when it comes to time, energy and attention for making decisions about how things could be done. In Revolutionary France the Girondins attempted to

reduce the revolutionary fervor of the Parisian popular assemblies—the great sections of 1793—by decreeing that the meetings should close “at ten in the evening,” or as Carlyle tells us, “before the working people come...” from their jobs.⁴⁰

What appeal would there be, for David Rockefeller or Bill Gates, in a world where everyone had a cheap Star Trek matter-energy replicator that could provide them with an unlimited standard of living—and in which that standard of living was available to everyone free and clear, without dependence on

³⁷ Kropotkin, *The Conquest of Bread*, pp. 91-92.

³⁸ *Ibid.*, p. 93.

³⁹ Murray Bookchin, *Post-Scarcity Anarchism* (Berkeley, The Ramparts Press, 1971), p. 9.

⁴⁰ *Ibid.*, p. 131.

anyone else? Most of the hierarchical institutions in our world, and the people running them, exist only for the sake of rationing scarce goods. The management at your workplace, and the sense of identity they get from their jobs, all revolve around the fact of scarcity and your dependence on them to keep paying the rent and grocery bill. In a world where they no longer get status from control over other people's livelihoods, they'd be strangers in a strange land. A world in which all the hierarchical institutions formerly required to regulate scarcity become redundant and irrelevant — in which every single person was the equal of Gates and Rockefeller in wealth and power, and could tell them to go to hell with impunity — would be intolerable for them. What fun would it to live like a king, if everyone was a king?

What's more, a major part of the resources expended by authoritarian structures goes to the costs of enforcing property rights in scarce resources. When that scarcity is natural the costs of enforcing the property system may be rational. When, for example, it takes significant effort to create material goods, and the comparative effort of producing versus stealing makes theft an attractive alternative, then the costs of protecting the producer's possession of his labor product against theft may be necessary.

But when the scarcity is artificial, the cost of enforcing it is a dead loss to society. When state intervention artificially increases the effort or capital outlay entailed in producing a given unit of consumption goods, the comparative ease of producing without artificial levels of effort might make the effort of circumventing such restrictions an attractive proposition. For example, when the marginal cost of reproducing digital information is zero, and the price of digital information obtained from the content "owner" is significant, the cost difference can only be upheld by a costly apparatus like the Digital Millennium Copyright Act and all the industry and Justice Department machinery required to enforce it.

We have experienced a major shift, in recent decades, from a situation in which most scarcity was natural to one in which most scarcity is artificial. That's not to say that property rights to scarce goods weren't artificial in most cases, but simply that they really were scarce in the sense that they required significant effort to produce. The primary effect of artificial property rights, in the old days, was to shift the necessary effort of production to someone other than the beneficiary. The primary effect of artificial property rights today, in most cases, is instead to impose effort where there is no material reason for effort on *anyone's* part, so that the privileged can collect rents from the artificially mandated effort. The primary focus of socialism in the nineteenth century was to ensure that the effort required to produce consumption goods was equitably allocated, and that the product was distributed commensurate with contributions to the production process. Today, in contrast, our focus should be on making sure that there are no limits on the free reproduction of non-scarce goods and that there is no effort required for consumption where it does not by nature exist. A growing share of total consumption goods consists of what Carl Menger called "non-economic goods," whose natural market price absent artificial scarcity rents is zero. As Bookchin put it: "A century ago, scarcity had to be endured; today, it has to be enforced—hence the importance of the state in the present era."⁴¹

Samuel Bowles and Arjun Jayadev coined the term "guard labor" for economic activity whose primary purpose is "the perpetuation of social relationships of domination and subordination"—what we saw Edward Wolff describe above as economic activity meant to secure an unproductive class's control of surplus output. They argued that the higher the degree of inequality in wealth and power, the larger the share of economic activity that goes to guard labor.⁴²

⁴¹ *Ibid.*, pp. 37-38.

⁴² Samuel Bowles and Arjun Jayadev, "Guard Labor: An Essay in Honor of Pranab Bardhan" Working Paper Series No. 90

Douglas Dowd pointed to the lower productivity of labor and higher unit costs resulting from low morale and other incentive problems in the standard capitalist enterprise.⁴³ For example, the worker-owned plywood co-ops in the Pacific Northwest typically have a quarter the supervisory personnel of a capitalist-owned plywood factory, because of the completely different structure of incentives in a worker-owned and -managed firm. Dowd compared the 10.8% of the U.S. labor force in managerial and clerical positions in 1980, compared to 3% in Germany and 4.4% in Japan.

That figure in 1980 was comparatively modest compared to the inflated level it has swollen to since then. The expansion of management, in both numbers and salaries, as a share of the labor force from the 1970s to the 1990s, as described by David M. Gordon in *Fat and Mean*, bears out Bowles' and Jayadev's thesis of a correlation between economic inequality and guard labor. The real wages of non-supervisory labor have been largely stagnant since the late '60s, while real productivity has increased enormously.

Between 1973 and 1993 management's share of total labor compensation rose from 28.6% to 41.1%. The difference would have been enough to increase the pay of production workers by almost a quarter. And the portion of the non-farm labor force in managerial positions rose to 13% at the time Gordon wrote, compared to 4.2% in Japan.⁴⁴ Thus there seems to be a strong correlation between total spending on management salaries and the degree of inequality, both cross-nationally and over time in the U.S.

Gordon explicitly drew out the correlation:

In one direction, stagnant or falling wages create the need for intensive management supervision of frontline employees. If workers do not share in the fruits of the enterprise, if they are not provided a promise of job security and steady wage growth, what incentive do they have to work as hard as their bosses would like? So the corporations need to monitor the workers' effort and be able to threaten credibly to punish them if they do not perform. The corporations must wield the Stick. Eventually the stick requires millions of Stick-wielders.⁴⁵

With a coercive approach, by contrast, a much more fundamental conflict between owners and workers is likely to persist over workers' labor effort. Corporations are naturally interested in their employees working as hard as possible. In the absence of strong wage benefits and employment security, however, what provides the worker with the incentive to work anywhere nearly as intensively as the corporation would prefer?...

The solution to such motivational problems... is a combination of intensive supervision of employees and the threat of job dismissal....⁴⁶

Radical Monopoly

The concept of radical monopoly overlaps heavily with that of privilege or artificial property rights.

(Political Economy Research Institute, 2004).

43 Dowd, *The Waste of Nations*, p. 70.

44 David M. Gordon, *Fat and Mean: The Corporate Squeeze of Working Americans and the Myth of Management "Downsizing"* (New York: The Free Press, 1996), p. 82.

45 *Ibid.*, pp. 5-6.

46 *Ibid.*, pp. 65-66, 68.

Radical monopoly, by subsidizing more costly ways of doing things and penalizing or imposing costs on cheaper alternatives, compels the individual to consume goods and services that are more costly to produce in terms of effort and disutility, when (had not such alternatives been artificially suppressed) she might have preferred less effort- and disutility-intensive alternatives. It should be clear, therefore, that radical monopoly is closely related to the basic operating principle of privilege: requiring individuals to exert effort over and above what is required to produce a given consumption good.

The state and its affiliated corporate system, by mandating minimum levels of overhead for supplying all human wants, create what Ivan Illich called “radical monopolies.”

I speak about radical monopoly when one industrial production process exercises an exclusive control over the satisfaction of a pressing need, and excludes nonindustrial activities from competition....

Radical monopoly exists where a major tool rules out natural competence. Radical monopoly imposes compulsory consumption and thereby restricts personal autonomy. It constitutes a special kind of social control because it is enforced by means of the imposed consumption of a standard product that only large institutions can provide.⁴⁷

Radical monopoly is first established by a rearrangement of society for the benefit of those who have access to the larger quanta; then it is enforced by compelling all to consume the minimum quantum in which the output is currently produced....⁴⁸

The goods supplied by a radical monopoly can only be obtained at comparably high expense, requiring the sale of wage labor to pay for them, rather than direct use of one's own labor to supply one's own needs. The effect of radical monopoly is that capital-, credential- and tech-intensive ways of doing things crowd out cheaper and more user-friendly, more libertarian and decentralist, technologies. The individual becomes increasingly dependent on credentialed professionals, and on unnecessarily complex and expensive gadgets, for all the needs of daily life. She experiences an increased cost of subsistence, owing to the barriers that mandatory credentialing erects against transforming one's labor directly into use-value (Illich's "convivial" production), and the increasing tolls levied by the licensing cartels and other gatekeeper groups.

....The establishment of a radical monopoly happens when people give up their native ability to do what they can do for themselves and each other, in exchange for something "better" that can be done for them only by a major tool. Radical monopoly reflects the industrial institutionalization of values.... It introduces new classes of scarcity and a new device to classify people according to the level of their consumption. This redefinition raises the unit cost of valuable services, differentially rations privileges, restricts access to resources, and makes people dependent.⁴⁹

The result is an increased cost of subsistence. Leopold Kohr observed that “what has actually risen under the impact of the enormously increased production of our time is not so much the standard of living as the level of subsistence.”⁵⁰ Or as Paul Goodman put it, "decent poverty is almost impossible."⁵¹ Expenditures which are not actually necessary for a given standard of living, have

47 Ivan Illich, *Tools for Conviviality* (New York, Evanston, San Francisco, London: Harper & Row, 1973), pp. 52-53.

48 Illich, *Energy and Equity* (1973), Chapter Six (online edition courtesy of Ira Woodhead and Frank Keller) <http://www.cogsci.ed.ac.uk/~ira/illich/texts/energy_and_equity/energy_and_equity.html>.

49 Illich, *Tools for Conviviality*, p. 54.

50 Leopold Kohr, *The Overdeveloped Nations: The Diseconomies of Scale* (New York: Schocken Books, 1978, 1979), pp. 27-28.

51 Goodman, *Compulsory Miseducation*, in *Compulsory Miseducation and The Community of Scholars* (New York: Vintage books, 1964, 1966), p. 108.

nevertheless been rendered artificially necessary by the effect of state policies which promote the crowding out of less expensive by more expensive ways of doing things.

For example: Someone who lives in a walkable city like Florence, within convenient distance of where she shops and works, and has access to convenient public transport for visiting other parts of the city, is likely to view a car as a luxury. On the other hand subsidized fuel, freeways, and automobiles generate distance between things, so that "[a] city built around wheels becomes inappropriate for feet."⁵² The car becomes an expensive necessity; feet and bicycle are rendered virtually useless, and the working poor are forced to earn the additional wages to own and maintain a car just to be *able* to work at all. The typical American suburbanite has been deprived of all alternatives to car ownership by subsidies to sprawl and the car culture. Having no choice, she must treat the car as a necessity. The GDP is inflated by whatever amount she must spend on periodically buying a car, keeping it insured and in working order, and putting gas in the tank. That portion of the GDP is, essentially, the cost of a window broken by the state. And it's a huge part of GDP. According to Bill McKibben, in compact, mixed-use communities that emphasize walkability, bike-friendliness and public transit, transportation costs amount to only 4 or 5% of local economic output. In American freeway-centered communities, it's more like 17%.⁵³

As Hoeschele describes the process: "As a result of the widespread adoption of the new product, infrastructural changes become necessary—changes that often impede the activities of those people who have not yet adopted the new technology. These changes force even the laggards to accept the new technology, whether they want to or not. What began as a want has become a need."⁵⁴

Radical monopoly is associated with a crowding-out process, as standard practices gravitate toward where the rents are.

Waste from Subsidized Inputs

In addition to artificial scarcity rents on unequal exchange, by which workers and consumers pay tribute to the holders of artificial scarcity rents, corporate capitalism also creates inefficiency by allowing firms to waste subsidized production inputs at public expense. This includes the supply of transportation, energy, education, and other production inputs to privileged enterprises below their market costs. Murray Rothbard described the effects of such subsidies:

....The resources needed to supply the free governmental service are extracted from the rest of production. Payment is made, however, not by users on the basis of their voluntary purchases, but by a coerced levy on the taxpayers. A basic split is thus effected between *payment* and *receipt of service*. This split is inherent in all government operations.

Many grave consequences follow from the split and from the "free" service as well. As in all cases where price is below the free-market price, an enormous and excessive demand is stimulated for the good, far beyond the supply of service available. Consequently, there will always be "shortages" of the free good, constant complaints of insufficiency, overcrowding, etc....

Free supply not only subsidizes the users at the expense of non-using taxpayers; it also misallocates

52 Illich, *Disabling Professions* (New York and London: Marion Boyars, 1977), p. 28.

53 McKibben, *Deep Economy: The Wealth of Communities and the Durable Future* (New York: Times Books, 2007), p. 154.

54 Hoeschele, *The Economics of Abundance*, p. 61.

resources by failing to supply the service where it is most needed. The same is true, to a lesser extent, wherever the price is under the free-market price. On the free market, consumers can dictate the pricing and thereby assure the best allocation of productive resources to supply their wants. In a government enterprise, this cannot be done. Let us take again the case of the free service. Since there is no pricing, and therefore no exclusion of submarginal uses, there is no way that the government, even if it wanted to, could allocate its services to their most important uses and to the most eager buyers. All buyers, all uses, are artificially kept on the same plane. As a result, the most important uses will be slighted. The government is faced with insuperable allocation problems, which it cannot solve *even to its own satisfaction*. Thus, the government will be confronted with the problem: Should we build a road in place A or place B? There is no rational way whatever by which it can make this decision. It cannot aid the private consumers of the road in the best way. It can decide only according to the whim of the ruling government official, i.e., only if the *government officials* do the “consuming,” and not the public. If the government wishes to do what is best for the public, it is faced with an impossible task.⁵⁵

Subsidized inputs are closely related to the phenomenon of radical monopoly. They are tied together by Ivan Illich's concept of “counterproductivity.” Illich distinguished the “first watershed” of adopting a technology, in which it has net social benefits, from the “second watershed” beyond which it has negative benefits to society. Beyond the second watershed, the technology becomes counterproductive; society is brought into service to the technology rather than vice versa, and the technology imposes its logic on society.⁵⁶ Society becomes dominated by radical monopolies.

But Illich failed to grasp the reason for counterproductivity. A technology will not normally be adopted by an unconstrained individual, of her own free choice, beyond the point at which the disutilities exceed the utilities. She will adopt a machine or tool, or a practice, for her own ends, when she fully internalizes the benefits, only because she judges the utility to her personally to outweigh the disutility. The second watershed is the point beyond which the marginal utility of further adoption would be zero if all costs and benefits were fully internalized by the decision maker. A technology or practice is adopted beyond the point where negative effects outweigh the positive, only when those making the decision to adopt it are able to collect the benefits while shifting the costs to others.

Illich treated counterproductivity not as a negative externality, but as a “negative internality” which was entailed in the process of consumption itself.⁵⁷ But this is not accurate. Counterproductivity is not a “negative internality,” but the negative externality of *others'* subsidized consumption. Illich failed to identify the real consumer: the party who makes the decision to adopt and appropriates the benefits, while others pay the costs. The person who is forced to use the technology in her daily life, despite its unpleasantness, is not the real consumer; she bears the costs of a radical monopoly created for the benefit of another, who *is* the real consumer.

Where the bearing of cost is divorced from decision-making authority, decision-makers are enabled to consume uneconomical quantities of inputs without discipline by the market price system. Authority breeds conflict of interest wherever it is found, by enabling its possessors to shift effort downward while appropriating benefits for themselves. For example, as Lloyd Dumas described it,

The assumption that control is exercised by the cost bearers is nontrivial, and in some cases unrealistic. For instance, taxpayers bear the cost of the salaries of government employees. Yet, though rational, taxpayers are not necessarily in control of government personnel decisions. Hence it is quite possible that individuals

55 Murray Rothbard, *Man, Economy, and State: A Treatise on Economic Principles* (Auburn, Ala.: The Ludwig von Mises Institute, 1962, 1970, 1993), pp. 819-820.

56 Illich, *Tools for Conviviality*, p. 7.

57 Illich, *In the Mirror of the Past: Lectures and Addresses, 1978-1990* (New York: M. Boyars, 1992), p. 84.

will be hired whose salaries exceed the value of their work output in the eyes of the taxpayers. In the opinion of the government administrators doing the hiring, the value of the salaries may far exceed the opportunity cost of that use of budgeted funds. But the administrators are not paying the salaries—the taxpayers are. This situation is not peculiar to government. Managers of private corporations, for example, may engage in bureaucratic empire-building and hire people whose work output is less valuable than its cost, in the eyes of the stockholders and/or consumers who share the salary costs. It is thus the judgment of the decision makers that holds sway when the decision makers and the cost bearers are different individuals.⁵⁸

The same principle holds true not only in the case of public sector allocation of resources, but also in the private sector when systems of artificial property rights grant decision-making authority over property to actors whose *de facto* property rights result from no personal investment. For example corporate management, while in theory acting as agents of shareholders, in fact exercise virtually unaccountable authority over property which lacks any real owner. Senior corporate management, in practice, is a self-perpetuating oligarchy which controls the use of enormous masses of free-floating capital which they did not themselves contribute from their own effort or savings. In this regard, it is much like corporate managers in the Oskar Lange model of market socialism, as critiqued by Mises. The manager of the market socialist enterprise is simply playing at entrepreneurship, because in the event of failure he risks losing capital which he did not himself contribute, while standing to gain if his decision pays off. The corporate CEO, likewise, reaps enormous bonuses in the event of a profitable quarter, whereas even a series of disastrous losses results only in his resignation with a golden parachute.

A major part of the economy consists of things which are paid for but produce no value, the moral equivalent of digging holes and filling them in again. Decision makers aim at maximizing net utility, not to society as a whole, but to themselves personally. If their power enables them to shift marginal cost downward relative to benefits, they will consume an input beyond its point of diminishing social utility. The same is true of business firms which decide on the amount of production inputs to consume based on their taxpayer-subsidized cost, rather than their real market cost.

Normally market prices function as a feedback mechanism, informing the user of the real cost of providing the goods and services she consumes so that she can make a rational decision as to how much to consume. Subsidies disrupt this feedback mechanism. Just as putting a candle under a thermostat will result in a freezing house, providing production inputs below cost will result in demand for them growing faster than it can be met.

As Illich wrote, “queues will sooner or later stop the operation of any system that produces needs faster than the corresponding commodity...”⁵⁹ “[I]nstitutions create needs faster than they can create satisfaction, and in the process of trying to meet the needs they generate, they consume the Earth.”⁶⁰

Because so many of the inputs of state capitalist industry are subsidized, and their artificially low cost leads to a model of growth based on adding inputs extensively rather than economizing on them, it follows that an increasing share of the total production inputs of state capitalism are socialized and borne by the taxpayer rather than by the user.

For example, because transportation and energy inputs are subsidized, industry has grown until recently by adding those inputs extensively rather than by using existing inputs more intensively. As

58 Dumas, *The Overburdened Economy*, pp. 39-40.

59 Illich, *Disabling Professions*, p. 30.

60 Illich, *Deschooling Society* (New York, Evanston, San Francisco, London: Harper & Row, 1970, 1971), p. 110.

James O'Connor described the process,

Transportation costs and hence the fiscal burden on the state are not only high but also continuously rising. It has become a standard complaint that the expansion of road transport facilities intensifies traffic congestion. The basic reason is that motor vehicle use is subsidized and thus the growth of the freeway and highway systems leads to an increase in the demand for their use.⁶¹

There is another reason to expect transportation needs (and budgets) to expand. The development of rapid transport and the modernization of the railroads, together with the extension of the railroad systems, will push the suburbs out even further from urban centers, putting still more distance between places of work, residence, and recreation. Far from contributing to an environment that will free suburbanites from congestion and pollution, rapid transit will, no doubt, extend the traffic jams and air pollution to the present perimeters of the suburbs, thus requiring still more freeway construction, which will boost automobile sales.⁶²

Government subsidies to highways and airports, by distorting the cost feedback to users, destroy the link between the amount provided and the amount demanded. The result is an Interstate Highway System that generations congestion faster than it can expand the system to accommodate the congestion. Demand for new roads, expansion of existing roads, and maintenance of already built infrastructure, outstrips the revenue available for those functions. Although highway money is a top priority for the federal and state governments, it remains bottlenecked at any given time. The cost of repairing the most urgent deteriorating roadbeds and bridges is several times greater than the money being appropriated for that purpose.

The Western industrial economies have become heavily dependent on extensive inputs of long-distance shipping, to the point of insanity. Hedrick Smith, attempting to illustrate the irrationality of the Soviet economy, once used the example of a trainload of concrete beams traveling from Leningrad to Moscow, passing a trainload of identical beams traveling from Moscow to Leningrad. E.F. Schumacher, in *Good Work*, wrote:

When you travel up the big motor road from London you find yourself surrounded by a huge fleet of lorries carrying biscuits from London to Glasgow. And when you look across to the other motorway, you find an equally huge fleet of lorries carrying biscuits from Glasgow to London. Any impartial observer from another planet would come to the inescapable conclusion that biscuits have to be transported at least six hundred miles before they reach their proper quality.⁶³

The same holds true in other sectors. Conventional large-scale agriculture makes extensive use of large tracts of land, and uses mechanization mainly to increase efficiency in terms of output per labor-hour, rather than maximizing output per acre. To confirm this one need only compare the productivity per acre of intensive agriculture by small, land-poor producers, versus that of large agribusiness operations with privileged access to large tracts of land. In Latin America a large share of the typical *hacienda* is typically undeveloped, while land-poor peasants are forced to spend a portion of their time hiring out as laborers for the neighboring *patron*. In America, the USDA pays the largest farmers price support subsidies for holding huge tracts of land out of cultivation while small truck farmers resort to such methods as square foot gardening or biointensive horticulture to squeeze every jot and tittle of yield out of their raised beds.

61 James O'Connor, *The Fiscal Crisis of the State* (New York: St. Martin's Press, 1973), p. 106.

62 *Ibid.*, pp. 109-110.

63 E. F. Schumacher, *Good Work* (New York, Hagerstown, San Francisco, London: Harper & Row, 1979), p. 19.

The cumulative effect of subsidized inputs is that massive amounts of waste are built into the basic structure of the economy.

Subsidies to less efficient, input-intensive ways of doing things contribute heavily to radical monopoly. For example, our whole model of urban sprawl and monoculture development is a side-effect of subsidized energy and transportation inputs.

The main force behind urban sprawl is disregard of the cost principle. Local governments build subsidized freeway systems and ever further outlying bypasses in order to "relieve congestion," only generating new congestion as the new roads fill up with new traffic from the new subdivisions and strip malls that spring up at every exit. As the saying goes, trying to relieve traffic congestion by building more roads is like trying to lose weight by letting out your belt.

Suburban developments commonly receive subsidized utility connections at the expense of ratepayers in the old, inlying parts of town. One of the most egregious examples I've seen is in the neighboring town of Fayetteville, Arkansas, where citizens voted in 2006 to pay an extra penny in sales tax to expand the sewer system to accommodate the increased burden imposed on it by new subdivisions built by local real estate kingpin Jim Lindsey—rather than simply charging Lindsey a higher sewer hookup fee to cover the cost of expansion.

In addition, zoning prohibits mixed-use development, and thereby inflates the need for transportation to get from the cul de sac to where one shops and works. The neighborhood grocery store has been zoned out of existence, along with all but the most informal and unobtrusive of home businesses. Affordable housing in the downtown commercial district (e.g. walkup apartments over shops), likewise, is prohibited by zoning.⁶⁴

The practical result of government promotion of monoculture development is that for most of us there are two communities: a community in which we work and shop, and a bedroom community in which we are stored. There is a separate utility and road infrastructure for each one, and a transportation infrastructure linking the two of them. It's a safe bet that a substantial majority of the automobile industry and its suppliers (not even counting planned obsolescence), and of the roadbuilding industry, is waste production. (Of course that's not counting the waste time—hardly distinguishable from labor-time devoted directly to waste production—spent in commuting.)

In a society where transportation and energy were not artificially cheap, new urban development would likely take the form of the pre-automobile railroad suburbs: compact, self-contained new communities with their own commercial centers.

Waste From Mandated Capital Outlays and Overhead

In addition to crowding out lower-cost alternatives by rendering high-cost means artificially competitive through input subsidies, the state also promotes radical monopoly by mandating capital outlays and overhead costs over and above what is technically required for undertaking production. Laws imposing artificially high capital outlays for market entry have exactly the same effect as making capital artificially scarce and expensive.

⁶⁴ See, for example, James Kunstler, *The Geography of Nowhere: The Rise and Decline of America's Manmade Landscape* (New York and London: Simon & Schuster, 1993), for the effects of imposing car culture through zoning laws.

At the local level, one of the central functions of so-called "health" and "safety" codes, and occupational licensing, is to prevent people from using idle capacity (or "spare cycles") of tools they already own, and thereby transforming them into capital goods for productive use. Such regulations mandate minimum levels of overhead (for example, by outlawing a restaurant run out of one's own home, and requiring the use of industrial-sized ovens, refrigerators, dishwashers, etc.), so that the only way to service the overhead and remain in business is to engage in large batch production.

You can't do just a few thousand dollars worth of business a year, because the state mandates capital equipment on the scale required for a large-scale business if you engage in the business at all.

In the absence of licensure, zoning, and other regulations, how many people would start a restaurant *today* if all they needed was their living room and their kitchen? How many people would start a beauty salon *today* if all they needed was a chair and some scissors, combs, gels, and so on? How many people would start a taxi service *today* if all they needed was a car and a cell phone? How many people would start a day care service *today* if a bunch of working parents could simply get together and pool their resources to pay a few of their number to take care of the children of the rest? These are not the sorts of small businesses that receive SBIR awards; they are the sorts of small businesses that get hammered down by the full strength of the state whenever they dare to make an appearance without threading the lengthy and costly maze of the state's permission process.⁶⁵

Zoning laws, likewise, criminalize low-overhead enterprise by compelling the microentrepreneur to pay expensive rents on a free-standing building in the commercial district instead of operating out of her home. The rent, like capital outlays for mandated industrial-sized equipment, can only be amortized by large batch production.

Another example is the building codes, which criminalize self-built housing using cheap alternative construction techniques and the use of vernacular materials (earthships, papercrete, cob houses, rammed earth, etc.). Perhaps more importantly, they insulate incumbent contractors from competition by such techniques, and remove the competitive pressure to adopt lower cost methods. The effect is to inflate the cost of subsistence and create an overhead cost of daily living that can only be amortized by a large revenue stream—creating, it follows, a strong pressure for increased wage labor.

In the building trades, according to Illich the entry barrier enjoyed by licensed contractors "reduces and cancels opportunities for the otherwise much more efficient self-builder." Construction codes prevent most self-building, and drive the cost of professionally built housing to excessive levels.⁶⁶ So-called "safety" regulations prohibit simpler and more user-friendly technologies that might be safely managed by an intelligent layman, instead mandating more complex technologies that can only be safely handled by licensed professionals. The system selects against simple technologies that can be safely controlled, and in favor of complex technologies that can only be safely wielded by a priesthood. For example, self-built housing in Massachusetts fell from around a third of all single-family houses to 11%, between 1945 and 1970. But by 1970 the feasible self-building technologies could have been far safer and more user-friendly than in 1940, had not the building trades actively suppressed them.⁶⁷

Illich elaborated in greater detail on both the potentially feasible convivial building technologies, and the measures taken to suppress them, in the case of the "vast tracts of self-built *favelas, barrios*,

65 Roderick Long, "Free Market Firms: Smaller, Flatter, and More Crowded," *Cato Unbound*, Nov. 25, 2008 <<http://www.cato-unbound.org/2008/11/25/roderick-long/free-market-firms-smaller-flatter-and-more-crowded>>.

66 Illich, *Tools for Conviviality*, p. 39.

67 *Ibid.*, p. 40.

or *poblaciones*" surrounding major Latin American cities.

Components for new houses and utilities could be made very cheaply and designed for self-assembly. People could build more durable, more comfortable, and more sanitary dwellings, as well as learn about new materials and options.... [But the government instead] defines the professionally built house as the functional unit, and stamps the self-built house a shanty. The law establishes this definition by refusing a building permit to people who cannot submit a plan signed by an architect. People are deprived of the ability to invest their own time with the power to produce use-value, and are compelled to work for wages and to exchange their earnings for industrially defined rented space.⁶⁸

Colin Ward's account of the Laindon and Pitsea communities in Essex parallels the Latin American *favelas*. Following a depression in agricultural land prices in the 1880s, some of the farmers in the area sold out to developers, who divided it up into cheap plots but did little in the way of development. In succeeding decades, many of those plots were sold (often for as little as 3 per 20-ft. frontage), and used not only for cheap bungalows but for every imaginable kind of self-built housing ("converted buses or railway coaches, with a range of army huts, beach huts and every kind of timber-framed shed, shack or shanty"), as working class people painstakingly hauled odds and ends of building material to the sites and gradually built up homes. During the WWII bombing of the East End of London, many working class families were bombed out or fled to plots in Pitsea and Laindon, increasing the area's population to 25,000 at the end of the war. In general, the sort of people who resorted to such self-built expedients "would never have qualified as building society mortgagees," owing to their low incomes.

What in fact those Pitsea-Laindon dwellers had was the ability to turn their labour into capital over time, just like the Latin American squatters. The poor in the third-world cities—with some obvious exceptions—have a freedom that the poor in the rich world have lost....

You might observe of course that some of the New Town and developing towns have—more than most local authorities have—provided sites and encouragement to self-build housing societies. But a self-build housing association has to provide a fully-finished product right from the start, otherwise no consent under the building regulations, no planning consent, no loan. No-one takes into account the growth and improvement and enlargement of the building over time, so that people can invest out of income and out of their own time, in the structure.⁶⁹

Ward quotes Anthony King, in *The Bungalow*, on conditions in the first half of the twentieth century:

A combination of cheap land and transport, pre-fabricated materials, and the owner's labour and skills had given back to the ordinary people of the land, the opportunity denied to them for over two hundred years, an opportunity which, at the time, was still available to almost half of the world's non-industrialized populations: the freedom for a man to build his own house. It was a freedom that was to be very short-lived.⁷⁰

This kind of non-standard construction, "that gives the underprivileged a place of their own," has been stamped out by urban planners of the very cultural type who profess the most concern about the

68 *Ibid.*, pp. 62-63. See also the article "Shanty Settlements in Britain" in *Radical Technology*. The self-built houses, not only far cheaper but often quite beautiful and elegantly designed, all predate the 1947 Planning Acts "which changed the nature of building permission and made it a much tighter financial game." Godfrey Boyle and Peter Harper, eds. *Radical Technology*. From the editors of *Undercurrents* (New York: Pantheon Books, 1976). p. 107.

69 Colin Ward, "The Do It Yourself New Town," *Talking Houses: Ten Lectures by Colin Ward* (London: Freedom Press, 1990), pp. 25-31.

70 *Ibid.*, pp. 90-91.

needs of the poor.⁷¹ Such legislation amounts to "a highly regressive form of indirect taxation."⁷²

The situation is doubly unfortunate, because urban areas are full of vacant lots which would be ideal for such self-build projects, but which are seen as uneconomical by conventional developers. Two architects, at a time when the London borough of Newham claimed to be running out of building sites, surveyed the borough for sites of less than a half-acre, excluding sites which were claimed for local authority housing proposals, or lay in exclusively industrial areas. They found sufficient land to house three to five thousand people in single-family dwellings. The council, however, told them that "all these small and scattered plots were useless.... Given the local authority's procedures, it would be uneconomic to develop them."⁷³ They would, however, have been found quite "economic" by those folks in Pittsea-Laindon.

Yet another example of radical monopoly is credentialism, with mandated years of schooling unrelated to the practical requirements of an occupation. In order to transform one's labor into use-value, one must forgo income during what would otherwise be prime earning years, and often take on enormous debt for tuition in vocational-technical school or professional training. This debt load, exacerbated by several years' lost income, is—once again—a form of overhead that must be amortized by a large revenue stream, which means greater dependence on wage labor for more hours of work.

According to Chris Dillow, the inflation of educational credentials required for the typical job has had little effect on actual economic productivity:

The thing is, this slowdown has come at a time when the workforce is better qualified than ever before; over 30% of the working age population has a degree now - twice the proportion in the mid-90s, and eight times that of the mid-70s.

This vast increase in qualifications, however, seems to have had no impact in raising productivity....

This seems to refute one of the foundational beliefs of New Labour—that education is the key to economic growth. As [Tony] Blair said:

*Education is the best economic policy there is...Britain has neglected the impact on economic growth of human capital.*⁷⁴

The problem is, Blair's argument is circular. Education is not—as Blair seems to imply—equivalent to “human capital.” It's only human capital when it actual increases the worker's proficiency at doing his job. Dillow quotes a literature review by Alan Krueger and Mikael Lidahl which found that there was a significant correlation between educational levels and productivity only in economies which started out with comparatively low absolute levels of average education.

Education was statistically significantly and positively associated with subsequent growth only for the countries with the lowest level of education...The positive effect of the initial level of education on growth seems to be a phenomenon that is confined to low-productivity countries.

This seems to contradict the commonly found correlation between educational levels and individual

⁷¹ *Ibid.*, p. 30.

⁷² *Ibid.*, p. 72.

⁷³ *Ibid.*, pp. 73-74.

⁷⁴ Chris Dillow, “Education & Productivity,” *Stumbling and Mumbling*, November 5, 2010

<http://stumblingandmumbling.typepad.com/stumbling_and_mumbling/2010/11/education-productivity.html>.

income. Dillow argues that the discrepancy might be explained by the productivity being

a feature not of individuals, but of jobs. If an individual gets a degree, he has more chance of getting a high-productivity job. But if the number of high-productivity jobs doesn't rise in line with the number of graduates, increasing numbers of graduates will find jobs for which they are over-qualified, and productivity won't increase.

Joe Bageant demolished the meritocratic hokum, with its panacea of "more education," in short order:

Look at it this way: The empire needs only about 20-25% of its population at the very most to administrate and perpetuate itself—through lawyers, insurance managers, financial managers, college teachers, media managers, scientists, bureaucrats, managers of all types and many other professions and semi-professions.

What happens to the rest? They are the production machinery of the empire and they are the consumers upon whom the empire depends to turn profits. If every one of them earned a college degree it would not change their status, but only drive down wages of the management class, who are essentially caterers to the corporate financial elites who govern most things simply by controlling the availability of money at all levels, top to bottom....

Clawing down basic things like an education in such a competitive, reptilian environment makes people hard. And that's what the empire wants, hardassed people in the degreed classes managing the dumbed down, over-fed proles whose mental activity consists of plugging their brains into their television sets so they can absorb the message to buy more....

....Right now we are seeing the proletarianization of college graduates, as increasingly more of them are forced to take service and labor jobs. (Remember that it only takes a limited number to directly or indirectly manage the working masses, which these days includes workers like hospital technicians, and a thousand other occupations we have not traditionally thought of as working class.).⁷⁵

Worse yet, credentials may actually boost individual income by serving as a means to purchase the right to extract rents from others. Dillow continues:

Another possibility is that the social product of educated people, far from being higher than the private product as some endogenous growth theories predict, is in fact lower. This would happen if having a degree allows you to earn more at the expense of other people—if it propels one into a management job where you can exploit workers, or into the “heads I win, tails the public loses” banking industry.

The real effect of credentialism, when it's a prerequisite for engaging in actual productive work, is to burden workers with unnecessary educational requirements that are irrelevant to the actual performance of their jobs—a mandate to purchase a certain number of educational hours as a form of tribute before one can enter a field, but as superfluous to the performance of actual work in that field as the purchase of a \$300,000 medallion is to driving a cab.

Accounting Systems and Broken Windows

A large share of what's conventionally counted as “output” consists of waste production. Many

⁷⁵ Joe Bageant, "The masses have become fat, lazy, and stupid," December 11, 2006 <http://www.joebageant.com/joe/2006/12/the_masses_have.html>.

areas of our national life are governed by accounting systems that count the consumption of inputs as an output.

For example, economists' calculation of the Gross Domestic Product is a textbook illustration of the "broken window fallacy." That fallacy, according to Frédéric Bastiat, is the belief that a broken window is good because it creates work and revenue for the glaziers. True, said Bastiat, it employs glaziers. But that does not mean that the breaking of windows is a good thing; the owner of the broken window simply spends money to wind up in the same state that he would have been for free had the window not been broken at all. "Society loses the value of objects unnecessarily destroyed...."⁷⁶

As the authors of *Natural Capitalism* point out, anything that involves an expenditure of money adds to the GDP.⁷⁷ Jonathan Rowe writes:

The GDP is simply a gross measure of market activity, of money changing hands. It makes no distinction whatsoever between the desirable and the undesirable, or costs and gain. On top of that, it looks only at the portion of reality that economists choose to acknowledge—the part involved in monetary transactions. The crucial economic functions performed in the household and volunteer sectors go entirely unreckoned. As a result the GDP not only masks the breakdown of the social structure and the natural habitats upon which the economy—and life itself—ultimately depend; worse, it portrays such breakdown as economic gain.⁷⁸

Or as Scott Burns put it, "The value of a friend's services on his own car is excluded from GNP. But the cost of his accident, ambulance ride, and hospital stay is not."⁷⁹

Everything that entails the expenditure of money adds to the GDP, even if most of the cost is waste that adds nothing to the actual production of use-value. A pileup on the expressway that totals out a dozen cars and results in several funerals or several people spending weeks on life support means millions of dollars added to the GDP. When you pay three times as much to buy food grown in another country with subsidized irrigation water and trucked to you on subsidized highways, as it would cost to buy food of identical quality grown by a local farmer and distributed in bulk without a brand-name markup, it adds three times as much to the GDP—even though you're just having to work three times as long to obtain identical (or inferior) use-values.

The internal accounting mechanism of the large corporation is similar to that entailed in calculating GDP, in that it counts expenditure on inputs as the creation of wealth. Given the pervasiveness of state cartelization, a major share of the economy is made up of oligopoly markets dominated by a handful of firms. Because oligopoly firms tend to be "price-givers" rather than "price-takers," and to be able to pass their costs on as a markup to the consumer via administered pricing, they are largely insulated from competitive pressure for minimizing costs.

The dominant firms in an oligopoly market usually have similar internal cultures in most regards, and are likely to follow the same "best practices." Many such aspects of their business models aren't matters for competition, because they are based on the same set of unquestioned assumptions common to the institutional culture of the entire industry.

76 Frédéric Bastiat, "What is Seen and What is not Seen," *Selected Essays on Political Economy* (1848). Trnsns. Seymour Cain. Foundation for Economic Education edition, 1995. Hosted at Library of Economics and Liberty <<http://www.econlib.org/library/Bastiat/basEss1.html>>.

77 *Natural Capitalism*, pp. 59-60.

78 T. Halstead, Jonathan Rowe, and C. Cobb, "If the GDP is Up, Why is America Down?," *The Atlantic Monthly* 276(4): 59-78, Oct. 1995, in *Natural Capitalism*, p. 60.

79 Scott Burns, *The Household Economy: Its Shape, Origins, & Future* (Boston: The Beacon Press, 1975), pp. 61-62.

Large corporations are also frequently isolated from pressures to minimize costs because of the superfluity of capital available for investment. Large corporations are rarely dependent either on new stock issues or capital markets to finance new investment, choosing instead to finance expansion of capacity or upgrades of plant and equipment through retained earnings. But as Martin Hellwig pointed out, far from serving as a constraint or imposing the need to ration investment, the value of retained earnings often exceeds the total value of opportunities for rational investment.⁸⁰ Under such circumstances, the firm may well overinvest or be prodigal in the use of its funds for the sake of internal empire-building, rather than issue the surplus as dividends.

As with GDP calculations, Robin Marris wrote, the bureaucratic culture of the corporation

is likely to divert emphasis from the character of the goods and services produced to the skill with which these activities are organized.... The concept of consumer need disappears, and the only question of interest... is whether a sufficient number of consumers, irrespective of their "real need" can be persuaded to buy [a proposed new product]."⁸¹

The result, as in the calculational chaos of the old Soviet Union, is not that technical progress stops or that production of a kind takes place, but that enormous sums are spent on capital outlays with no reliable way of knowing whether the expenditure was worth it. The large corporation is riddled with the same irrationality and uneven development that plagued the USSR.

Richard Ericson remarked on the ability of communist systems to achieve great feats of engineering without regard to cost:

When the system pursues a few priority objectives, regardless of sacrifices or losses in lower priority areas, those ultimately responsible cannot know whether the success was worth achieving.⁸²

Consider also Hayek's prediction of the uneven development, irrationality, and misallocation of resources within a planned economy:

There is no reason to expect that production would stop, or that the authorities would find difficulty in using all the available resources somehow, or even that output would be permanently lower than it had been before planning started.... [We should expect] the excess development of some lines of production at the expense of others and the use of methods which are inappropriate under the circumstances. We should expect to find overdevelopment of some industries at a cost which was not justified by the importance of their increased output and see unchecked the ambition of the engineer to apply the latest development elsewhere, without considering whether they were economically suited to the situation. In many cases the use of the latest methods of production, which could not have been applied without central planning, would then be a symptom of misuse of resources rather than a proof of success.

As an example he cited "the excellence, from a technological point of view, of some parts of the Russian industrial equipment, which often strikes the casual observer and which is commonly regarded as evidence of success...."⁸³

80 Martin Hellwig, "On the Economics and Politics of Corporate Finance and Corporate Control," in Xavier Vives, ed., *Corporate Governance: Theoretical and Empirical Perspectives* (Cambridge: Cambridge University Press, 2000), pp. 114-115.

81 Quoted in Stein, *Size, Efficiency, and Community Enterprise*, p. 55.

82 Richard Ericson, "The Classical Soviet-Type Economy: Nature of the System and Implications for Reform," *Journal of Economic Perspectives* 5:4 (1991), p. 21.

83 F. A. Hayek, "Socialist Calculation II: The State of the Debate (1935)," in Hayek, *Individualism and Economic Order*

I'd be hard-pressed to find a better description of how capital is allocated under our corporatist economy. Entire categories of goods and production methods have been developed at enormous expense, either within military industry or by state-subsidized R&D in the civilian economy, without regard to cost. Production methods are radically distorted by such subsidies, as well. Economic centralization and capital-intensive, blockbuster production facilities become artificial profitable, thanks to the Interstate Highway System and civil aviation.

What's more, as we shall see shortly, the quotes above on communist central planning also describe the pervasive irrationality *within* the large corporation: management featherbedding and self-dealing; “cost-cutting” measures that hollow out productive resources while leaving management's petty empires intact; the pouring of money down the ratholes of enormous capital projects undertaken primarily for their prestige value; and the tendency to extend bureaucratic domain while cutting maintenance and support for existing obligations. Management's allocation of resources may create use value of a sort—but with no reliable way to assess the opportunity costs or determine whether the benefit was worth it.

The dominant corporate accounting model results, to a large extent, from the imperatives of mass production. The mass production industrial model is based on using extremely expensive, product-specific capital equipment, which in turn requires large batch production to run the machinery at full speed and spread capital amortization costs out over as many units as possible. This means that production is undertaken for the primary purpose of fully utilizing productive capacity and achieving economies of speed, without regard to spontaneous, preexisting demand. The accounting system used within the typical large corporation reflects this requirement.

In Sloanist management accounting, according to William Waddell and Norman Bodek, inventory is counted as an asset “with the same liquidity as cash.” Regardless of whether a current output is needed to fill an order, the producing department sends it to inventory and is credited for it. Under the practice of “overhead absorption,” all overhead costs are fully incorporated into the price of goods “sold” to inventory, at which point they count as an asset on the balance sheet.

With inventory declared to be an asset with the same liquidity as cash, it did not really matter whether the next 'cost center,' department, plant, or division actually needed the output right away in order to consummate one of these paper sales. The producing department put the output into inventory and took credit.⁸⁴

...Expenses go down..., while inventory goes up, simply by moving a skid full of material a few operations down the stream. In fact, expenses can go down and ROI can improve even when the plant pays an overtime premium to work on material that is not needed; or if the plant uses defective material in production and a large percentage of the output from production must be scrapped.⁸⁵

...By defining the creation of inventory, including work-in-process, as a money-making endeavor, any incentive to encourage flow went out the window. The 1950s saw the emergence of warehouses as a logical and necessary adjunct to manufacturing. Prior to that, the manufacturing warehouse was typically a small

(Chicago: University of Chicago Press, 1948), pp. 149-150.

84 William H. Waddell and Norman Bodek, *Rebirth of American Industry: A Study of Lean Management* (Vancouver, WA: PCS Press, 2005), p. 75. The term “Sloanism” refers to the central role of Alfred Sloan and chief accountant Donaldson Brown, first at DuPont and then at General Motors, in formulating the management accounting rules that govern large corporations today.

85 *Ibid.*, p. 140.

shed out behind the plant.... By the 1960s warehouse space often equaled, or exceeded, production space in many plants....⁸⁶

In other words, by the Sloanist accounting principles predominant in American industry, the expenditure of money on inputs is by definition the creation of value. As Waddell described it at his blog,

companies can make a bunch of stuff, assign huge buckets of fixed overhead to it and move those overheads over to the balance sheet, making themselves look more profitable.

Paul Goodman's phrase “great domain of cost-plus” sums it up perfectly. The culture of cost-plus is traditionally associated with the public utility, and (in the brilliant work of Seymour Melman) the military contractor.⁸⁷ The firm is insulated from market competition, and has a guaranteed revenue source, so that it can set its prices on a cost-plus markup basis. There is, accordingly, no incentive to minimize costs. The higher the production cost is padded with waste and featherbedding, the higher the firm can set its prices. This is the cost-maximizing incentive structure that resulted in the Pentagon's notorious \$600 toilet seats. But it prevails as well, in kind if not to quite the same degree, in the large firms in civilian oligopoly markets. The large corporation has a significant portion of its operating costs subsidized by the state, and typically operates with a superfluity of investment capital from retained earnings. It exists in a market of restricted competition in a state-fostered cartel. Not only is most competition in terms of brand image and minor variations in features rather than price, but even the competition in features is limited by the ability of oligopoly firms to collude in rationing technical improvements over time—with the help, of course, of government regulations in limiting the range of competition in product features and quality (remember that Paul Goodman quote about “fixed prices and slowly spooned-out improvements”?).

The very idea of “marginal productivity” is meaningless in such an environment. “Marginal productivity” is defined as the portion which a given expenditure adds to the additional revenue stream which is realized when the product is sold. But in an atmosphere of cost-plus markup, every expenditure on administrative overhead or wastefully allocated capital increases the final price of the good on (at least) a one-to-one basis.

And even if internal bureaucratic waste and overhead *do* have a detrimental effect on productivity and the nominal profit margin, management is the de facto residual claimant and management remuneration is the de facto profit for whose sake the enterprise actually exists. The shareholder, in reality, is at best a contractual claimant with even fewer actionable rights than a bondholder; whether management issues a dividend at all is entirely at their discretion, while they can set their own salaries virtually without limit in mutual logrolling with the Board of Directors. So management may very well choose, entirely rationally, to take a large slice of a small pie in preference to maximizing the size of the whole pie.

It's interesting to consider the parallels between the management accounting system of the typical large American corporation and the old Soviet planned economy. Both equated the using up of inputs to the creation of value. “Selling to inventory,” under standard management accounting rules, is equivalent to the incentive systems for production under a Five-Year Plan: there is no incentive to produce goods that will actually work or be consumed.

⁸⁶ *Ibid.*, p. 97.

⁸⁷ Seymour Melman, *The Permanent War Economy: American Capitalism in Decline* (New York: Simon and Schuster, 1974).

Another parallel between corporate management accounting and state socialism is that the transfer prices assigned to intermediate goods, and credited to the sub-processes that produce them, bear a strong resemblance to the pricing system in the Soviet planned economy.

Ludwig von Mises argued that the Soviet economy could more or less stagger along, without being utterly destroyed by the calculation problem, by assigning prices to producer goods in their economy based on price data from external markets.⁸⁸ Likewise, Murray Rothbard argued, the need for an external market in producer goods was a constraint on the size of a corporation; a monopoly that was vertically integrated to the point that it absorbed all producers of some intermediate good, would face calculational chaos in attempting to rationally allocate inputs of that particular intermediate good.⁸⁹ But Austrian scholar Peter Klein, developing Rothbard's hints regarding potential calculation problems within the large corporation, argued that the existence of any external market at all for an intermediate good was sufficient.⁹⁰ But if this is so, if meaningful calculation simply requires the existence of an outside market as a reference source for establishing internal transfer prices, without prices in that external market necessarily reflecting the spot conditions of supply and demand within the firm, then the Soviet economy stood and fell on the same terms as the American corporation when it came to establishing the prices it used internally based on rough approximations from distant markets.

What's more, there *is* in fact no external market for a large portion of the intermediate goods used in production by the typical large American corporation, because so many product components are unique to a particular company's design. If there is no external market for generic versions of some product component, then its internal transfer price must be established (through the kind of bureaucratic process it's best not to imagine) on some sort of cost-plus basis loosely derived the external market price of the producer goods that the component is made out of (or perhaps that those producer goods are made out of). In 1961 John Menge found that “integral, nonsubstitutable, components of the finished product,” for which no external market existed, amounted to some 65% of intermediate goods.⁹¹ There is no reason to doubt that a significant share of intermediate goods today is similarly product-specific.

A good example comes from Waddell and Bodek: the “price” assigned to each steering wheel produced on an assembly line. It's a product-specific component, a “good” for which there is no competitive external market hence for which no real external market price exists. It's assigned a “price” in a fake internal market. “Credit for that work—it looks like a payment on the manufacturing budget—is given for performing that simple task because it moves money from expenses to assets.”⁹²

Internal Waste in the Production Process

The internal culture of cost-plus markup and lack of cost-minimizing incentives in the typical corporation results in pathological levels of waste production. The Sloanist approach, “batch-and-queue thinking,” entails (as the authors of *Natural Capitalism* put it) optimizing each step of the

88 Ludwig von Mises, *Human Action: A Treatise on Economics*. Third Revised Edition (Chicago: Henry Regnery Company, 1949, 1963, 1966), p. 703.

89 Rothbard, *Man, Economy, and State*, pp. 549, 585.

90 Peter Klein, “Economic Calculation and the Limits of Organization,” *The Review of Austrian Economics* 9:2 (1996), p. 14n.

91 John A. Menge, “The Backward Art of Interdivisional Transfer Pricing,” *The Journal of Industrial Economics* 9:3 (July 1961), pp. 218-225.

92 Waddell and Bodek, *The Rebirth of American Industry*, pp. 89, 92.

production process in isolation, “thereby pessimizing the entire system.”⁹³

The normal Sloanist approach is to adopt the highest-speed, most specialized form of machinery at each individual step of the production process, and then minimize the unit costs of that step by running the machinery at full speed regardless of whether there's a need for it at the next step, and then fill up the warehouse with finished goods without regard to whether there are orders for them. Under the Sloan system, if a machine can be run at a certain speed, it *must* be run at that speed to maximize efficiency. And the only way to increase efficiency is to increase the speed at which individual machines can be run.⁹⁴

American factories frequently have warehouses filled with millions of dollars worth of obsolete inventory, which is still there “to avoid having to reduce profits this quarter by writing it off.” When the corporation finally does have to adjust to reality, the result is costly write-downs of inventory.

....It did not take much of a mathematician to figure out that, if all you really care about is the cost of performing one operation to a part, and you were allowed to make money by doing that single operation as cheaply as possible and then calling the partially complete product an asset, it would be cheaper to make them a bunch at a time.

It stood to reason that spreading set-up costs over many parts was cheaper than having to set-up for just a few even if it meant making more parts than you needed for a long time. It also made sense, if you could make enough parts all at once, to just make them cheaply, and then sort out the bad ones later.

Across the board, batches became the norm because the direct cost of batches was cheap and they could be immediately turned into money—at least as far as Mr. DuPont was concerned—by classifying them as work-in-process inventory.⁹⁵

The Sloan system focuses, exclusively, on labor savings "perceived to be attainable only through faster machines. Never mind that faster machines build inventory faster, as well."⁹⁶ A machine can reduce the labor cost of one step by running at enormous speeds, and yet be out of sync with the overall process.⁹⁷ Large batch operations are completely out of scale to the production process as a whole, and the process isn't geared to actual demand.

Amory Lovins and the other authors of *Natural Capitalism* provide two excellent examples: an overly “efficient” grinding machine at Pratt & Whitney, and a cola bottling machine likewise oversized in relation to its task:

The world's largest maker of jet engines for aircraft had paid \$80 million for a "monument"—state-of-the-art German robotic grinders to make turbine blades. The grinders were wonderfully fast, but their complex computer controls required about as many technicians as the old manual production system had required machinists. Moreover, the fast grinders required supporting processes that were costly and polluting. Since the fast grinders were meant to produce big, uniform batches of product, but Pratt & Whitney needed agile production of small, diverse batches, the twelve fancy grinders were replaced with eight simple ones costing one-fourth as much. Grinding time increased from 3 to 75 minutes, but the throughput time for the entire process decreased from 10 days to 75 minutes because the nasty supporting processes were eliminated. Viewed from the whole-system perspective of the complete production process,

93 Lovins et al., *Natural Capitalism*, pp. 129-30.

94 Waddell and Bodek, *The Rebirth of American Industry*, p. 122.

95 *Ibid.*, p. 98.

96 *Ibid.*, p. 119.

97 Lovins et al., *Natural Capitalism*, pp. 129-30.

not just the grinding step, the big machines had been so fast that they slowed down the process too much, and so automated that they required too many workers. The revised production system, using a high-wage traditional workforce and simple machines, produced \$1 billion of annual value in a single room easily surveyable from a doorway. It cost half as much, worked 100 times faster, cut changeover time from 8 hours to 100 seconds, and would have repaid its conversion costs in a year even if the sophisticated grinders were simply scrapped.⁹⁸

In the cola industry, the problem is “the mismatch between a very small-scale operation—drinking a can of cola—and a very large-scale one, producing it.” The most “efficient” large-scale bottling machine creates enormous batches that are out of scale with the distribution system, and result in higher unit costs overall than would modest-sized local machines that could immediately scale production to demand-pull. The reason is the excess inventories that glut the system, and the “pervasive costs and losses of handling, transport, and storage between all the elephantine parts of the production process.” As a result, “the giant cola-canning machine may well cost *more* per delivered can than a small, slow, unsophisticated machine that produces the cans of cola locally and immediately on receiving an order from the retailer.”⁹⁹

The result of this production model is a huge amount of what Taichi Ohno called *muda* (“any human activity which absorbs resources but creates no value”):

mistakes which require rectification, production of items no one wants so that inventories and remaindered goods pile up, processing steps which aren't actually needed, movement of employees and transport of goods from one place to another without any purpose, groups of people in a downstream activity standing around waiting because an upstream activity has not delivered on time, and goods and services which don't meet the needs of the customer.¹⁰⁰

And the effect of these inventories on cost is enormous. In the garment industry, making to forecast rather than to order, and maintaining large enough inventory to avoid idle machines, is estimated to account for some 25% of retail price.¹⁰¹ That means your clothes cost about a third more because of the “efficiencies” of Sloanist mass production.

Muda includes, besides in-process and finished inventory produced without regard to demand, waste inputs of all kind which result from the perverse cost-maximizing incentives entailed in Sloanist accounting. This culture of cost-plus markup, which incorporates the full cost of all inputs used into the artificial transfer price of a good “sold” to inventory, results—to repeat—in the same incentives that gave us that \$600 toilet seat. Because wasteful capital outlays and administrative costs go to general overhead, and are absorbed in the price of goods “sold” to inventory, there is no real incentive to reduce them.

All this falls under Lloyd Dumas' heading of neutral, unproductive activity, which we examined at the outset of this article.

To a large extent, the proliferation of “neutral activity” and other forms of internal waste results from the calculational chaos that prevails under state capitalism.

98 *Ibid.*, pp. 128-129.

99 *Ibid.*, p. 129.

100 James Womack and Daniel Jones, *Lean Thinking: Banish Waste and Create Wealth in Your Corporation* (Simon & Schuster, 1996).

101 Raphael Kaplinsky, “From Mass Production to Flexible Specialization: A Case Study of Microeconomic Change in a Semi-Industrialized Economy,” *World Development* 22:3 (March 1994), p. 346.

The large corporation exists in an external economic environment of restricted competition, with reduced pressures for efficiency. Its internal incentive structure is governed primarily by bureaucratic empire-building and managerial self-dealing rather than traditional market standards of efficiency. To the extent that there are pressures for cost cutting at all, they are skewed by a management accounting system that (as we saw above) exempts senior management salaries and new capital expenditures from the category of costs, and an incentive structure that encourages hollowing out long-term productivity for the sake of making the short-term numbers.

Coupled with an insulation from competitive pressure to minimize costs, the general environment of centralization, irrationality and stove-piping results in an enormous waste of inputs from poor product and systems design.

One example is the lack of whole-systems thinking” in product design, as well as the design of production processes. Sloanist management accounting tends to cost components in isolation and maximize the efficiency of each stage of production in isolation, even when the effect of the separate “cheaper” components and processes working in combination is an increase in overall costs.

*Optimizing components in isolation tends to pessimize the whole system—and hence the bottom line. You can actually make a system less efficient while making each of its parts more efficient, simply by not properly linking up those components. If they're not designed to work with one another, they'll tend to work against one another.*¹⁰²

Stovepiped corporate bureaucracies are apt to follow a design process where each part of a system is designed in isolation by someone whose relation to the whole is mediated by a bureaucratic hierarchy. In building design, this is the process in which each design specialist “tosses the drawings over the transom” to the next specialist, and all the individual specialists' designs are eventually “integrated, sometimes simply by using a stapler.”¹⁰³

This approach inevitably results in higher costs, because increased efficiencies of a single step taken in isolation generally *are* governed by a law of increased costs and diminishing returns. Thicker insulation, better windows, etc., cost more than their conventional counterparts. Lighter materials and more efficient engines for a car, similarly, cost more than conventional components. So optimizing the efficiency of each step in isolation follows a rising cost curve, with each marginal improvement in efficiency of the step costing more than the last.

Such stovepiped bureaucracies, especially with the perverse incentives presented by Sloanist accounting and the culture of cost-plus markup, are unable to capitalize on the kinds of whole-systems efficiencies Amory Lovins et al in *Natural Capitalism* call “tunneling through the cost barrier.” More efficient individual components, in isolation, do cost more than their conventional counterparts. But when the entire system is designed with a view to the savings the more efficient component makes possible in the system as a whole, the total cost may be dramatically less. Passive solar design, more efficient windows and more insulation may cost more than conventional building design; and the same may be true for more efficient light-bulbs. But if the choice of heating and cooling system takes such considerations into account, the radical reduction in heating and cooling expenditures may more than offset the costs of increased efficiency. A building with good passive solar heating and cooling design may require no central heat or air conditioning at all.

¹⁰² Lovins et al, *Natural Capitalism*, p. 117.

¹⁰³ *Ibid.*, p. 90.

Such efficiencies simply require “doing the right things in the right order,” and taking each step with a view not only to its efficiency in isolation but also to its effect on the efficiency of the entire system. A good example is Jan Schilham's pumping system design for a carpet factory in Shanghai. The typical factory takes the layout of machines as given, and then runs pipes between them as an afterthought.

...First, Schilham chose to deploy big pipes and small pumps instead of the original design's small pipes and big pumps. Friction falls as nearly the fifth power of pipe diameter, so making the pipes 50 percent fatter reduces their friction by 86 percent. The system needs less pumping energy—and smaller pumps and motors to push against the friction. If the solution is this easy, why weren't the pipes originally specified to be big enough? ...Traditional optimization compares the cost of fatter pipe with only the value of the saved *pumping energy*. This comparison ignores the size, and hence the capital cost, of the [pumping] *equipment* needed to combat the pipe friction. Schilham found he needn't calculate how quickly the savings would repay the extra up-front cost of the fatter pipe, because capital cost would fall more for the pumping and drive equipment than it would rise for the pipe, making the efficient system as a whole cheaper to construct.

Second, Schilham laid out the pipes first and *then* installed the equipment, in reverse order from how pumping systems are conventionally installed. Normally, equipment is put in some convenient and arbitrary spot, and the pipe fitter is then instructed to connect point A to point B. the pipe often has to go through all sorts of twists and turns to hook up equipment that's too far apart, turned the wrong way, mounted at the wrong height, and separated by other devices installed in between....

By laying out the pipes before placing the equipment that the pipes connect, Schilham was able to make the pipes short and straight rather than long and crooked. That enabled him to exploit their lower friction by making the pumps, motors, inverters and electricals even smaller and cheaper.

The fatter pipes and cleaner layout yielded not only 92 percent lower pumping energy at a lower capital cost but also simpler and faster construction, less use of floor space, more reliable operation, easier maintenance, and better performance. As an added bonus, easier thermal insulation of the straighter pipes saved an additional 70 kilowatts of heat loss....¹⁰⁴

Doing the right things in the right order entails, in the design process, what the authors of *Natural Capitalism* call “downstream-to-upstream thinking”:

For example, if you're going to retrofit your lights and your air conditioner, do the lights first so you can make the air conditioner smaller. If you did the opposite, you'd pay for more cooling capacity than you'd need after the lighting retrofit, and you'd also make the air conditioner less efficient because it would either run at part-load or cycle on and off too much.¹⁰⁵

But the typical corporate bureaucracy militates against such considerations. It creates enormously wasteful designs because it is institutionally structured to make such an approach almost impossible. Corporate bureaucracies optimize each step and each component in isolation, more often than not creating costly inefficiencies in the system as a whole.

Poor overall design may lead to an order of magnitude increase in infrastructure costs. The general rule is that most costs come from a small percentage of point consumption needs, and from scaling the capacity of the load-bearing infrastructure to cover the additional twenty percent instead of just handling the first eighty percent. Examples include the costly automobile horsepower added to handle

104 *Ibid.*, pp. 116-117.

105 *Ibid.*, p. 122.

infrequent acceleration, and scaling a central heating system's capacity to handle needs that could be met by using space heaters on a spot basis. Getting production out of sync with demand (including the downstream demand for the output of one step in a process), either spatially or temporally, also creates inefficiencies. Optimizing one stage without regard to production flow and downstream demand usually involves expensive infrastructure to get an in-process input from one stage to another, often with intermediate storage while it is awaiting a need. The total resulting infrastructure cost greatly exceeds the saving at individual steps. Inefficient synchronization of sequential steps in any process results in bloated overhead costs from additional storage and handling infrastructure.

The problem is compounded by another distorting effect of the standard corporate accounting system: the failure to treat savings from efficiency as equivalent to other returns on investment. Corporations typically make purchases based entirely on the lowest initial cost, without making an apples-to-apples comparison of multi-year increased efficiency paybacks to other forms of return. Management seldom even considers an investment in increased efficiency with a longer than two-year payback, and frequently demands a payback period of less than six months to even consider an outlay on increased efficiency.

Most corporate officers are so so immersed in discounted-cash-flow measures of profitability that they don't know how to translate between their own financial language and the engineers' language of simple payback. They therefore may not realize that a 1.9 year simple payback is equivalent to a 71 percent real after-tax rate of return per year, or around *six times* the cost of additional capital.¹⁰⁶

Unfortunately, in this case as well, the corporation usually exists in an environment—a cartelized market shared by “competitors” with similar organizational cultures and operating assumptions—where environmental pressures to overcome such irrationality are minimal.

The overhead costs of excess production capacity should also count as a form of waste. The resources devoted to excess industrial capacity, thanks to state-subsidized overaccumulation, inflate commodity prices. The standard practice, among oligopoly industries, of running at 75- 80% of capacity and passing the cost of idle capacity on to the consumer, adds greatly to the price.¹⁰⁷ In farming, holding land out of use for price support or “conservation” subsidies is a lucrative real estate investment, which simultaneously adds to the social cost (albeit concealed in taxes) of corporate farm produce, and makes land artificially scarce and expensive for the small producer.

Ultimately, cost-plus comes to define an entire organizational style based on wasted inputs, hamstringing rules and endless layers of self-aggrandizing bureaucracy. Paul Goodman described this organizational style—which tends to become hegemonic in state capitalist society—at length in *People or Personnel*.

In a lengthy chapter titled “Comparative Costs,” Goodman contrasted two organizational styles (Categories A and B), which he describes respectively as “enterprises extrinsically motivated and interlocked with the other centralized systems,” and “enterprises intrinsically motivated and tailored to the concrete product or service.”¹⁰⁸ In the former, Goodman wrote elsewhere, there is a “need for amounts of capital out of proportion to the nature of the enterprise.”¹⁰⁹ Category A and Category B each contains both for-profit and not-for-profit organizations, including some which are superficially

106 *Ibid.*, pp. 266-268.

107 Dowd, *The Waste of Nations*, pp. 67-68.

108 Goodman, *People or Personnel*, pp. 114-115.

109 *Ibid.* p. 88.

“progressive” or “countercultural.”

When it comes to organizational style, the regulatory agency and union don't act—as per Galbraith's schema in *American Capitalism*—as “countervailing powers.” Rather, the big corporation, the big regulatory agency, the big union, the big charitable foundation or university or think tank, act together in interlocking complexes characterized by limited cost competition, cost-plus markup culture, and high bureaucratic overhead and waste. These coalitions of high-overhead organizations, whether the military-industrial complex, the coalition of government corporate, and university R&D efforts, or “the alliance of promoters, contractors, and government in Urban Renewal,” constitute “the great domain of cost-plus.”¹¹⁰

...What swell the costs in enterprises carried on in the interlocking centralized systems of society, whether commercial, official, or non-profit institutional, are all the factors of organization, procedure, and motivation that are not directly determined to the function and to the desire to perform it. These are patents and rents, fixed prices, union scales, featherbedding, fringe benefits, status salaries, expense accounts, proliferating administration, paper work, permanent overhead, public relations and promotion, waste of time and sill by departmentalizing task-roles, bureaucratic thinking that is penny-wise and pound-foolish, inflexible procedure and tight scheduling that exaggerate contingencies and overtime.

But when enterprises can be carried on autonomously by professionals, artists, and workmen intrinsically committed to the job, there are economies all along the line. People make do on means. They spend on value, not convention. They flexibly improvise procedures as opportunity presents and they step in in emergencies. They do not watch the clock. The available skills of each person are put to use. They eschew status and in a pinch accept subsistence wages. Administration and overhead are *ad hoc*. The task is likely to be seen in its essence rather than abstractly.¹¹¹

In the same chapter, Goodman provided several case studies contrasting the two styles: a large corporate radio station versus a non-profit run by university students; the Peace Corps versus the American Friends Service Committee; a conventional university versus Black Mountain College.¹¹² Closer to home, the reader need only consider the extent to which per pupil spending in the local public school system is swollen by the number and size of administrative salaries, the need to purchase large centrally located blocks of real estate, and insistence on the use of monumental (not to say totalitarian) architecture specially designed for the purpose, with all sorts of bureaucratic rules limiting discretion in the use of cheap local materials and vernacular techniques. Goodman proposed a cooperative prep school with a sample budget, and came up with only about a third the cost of the typical high school's per pupil expenditure.¹¹³ Indeed, anyone undertaking such a thought experiment will be hard pressed to come up any means (short of installing solid gold toilets and then flushing money down them) of absorbing the money budgeted per pupil in the public schools.

“Everywhere one turns...,” Goodman wrote, “there seems to be a markup of 300 and 400 percent, to do anything or make anything.”¹¹⁴ And paradoxically, the more “efficiently” an organization is run, “the more expensive it is per unit of net value, if we take into account the total social labor involved, both the overt and the covert overhead.”¹¹⁵ That last sentence might serve as a motto for lean production's critique of overly “efficient” machines operating out of sync with the production process.

110 *Ibid.* p. 115

111 *Ibid.* p. 113.

112 *Ibid.*, pp. 102-111.

113 *Ibid.* p. 105.

114 *Ibid.*, p. 120.

115 Goodman, *The Community of Scholars*, in *Compulsory Miseducation and The Community of Scholars*, p. 241.

Goodman pointed to countries where the official GDP is one fourth that of the U.S., and yet “these unaffluent people do not seem four times ‘worse off’ than we, or hardly worse off at all.”¹¹⁶ The cause lies in the increasing portion of GDP that goes to support and overhead, rather than direct consumption. Most of the costs do not follow from the technical requirements of producing direct consumption goods themselves, but from the mandated institutional structures for producing and consuming them.

It is important to notice how much the various expensive products and services of corporations and government make people subject to repairmen, fees, commuting, queues, unnecessary work, dressing just for the job; and these things often prevent satisfaction altogether.¹¹⁷

A related phenomenon is what Kenneth Boulding called the "non-proportional change" principle of structural development: the larger an institution grows, the larger the proportion of resources that must be devoted to secondary, infrastructure and support functions rather than the actual primary function of the institution. “As any structure grows, the proportions of the parts and of its significant variables *cannot* remain constant.... This is because a uniform increase in the linear dimensions of a structure will increase all its areas as the square, and its volume as the cube, of the increase in the linear dimension....”¹¹⁸

Leopold Kohr gave the example of a skyscraper: the taller the building, the larger the percentage of floorspace that must taken up with elevator shafts and stairwells, heating and cooling ducts, and so forth. Eventually, the building reaches the point where the space on the last floor added will be cancelled out by the increased space required for support structures. This is hardly theoretical: Kohr cited a \$25 billion increase in GNP in the 1960s, \$18 billion (or 72%) of which went to administrative and support costs of various sorts.¹¹⁹

One reason for the higher cost of the bureaucratic, hierarchical organization is its Weberian work rules and formalized procedures for approving even the simplest actions. The reason for such constraints on individual initiative and judgment—the initiative and judgment of those who know the work and are the best judges of the efficiency of alternative courses of action—is that the organization is not a vehicle for cooperation between those working for themselves. The individual work, rather, is for ends which are given by the organization.

Hence those at the top of the pyramid have an obsessive need to render the organization below them transparent, and to head off any agency problems or conflicts of interests between the individual worker and the organization. The leadership must intervene in situations it is not in direct contact with, establish inflexible standardized procedures for dealing with situations it cannot anticipate, and second-guess and hamstring those best equipped to analyze the situation. It must do so because, by the very nature of hierarchy, the organization exists to shift costs and responsibility downward while shifting authority and rewards upward. Anyone who has worked in a hospital where patient care staff is ruthlessly downsized in the name of “finding efficiencies and cost-savings,” while the hospital saturates the work environment with posters, slogans, and official happy talk about “extraordinary patient care” (and while the CEO's \$3 million salary is oddly exempted from the list of potential cost efficiencies) can attest to this.

116 Goodman, *People or Personnel*, p. 120.

117 *Ibid.*, p. 117.

118 Kenneth Boulding, *Beyond Economics* (Ann Arbor: University of Michigan Press, 1968), p. 75.

119 Kohr, *The Overdeveloped Nations: The Diseconomies of Scale* (New York: Schocken Books, 1978, 1979), pp. 36-37.

Because the organization cannot trust the initiative of people it has every reason to suspect do not identify with the goals of the organization or its leadership, it is forced to resort to an endless series of unworkable expedients for rendering the activity of subordinates transparent and to constrain their freedom of action to prevent it being used in ways that might hurt the interest of the leadership.

In the hospital, this means a snowballing proliferation of new paperwork, with the constant addition of new tracking forms to verify that nurses have complied with organizational policy and carried out all tasks as assigned. The problem is that, while the proliferation of such forms reflects a distrust of nurses' willingness to conform to organizational policy, it also necessarily depends on the implicit assumption that they can be trusted to fill out the forms truthfully.

The need to impose constraints on freedom of action, and to impede individual initiative in directly adopting the most common-sense and lowest-cost solutions to immediate problems, is described by Paul Goodman:

...the government Peace Corps is many times as expensive as similar less official operations largely because an errant twenty-year-old well-digger might become an International Incident, so one cannot be too careful in selecting him. Convenience of supervision overrides performance. And the more "objective" the better. If the punch card [i.e. computer punch card—this was the mid-1960s] approves, no one is guilty. To bureaucrats, a fatal hallmark of decentralist enterprises is their variety in procedure and persons; how can one *know*, with a percentage validity, that these methods and persons are *right*?¹²⁰

Every new layer of paperwork is added to address the perceived problem that stuff isn't getting done the way management wants, despite the proliferation of paperwork saying everything's being done exactly according to orders. But none of the paperwork can solve the basic problem: management's inability to get inside its subordinates' heads and look through their eyes. So the organization is buried under ever greater amounts of falsified paperwork, like the Soviet industrial ministry which was reassured by all the incoming local paperwork that a new factory had been built according to plan and was busily meeting its production quotas—even as the "factory" consisted of a bare concrete foundation and a guard shack, while all the building materials had been sold off by corrupt ministerial bureaucrats who bribed inspectors to overlook the falsified paperwork.

The result is a world which is hard to distinguish from such parodies as "The Feds" in Neal Stephenson's *Snow Crash*, or *Brazil's* Ministry of Central Services in which one cannot replace a blown fuse without a Form 27-B. The problem of replacing a door catch in the New York public school system, which suggests "Form 27-B" was hardly even a parody, is a good example:

...To remove a door catch that hampers the use of a lavatory requires a long appeal through headquarters, because it is "city property." ...

...An old-fashioned type of hardware is specified for all new buildings, that is kept in production only for the New York school system.¹²¹

When the social means are tied up in such complicated organizations, it becomes extraordinarily difficult and sometimes impossible to do a simple thing directly, even though the doing is common sense and would meet with universal approval, as when neither the child, nor the parent, nor the janitor, nor the principal of the school can remove the offending door catch.¹²²

120 Goodman, *People or Personnel*, p. 19.

121 *Ibid.* p. 52.

122 *Ibid.* p. 88.

I've seen the phenomenon at work in the hospital that employs me, in the procurement of toilet paper dispensers. A plastic-housed Georgia-Pacific dispenser, which sells for over \$20 and whose design makes it almost impossible to turn the roll or to get paper without breaking one's wrist, couldn't be any worse if it were deliberately designed to be worthless for its intended use. Meanwhile, a fully functional toilet paper spool could probably be bought from the local hardware store for under a dollar. The Georgia-Pacific monstrosity is designed by a stovepiped engineering bureaucracy which is completely insulated from user feedback, and purchased by a procurement bureaucracy primarily concerned with serving its own bureaucratic ends, for the use of a captive clientele who are unlikely to take their business elsewhere. It's a lot like the collusion between military procurement officers and military contractors in falsifying tests of faulty weapons, and leaving the troops to die until the bugs are worked out in combat, in other words.

The organizational style of cost-plus permeates not only the whole range of large organizations, but comes to contaminate even smaller organizations. Never mind that "status salaries and expense accounts are equally prevalent, excessive administration and overhead are often more prevalent, and there is less pressure to trim costs"¹²³ in GM or in the Red Cross and United Way. Even a local credit union or a natural foods co-op with a few dozen employees is apt to have a Mission Statement, a complex of rules second-guessing the judgment (and hence hampering the productivity) of those actually engaged in the work, and a comparatively high-salaried CEO whose resume is padded with a long list of the previous credit unions or co-ops where she busily absorbed the conventional organizational culture before she arrived with carpetbags at her present position.

External Waste from Marketing and Planned Obsolescence

The imperative of running machinery at full speed, without regard to demand, results in all kinds of waste within the production process. Maximizing the output of each individual machine without regard to downstream demand results in enormous stocks of in-process inventory. Maximizing the output of the factory as a whole, by undertaking production that's not driven by orders, results in warehouses full of inventory. And the Sloanist accounting system, by counting the consumption of inputs as the creation of imaginary "value" to be sold to inventory, provides the same perverse cost-maximizing incentives that prevail among Pentagon contractors and public utilities.

But the same imperative also results in enormous wastes in society at large. Undertaking production to maximize the utilization of capacity, without regard to preexisting demand, requires the costly exertion of power over external society to guarantee a market for what is produced.

The result is a "supply-push" distribution model, in which the costs of distribution and marketing rise astronomically compared to the costs of production.

Ralph Borsodi's book *The Distribution Age* was an elaboration of the fact that, as he stated in the Preface, production costs fell by perhaps a fifth between 1870 and 1920, even as the cost of marketing and distribution nearly tripled.¹²⁴ The modest reduction in unit production cost was more than offset by the increased costs of distribution and high-pressure marketing. "[E]very part of our economic structure," he wrote, was "being strained by the strenuous effort to market profitably what modern

123 *Ibid.* p. 115.

124 Ralph Borsodi, *The Distribution Age* (New York and London: D. Appleton and Company, 1929), p. v.

industry can produce.”¹²⁵

Supply-push distribution and high-pressure marketing carry enormous costs. According to Borsodi, over a couple of decades around the turn of the 20th century the majority of groceries bought by consumers shifted from bulk commodities to packaged brand-name goods. Before the change, almost all flour, oatmeal, and the like were generic; production was driven by retailers' orders, as they depleted their storage bins in response to spontaneous customer demand.¹²⁶ The only real marketing cost, by the producers of bulk commodities, was in convincing grocers that they sold a better grade of the commodity than their competitors. There was no direct marketing to the consumer, as with brand-name goods; the customer simply decided how much flour she needed and asked the grocer for it.

Under the new "push" system, the producers appealed directly to the consumer through brand-name advertising, and relied on pressure on the grocer to create demand for what they chose to produce. Brand loyalty helps to stabilize demand for a particular manufacturer's product, and eliminate the fluctuation of demand that accompanies price competition in pure commodities.

It is possible to roughly classify a manufacturer as belonging either to those who "make" products to meet requirements of the market, or as belonging to those who "distribute" brands which they decide to make. The manufacturer in the first class relies upon the natural demand for his product to absorb his output. He relies upon competition among wholesalers and retailers in maintaining attractive stocks to absorb his production. The manufacturer in the second class creates a demand for his brand and forces wholesalers and retailers to buy and "stock" it. In order to market what he has decided to manufacture, he figuratively has to make water run uphill.¹²⁷

The problem was that the consumer paid about four times as much for trademarked flour, sugar, etc., as she had paid for bulk goods under the old "inefficient" system.¹²⁸ In Paul Goodman's words, "What we have in America is a complex system of semi-competition with several-times-duplicated capital, charging a high fixed price for rather trivial variety."¹²⁹

The reason is fairly straightforward. Distribution costs are far lower under a demand-pull regime, in which production is geared to demand. As Borsodi argued,

...[I]t is still a fact... that the factory which sells only in its natural field because that is where it can serve best, meets little sales-resistance in marketing through the normal channels of distribution. The consumers of such a factory are so "close" to the manufacturer, their relations are so intimate, that buying from that factory has the force of tradition. Such a factory can make shipment promptly; it can adjust its production to the peculiarities of its territory, and it can make adjustments with its customers more intelligently than factories which are situated at a great distance. High pressure methods of distribution do not seem tempting to such a factory. They do not tempt it for the very good reason that such a factory has no problem to which high pressure distribution offers a solution.

It is the factory which has decided to produce trade-marked, uniform, packaged, individualized, and nationally advertised products, and which has to establish itself in the national market by persuading distributors to pay a higher than normal price for its brand, which has had to turn to high pressure distribution. Such a factory has a selling problem of a very different nature from that of factories which are

125 *Ibid.*, p. 4.

126 *Ibid.*, pp. 217, 228.

127 *Ibid.*, p. 110.

128 Quoted in *Ibid.*, pp. 160-61.

129 Goodman, *People or Personnel*, p. 141.

content to sell only where and to whom they can sell most efficiently.¹³⁰

For those whose low overhead permits them to produce in response to consumer demand, marketing is relatively cheap. Rather than expending enormous effort to make people buy their product, they can just fill the orders that come in. When demand for the product must be created, the effort (to repeat Borsodi's metaphor) is comparable to that of making water run uphill. Mass advertising is only a small part of it. Even more costly is direct mail advertising and door-to-door canvassing by salesmen to pressure grocers in a new market to stock one's goods, and canvassing of grocers themselves by sales reps.¹³¹ The costs of advertising, packaging, brand differentiation, etc., are all costs of overcoming sales resistance that only exist because production is divorced from demand rather than driven by it.

Douglas Dowd, chronicling (as we saw above) the expenditure of resources on distribution and marketing since Borsodi's time, points to an immensity of accumulated waste.¹³² This is especially true of the wastes associated with push distribution: planned obsolescence, excessive marketing costs, brand-name markups, etc.¹³³

Planned obsolescence often severely shortens product lifetime with no appreciable reduction in product cost. Products are deliberately designed to thwart repair and encourage replacement, often relying on "intellectual property" to restrict access to replacement parts.

The amount of wasted resources and crystallized labor embodied in the mushrooming cost of marketing, the "warehouses on wheels," and the mountains of discarded goods in the landfills that could have been repaired for a tiny fraction of the cost of replacing them, easily outweigh the savings in unit costs from mass production itself. The cost savings from mass production are more than offset by the costs of mass distribution.

Waste Sectors of the Economy

As we already saw above, mass production requires running machinery at full speed to minimize unit costs, without regard to preexisting demand. This large batch production model carries with it, in turn, the imperative of controlling the outside society to guarantee demand for the product, so the economy is not glutted with unsold inventory. This is accomplished, in part, by the mechanisms of push distribution we saw above: high-pressure marketing and planned obsolescence.

It is accomplished as well, at the macro level, by the existence of entire sectors of the economy whose primary function is to absorb surplus capital and production capacity.

Government has intervened (and continues to intervene) directly to alleviate the problem of overproduction, by its increasing practice of directly purchasing the corporate economy's surplus output—through Keynesian fiscal policy, massive highway and civil aviation programs, the military-industrial complex, the prison-industrial complex, foreign aid, and so forth. Baran and Sweezy point to the government's rising share of GDP as "an approximate index of the extent to which government's role as

¹³⁰ Borsodi, *The Distribution Age*, pp. 112-113.

¹³¹ *Ibid.*, p. 136.

¹³² He estimates the U.S. GDP would have been 49% higher in 1980 without the enumerated forms of waste. Douglas Dowd, *The Waste of Nations: Dysfunction in the World Economy* (Boulder and London: Westview Press, 1989), p. 65.

¹³³ *Ibid.*, pp. 64-65.

a creator of effective demand and absorber of surplus has grown during the monopoly capitalist era.”¹³⁴

If the depressive effects of growing monopoly had operated unchecked, the United States economy would have entered a period of stagnation long before the end of the nineteenth century, and it is unlikely that capitalism could have survived into the second half of the twentieth century. What, then, were the powerful external stimuli which offset these depressive effects and enabled the economy to grow fairly rapidly during the later decades of the nineteenth century and, with significant interruptions, during the first two thirds of the twentieth century? In our judgment, they are of two kinds which we classify as (1) epoch-making innovations, and (2) wars and their aftermaths.

By “epoch-making innovations,” Baran and Sweezy meant “those innovations which shake up the entire pattern of the economy and hence create vast investment outlets in addition to the capital which they directly absorb.”¹³⁵

The increased total share of GDP occupied by government spending, to a large extent, tracks the share of total productive capacity for whose output there would be no demand if the state did not either directly purchase it or subsidize its purchase. It's hardly an exaggeration to say that, for things like military spending and superhighways, doing things less efficiently is a virtue; the whole point of them is to soak up surplus productive capacity for which there would be no use in an efficiently organized economy.

Military production occupies industrial capacity that would otherwise be idle. Subsidies to the automobile-highway complex, by turning the car into a necessity, prevent the shutdown of assembly lines in Detroit that would result from a society where most people lived within easy walking, bicycling or public transit distance of where they worked and shopped.

Perhaps the most costly form of government intervention to absorb surplus capital and output is imperialism and the wars associated with it. From the Depression of the 1890s on, corporate elites perceived the economy as chronically tending toward overproduction and overinvestment, and government action as necessary to counter these tendencies. The rise of American imperialism in the 1890s was explicitly tied to the imperative of forcibly opening up foreign markets to American goods, and creating an open field for American goods and American capital investment has been the centerpiece of American foreign policy from the Open Door Policy to the Bretton Woods agencies and the WTO.

The imperative of integrating the markets of foreign countries into a global corporate economy was behind the imperial rivalry that led to war with Japan; American foreign policy was explicitly formulated around the goal of keeping open a “Grand Area” of foreign markets and resources in the face of attempts at regional autarky by Fortress Europe and the Greater East Asian Co-Prosperity Sphere.¹³⁶ And the postwar system, with the U.S. as military guarantor, was aimed at preventing another would-be autarkic power like the Soviet Union from withdrawing a significant part of the world's markets from the global corporate economy. The cost of World War II and the cost of the permanent military-industrial complex we have had ever since can, therefore, be subsumed under this

¹³⁴ Baran and Sweezy, *Monopoly Capitalism*, pp. 146-147.

¹³⁵ *Ibid.*, p. 219.

¹³⁶ See Carson, *Organization Theory: A Libertarian Perspective* (Booksurge, 2008), pp. 94-95. My chief source is a magisterial study, based on extensive use of declassified State Department documents, by Laurence Shoup and William Minter: “Shaping a New World Order: The Council on Foreign Relations' Blueprint for World Hegemony, 1939-1945,” in Holly Sklar, ed., *Trilateralism: The Trilateral Commission and Elite Planning for World Management* (Boston: South End Press, 1980), pp. 135-156.

heading.

And of course the wars themselves have served an important purpose in soaking up surplus capital and productive capacity. In the words of Emmanuel Goldstein: "Even when weapons of war are not actually destroyed, their manufacture is still a convenient way of expending labor power without producing anything that can be consumed." War is a way of "shattering to pieces, or pouring into the stratosphere, or sinking in the depths of the sea," excess output and capital.¹³⁷

As David Bazelon put it: "Why is war so wonderful? Because it creates artificial demand ... the only kind of artificial demand, moreover, that does not raise any political issues: war, and only war, solves the problem of inventory."¹³⁸

"Not Enough Work"

Proposals to eliminate waste production frequently meet with the objection that something called "the economy" would be hurt, or that there wouldn't be enough "jobs." The argument, as stated by Dumas: "A society that does not generate waste in the form of planned obsolescence, or neutral or distractive activities, cannot, it is commonly argued, generate sufficient paid work opportunities to keep the labor force fully employed."¹³⁹ Or as stated in George Meany's complaint that labor-saving technologies were "rapidly becoming a curse to this society... in a mad rush to produce more and more with less and less labor, and without feeling [as to] what it may mean to the economy as a whole."¹⁴⁰

Of course this is nonsense. Labor-saving technology is not a curse when the subsistence farmer manages to feed himself with less work. It becomes a curse only when the link between work and consumption is broken, when either work or its product becomes maldistributed. Dumas showed why Meany's complaint was nonsense.¹⁴¹

The key here lies in the word "sufficient." To be sufficient the paid work opportunities need only supply enough income to satisfy the material needs and wants of the population, given the availability of goods and services for which no income is necessary. In the hypothetical purely wasteless economy, that means the workers must earn only enough income to supply them with the nondurable goods and services for which they must pay, plus any required or desired increase in their stock of durable goods. But once they have obtained access to a durable good, whether by purchase, gift, or inheritance, they need only enough income to cover the costs of its operation and maintenance.... So although there is less paid work *available* because durable goods are not built to become artificially obsolete or to fall apart, for exactly the same reason there is also less paid work *needed* by workers in order to achieve a given material standard of living. Accordingly, the permanence of durable goods may reduce the volume of paid activity, but it does not reduce the material well-being of the work force.¹⁴²

The only point of a job is consumption, and what matters is the ratio of effort to consumption. The problem is not that productivity gains reduce the need for labor, but that—thanks to a set of artificial property rights enforced by the state—the benefits of those productivity are “enclosed” and capitalized

137 George Orwell, 1984. Signet Classics reprint (New York: Harcourt Brace Jovanovich, 1949, 1981), p. 157.

138 David T. Bazelon, "The Politics of the Paper Economy," *Commentary* (November 1962), p. 409.

139 Dumas, *The Overburdened Economy*, p. 75.

140 Jeremy Rifkin, *The Future of Work: The Decline of the Global Labor Force and the Dawn of the Post- Market Era* (New York: G. P. Putnam's Sons, 1995), pp. 84-85.

141 Dumas, *The Overburdened Economy*, pp. 46-47, 70-76.

142 *Ibid.*, pp. 75-76.

as rents by a privileged class. The average worker must perform the equivalent of twenty hours digging holes and filling them in, in addition to twenty hours of productive labor, to pay for the actual twenty hours' worth of use-value he consumes. And the price of that twenty hours' worth of use value has embedded in it the cost of another twenty hours of unproductive labor. These things result from the divorce of effort from consumption, and the maldistribution of claims on the worker's labor product.

The solution, therefore, is not a demand-side program to combat the superfluity of investment capital by artificially raising the amount of capital that must be wastefully expended per unit of output, or to promote waste production through planned obsolescence and other forms of inefficiency so that the entire population can be guaranteed a forty-hour week digging holes and filling them back in again.

The solution, rather, is to allow radical deflation to happen—but to let workers reap the gains from it. Rather than maintaining the labor hours needed to provide the purchasing power to consume present levels of output at their rent-inflated prices, we should reduce the number of hours required to earn the purchasing power to consume those levels of output. That means eliminating all the forms of government intervention that prop up artificial scarcity rents and rents on artificial property, and allow unfettered competition to strip them from the price of goods and services. It means eliminating all regulatory barriers to meeting as many of our consumption needs as possible outside the wage economy, through self-provisioning or production for barter in the informal and household sector. And it means a reduction in the average work week to distribute the remaining hours of wage labor evenly throughout the population.

In practical terms, I suggest the following tentative agenda as a basis for discussion:

- * Eliminate “intellectual property” as a source of scarcity rents in informational and cultural goods, and embedded rents on patents as a component of the price of manufactured goods.
- * End local business licensing, zoning laws, and spurious “safety” and “health” codes insofar as they prohibit operating microenterprises out of family residences, or impose arbitrary capital outlays and overhead on such microenterprises by mandating more expensive equipment than the nature of the case requires.
- * End local building codes whose main effect is to lock in conventional building techniques used by established contractors, and to criminalize innovative practices like the use of new low-cost building techniques and cheap vernacular materials.
- * End occupational licensing, or at least end artificial restrictions on the number of licenses granted and licensing fees greater than necessary to fund the costs of administration.
- * End government policies aimed at propping up asset prices, allowing the real estate bubble to finish popping.
- * Increase work-sharing and shorten work weeks to evenly distribute the amount of necessary work that remains. Absent artificial scarcity rents to disrupt the link between effort and consumption, I believe the average individual share of available work would provide sufficient income to purchase a comfortable standard of living.
- * Decouple the social safety net from both wage employment and the welfare state through an increase in extended family or multi-family income-pooling arrangements, cohousing projects, urban communes, etc.; expand mutuals (of the kind described by Kropotkin, E.P. Thompson, and Colin Ward) as mechanisms for pooling cost and risk.

* Shift consumption, wherever feasible, from the purchase of store goods with wage income, to subsistence production or production for barter in the household economy using home workshops, sewing machines, ordinary kitchen food prep equipment, etc.

* Expand local alternative currency and barter networks, taking advantage of the latest network technology, as a source of liquidity for direct exchange between informal/household producers.

Conclusion

Consider the amount of the average worker's total labor that is expended not only to pay for the above-mentioned embedded costs of intellectual property and for the oligopoly markup, but to pay artificial scarcity rents to owners of land and capital. The cumulative effect of eliminating all such forms of privilege would likely equal that of eliminating subsidized waste in the production process. If, as seems plausible as a rough approximation, waste production and rents on intangible property each result in what amounts to a 100% markup, then their cumulative effect is to quadruple the number of work hours actually necessary to produce our current levels of consumption. Three quarters of our labor goes either to waste or to tribute.

Absent the unnecessary production that amounts to fixing Bastiat's broken windows, and other waste (including the deliberate choice of planned obsolescence over reparability by the state's industrial cartels), and absent the portion of commodity price that reflects embedded rents on "intellectual property" and other artificial property rights like artificially scarce land and capital, we could probably produce something like our current standard of living working an average of two days or less a week. We're working the other three days to dig holes and fill them back in again, or to pay protection money so parasitic rentiers won't use their artificial property rights to obstruct production.

The main barrier to achieving this is brilliantly summed up in the email signature line of Paul Fernhout, a member of the P2P Research and Open Manufacturing email lists: "The biggest challenge of the 21st century is the irony of technologies of abundance in the hands of those thinking in terms of scarcity."

I mentioned, earlier, the extent to which the power of hierarchical organizations results from their ability to ration scarce resources—and more than that, the extent to which the personal identity of those running them is positional, based on the significance that attaches to performing this function. In a world where (say) Star Trek matter-energy replicators enabled everyone to live in abundance, what importance would Bill Gates or David Rockefeller have?

The character of "The Major," in Daniel Suarez's "Daemon" novels, saw his role as defending a system of authority and subordination, and keeping the institutional wheels turning efficiently.

And that [the murder of the Central American trade unionist] began his awakening—his realization that the Western World was a bedtime story of comforting humanistic bullshit. Slavery existed everywhere—even in the United States. We were all slaves in one way or another. Slavery was just control, and control kept things running in an orderly fashion. It was what made progress possible.¹⁴³

"'Bastards like me' serve a purpose. People need order.... They need to be told what to think, what to do, what to believe, or everything will fall apart. This miracle of modern civilization doesn't just happen. It

143 Daniel Suarez, *Freedom™* (New York: Dutton, 2010), p. 86.

requires careful management by professionals willing to do whatever is necessary to keep things running smoothly.”¹⁴⁴

This function meant, above all, keeping the populace dependent on the existing institutional framework for their survival. Confronted with the threat from an economy of abundance — the super-efficient, high-tech local economies of the “holons,” based on micromanufacturing and intensive agriculture — his reaction was that of a body's immune system rejecting an intruder. Because of its subversive effect in demonstrating that people could live without authority, the alternative economy had to be eliminated.

“...kill everyone you can find, burn every structure, and destroy every vehicle. Without exception. The knowledge and equipment that makes these communities work must be eradicated. The cultural memory that they ever existed must be erased....”¹⁴⁵

This problem—how to maintain the power of the old ruling hierarchies where there is no longer a material need for them—is a recurring theme in literature. Something like it was the thesis of “Goldstein’s Book,” in 1984. The industrial economies of the 20th century created the problem of abundance: a populace with enough leisure to remove their noses from the grindstone and start asking pointed questions about the age-old systems of authority they observed in their world. In order to maintain the power of the old ruling hierarchies — the kings and priests, the bureaucrats, the owners and employers — it was necessary to destroy the subversive threat of abundance, and to keep the general public poor and stupid. The beauty of perpetual war with Eurasia and Eastasia was that it enabled Oceania to blast unlimited amounts of economic output into the stratosphere or sink them to the bottom of the sea, and push everyone down to the margin of subsistence so they’d be too busy staying alive to ask all sorts of impertinent questions.

The satirical *Report from Iron Mountain*, published in 1967, was a fictitious government document addressing the need for some moral equivalent of war to maintain public deference to the ruling and owning classes in the face of the subversive effects of world peace. The primary benefit of a society organized for war was not the ability of the society to conduct wars resulting from conflicts with foreign powers; such wars were an outgrowth of the internal imperatives of societies organized for war, rather than any external dynamic. Rather, it was necessary that a society be organized for war—justified by some foreign “threat” real or contrived—in order to preserve a domestic system of power.

Without [war], no government has ever been able to obtain acquiescence in its "legitimacy," or right to rule its society. The possibility of war provides the sense of external necessity without which no government can long remain in power. The historical record reveals one instance after another where the failure of a regime to maintain the credibility of a war threat led to its dissolution, by the forces of private interest, of reactions to social injustice, or of other disintegrative elements. The organization of a society for the possibility of war is its principal political stabilizer.

* * *

The permanent possibility of war is the foundation for stable government; it supplies the basis for general acceptance of political authority. It has enabled societies to maintain necessary class distinctions, and it has ensured the subordination of the citizen to the state, by virtue of the residual war powers inherent in the concept of nationhood. No modern political ruling group has successfully controlled its constituency after failing to sustain the continuing credibility of an external threat of war.¹⁴⁶

144 *Ibid.*, p. 336.

145 *Ibid.*, p. 293.

146 Leonard Lewin, *Report from Iron Mountain* (1967). Online version at Mega.Nu <<http://www.mega.nu/ampp/>>

In the more succinct phrasing of Randolph Bourne, “War is the health of the state.” The putative “study group’s” perspective was much like that of the equally fictional Emanuel Goldstein, who saw the warring superpowers of *1984* as three sheaves of wheat propping each other up. Or as Noam Chomsky put it nonfictionally: “Putting second-order complexities to the side, for the USSR the Cold War has been primarily a war against its satellites, and for the US a war against the Third World. For each, it has served to entrench a particular system of domestic privilege and coercion.”¹⁴⁷

One might imagine a similar “study group,” confronted with the destabilizing effects of abundance on systems of authority conditioned on scarcity, formulating an agenda for maintaining artificial scarcity after the material necessity for it has disappeared. The Iron Mountain study group contemptuously dismissed the myth that organization for war is functionally subordinate to the social system that wars allegedly serve. It is likewise a myth that the management of scarcity is a function carried out on behalf of society, in the face of objective necessity. Rather, the management of scarcity—the rationing of scarce resources—serves the primary purpose of maintaining a system of power which could not exist without scarcity. If scarcity does not exist naturally, therefore, it must be manufactured.

The good news is that the ability to manufacture scarcity does not follow from the need. The rentiers and managers are confronting the harsh reality of their increasing inability to manufacture scarcity. The productivity of new technologies of abundance is outstripping their ability to suppress them. The recording industry’s attack on file-sharers was the opening salvo in the war to suppress abundance. Its outcome is a paradigmatic illustration of how all such attacks will fare.

ironmtn.html>.

147 Noam Chomsky, *Deterring Democracy* (New York: Hill and Wang, 1991, 1992) 28.