

Chapter Two

Moloch: The Sloanist Mass Production Model

Introduction

The mass-production model carried some strong imperatives: first, it required large-batch production, running the enormously expensive product-specific machinery at full capacity, to minimize unit costs; and second, it required social control and predictability to ensure that the output would be consumed, lest growing inventories and glutted markets cause the wheels of industry to stop turning. Utilize capacity, utilize capacity, that is Moses and the prophets. Here's Lewis Mumford on the principle:

As mechanical methods have become more productive, the notion has grown up that consumption should become more voracious. In back of this lies an anxiety lest the productivity of the machine create a glut in the market....

This threat is overcome by “the devices of competitive waste, of shoddy workmanship, and of fashion...”¹

As described by Michael Piore and Charles Sabel, the problem was that product-specific resources could not be reallocated when the market shifted; under such conditions, the cost of market unpredictability was unacceptably high. Markets for the output of mass-production industry had to be guaranteed because highly specialized machinery could not be reallocated to other uses with changes in demand. “A piece of modern machinery dedicated to the production of a single part cannot be turned to another use, no matter how low the price of that part falls, or how high the price of other goods rises.”²

Mass production required large investments in highly specialized equipment and narrowly trained workers. In the language of manufacturing, these resources were “dedicated”: suited to the manufacture of a particular product—often, in fact, to just one make or model. When the market for that particular product declined, the resources had no place to go. Mass production was therefore profitable only with markets that were large enough to absorb an enormous output of a single, standardized commodity, and stable enough to keep the resources involved in the production of that commodity continuously employed. Markets of this kind... did not occur naturally. They had to be created.³

...It became necessary for firms to organize the market so as to avoid fluctuations in demand and create a stable atmosphere for profitable, long-term investment.⁴

Ralph Borsodi argued that “[w]ith serial production, ... man has ventured into a topsy-turvy world in which

goods that wear out rapidly or that go out of style before they have a chance to be worn out seem more desirable than goods which are durable and enduring. Goods now have to be consumed quickly or discarded quickly so that the buying of goods to take their place will keep the factory busy.

1 Lewis Mumford, *Technics and Civilization* (New York: Harcourt, Brace, and Company, 1934), pp. 396-397.

2 Michael J. Piore and Charles F. Sabel, *The Second Industrial Divide: Possibilities for Prosperity* (New York: HarperCollins, 1984), p. 50.

3 *Ibid.*, p. 49.

4 *Ibid.*, p. 54.

By the old system production was merely the means to an end.

By the new system production itself has become the end.¹

With continuous operation of [the factory's] machinery, much larger quantities of its products must be sold to the public. The public buys normally only as fast as it consumes the product. The factory is therefore confronted by a dilemma; if it makes things well, its products will be consumed but slowly, while if it makes them poorly, its products will be consumed rapidly.

It naturally makes its products as poorly as it dares.

It encourages premature depreciation.²

(In a free market, of course, firms that made stuff well would have a competitive advantage. But in our unfree market, the state's subsidies to inefficiency cost, "intellectual property" laws, and other restraints on competition insulate firms from the full competitive disadvantage of offering inferior products.)

Because of the imperative for overcapitalized industry to operate at full capacity, on round-the-clock shifts, in order to spread the cost of its expensive machinery over the greatest possible number of units of output, the imperative of guaranteeing consumption of the output was equally great. As Benjamin Barber puts it, capitalism manufactures needs for the goods it's producing rather than producing goods in response to needs.³

This is not just a caricature by the enemies of Sloanist mass-production. It has been a constant theme of the model's most enthusiastic advocates and defenders. They disagree with economic decentralists, not on the systemic requirements of the mass-production model, but only on whether or not it has on the whole been a good thing, and whether there is any viable alternative.

In *The New Industrial State*, Galbraith wrote about the connection between capital intensiveness and the "technostructure's" need for predictability and control:

...[Machines and sophisticated technology] require... heavy investment of capital. They are designed and guided by technically sophisticated men. They involve, also, a greatly increased lapse of time between any decision to produce and the emergence of a salable product.

From these changes come the need and the opportunity for the large organization. It alone can deploy the requisite capital; it alone can mobilize the requisite skills.... The large commitment of capital and organization well in advance of result requires that there be foresight and also that all feasible steps be taken to insure that what is foreseen will transpire.⁴

...From the time and capital that must be committed, the inflexibility of this commitment, the needs of large organization and the problems of market performance under conditions of advanced technology, comes the necessity for planning.⁵

The need for planning... arises from the long period of time that elapses during the production process,

1 Ralph Borsodi, *This Ugly Civilization* (Philadelphia: Porcupine Press, 1929, 1975), pp. 64-65.

2 Ibid., p. 126.

3 "Manufacture Goods, Not Needs," E. F. Schumacher Society Blog, October 11, 2009 <http://efsociety.blogspot.com/2009/10/manufacture-goods-not-needs_11.html>.

4 John Kenneth Galbraith, *The New Industrial State* (New York: Signet Books, 1967), p. 16

5 Ibid., p. 28.

the high investment that is involved and the inflexible commitment of that investment to the particular task.¹

Planning exists because [the market] process has ceased to be reliable. Technology, with its companion commitment of time and capital, means that the needs of the consumer must be anticipated--by months or years.... [I]n addition to deciding what the consumer will want and will pay, the firm must make every feasible step to see that what it decides to produce is wanted by the consumer at a remunerative price.... It must exercise control over what is sold.... It must replace the market with planning.²

...The need to control consumer behavior is a requirement of planning. Planning, in turn, is made necessary by extensive use of advanced technology and capital and by the relative scale and complexity of organization. These produce goods efficiently; the result is a very large volume of production. As a further consequence, goods that are related only to elementary physical sensation--that merely prevent hunger, protect against cold, provide shelter, suppress pain--have come to comprise a small and diminishing part of all production. Most goods serve needs that are discovered to the individual not by the palpable discomfort that accompanies deprivation, but by some psychic response to their possession....³

For Galbraith, the "accepted sequence" of consumer sovereignty (what Mises called "dollar democracy"), in which consumer demand determines what is produced, was replaced by a "revised sequence" in which oligopoly corporations determine what is produced and then dispose of it by managing consumer behavior. In contemporary terms, the demand-pull economy is replaced by a supply-push model.

Alfred Chandler, like Galbraith, was thoroughly sold on the greater efficiencies of the large corporation. He argued that the modern multi-unit enterprise arose when administrative coordination "permitted" greater efficiencies.⁴

By linking the administration of producing units with buying and distributing units, costs for information on markets and sources of supply were reduced. Of much greater significance, the internalization of many units permitted the flow of goods from one unit to another to be administratively coordinated. More effective scheduling of flows achieved a more intensive use of facilities and personnel employed in the processes of production and so increased productivity and reduced costs.⁵

Organizationally, output was expanded through improved design of manufacturing or processing plants and by innovations in managerial practices and procedures required to synchronize flows and supervise the work force. Increases in productivity also depend on the skills and abilities of the managers and the workers and the continuing improvement of their skills over time. Each of these factors or any combination of them helped to increase the speed and volume of the flow, or what some processors call the "throughput," of materials within a single plant or works....⁶

Integration of mass production with mass distribution afforded an opportunity for manufacturers to lower costs and increase productivity through more effective administration of the processes of production and distribution and coordination of the flow of goods through them. Yet the first industrialists to integrate the two basic sets of processes did not do so to exploit such economies. They did so because existing marketers were unable to sell and distribute products in the volume they were produced.⁷

1 Ibid., p. 31.

2 Ibid., pp. 34-35.

3 Ibid., pp. 210-212.

4 Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge and London: The Belknap Press of Harvard University Press, 1977), p. 6.

5 Ibid., pp. 6-7.

6 Ibid., p. 241.

7 Ibid., p. 287.

The mass-production factory achieved "economies of speed" from "greatly increasing the daily use of equipment and personnel."¹ (Of course, Chandler starts by assuming the greater inherent efficiency of capital-intensive modes of production, which *then* require "economies of speed" to reduce unit costs from the expensive capital assets).

What Chandler meant by “economies of speed” was entirely different from lean production's understanding of flow. Chandler's meaning is suggested by his celebration of the new corporate managers who “developed techniques to purchase, store, and move huge stocks of raw and semifinished materials. In order to maintain a more certain flow of goods, they often operated fleets of railroad cars and transportation equipment.”² In other words, both the standard Sloanist model of enormous buffer stocks of unfinished goods, and warehouses full of finished goods awaiting orders—and the faux “lean” model in which inventory is swept under the rug and moved into warehouses on wheels and in container-ships.

(The reader may be puzzled or even annoyed by my constant use of the term “Sloanism.” I got it from the insightful commentary of Eric Husman at *GrimReader* blog, in which he treats the production and accounting methods of General Motors as paradigmatic of 20th century American mass-production industry, and contrasts them with the lean methods popularly identified with Taichi Ohno's Toyota production system.)

“Sloanism” refers, in particular, to the management accounting system identified with General Motors. It was first developed by Brown at DuPont, and brought to GM when DuPont acquired a controlling share of the company and put Alfred Sloan in charge. Brown's management accounting system, whose perverse incentives are dissected in detail by William Waddell and Norman Bodek in *Rebirth of American Industry*, became the basis of the Generally Accepted Accounting Principles (GAAP) that prevail throughout American corporate management.

In Sloanist management accounting, 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 production 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.³

...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.⁴

In other words, by the Sloanist accounting principles predominant in American industry, the

1 Ibid., p. 244.

2 Ibid., p. 412.

3 William H. Waddell and Norman Bodek, *Rebirth of American Industry: A Study of Lean Management* (Vancouver, WA: PCS Press, 2005), p. 75.

4 Ibid., p. 140.

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.

In other words, “they accept cost as a fait accompli....” Paul Goodman's idea of the culture of cost-plus (about which more below) sums it up perfectly. And as Waddell points out, the GDP as a metric depends on the same GAAP assumptions as American industry: it counts expenditure on inputs, by definition, as the creation of wealth.¹

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.²

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.³ That means your clothes cost about a third more because of the “efficiencies” of Sloanist mass production.

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.⁴ 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.”⁵

The incredible bureaucratic inefficiencies resulting from these inventories is suggested by GM's “brilliant innovation” of MRP software in the 1960s—a central planning system that surely would have made the folks at Gosplan green with envy. Of course, as Toyota Production System father Taichi Ohno pointed out, MRP would be useless to a company operating on zero lead time and lot sizes of

1 William Waddell, “The Irrelevance of the Economists,” *Evolving Excellence*, May 6, 2009 <<http://www.evolvingexcellence.com/blog/2009/05/the-irrelevance-of-the-economists.html>>.

2 Waddell and Bodek, p. 98.

3 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.

4 Waddell and Bodek, p. 122.

5 *Ibid.*, p. 119.

one.¹ The point of MRP is that it “allows each cost center to operate at its individual optimum without regard to the performance of the other cost centers.”

If the machining department is having a good week, that supervisor can claim credit for his production—perhaps even exceeding the schedule.

It does not affect him at all that the next department upstream—assembly, for example—is having major problems and will not come close to making schedule....

...[MRP's] core is the logic and a set of algorithms to enable each component of a product to be produced at different volumes and speeds; and, in fact, the same components of a product going through different operations to be produced at different volumes and speeds, in order to optimum efficiency at each operation. It is based on the assumption that manufacturing is best performed in such a disjointed manner, and it assures adequate inventory to buffer all of this unbalanced production.²

The lean approach has its own “economies of speed,” but they are the direct opposite of the Sloanist approach. The Sloanist approach focuses on maximizing economies of speed in terms of the unit cost of a particular machine, without regard to the inventories of unfinished goods that must accumulate as buffer stocks as a result, and all the other enormous eddies in the flow of production. As the authors of *Natural Capitalism* put it, it attempts to optimize each step of the production process in isolation, “thereby pessimizing the entire system.” 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.³ Waddell and Bodek give the example of Ernie Breech, sent from GM to “save” Ford, demanding a plant manager tell him the cost of manufacturing the steering wheel so he could calculate ROI for that step of the process. The plant manager was at a loss trying to figure out what Breech wanted: did he think steering wheel production was a bottleneck in production flow, or what? But for Breech, if the unit cost of that machine and the direct cost of the labor working it were low enough compared to the “value” of the steering wheels “sold” to inventory, that was all that mattered. Under the Sloan accounting system, producing a steering wheel—even in isolation, and regardless of what was done with it or whether there was an order for the car it was a part of—was a money-making proposition. “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.”⁴

“Selling to inventory,” under GAAP 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. Hence the carloads of refrigerators, for which Soviet factories were credited toward their 5YP quotas, thrown off trains with no regard to whether they were damaged beyond repair in the process.

The lean approach, in contrast, gears production flow to orders, and then sizes individual machines and steps in the production process to the volume of overall flow. Under lean thinking, it's better to have a less specialized machine with a lower rate of output, in order to avoid an individual step out of proportion to the overall production flow. This is what the Toyota Production System calls *takt*: pacing the output of each stage of production to meet the needs of the next stage, and pacing the overall flow

1 Ibid., p. xx.

2 Ibid., pp. 112-114.

3 Paul Hawken, Amory Lovins, and L. Hunter Lovins, *Natural Capitalism: Creating the Next Industrial Revolution* (Boston, New York, London: Little, Brown, and Company, 1999), pp. 129-30.

4 Waddell and Bodek, pp. 89, 92.

of all the stages in accordance with current orders.¹ In a Sloan factory, the management would select machinery to produce the entire production run “as fast as they humanly could, then sort out the pieces and put things together later.”²

To quote the authors of *Natural Capitalism* again: “The essence of the lean approach is that in almost all modern manufacturing,

the combined and often synergistic benefits of the lower capital investment, greater flexibility, often higher reliability, lower inventory cost, and lower shipping cost of much smaller and more localized production equipment will far outweigh any modest decreases in its narrowly defined “efficiency” per process step. It’s more efficient overall, in resources and time and money, to scale production properly, using flexible machines that can quickly shift between products. By doing so, all the different processing steps can be carried out immediately adjacent to one another with the product kept in continuous flow. The goal is to have no stops, no delays, no backflows, no inventories, no expediting, no bottlenecks, no buffer stocks, and no *muda* [waste].³

The contrast is illustrated by a couple of examples from *Natural Capitalism*: 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, 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.⁴

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.”⁵

1 Ibid., pp. 122-123.

2 Ibid., p. 39.

3 Hawken et al, pp. 129-130.

4 Ibid., pp. 128-129.

5 Ibid., p. 129.

In a genuine lean factory, managers are hounded in daily meetings about meeting the numbers for inventory reduction and reduction of cycle time, in the same way that they're hounded on a daily basis to reduce direct labor hours and increase ROI in a Sloanist factory (including the American experiments with "lean production" in firms still governed by GAAP accounting principles). James Womack et al, in *The Machine That Changed the World*, recount an amusing anecdote about a delegation of lean production students from Corporate America touring a Toyota plant. Reading a question on their survey form as to how many days of inventory were in the plant, the Toyota manager politely asked whether the translator could have meant *minutes* of inventory.¹

As Mumford put it, "Measured by effective work, that is, human effort transformed into direct subsistence or into durable works of art and technics, the relative gains of the new industry were pitifully small."² The amount of wasted resources and crystallized labor embodied in the enormous warehouses of Sloanist factories and the enormous stocks of goods in process, 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. As Michael Parenti put it, the essence of corporate capitalism is "the transformation of living nature into mountains of commodities and commodities into heaps of dead capital."³ The cost savings from mass production are more than offset by the costs of mass distribution.

Chandler's model of production resulted in the adoption of increasingly specialized, asset-specific production machinery:

The large industrial enterprise continued to flourish when it used capital-intensive, energy-consuming, continuous or large-batch production technology to produce for mass markets.⁴

The ratio of capital to labor, materials to labor, energy to labor, and managers to labor for each unit of output became higher. Such high-volume industries soon became capital-intensive, energy-intensive, and manager-intensive.⁵

Of course this view is fundamentally wrong-headed. To regard a particular machine as "more efficient" based on its unit costs taken in isolation is sheer idiocy. If the costs of idle capacity are so great as to elevate unit costs above those of less specialized machinery, at the levels of spontaneous demand occurring without push marketing, and if the market area required for full utilization of capacity results in distribution costs greater than the unit cost savings from specialized machinery, then the expensive product-specific machinery is, in fact, *less* efficient. The basic principle was stated by F. M. Scherer:

Ball bearing manufacturing provides a good illustration of several *product-specific* economies. If only a few bearings are to be custom-made, the ring machining will be done on general-purpose lathes by a skilled operator who hand-positions the stock and tools and makes measurements for each cut. With this method, machining a single ring requires from five minutes to more than an hour, depending on the part's size and complexity and the operator's skill. If a sizable batch is to be produced, a more specialized automatic screw

1 James P. Womack, Daniel T. Jones, Daniel Roos, *The Machine That Changed the World* (New York: Macmillan Publishing Company, 1990), p. 80.

2 Mumford, *Technics and Civilization*, p. 196.

3 Michael Parenti, "Capitalism's Self-Inflicted Apocalypse," *Common Dreams*, January 21, 2009 <<http://www.commondreams.org/view/2009/01/20-9>>.

4 Mumford, *Technics and Civilization*, p. 347.

5 *Ibid.*, p. 241.

machine will be used instead. Once it is loaded with a steel tube, it automatically feeds the tube, sets the tools and adjusts its speed to make the necessary cuts, and spits out machined parts into a hopper at a rate of from eighty to one hundred forty parts per hour. A substantial saving of machine running and operator attendance time per unit is achieved, but setting up the screw machine to perform these operations takes about eight hours. If only one hundred bearing rings are to be made, setup time greatly exceeds total running time, and it may be cheaper to do the job on an ordinary lathe.¹

The Sloanist approach is to choose the specialized automatic machine and find a way to make people buy more bearing rings.

Galbraith and Chandler write as though the adoption of the machinery were enough to automatically increase efficiency, in and of itself, regardless of how much money had to be spent elsewhere to “save” that money.

But if we approach things from the opposite direction, we can see that flexible manufacturing with easily redeployable assets makes it feasible to shift quickly from product to product in the face of changing demand, and thus eliminates the imperative of controlling the market. As Barry Stein said,

if firms could respond to local conditions, they would not *need* to control them. If they must control markets, then it is a reflection of their lack of ability to be adequately responsive.²

...Consumer needs, if they are to be supplied efficiently, call increasingly for organizations that are more flexibly arranged and in more direct contact with those customers. The essence of planning, under conditions of increasing uncertainty, is to seek better ways for those who have the needs to influence or control the productive apparatus more effectively, not less.

Under conditions of rapid environmental change, implementing such planning is possible only if the “distance” between those supplied and the locus of decision-making on the part of those producing is reduced... But it can be shown easily in information theory that the feedback—information linking the environment and the organization attempting to service that environment—necessarily becomes less accurate or less complete as the rate of change of data increases, or as the number of steps in the information transfer process continues.

Stein suggested that Galbraith's solution was to suppress the turbulence: “to control the changes, in kind and extent, that the society will undergo.”³ But far better, he argues, would be “a value shift that integrates the organization and the environment it serves.”

This problem is to be solved not by the hope of better planning on a large scale..., but by the better integration of productive enterprises with the elements of society needing that production.

Under conditions of rapid change in an affluent and complex society, the only means available for meeting differentiated and fluid needs is an array of producing units small enough to be in close contact with *their* customers, flexible enough to produce for *their* demands, and able to do so in a relatively short time... It is a contradiction in terms to speak of the necessity for units large enough to control their environment, but producing products which in fact no one may want!⁴

1 F.M. Scherer and David Ross, *Industrial Market Structure and Economic Performance*. 3rd ed (Boston: Houghton Mifflin, 1990), p. 97.

2 Barry Stein, *Size, Efficiency, and Community Enterprise* (Cambridge: Center for Community Economic Development, 1974), p. 41.

3 *Ibid.*, p. 43.

4 *Ibid.*, p. 44.

As to the problem of planning—large firms are said to be needed here because the requirements of sophisticated technology and increasingly specialized knowledge call for long lead times to develop, design, and produce products. Firms must therefore have enough control over the market to assure that the demand needed to justify that time-consuming and costly investment will exist. This argument rests on a foundation of sand; first, because the needs of society should *precede*, not follow, decisions about what to produce, and second, because the data do not substantiate the need for large production organizations except in rare and unusual instances, like space flight. On the contrary, planning for social needs requires organizations and decision-making capabilities in which the feedback and interplay between productive enterprises and the market in question is accurate and timely—conditions more consistent with smaller organizations than large ones.¹

A. Institutional Forms to Provide Stability

In keeping with the need for stability and control Galbraith described above, the technostructure resorted to organizational expedients within the corporate enterprise to guarantee reliable outlets for production and provide long-term predictability in the availability and price of inputs. These expedients can be summed up as replacing the market price mechanism with planning.

A firm cannot usefully foresee and schedule future action or prepare for contingencies if it does not know what its prices will be, what its sales will be, what its costs including labor and capital costs will be and what will be available at these costs.... Much of what the firm regards as planning consists in minimizing or getting rid of market influences.²

Galbraith describes three institutional expedients taken by the technostructure to control the uncertainties of the market and permit long-term predictability: vertical integration, the use of market power to control suppliers and outlets, and long-term contractual arrangements with suppliers and outlets.³

In vertical integration, “[t]he planning unit takes over the source of supply or the outlet; a transaction that is subject to bargaining over prices and amounts is thus replaced with a transfer within the planning unit.”⁴

One of the most important forms of “vertical integration” is the choice to “make” rather than “buy” credit—replacing the external credit markets with internal finance through retained earnings.⁵ The theory that management is controlled by outside capital markets assumes a high degree of dependence on outside finance. But in fact management's first line of defense, in maintaining its autonomy from shareholders and other outside interests, is to *minimize* its reliance on outside finance. Management tends to finance new investments as much as possible with retained earnings, followed by debt, with new issues of shares only as a last resort.⁶ Issues of stock are important sources of investment capital only for startups and small firms undertaking major expansions.⁷ Most corporations finance a majority

1 Ibid., p. 58.

2 Galbraith, *The New Industrial State*, p. 37.

3 Ibid., p. 38.

4 Ibid., p. 39.

5 Ibid., pp. 50-51.

6 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. 100-101.

7 Ralph Estes, *Tyranny of the Bottom Line: Why Corporations Make Good People Do Bad Things* (San Francisco: Berrett-Koehler Publishers, 1996), p. 51.

of their new investment from retained earnings, and tend to limit investment to the highest priorities when retained earnings are scarce.¹ As Doug Henwood says, in the long run "almost all corporate capital expenditures are internally financed, through profits and depreciation allowances." Between 1952 and 1995, almost 90% of investment was funded from retained earnings.²

The prevailing reliance on internal financing tends to promote concentration. Internally generated funds that exceed internal requirements are used to expand or diversify internal operations, or for horizontal and vertical integration, rather than "lending it or making other kinds of arm's-length investments."³ Martin Hellwig, in his discussion of the primacy of finance by retained earnings, makes one especially intriguing observation, in particular. He denies that reliance primarily on retained earnings necessarily leads to a "rationing" of investment, in the sense of underinvestment; internal financing, he says, can just as easily result in overinvestment, if the amount of retained earnings exceeds available opportunities for rational capital investment.⁴ This confirms Schumpeter's argument that double taxation of corporate profits promoted excessive size and centralization, by encouraging reinvestment in preference to the issue of dividends. Of course it may result in structural misallocations and irrationality, to the extent that retention of earnings prevents dividends from returning to the household sector to be invested in other firms, so that overaccumulation in the sectors with excessive retained earnings comes at the expense of a capital shortage in other sectors.⁵ Doug Henwood contrasts the glut of retained earnings, under the control of corporate bureaucracies with a shortage of investment opportunities, to the constraints the capital markets place on small, innovative firms that need capital the most.⁶

Market control "consists in reducing or eliminating the independence of action of those to whom the planning unit sells or from whom it buys," while preserving "the outward form of the market." Market power follows from large size in relation to the market. A decision to buy or not to buy, as in the case of General Motors and its suppliers, can determine the life or death of a firm. What's more, large manufacturers always have the option of vertical integration—making a part themselves instead of buying it—to discipline suppliers. "The option of eliminating a market is an important source of power for controlling it."⁷

Long-term contracting can reduce uncertainty by "specifying prices and amounts to be provided or bought for substantial periods of time." Each large firm creates a "matrix of contracts" in which market uncertainty is eliminated.⁸

Piore and Sabel mention Edison Electric as an example of using long-term contracts to guarantee stability,

inducing its customers to sign long-term "future delivery" contracts, under which they had to buy specified quantities of Edison products at regular intervals over ten years. By assuring the demand for output, these contracts enabled the company to invest in large plants.... As one Edison executive explained:

It is essential in order to make lamps at a minimum cost that the factory should be run constantly at as

1 Hellwig, pp. 101-102, 113.

2 Doug Henwood, *Wall Street: How it Works and for Whom* (London and New York: Verso, 1997), p. 3.

3 Piore and Sabel, pp. 70-71.

4 Hellwig, pp. 114-115.

5 *Ibid.*, p. 117.

6 Henwood, *Wall Street*, pp. 154-155.

7 Galbraith, *The New Industrial State*, pp. 39-40.

8 *Ibid.*, pp. 41-42.

*uniform an output as possible. Our future delivery plan in lamps has been very successful [in this regard].... It is very expensive work changing from one rate of production to another in factories.... The benefit of the future delivery plan is apparent since we can manufacture to stock knowing that all the stock is to be taken within a certain time.*¹

Unlike lean, demand-pull production, which minimizes inventory costs by producing only in response to orders, mass production requires supply-push distribution (guaranteeing a market before production takes place).

The use of contracts to stabilize input availability and price is exemplified, in particular, by the organizational expedients to stabilize wages and reduce labor turnover. After mixed success with a variety of experiments with company unions, the “American Plan,” and other forms of welfare capitalism, employers finally turned to the official organized labor regime under the Wagner Act to establish long-term predictability in the supply and price of labor inputs, and to secure management's control of production. Under the terms of “consensus capitalism,” the relatively minor significance of labor costs in the total cost package of capital-intensive industry meant that management was willing to pay comparatively high wages and benefits (up to the point of gearing wages to productivity), to provide more or less neutral grievance procedures, etc., so long as management's prerogatives were recognized for directing production. But the same had been true in many cases of the American Plan: it allowed for formalized grievance procedures and progressive discipline, and in some cases negotiation over rates of pay. The common goal of all these various attempts, however much they disagreed in their particulars, was “by stabilizing wages and employment, to insulate the cost of a major element of production from the flux of a market economy.”² From management's perspective, the sort of bureaucratized industrial union established under Wagner had the primary purposes of enforcing contracts on the rank and file and suppressing wildcat strikes. The corporate liberal managers who were most open to industrial unionism in the 1930s were, in many cases, the same people who had previously relied on company unions and works councils. Their motivation, in both cases, was the same. For example, GE's Gerard Swope, one of the most “progressive” of corporate liberals and the living personification of the kinds of corporate interests that backed FDR, had attempted in 1926 to get the AFL's William Green to run GE's works council system.³

Another institutional expedient of Galbraith's technostructure is to regulate the pace of technical change, with the oligopoly firms in an industry colluding to introduce innovation at a rate that maximizes returns. Baran and Sweezy described the regulation of technical change, as it occurs in oligopoly markets under corporate capitalism:

Here innovations are typically introduced (or soon taken over) by giant corporations which act not under the compulsion of competitive pressures but in accordance with careful calculations of the profit-maximizing course. Whereas in the competitive case no one, not even the innovating firms themselves, can control the rate at which new technologies are generally adopted, this ceases to be true in the monopolistic case. It is clear that the giant corporation will be guided not by the profitability of the new method considered in isolation, but by the net effect of the new method on the overall profitability of the firm. And this means that in general there will be a slower rate of introduction of innovation than under competitive criteria.⁴

1 Piore and Sabel, p. 58.

2 Ibid., p. 65.

3 Ibid., p. 132.

4 Paul Baran and Paul Sweezy, *Monopoly Capitalism: An Essay in the American Economic and Social Order* (New York: Monthly Review Press, 1966), pp. 93-94.

Or as Paul Goodman put it, a handful of manufacturers control the market, “competing with fixed prices and slowly spooned-out improvements.”¹

Besides these microeconomic structures created by the nominally private corporation to provide stability, the state engaged in the policies described by Gabriel Kolko as “political capitalism.”

Political capitalism is the utilization of political outlets to attain conditions of stability, predictability, and security—to attain rationalization—in the economy. *Stability* is the elimination of internecine competition and erratic fluctuations in the economy. *Predictability* is the ability, on the basis of politically stabilized and secured means, to plan future economic action on the basis of fairly calculable expectations. By *security* I mean protection from the political attacks latent in any formally democratic political structure. I do not give to *rationalization* its frequent definition as the improvement of efficiency, output, or internal organization of a company; I mean by the term, rather, the organization of the economy and the larger political and social spheres in a manner that will allow corporations to function in a predictable and secure environment permitting reasonable profits over the long run.²

The state played a major role in cartelizing the economy, to protect the large corporation from the destructive effects of price competition. At first the effort was mainly private, reflected in the trust movement at the turn of the 20th century. Chandler celebrated the first, private efforts toward consolidation of markets as a step toward rationality:

American manufacturers began in the 1870s to take the initial step to growth by way of merger—that is, to set up nationwide associations to control price and production. They did so primarily as a response to the continuing price decline, which became increasingly impressive after the panic of 1873 ushered in a prolonged economic depression.³

The process was further accelerated by the Depression of the 1890s, with mergers and trusts being formed through the beginning of the next century in order to control price and output: “the motive for merger changed. Many more were created to replace the association of small manufacturing firms as the instrument to maintain price and production schedules.”⁴

From the turn of the twentieth century on, there was a series of attempts by J.P. Morgan and other promoters to create some institutional structure for the corporate economy by which price competition could be regulated and their respective market shares stabilized. “It was then,” Paul Sweezy wrote,

that U.S. businessmen learned the self-defeating nature of price-cutting as a competitive weapon and started the process of banning it through a complex network of laws (corporate and regulatory), institutions (e.g., trade associations), and conventions (e.g., price leadership) from normal business practice.⁵

Chandler's celebratory account of the trust movement, as a progressive force, ignores one central fact: the trusts were less efficient than their smaller competitors. They immediately began losing market share to less leveraged firms outside the trusts. The trust movement was an unqualified failure, as big business quickly recognized. Subsequent attempts to cartelize the economy, therefore, enlisted

1 Paul Goodman, *People or Personnel*, in *People or Personnel and Like a Conquered Province* (New York: Vintage Books, 1964, 1966), p. 58.

2 Gabriel Kolko. *The Triumph of Conservatism: A Reinterpretation of American History 1900-1916* (New York: The Free Press of Glencoe, 1963), p. 3.

3 Chandler, *The Visible Hand*, p. 316.

4 *Ibid.*, p. 331.

5 Paul Sweezy. "Competition and Monopoly," *Monthly Review* (May 1981), pp. 1-16.

the state. As recounted by Gabriel Kolko,¹ the main force behind the Progressive Era regulatory agenda was big business itself, the goal being to restrict price and quality competition and to reestablish the trusts under the aegis of government. His thesis was that, “contrary to the consensus of historians, it was not the existence of monopoly that caused the federal government to intervene in the economy, but the lack of it.”

Merely private attempts at cartelization (i.e., collusive price stabilization) before the Progressive Era—namely the so-called “trusts”—were miserable failures, according to Kolko. The dominant trend at the turn of the century—despite the effects of tariffs, patents, railroad subsidies, and other existing forms of statism—was competition. The trust movement was an attempt to cartelize the economy through such voluntary and private means as mergers, acquisitions, and price collusion. But the over-leveraged and over-capitalized trusts were even less efficient than before, and steadily lost market share to their smaller, more efficient competitors. Standard Oil and U.S. Steel, immediately after their formation, began to lose market share.

In the face of this resounding failure, big business acted through the state to cartelize itself—hence, the Progressive regulatory agenda.

Ironically, contrary to the consensus of historians, it was not the existence of monopoly that caused the federal government to intervene in the economy, but the lack of it.”²

If economic rationalization could not be attained by mergers and voluntary economic methods, a growing number of important businessmen reasoned, perhaps political means might succeed.”³

The rationale of the Progressive Era regulatory state was stated in 1908 by George Perkins, whom Kolko described as “the functional architect... of political capitalism during Roosevelt's presidency...”
The modern corporation

must welcome federal supervision, administered by practical businessmen, that “should say to stockholders and the public from time to time that the management's reports and methods of business are correct.” With federal regulation, which would free business from the many states, industrial cooperation could replace competition.⁴

Kolko provided considerable evidence that the main force behind the Progressive Era legislative agenda was big business. The Meat Inspection Act, for instance, was passed primarily at the behest of the big meat packers.⁵ This pattern was repeated, in its essential form, in virtually every component of the “Progressive” regulatory agenda.

The various safety and quality regulations introduced during this period also worked to cartelize the

1 Kolko, *Triumph of Conservatism*.

2 Ibid., p. 5.

3 Ibid., p. 58.

4 Ibid., p. 129.

5 Ibid., pp. 98-108. In the 1880s, repeated scandals involving tainted meat had resulted in U.S. firms being shut out of several European markets. The big packers had turned to the government to inspect exported meat. By organizing this function jointly, through the state, they removed quality inspection as a competitive issue between them, and the government provided a seal of approval in much the same way a trade association would. The problem with this early inspection regime was that only the largest packers were involved in the export trade, which gave a competitive advantage to the small firms that supplied only the domestic market. The main effect of Roosevelt's Meat Inspection Act was to bring the small packers into the inspection regime, and thereby end the competitive disability it imposed on large firms. Upton Sinclair simply served as an unwitting shill for the meat-packing industry.

market. They served essentially the same purpose as attempts in the Wilson war economy to reduce the variety of styles and features available in product lines, in the name of "efficiency." Any action by the state to impose a uniform standard of quality (e.g. safety), across the board, necessarily eliminates that feature as a competitive issue between firms. As Butler Shaffer put it, the purpose of "wage, working condition, or product standards" is to "universalize cost factors and thus restrict price competition."¹ Thus, the industry is partially cartelized, to the very same extent that would have happened had all the firms in it adopted a uniform quality standard, and agreed to stop competing in that area. A regulation, in essence, is a state-enforced cartel in which the members agree to cease competing in a particular area of quality or safety, and instead agree on a uniform standard which they establish through the state. And unlike private cartels, which are unstable, no member can seek an advantage by defecting.

Although theoretically the regulations might simply put a floor on quality competition and leave firms free to compete by exceeding the standard, in practice corporations often take a harsh view of competitors that exceed regulatory safety or quality requirements. A good example is Monsanto's (often successful) attempts to secure regulatory suppression of commercial speech by competitors who label their milk rBGH-free; more generally, the frankenfoods industry relies on FDA regulations to prohibit the labeling of food as GMO-free. Another example is the beef industry's success at getting the government to prohibit competitors from voluntarily testing their cattle for mad cow disease more frequently than required by law.² So the regulatory floor frequently becomes a ceiling.

More importantly, the FTC and Clayton Acts reversed the long trend toward competition and loss of market share and made stability possible.

The provisions of the new laws attacking unfair competitors and price discrimination meant that the government would now make it possible for many trade associations to stabilize, for the first time, prices within their industries, and to make effective oligopoly a new phase of the economy.³

The Federal Trade Commission created a hospitable atmosphere for trade associations and their efforts to prevent price cutting.⁴ Butler Shaffer, in *In Restraint of Trade*, provides a detailed account of the functioning of these trade associations, and their attempts to stabilize prices and restrict "predatory price cutting," through assorted codes of ethics.⁵ Specifically, the trade associations established codes of ethics directly under FTC auspices that had the force of law: "[A]s early as 1919 the FTC began inviting members of specific industries to participate in conferences designed to identify trade practices that were felt by 'the practically unanimous opinion' of industry members to be unfair." The standard procedure, through the 1920s, was for the FTC to invite members of a particular industry to a conference, and solicit their opinions on trade practice problems and recommended solutions.

The rules that came out of the conferences and were approved by the FTC fell into two categories: Group I rules and Group II rules. Group I rules were considered by the commission as expressions of the prevailing law for the industry developing them, and a violation of such rules by any member of that

1 Butler Shaffer, *Calculated Chaos: Institutional Threats to Peace and Human Survival* (San Francisco: Alchemy Books, 1985), p. 143.

2 Associated Press, "U.S. government fights to keep meatpackers from testing all slaughtered cattle for mad cow," *International Herald-Tribune*, May 29, 2007 <<http://www.iht.com/articles/ap/2007/05/29/america/NA-GEN-US-Mad-Cow.php>>. "Monsanto Declares War on 'rBGH-free' Dairies," April 3, 2007 (reprint of Monsanto press release by Organic Consumers Association) <http://www.organicconsumers.org/articles/article_4698.cfm>. "Pa. bars hormone-free milk labels," *USA Today*, November 13, 2007 <http://www.usatoday.com/news/nation/2007-11-13-milk-labels_N.htm>.

3 Kolko, *The Triumph of Conservatism*, p. 268.

4 *Ibid.*, p. 275.

5 Butler Shaffer, *In Restraint of Trade: The Business Campaign Against Competition, 1918-1938* (Lewisburg: Bucknell University Press, 1997).

industry—whether that member had agreed to the rules or not—would subject the offender to prosecution under Section 5 of the Federal Trade Commission Act as an "unfair method of competition."...

Contained within Group I were rules that dealt with practices considered by most business organizations to be the more "disruptive" of stable economic conditions. Generally included were prohibitions against inducing "breach of contract; ...commercial bribery; ...price discrimination by secret rebates, excessive adjustments, or unearned discounts; ...*selling of goods below cost or below published list of prices for purpose of injuring competitor*; misrepresentation of goods; ... use of inferior materials or deviation from standards; [and] falsification of weights, tests, or certificates of manufacture [emphasis added]."¹

The two pieces of legislation accomplished what the trusts had been unable to: they enabled a handful of firms in each industry to stabilize their market share and to maintain an oligopoly structure between them.

It was during the war that effective, working oligopoly and price and market agreements became operational in the dominant sectors of the American economy. The rapid diffusion of power in the economy and relatively easy entry virtually ceased. Despite the cessation of important new legislative enactments, the unity of business and the federal government continued throughout the 1920s and thereafter, using the foundations laid in the Progressive Era to stabilize and consolidate conditions within various industries. And, on the same progressive foundations and exploiting the experience with the war agencies, Herbert Hoover and Franklin Roosevelt later formulated programs for saving American capitalism. The principle of utilizing the federal government to stabilize the economy, established in the context of modern industrialism during the Progressive Era, became the basis of political capitalism in its many later ramifications.²

The regulatory state provided "rationality" in two other ways: first, by the use of federal regulation to preempt potentially harsher action by populist governments at the state and local level; and second, by preempting and overriding older common law standards of liability, replacing the potentially harsh damages imposed by local juries with a least common denominator of regulatory standards based on "sound science" (as determined by industry, of course). Regarding the first, whatever view one takes of the validity of the local regulations in and of themselves, it is hardly legitimate for a centralized state to act on behalf of corporate interests, in suppressing unfriendly local regulations and overcoming the transaction costs of operating in a large number of conflicting jurisdictions, all at taxpayer expense. "Free trade" simply means the state does not hinder those under its own jurisdiction from trading with anyone else on whatever terms they can obtain on their own—not that the state actually opens up markets. Regarding the second, it is interesting that so many self-described "libertarians" support what they call "tort reform," when civil liability for damages is in fact the libertarian *alternative* to the regulatory state. Much of such "tort reform" amounts to indemnifying business firms from liability for reckless fraud, pollution, and other externalities imposed on the public.

There is also the regulatory state's function, which we will examine below in more depth, of imposing mandatory minimum overhead costs and thus erecting barriers to competition from low-overhead producers.

State spending serves to cartelize the economy in much the same way as regulation. Just as regulation removes significant areas of quality and safety as issues in cost competition, the socialization of operating costs on the state (e.g. R&D subsidies, government-funded technical education, etc.) allows monopoly capital to remove them as components of price in cost competition between firms, and places them in the realm of guaranteed income to all firms in a market alike.

1 Ibid., pp. 82-84.

2 Kolko, *Triumph of Conservatism*, p. 287.

Transportation subsidies reduce the competitive advantage of locating close to one's market. Farm price support subsidies turn idle land into an extremely lucrative real estate investment. Whether through regulations or direct state subsidies to various forms of accumulation, the corporations act through the state to carry out some activities jointly, and to restrict competition to selected areas.

An ever-growing portion of the functions of the capitalist economy have been carried out through the state. According to James O'Connor, state expenditures under monopoly capitalism can be divided into "social capital" and "social expenses."

Social capital is expenditures required for profitable private accumulation; it is indirectly productive (in Marxist terms, social capital indirectly expands surplus value). There are two kinds of social capital: social investment and social consumption (in Marxist terms, social constant capital and social variable capital)... *Social investment* consist of projects and services that increase the productivity of a given amount of laborpower and, other factors being equal, increase the rate of profit.... *Social consumption* consists of projects and services that lower the reproduction costs of labor and, other factors being equal, increase the rate of profit. An example of this is social insurance, which expands the productive powers of the work force while simultaneously lowering labor costs. The second category, social expenses, consists of projects and services which are required to maintain social harmony—to fulfill the state's "legitimization" function.... The best example is the welfare system, which is designed chiefly to keep social peace among unemployed workers.¹

According to O'Connor, such state expenditures counteract the falling direct rate of profit that Marx predicted in volume 3 of *Capital*. Monopoly capital is able to externalize many of its operating expenses on the state; and since the state's expenditures indirectly increase the productivity of labor and capital at taxpayer expense, the apparent rate of profit is increased. "In short, monopoly capital socializes more and more costs of production."²

(In fact, O'Connor makes the unwarranted assumption that the subsidized increase in capital-intensiveness actually increases productivity, rather than simply subsidizing the cost of increasing the ratio of capital to unit of output and despite the inefficiency of more capital-intensive methods. The subsidized capital-intensive production methods are, in fact, as surely a means of destroying surplus capital as sinking it in the ocean would be.)

O'Connor listed several ways in which monopoly capital externalizes its operating costs on the political system:

Capitalist production has become more interdependent—more dependent on science and technology, labor functions more specialized, and the division of labor more extensive. Consequently, the monopoly sector (and to a much lesser degree the competitive sector) requires increasing numbers of technical and administrative workers. It also requires increasing amounts of infrastructure (physical overhead capital)—transportation, communication, R&D, education, and other facilities. In short, the monopoly sector requires more and more social investment in relation to private capital.... The costs of social investment (or social constant capital) are not borne by monopoly capital but rather are socialized and fall on the state.³

The general effect of the state's intervention in the economy, then, is to remove ever increasing spheres of economic activity from the realm of competition in price or quality, and to organize them collectively through organized capital as a whole.

1 James O'Connor, *The Fiscal Crisis of the State* (New York: St. Martin's Press, 1973), pp. 6-7.

2 Ibid., p. 24.

3 Ibid., p. 24.

B. Mass Consumption and Push Distribution to Absorb Surplus

As we have already seen, the use of expensive product-specific machinery requires large-batch production to achieve high throughput and thus spread production costs out over as many units as possible. And to do this, in turn, requires enormous exercises of power to ensure that a market existed for this output.

First of all, it required the prior forms of intervention described in the last chapter and in the previous section of this chapter: state intervention to create a unified national market and transportation system, and state intervention to promote the formation of stable oligopoly cartels.

But despite all the state intervention up front to make the centralized corporate economy possible, state intervention is required *afterward* as well as before in order to keep the system running. Large, mass-production industry is unable to survive without the government guaranteeing an outlet for its overproduction, and insulating it from a considerable amount of market competition. As Paul Baran and Paul Sweezy put it, monopoly capitalism

tends to generate ever more surplus, yet it fails to provide the consumption and investment outlets required for the absorption of a rising surplus and hence for the smooth working of the system. Since surplus which cannot be absorbed will not be produced, it follows that the *normal* state of the monopoly capitalist economy is stagnation. With a given stock of capital and a given cost and price structure, the system's operating rate cannot rise above the point at which the amount of surplus produced can find the necessary outlets. And this means chronic underutilization of available human and material resources. Or, to put the point in slightly different terms, the system must operate at a point low enough on its profitability schedule not to generate more surplus than can be absorbed. Since the profitability schedule is always moving upward, there is a corresponding downdrift of the "equilibrium" operating rate. Left to itself—that is to say, in the absence of counteracting forces which are no part of what may be called the "elementary logic" of the system—monopoly capitalism would sink deeper and deeper into a bog of chronic depression.¹

Mass production divorces production from consumption. The rate of production is driven by the imperative of keeping the machines running at full capacity so as to minimize unit costs, rather than by customer orders. So in addition to contractual control of inputs, mass-production industry faces the imperative of guaranteeing consumption of its output by managing the consumer. It does this through push distribution, high-pressure marketing, planned obsolescence, and consumer credit.

Mass advertising serves as a tool for managing aggregate demand. According to Baran and Sweezy, the main function of advertising is "waging, on behalf of the producers and sellers of consumer goods, a relentless war against saving and in favor of consumption." And that function is integrally related to planned obsolescence:

The strategy of the advertiser is to hammer into the heads of people the unquestioned desirability, indeed the imperative necessity, of owning the newest product that comes on the market. For this strategy to work, however, producers have to pour on the market a steady stream of "new" products, with none daring to lag behind for fear his customers will turn to his rivals for newness.

Genuinely new or different products, however, are not easy to come by, even in our age of rapid

¹ Paul Baran and Paul Sweezy, *Monopoly Capitalism : An Essay in the American Economic and Social Order* (New York: Monthly Review Press, 1966), p. 108.

scientific and technological advance. Hence much of the newness with which the consumer is systematically bombarded is either fraudulent or related trivially and in many cases even negatively to the function and serviceability of the product.¹

....In a society with a large stock of consumer durable goods like the United States, an important component of the total demand for goods and services rests on the need to replace a part of this stock as it wears out or is discarded. Built-in obsolescence increases the rate of wearing out, and frequent style changes increase the rate of discarding.... The net result is a stepping up in the rate of replacement demand and a general boost to income and employment. In this respect, as in others, the sales effort turns out to be a powerful antidote to monopoly capitalism's tendency to sink into a state of chronic depression.²

Although somewhat less state-dependent than the expedients discussed later in this chapter, mass advertising had a large state component. For one thing, the founders of the mass advertising and public relations industries were, in large part, also the founders of the science of "manufacturing consent" used to manipulate Anglo-American populations into support for St. Woodrow's crusade. Edward Bernays and Harold Lasswell, who played a central role in the Creel Commission and other formative prowar propaganda efforts in WWI, went on to play similarly prominent roles in the development of public relations and mass consumer advertising.

For another, the state's own organs of propaganda (through the USDA, school home economics classes, etc.) put great emphasis on discrediting "old-fashioned" atavisms like home-baked bread and home-grown and -canned vegetables, and promoting in their place the "up-to-date" housewifely practice of heating stuff up out of cans from the market.³ Jeffrey Kaplan described this, in a recent article, as the "gospel of consumption":

[Industrialists] feared that the frugal habits maintained by most American families would be difficult to break. Perhaps even more threatening was the fact that the industrial capacity for turning out goods seemed to be increasing at a pace greater than people's sense that they needed them.

It was this latter concern that led Charles Kettering, director of General Motors Research, to write a 1929 magazine article called "Keep the Consumer Dissatisfied."... Along with many of his corporate cohorts, he was defining a strategic shift for American industry—from fulfilling basic human needs to creating new ones.

In a 1927 interview with the magazine *Nation's Business*, Secretary of Labor James J. Davis provided some numbers to illustrate a problem that the *New York Times* called "need saturation." Davis noted that "the textile mills of this country can produce all the cloth needed in six months' operation each year" and that 14 percent of the American shoe factories could produce a year's supply of footwear. The magazine went on to suggest, "It may be that the world's needs ultimately will be produced by three days' work a week."

Business leaders were less than enthusiastic about the prospect of a society no longer centered on the production of goods. For them, the new "labor-saving" machinery presented not a vision of liberation but a threat to their position at the center of power. John E. Edgerton, president of the National Association of Manufacturers, typified their response when he declared: "Nothing... breeds radicalism more than unhappiness unless it is leisure."

By the late 1920s, America's business and political elite had found a way to defuse the dual threat of stagnating economic growth and a radicalized working class in what one industrial consultant called "the

1 Ibid., pp. 128-129.

2 Ibid., p. 131.

3 This is the theme of Stuart Ewen, *Captains of Consciousness: Advertising and the Social Roots of Consumer Culture* (New York: McGraw-Hill, 1976).

gospel of consumption”—the notion that people could be convinced that however much they have, it isn't enough. President Herbert Hoover's 1929 Committee on Recent Economic Changes observed in glowing terms the results: "By advertising and other promotional devices . . . a measurable pull on production has been created which releases capital otherwise tied up." They celebrated the conceptual breakthrough: "Economically we have a boundless field before us; that there are new wants which will make way endlessly for newer wants, as fast as they are satisfied."¹

Right-wing libertarians like Murray Rothbard answer critiques of mass advertising by saying they downplay the role of the audience as an active moral agent in deciding what to accept and what to reject, and fail to recognize that information has a cost and that there's such a thing as "rational ignorance." Interestingly, however, many of Rothbard's followers at Mises.Org and Lew Rockwell.Com show no hesitancy whatsoever in attributing a cumulative sleeper effect to statist propaganda in the public schools and state-allied media. No doubt they would argue that, in the latter case, both the volume and the content of the propaganda are artificially shifted in the direction of a certain message, thus artificially raising the cost of defending against the propaganda message. But that is exactly my point concerning mass advertising. The state capitalist system makes mass-production industry for the national market artificially prevalent, and makes its need to dispose of surplus output artificially urgent, thus subjecting the consumer to a barrage of pro-consumption propaganda far greater in volume than would be experienced in a decentralized, free market society of small-scale local commodity production.

Chandler's model of "high-speed, high-throughput, turning high fixed costs into low unit costs," and Galbraith's "technostructure," presuppose a "push" model of distribution. Here's how it was described by Paul Goodman:

... in recent decades... the center of economic concern has gradually shifted from either providing goods for the consumer or gaining wealth for the enterpriser, to keeping the capital machines at work and running at full capacity; for the social arrangements have become so complicated that, unless the machines are running at full capacity, all wealth and subsistence are jeopardized, investment is withdrawn, men are unemployed. That is, when the system depends on all the machines running, unless every kind of good is produced and sold, it is also impossible to produce bread.²

The same imperative was at the root of the hypnopaedic socialization in Huxley's *Brave New World*: "ending is better than mending"; "the more stitches, the less riches." Or as GM designer Harley Earl said in the 1950s,

My job is to hasten obsolescence. I've got it down to two years; now when I get it down to one year, I'll have a perfect score.³

Along the same lines, Baran and Sweezy cite a New York investment banker on the disaster that would befall capitalism without planned obsolescence or branding: "Clothing would be purchased for its utility value; food would be bought on the basis of economy and nutritional value; automobiles would be stripped to essentials and held by the same owners for the full ten to fifteen years of their useful lives; homes would be built and maintained for their characteristics of shelter..."⁴

1 Jeffrey Kaplan, "The Gospel of Consumption: And the better future we left behind," *Orion*, May/June 2008 <<http://www.orionmagazine.org/index.php/articles/article/2962>>.

2 Paul and Percival Goodman, *Communitas: Means of Livelihood and Ways of Life* (New York: Vintage Books, 1947, 1960), pp. 188-89.

3 Eric Rumble, "Toxic Shocker," *Up! Magazine*, January 1, 2007 <http://www.up-magazine.com/magazine/exclusives/Toxic_Shocker_3.shtml>.

4 Baran and Sweezy, *Monopoly Capital*, p. 124.

The older economy that the "push" distribution system replaced was one in which most foods and drugs were what we would today call "generic." Flour, cereal, and similar products were commonly sold in bulk and weighed and packaged by the grocer (the ratio had gone from roughly 95% bulk to 75% package goods during the twenty years before Borsodi wrote in 1927); the producers geared production to the level of demand that was relayed to them by the retailers' orders. Drugs, likewise, were typically compounded by the druggist on-premises to the physician's specifications, from generic components.¹ Production was driven by orders from the grocer, as customers used up his stock of bulk goods.

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.²

The problem was that the consumer, under the new regime of Efficiency, paid about four times as much for trademarked flour, sugar, etc., as he had paid for bulk goods under the old "inefficient" system.³ Under the old regime, the grocer was a purchasing agent for the customer; under the new, he was a marketing agent for the producer.

Distribution costs are increased still further by the fact that larger-scale production and greater levels of capital intensiveness increase the unit costs resulting from idle capacity, and thereby (as we saw in the last chapter) greatly increase the resources devoted to high-pressure, "push" forms of marketing.

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.⁴ 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 industry can produce."⁵

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

1 Ralph Borsodi, *The Distribution Age* (New York and London: D. Appleton and Company, 1929), pp. 217, 228.

2 *Ibid.*, p. 110.

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

4 *Ibid.*, p. v.

5 *Ibid.*, p. 4.

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 content to sell only where and to whom they can sell most efficiently.¹

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.² 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.

And this increased marginal cost of distribution for output above the natural level of demand results, in accordance with Ricardo's law of rent, in higher average price for *all* goods. This means that in the market as it exists now, the price of generic and store brand goods is not governed by production cost, as it would be if competing in a commodity market; it is governed by the bare amount it needs to be marked down to compete with brand name goods.³

For those who can flexibly respond to demand, also, predictability of consumer demand doesn't matter that much. Of the grocer, for example, Borsodi pointed out that the customer would always have to eat, and would continue to do so without a single penny of high pressure marketing. It was therefore a matter of indifference to the grocer whether the customer ate some particular product or brand name; he would stock whatever goods the customer preferred, as his existing stocks were used up, and change his orders in keeping with changes in customer preference. To the manufacturer, on the other hand, it is of vital importance that the customer buy (say) mayonnaise in particular—and not just mayonnaise, but his particular brand of mayonnaise.⁴

And the proliferation of brand names with loyal followings raises the cost of distribution considerably: rather than stocking generic cornflakes in bulk commodity form, and replacing the stock as it is depleted, the grocer must maintain large enough stocks of all the (almost identical) popular brands to ensure against running out, which means slower turnover and more wasted shelf space. In other words, push distribution results in the costly disruption of flow by stagnant eddies and flows, in the form of ubiquitous inventories.⁵

1 Ibid., pp. 112-113.

2 Ibid., p. 136.

3 Ibid., p. 247.

4 Ibid., pp. 83-84.

5 Ibid., p. 84.

The advantage of brand specification, from the perspective of the producer, is that it "lifts a product out of competition":¹ "the prevalence of brand specification has all but destroyed the normal basis upon which true competitive prices can be established."² As Barry Stein described it, branding "convert[s] true commodities to apparent tailored goods, so as to avoid direct price competition in the marketplace."

The distinctions introduced—elaborate packaging, exhortative advertising and promotion that asserts the presence of unmeasurable values, and irrelevant physical modification (colored toothpaste)—do not, in fact, render these competing products "different" in any substantive sense, but to the extent that consumers are convinced by these distinctions and treat them as if they were different, product loyalty is generated.³

Under the old regime, competition between identifiable producers of bulk goods enabled grocers to select the highest quality bulk goods, while providing them to customers at the lowest price. Brand specification, on the other hand, relieves the grocer of the responsibility for standing behind his merchandise and turns him into a mere stocker of shelves with the most-demanded brands.

The change, naturally, did not go unremarked by those profiting from it. For example, here's a bit of commentary from an advertising trade paper in 1925:

In the statement to its stockholders issued recently by The American Sugar Refining Company, we find this statement:

"Formerly, as is well known, household sugar was largely of bulk pricing. We have described the sale of package sugar and table syrup under the trade names of 'Domino' and 'Franklin' with such success that the volume of trade-mark packages now constitutes roundly one-half of our production that goes into households...."

These facts should be of vital interest to any executive who faces the problem of marketing a staple product that is hard to control because it is sold in bulk.

Twenty years ago the sale of sugar in cardboard cartons under a brand name would have been unthinkable. Ten years hence this kind of history will have repeated itself in connection with many other staple commodities now sold in bulk....⁴

The process went on, just as the paper predicted, until—decades later—the very idea of a return to price competition in the production of goods, instead of brand-name competition for market share, would strike manufacturers with horror. What Borsodi proposed, making "[c]ompetition... descend from the cloudy heights of sales appeals and braggadocio generally, to just one factor—price,"⁵ is the worst nightmare of the oligopoly manufacturer and the advertising industry:

At the annual meeting of the U.S. Association of National Advertisers in 1988, Graham H. Phillips, the U.S. Chairman of Ogilvy & Mather, berated the assembled executives for stooping to participate in a "commodity marketplace" rather than an image-based one. "I doubt that many of you would welcome a commodity marketplace in which one competed solely on price, promotion and trade deals, all of which can be easily duplicated by competition, leading to ever-decreasing profits, decay, and eventual bankruptcy." Others spoke of the importance of maintaining "conceptual value-added," which in effect means adding

1 Ibid., p. 162.

2 Ibid. pp. 216-17.

3 Stein, *Size, Efficiency, and Community Enterprise*, p. 79.

4 *Advertising and Selling Fortnightly*, February 25, 1925, in Borsodi, *The Distribution Age*, pp. 159-60.

5 Stuart Chase and F. J. Schlink, *The New Republic*, December 30, 1925, in Ibid., p. 204.

nothing but marketing. Stooping to compete on the basis of real value, the agencies ominously warned, would speed not just the death of the brand, but corporate death as well.¹

It's telling that Chandler, the apostle of the great "efficiencies" of this entire system, frankly admitted all of these things. In fact, far from regarding it as an "admission," he treated it as a feature of the system. He explicitly equated "prosperity" to the rate of flow of material through the system and the speed of production and distribution—without any regard to whether the rate of "flow" was twice as fast because people were throwing stuff in the landfills twice as fast to keep the pipelines from clogging up.

The new middle managers did more than devise ways to coordinate the high-volume flow from suppliers of raw materials to consumers. They invented and perfected ways to expand markets and to speed up the processes of production and distribution. Those at American Tobacco, Armour, and other mass producers of low-priced packaged products perfected techniques of product differentiation through advertising and brand names that had been initially developed by mass marketers, advertising agencies, and patent medicine makers. The middle managers at Singer were the first to systematize personal selling by means of door-to-door canvassing; those at McCormick among the first to have franchised dealers using comparable methods. Both companies innovated in installment buying and other techniques of consumer credit.²

In other words, the Sloanist system Chandler idealized was more "efficient" because it was better at persuading people to throw stuff away so they could buy more, and better at producing substandard shit that would *have* to be thrown away in a few years. Only a man of the mid-20th century, writing at the height of consensus capitalism, from the standpoint of an establishment liberalism was as yet utterly untainted by the thinnest veneer of greenwash, could write such a thing from the standpoint of an *enthusiast*.

Increased unit costs from idle capacity, given the high overhead of large-scale production, are the chief motive behind the push distribution model. Even so, the restrained competition of an oligopoly market limits the competitive disadvantage resulting from idle capacity—so long as the leading firms in an industry are running at roughly comparable percentages of capacity, and can pass their overhead costs onto the customer. The oligopoly mark-up included in consumer price reflects the high costs of excess capacity.

It is difficult to estimate how large a part of the nation's production facilities are normally in use. One particularly able observer of economic tendencies, Colonel Leonard P. Ayres, uses the number of blast furnaces in operation as a barometer of business conditions. When blast furnaces are in 60 per cent. operation, conditions are normal....

It is obvious, if 60 per cent. represents normality, that consumers of such a basic commodity as pig iron must pay dividends upon an investment capable of producing two-thirds more pig iron than the country uses in normal times.

Borsodi also found that flour mills, steel plants, shoe factories, copper smelters, lumber mills, automobiles, and rayon manufacturers were running at similar or lower percentages of total capacity.³ Either way, it is the consumer who pays for overaccumulation: both for the high marketing costs of distributing overproduced goods when industry runs at full capacity, and for the high overhead when the firms in an oligopoly market all run at low capacity and pass their unit costs on through

1 Naomi Klein, *No Logo* (New York: Picador, 1999), p. 14.

2 Chandler, *The Visible Hand*, p. 411.

3 Borsodi, *The Distribution Age*, pp. 42-43.

administered pricing.

So cartelization and high costs from idle capacity, alongside push distribution and planned obsolescence, together constitute the twin pathologies of monopoly capitalism. Both are expedients for dealing with the enormous capital outlays and overproduction entailed in mass-production industry, and both require that outside society be subordinated to the needs of the corporation and subjected to its control.

The worst-case scenario, from our standpoint, is that big business will attempt an end-run around the problem of excess capacity and underconsumption through measures like the abortive National Industrial Recovery Act of the New Deal era: cartelizing an industry under government auspices, so all its firms can operate at a fraction of full capacity indefinitely and use monopoly pricing to pass the cost of idle capacity on to the consumer on a cost-plus basis. Anyone tempted to see this as a solution should bear in mind that it removes all incentive to control costs or to promote efficiency. For a picture of the kind of society that would result from such an arrangement, one need only watch the movie *Brazil*.

The overall system, in short, was a "solution" in search of a problem. State subsidies and mercantilism gave rise to centralized, overcapitalized industry, which led to overproduction, which led to the need to find a way of creating demand for lots of crap that nobody wanted.

C. State Action to Absorb Surplus: Imperialism

The roots of the corporate state in the U.S., more than anything else, lie in the crisis of overproduction as perceived by corporate and state elites—especially the traumatic Depression of the 1890s—and the requirement, also as perceived by them, for state intervention to absorb surplus output or otherwise deal with the problems of overproduction, underconsumption, and overaccumulation. According to William Appleman Williams, "the Crisis of the 1890's raised in many sections of American society the specter of chaos and revolution."¹ Economic elites saw it as the result of overproduction and surplus capital, and believed it could be resolved only through access to a "new frontier." Without state-guaranteed access to foreign markets, output would fall below capacity, unit costs would go up, and unemployment would reach dangerous levels.

Accordingly, the centerpiece of American foreign policy to the present day has been what Williams called "Open Door Imperialism"²: securing American access to foreign markets on equal terms to the European colonial powers, and opposing attempts by those powers to divide up or close markets in their spheres of influence.

Open Door Imperialism consisted of using U.S. political power to guarantee access to foreign markets and resources on terms favorable to American corporate interests, without relying on direct political rule. Its central goal was to obtain for U.S. merchandise, in each national market, treatment equal to that afforded any other industrial nation. Most importantly, this entailed active engagement by the U.S. government in breaking down the imperial powers' existing spheres of economic influence or preference. The result, in most cases, was to treat as hostile to U.S. security interests any large-scale attempt at autarky, or any other policy whose effect was to withdraw major areas of the world from the

¹ William Appleman Williams, *The Tragedy of American Diplomacy* (New York: Dell Publishing Company, 1959, 1962) 21-2.

² Williams, *The Contours of American History* (Cleveland and New York: The World Publishing Company, 1961).

disposal of the U.S. corporate economy. When the power attempting such policies was an equal, like the British Empire, the U.S. reaction was merely one of measured coolness. When it was perceived as an inferior, like Japan, the U.S. resorted to more forceful measures, as events of the late 1930s indicate. And whatever the degree of equality between advanced nations in their access to Third World markets, it was clear that Third World nations were still to be subordinated to the industrialized West in a collective sense.

In the late 1930s, the American political leadership feared that Fortress Europe and the Greater East Asian Co-Prosperity sphere would deprive the American corporate economy of vitally needed raw materials, not to mention outlets for its surplus output and capital; that's what motivated FDR to maneuver the country into another world war. The State Department's internal studies at the time estimated that the American economy required, at a minimum, the resources and markets of a "Grand Area" consisting of Latin America, East Asia, and the British Empire. Japan, meanwhile, was conquering most of China (home of the original Open Door) and the tin and rubber of Indochina, and threatening to capture the oil of the Dutch East Indies as well. In Europe, the worst case scenario was the fall of Britain, followed by the German capture of some considerable portion of the Royal Navy and subsequently of the Empire. War with the Axis would have followed from these perceived threats as a matter of course, even had FDR not successfully maneuvered Japan into firing the first shot.¹

World War II, incidentally, also went a long way toward postponing America's crises of overproduction and overaccumulation for a generation, by blowing up most of the capital in the world outside the United States and creating a permanent war economy to absorb surplus output.

The American policy that emerged from the war was to secure control over the markets and resources of the global "Grand Area" through institutions of global economic governance, as created by the postwar Bretton Woods system, and to make preventing "defection from within" by autarkic powers the centerpiece of national security policy.

The problem of access to foreign markets and resources was central to U.S. postwar planning. Given the structural imperatives of "export dependent monopoly capitalism,"² the threat of a postwar depression was very real. The original drive toward foreign expansion at the end of the nineteenth century reflected the fact that industry, with state capitalist encouragement, had expanded far beyond the ability of the domestic market to consume its output. Even before World War II, the state capitalist economy had serious trouble operating at the level of output needed for full utilization of capacity and cost control. Military-industrial policy during the war exacerbated the problem of over-accumulation, greatly increasing the value of plant and equipment at taxpayer expense. The end of the war, if followed by the traditional pattern of demobilization, would have resulted in a drastic reduction in

1 Laurence H. 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. 135-56

2 "Now the price that brings the maximum monopoly profit is generally far above the price that would be fixed by fluctuating competitive costs, and the volume that can be marketed at that maximum price is generally far below the output that would be technically and economically feasible.... [The trust] extricates itself from this dilemma by producing the full output that is economically feasible, thus securing low costs, and offering in the protected domestic market only the quantity corresponding to the monopoly price—insofar as the tariff permits; while the rest is sold, or "dumped," abroad at a lower price...." --Joseph Schumpeter, "Imperialism," in *Imperialism, Social Classes: Two Essays* by Joseph Schumpeter. Translated by Heinz Norden. Introduction by Herta and Paul Amirson (New York: Meridian Books, 1955) 79-80.

Joseph Stromberg, by the way, did an excellent job of integrating this thesis, generally identified with the historical revisionism of the New Left, into the theoretical framework of Mises and Rothbard, in "The Role of State Monopoly Capitalism in the American Empire" *Journal of Libertarian Studies* Volume 15, no. 3 (Summer 2001), pp. 57-93. Available online at <http://www.mises.org/journals/jls/15_3/15_3_3.pdf>.

orders to that same overbuilt industry just as over ten million workers were being dumped back into the civilian labor force.

A central facet of postwar economic policy, as reflected in the Bretton Woods agencies, was state intervention to guarantee markets for the full output of U.S. industry and profitable outlets for surplus capital. The World Bank was designed to subsidize the export of capital to the Third World, by financing the infrastructure without which Western-owned production facilities could not be established there. According to Gabriel Kolko's 1988 estimate, almost two thirds of the World Bank's loans since its inception had gone to transportation and power infrastructure.¹ A laudatory Treasury Department report referred to such infrastructure projects (comprising some 48% of lending in FY 1980) as "externalities" to business, and spoke glowingly of the benefits of such projects in promoting the expansion of business into large market areas and the consolidation and commercialization of agriculture.² The Volta River power project, for example, was built with American loans (at high interest) to provide Kaiser aluminum with electricity at very low rates.³

D. State Action to Absorb Surplus: State Capitalism

Government also directly intervened 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 a creator of effective demand and absorber of surplus has grown during the monopoly capitalist era.”⁴

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 refer to “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.”⁵

As for wars, Emmanuel Goldstein described their function quite well. “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.⁶

1 Gabriel Kolko, *Confronting the Third World: United States Foreign Policy 1945-1980* (New York: Pantheon Books, 1988), p. 120.

2 *United States Participation in the Multilateral Development Banks in the 1980s*. Department of the Treasury (Washington, DC: 1982), p. 9.

3 L. S. Stavrianos, *The Promise of the Coming Dark Age* (San Francisco: W. H. Freeman and Co. 1976), p. 42.

4 Baran and Sweezy, pp. 146-147.

5 *Ibid.*, p. 219.

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

Earlier, we quoted Robin Marris on the tendency of corporate bureaucracies to emphasize, not the character of goods produced, but the skills with which their production was organized. This is paralleled at a societal level. The imperative to destroy surplus is reflected in the GDP, which measures not the utility of goods and services to the consumer but the materials consumed in producing them. The more of Bastiat's "broken windows," the more inputs consumed to produce a given output, the higher the GDP.

As we said in the last chapter, the highway-automobile complex and the civil aviation system were continuations of the process begun with the railroads and other "internal improvements" of the nineteenth century: i.e., government subsidy to market centralization and large firm size. But as we pointed out then, they also have special significance as examples of the phenomenon Paul Baran and Paul Sweezy described in *Monopoly Capitalism*: government's creation of entire new industries to soak up the surplus generated by corporate capitalism's chronic tendencies toward overinvestment and overproduction.

Of the automobile-highway complex, Baran and Sweezy wrote, "[t]his complex of private interests clustering around one product has no equal elsewhere in the economy—or in the world. And the whole complex, of course, is completely dependent on the public provision of roads and highways."¹ Not to mention the role of U.S. foreign policy in guaranteeing access to "cheap and abundant" petroleum.

One of the major barriers to the fledgling automobile industry at the turn of the century was the poor state of the roads. One of the first highway lobbying groups was the League of American Wheelmen, which founded "good roads" associations around the country and, in 1891, began lobbying state legislatures....

The Federal Aid Roads Act of 1916 encouraged coast-to-coast construction of paved roads, usually financed by gasoline taxes (a symbiotic relationship if ever there was one). By 1930, the annual budget for federal road projects was \$750 million. After 1939, with a push from President Franklin Roosevelt, limited-access interstates began to make rural areas accessible.²

It was this last, in the 1930s, that signified the most revolutionary change. From its beginning, the movement for a national superhighway network was identified, first of all, with the fascist industrial policy of Hitler, and second with the American automotive industry.

The "most powerful pressure group in Washington" began in June, 1932, when GM President, Alfred P. Sloan, created the National Highway Users Conference, inviting oil and rubber firms to help GM bankroll a propaganda and lobbying effort that continues to this day.³

One of the earliest depictions of the modern superhighway in America was the Futurama exhibit at the 1939 World's Fair in New York, sponsored by (who else?) GM.

The exhibit... provided a nation emerging from its darkest decade since the Civil War a mesmerizing glimpse of the future--a future that involved lots and lots of roads. Big roads. Fourteen-lane superhighways on which cars would travel at 100 mph. Roads on which, a recorded narrator promised, Americans would

1 Baran and Sweezy, pp. 173-174.

2 Jim Motavalli, "Getting Out of Gridlock: Thanks to the Highway Lobby, Now We're Stuck in Traffic. How Do We Escape?" *E Magazine*, March/April 2002 <<http://www.emagazine.com/view/?534>>.

3 Mike Ferner, "Taken for a Ride on the Interstate Highway System," *MRZine (Monthly Review)* June 28, 2006 <<http://mrzine.monthlyreview.org/ferner280606.html>>.

eventually be able to cross the nation in a day.¹

The Interstate's association with General Motors didn't end there, of course. Its actual construction took place under the supervision of DOD Secretary Charles Wilson, formerly the company's CEO. During his 1953 confirmation hearings, when asked whether "he could make a decision in the country's interest that was contrary to GM's interest,"

Wilson shot back with his famous comment, "I cannot conceive of one because for years I thought what was good for our country was good for General Motors, and vice versa. The difference did not exist. Our company is too big."²

Wilson's role in the Interstate program was hardly that of a mere disinterested technocrat. From the time of his appointment to DOD, he "pushed relentlessly" for it. And the chief administrator of the program was "Francis DuPont, whose family owned the largest share of GM stock..."³

Corporate propaganda, as so often in the twentieth century, played an active role in attempts to reshape the popular culture.

Helping to keep the driving spirit alive, Dow Chemical, producer of asphalt, entered the PR campaign with a film featuring a staged testimonial from a grade school teacher standing up to her anti-highway neighbors with quiet indignation. "Can't you see this highway means a whole new way of life for the children?"⁴

Whatever the political motivation behind it, the economic effect of the Interstate system should hardly be controversial. Virtually 100% of the roadbed damage to highways is caused by heavy trucks. And despite repeated liberalization of maximum weight restrictions, far beyond the heaviest conceivable weight the Interstate roadbeds were originally designed to support,

fuel taxes fail miserably at capturing from big-rig operators the cost of exponential pavement damage caused by higher axle loads. Only weight-distance user charges are efficient, but truckers have been successful at scrapping them in all but a few western states where the push for repeal continues.⁵

So only about half the revenue of the highway trust fund comes from fees or fuel taxes on the trucking industry, and the rest is externalized on private automobiles. Even David S. Lawyer, a skeptic on the general issue of highway subsidies, only questions whether highways receive a net subsidy from general revenues over and above total user fees on both trucks and cars; he effectively concedes the subsidy of heavy trucking by the gasoline tax.⁶

As for the civil aviation system, from the beginning it was a creature of the state. The whole physical infrastructure was built, in its early decades, with tax money.

1 Justin Fox, "The Great Paving How the Interstate Highway System helped create the modern economy--and reshaped the FORTUNE 500." Reprinted from *Fortune*. CNNMoney.Com, January 26, 2004 <http://money.cnn.com/magazines/fortune/fortune_archive/2004/01/26/358835/index.htm>.

2 Edwin Black, "Hitler's Carmaker: How Will Posterity Remember General Motors' Conduct? (Part 4)" *History News Network*, May 14, 2007 <<http://hnn.us/articles/38829.html>>.

3 Ferner, "Taken for a Ride."

4 Ibid.

5 Frank N. Wilner, "Give truckers an inch, they'll take a ton-mile: every liberalization has been a launching pad for further increases - trucking wants long combination vehicle restrictions dropped," *Railway Age*, May 1997 <http://findarticles.com/p/articles/mi_m1215/is_n5_v198/ai_19460645>.

6 David S. Lawyer, "Are Roads and Highways Subsidized?" March 2004 <http://www.lafn.org/~dave/trans/econ/highway_subsidy.html>.

Since 1946, *the federal government has poured billions of dollars into airport development.* In 1992, Prof. Stephen Paul Dempsey of the University of Denver estimated that *the current replacement value of the U.S. commercial airport system—virtually all of it developed with federal grants and tax-free municipal bonds—at \$1 trillion.*

Not until 1971 did the federal government begin collecting user fees from airline passengers and freight shippers to recoup this investment. In 1988 the Congressional Budget Office found that *in spite of user fees paid into the Airport and Airways Trust Fund, the taxpayers still had to transfer \$3 billion in subsidies per year to the FAA* to maintain its network of more than 400 control towers, 22 air traffic control centers, 1,000 radar-navigation aids, 250 long-range and terminal radar systems and its staff of 55,000 traffic controllers, technicians and bureaucrats.¹

(And even aside from the inadequacy of user fees, eminent domain remains central to the building of new airports and expansion of existing ones.)

Subsidies to the airport and air traffic control infrastructure of the civil aviation system are only part of the picture. Equally important was the direct role of the state in creating the heavy aircraft industry, whose heavy cargo and passenger jets revolutionized civil aviation after WWII. The civil aviation system is, many times over, a creature of the state.

In *Harry Truman and the War Scare of 1948*, Frank Kofsky described the aircraft industry as spiraling into red ink after the end of the war, and on the verge of bankruptcy when it was rescued by Truman's new bout of Cold War spending on heavy bombers.² David Noble pointed out that civilian jumbo jets would never have existed without the government's heavy bomber contracts. The production runs for the civilian market alone were too small to pay for the complex and expensive machinery. The 747 is essentially a spinoff of military production.³

The permanent war economy associated with the Cold War prevented the U.S. from relapsing into depression after demobilization. The Cold War restored the corporate economy's heavy reliance on the state as a source of guaranteed sales. Charles Nathanson argued that "one conclusion is inescapable: major firms with huge aggregations of corporate capital owe their survival after World War II to the Cold War..."⁴ According to David Noble, employment in the aircraft industry grew more than tenfold between 1939 and 1954. Whereas military aircraft amounted to only a third of industry output in 1939. By 1953, military airframe weight production was 93% of total output.⁵ "The advances in aerodynamics, metallurgy, electronics, and aircraft engine design which made supersonic flight a reality by October 1947 were underwritten almost entirely by the military."⁶

As Marx pointed out in Volume Three of *Capital*, the rise of major new forms of industry could absorb surplus capital and counteract the falling direct rate of profit." Baran and Sweezy, likewise, considered "epoch-making inventions" as partial counterbalances to the ever-increasing surplus. Their chief example was the rise of the automobile industry in the 1920s, which (along with the highway

1 James Coston, Amtrak Reform Council, 2001, in "America's long history of subsidizing transportation" <<http://www.trainweb.org/moksrail/advocacy/resources/subsidies/transport.htm>>.

2 Frank Kofsky, *Harry Truman and the War Scare of 1948*, (New York: St. Martin's Press, 1993).

3 Noble, *America by Design*, pp. 6-7.

4 Charles Nathanson, "The Militarization of the American Economy," in David Horowitz, ed., *Corporations and the Cold War* (New York and London: Monthly Review Press, 1969), p. 214.

5 David F. Noble, *Forces of Production: A Social History of American Automation* (New York: Alfred A. Knopf, 1984), pp. 5-6.

6 *Ibid.*, p. 6.

program) was to define the American economy for most of the mid-20th century.¹ The high tech boom of the 1990s was a similarly revolutionary event. It is revealing to consider the extent to which both the automobile and computer industries, far more than most industries, were direct products of state capitalism.

Besides civilian jumbo jets, many other entirely new industries were also created almost entirely as a byproduct of military spending. Through the military-industrial complex, the state has socialized a major share—probably the majority—of the cost of "private" business's research and development. If anything the role of the state as purchaser of surplus economic output is eclipsed by its role as subsidizer of research cost, as Charles Nathanson pointed out. Research and development was heavily militarized by the Cold War "military-R&D complex." Military R&D often results in basic, general use technologies with broad civilian applications. Technologies originally developed for the Pentagon have often become the basis for entire categories of consumer goods.² The general effect has been to "substantially [eliminate] the major risk area of capitalism: the development of and experimentation with new processes of production and new products."³

This is the case in electronics especially, where many products originally developed by military R&D "have become the new commercial growth areas of the economy."⁴ Transistors and other miniaturized circuitry were developed primarily with Pentagon research money. The federal government was the primary market for large mainframe computers in the early days of the industry; without government contracts, the industry might never have had sufficient production runs to adopt mass production and reduce unit costs low enough to enter the private market.

Overall, Nathanson estimated, industry depended on military funding for around 60% of its research and development spending; but this figure is considerably understated by the fact that a significant part of nominally civilian R&D spending is aimed at developing civilian applications for military technology.⁵ It is also understated by the fact that military R&D is often used for developing production technologies that become the basis for production methods throughout the civilian sector.

In particular, as described by Noble in *Forces of Production*, industrial automation, cybernetics and miniaturized electronics all emerged directly from the military-funded R&D of WWII and the early Cold War. The aircraft, electronics and machine tools industries were transformed beyond recognition by the military economy.⁶

"The modern electronics industry," Noble writes, "was largely a military creation." Before the war, the industry consisted largely of radio.⁷ Miniaturized electronics and cybernetics were almost entirely the result of military R&D.

Miniaturization of electrical circuits, the precursor of modern microelectronics, was promoted by the military for proximity fuses for bombs.... Perhaps the most significant innovation was the electronic digital computer, created primarily for ballistics calculations but used as well for atomic bomb analysis. After the war, the electronics industry continued to grow, stimulated primarily by military demands for aircraft and missile guidance systems, communications and control instruments, industrial control devices, high-speed

1 Baran and Sweezy, *Monopoly Capitalism*, p. 220.

2 "The Militarization of the American Economy," p. 208.

3 Ibid., p. 230.

4 Ibid., p. 230.

5 Ibid., pp. 222-25.

6 Noble, *Forces of Production*, p. 5.

7 Ibid., p. 7.

electronic computers for air defense command and control networks..., and transistors for all of these devices.... In 1964, two-thirds of the research and development costs in the electrical equipment industry (e.g., those of GE, Westinghouse, RCA, Raytheon, AT&T, Philco, IBM, Sperry Rand_ were still paid for by the government.¹

The transistor, “the outgrowth of wartime work on semi-conductors,” came out of Bell Labs in 1947. Despite obstacles like high cost and reliability, and resistance resulting from path dependency in the tube-based electronic industry, the transistor won out

through the large-scale and sustained sponsorship of the military, which needed the device for aircraft and missile control, guidance, and communications systems, and for the digital command- and-control computers that formed the core of their defense networks.²

In cybernetics, likewise, the electronic digital computer was developed largely in response to military needs. ENIAC, developed for the Army at the University's Moore School of Electrical Engineering, was used for ballistics calculations and for calculations in the atomic bomb project.³ Despite the reduced cost and increased reliability of hardware, and advances in computer language software systems, “in the 1950s the main users remained government agencies and, in particular, the military. The Air Force SAGE air defense system alone, for example, employed the bulk of the country's programmers...”

SAGE produced, among other things, “a digital computer that was fast enough to function as part of a continuous feedback control system of enormous complexity,” which could therefore “be used continuously to monitor and control a vast array of automatic equipment in 'real time'....” These capabilities were key to later advances industrial automation.⁴

The same pattern prevailed in the machine tool industry, the primary focus of *Forces of Production*. The share of total machine tools in use that were under ten years old rose from 28% in 1940 to 62% in 1945. At the end of the war, three hundred thousand machine tools were declared surplus and dumped on the commercial market at fire-sale prices. Although this caused the industry to contract (and consolidate), the Cold War resulted in a revival of the machine tools industry. R&D expenditures in machine tools expanded eightfold from 1951 to 1957, thanks to military needs. In the process, the machine tool industry became dominated by the “cost plus” culture of military industry, with its guaranteed profit.⁵

The specific technologies used in automated control systems for machine tools all came out of the military economy:

...[T]he effort to develop radar-directed gunfire control systems, centered at MIT's Servomechanisms Laboratory, resulted in a range of remote control devices for position measurement and precision control of motion; the drive to develop proximity fuses for mortar shells produced miniaturized transceivers, early integrated circuits, and reliable, rugged, and standardized components. Finally, by the end of the war, experimentation at the National Bureau of Standards, as well as in Germany, had produced magnetic tape, recording heads (tape readers), and tape recorders for sound movies and radio, as well as information storage

1 Ibid., pp. 7-8.

2 Ibid., pp. 47-48.

3 Ibid., p. 50.

4 Ibid., p. 52.

5 Ibid., pp. 8-9.

and programmable machine control.¹

In particular, World War II R&D for radar-directed gunfire control systems were the primary impetus behind the development of servomechanisms and automatic control,

pulse generators, to convey precisely electrical information; transducers, for converting information about distance, heat, speed, and the like into electrical signals; and a whole range of associated actuating, control and sensing devices.²

Industrial automation was introduced in private industry by the same people who had developed the technology for the military economy. The first analog computer-controlled industrial operations were in the electrical power and petroleum refining industries in the 1950s. By 1959, Texaco's Port Arthur refinery placed production under full digital computer control, and was followed in 1960 by Monsanto's Louisiana ammonia plant and B. F. Goodrich's vinyl plant in Calvert, Kentucky. From there the revolution quickly spread to steel rolling mills, blast furnaces, and chemical processing plants. By the 1960s, computerized control evolved from open-loop to closed-loop feedback systems, with computers making adjustments automatically based on sensor feedback.³

Numerically controlled machine tools, in particular, were first developed with Air Force money, and first introduced (both with Air Force funding and under Air Force pressure) in the aircraft and the aircraft engines and parts industries, and in USAF contractors in the machine tool industry.⁴

So the military economy and other state-created industries were an enormous sponge for surplus capital and surplus output. The heavy industrial and high tech sectors were given a virtually guaranteed outlet, not only by U.S. military procurement, but by grants and loan guarantees for foreign military sales under the Military Assistance Program.

Although apologists for the military-industrial complex have tried to stress the relatively small fraction of total production represented by military goods, it makes more sense to compare the volume of military procurement to the amount of idle capacity. Military production runs amounting to a minor percentage of total production might absorb a major part of total idle production capacity, and have a huge effect on reducing unit costs. Besides, the rate of profit on military contracts tends to be quite a bit higher, given the fact that military goods have no "standard" market price, and the fact that prices are set by political means (as periodic Pentagon budget scandals should tell us).⁵ So military contracts, small though they might be as a portion of a firm's total output, might well make the difference between profit and loss.

Seymour Melman described the "permanent war economy" as a privately-owned, centrally-planned economy that included most heavy manufacturing and high tech industry. This "*state-controlled economy*" was based on the principles of "maximization of costs and of government subsidies."⁶

It can draw on the federal budget for virtually unlimited capital. It operates in an insulated, monopoly market that makes the state-capitalist firms, singly and jointly, impervious to inflation, to poor productivity

1 Ibid., p. 47.

2 Ibid., pp. 48-49.

3 Ibid., pp. 60-61.

4 Ibid., p. 213.

5 Nathanson, "The Militarization of the American Economy," p. 208.

6 Seymour Melman, *The Permanent War Economy: American Capitalism in Decline* (New York: Simon and Schuster, 1974), p. 11.

performance, to poor product design and poor production managing. The subsidy pattern has made the state-capitalist firms failure-proof. That is the state-capitalist replacement for the classic self-correcting mechanisms of the competitive, cost-minimizing, profit-maximizing firm.¹

A great deal of what is called “progress” amounts, not to an increase in the volume of consumption per unit of labor, but to an increase in the inputs consumed per unit of consumption—namely, the increased cost and technical sophistication entailed in a given unit of output, with no real increase in efficiency.

The chief virtue of the military economy is its utter unproductivity. That is, it does not compete with private industry to supply any good for which there is consumer demand. But military production is not the only such area of unproductive government spending. Neo-Marxist Paul Mattick elaborated on the theme in a 1956 article. The overbuilt corporate economy, he wrote, ran up against the problem that “[p]rivate capital formation... finds its limitation in diminishing market-demand.” The State had to absorb part of the surplus output; but it had to do so without competing with corporations in the private market. Instead, “[g]overnment-induced production is channeled into non-market fields--the production of non-competitive public-works, armaments, superfluties and waste.”² As a necessary result of this state of affairs,

so long as the principle of competitive capital production prevails, steadily growing production will in increasing measure be a “production for the sake of production,” benefiting neither private capital nor the population at large.

This process is somewhat obscured, it is true, by the apparent profitability of capital and the lack of large-scale unemployment. Like the state of prosperity, profitability, too, is now largely government manipulated. Government spending and taxation are managed so as to strengthen big business at the expense of the economy as a whole....

In order to increase the scale of production and to accumulate [sic] capital, government creates “demand” by ordering the production of non-marketable goods, financed by government borrowings. This means that the government avails itself of productive resources belonging to private capital which would otherwise be idle.³

Such consumption of output, while not always directly profitable to private industry, serves a function analogous to foreign “dumping” below cost, in enabling industry to operate at full capacity despite the insufficiency of private demand to absorb the entire product at the cost of production.

It's interesting to consider how many segments of the economy have a guaranteed market for their output, or a “conscript clientele” in place of willing consumers. The “military-industrial complex” is well known. But how about the state's education and penal systems? How about the automobile-trucking-highway complex, or the civil aviation complex? Foreign surplus disposal (“export dependant monopoly capitalism”) and domestic surplus disposal (government purchases) are different forms of the same phenomenon.

E. Mene, Mene, Tekel, Upharsin (a Critique of Sloanism's Defenders)

Although Galbraith and Chandler commonly justified the corporation's power over the market in

1 Ibid., p. 21.

2 Paul Mattick, “The Economics of War and Peace,” *Dissent* (Fall 1956), p. 377.

3 Ibid., pp. 378-379.

terms of its social benefits, they had things exactly backward. The "technostructure" can survive because it is enabled to be *less* responsive to consumer demand. An oligopoly firm in a cartelized industry, in which massive, inefficient bureaucratic corporations share the same bureaucratic culture, is protected from competition. The "innovations" Chandler so prized are made by a leadership completely out of touch with reality. These "innovations" succeed because they are determined by the organization for its own purposes, and the organization has the power to impose top-down "change" on a cartelized market, with little regard to consumer preferences, instead of responding flexibly to them. "Innovative strategies" are based, not on finding out what people want and providing it, but on inventing ever-bigger hammers and then forcing us to be nails. The large corporate organization is not more efficient at accomplishing goals received from outside; it is more efficient at accomplishing goals it sets for itself for its own purposes, and then using its power to adapt the rest of society to those goals.

So to turn to our original point, the apostles of mass production have all, at least tacitly, identified the superior efficiency of the large corporation with its control over the external environment. Sloanist mass production subordinates the consumer, and the rest of outside society, to the institutional needs of the corporation.

Chandler himself admitted as much, in discussing what he called a strategy of "productive expansion." Big business added new outlets that permitted it to make "more complete use" of its "centralized services and facilities."¹ In other words, "efficiency" is defined by the existence of "centralized facilities," as such; efficiency is then promoted by finding ways to make people buy the stuff the centralized facilities can produce running at full capacity.

The authoritarianism implicit in such thinking is borne out by Chandler disciple William Lazonick's circular understanding of "organizational success," as he discusses it in his survey of "innovative organizations" in Part III of *Business Organization and the Myth of the Market Economy*.² The centralized, managerialist technostructure is the best vehicle for "organizational success"—defined as what best suits the interests of the centralized, managerialist technostructure. And of course, such "organizational success" has little or nothing to do with what society outside that organization might decide, on its own initiative, that it wants. Indeed (as Galbraith argued), "organizational success" requires institutional mechanisms to prevent outside society from doing what it wants, in order to provide the levels of stability and predictable demand that the technostructure needs for its long planning horizons. These theories amount, in practice, to a circular argument that oligopoly capitalism is "successful" because it is most efficient at achieving the ends of oligopoly capitalism.

Lazonick's model of "*successful* capitalist development" raises the question "successful" for whom? His "innovative organization" is no doubt "successful" for the people who make money off it—but not for those at whose expense they make money. It is only "success" if one posits the goals and values of the organization as those of society, and acquiesces in whatever organizational supports are necessary to impose those values on the rest of society.

His use of the expression "value-creating capabilities" seems to have very little to do with the ordinary understanding of the word "value" as finding out what people want and then producing it more efficiently than anyone else. According to his (and Chandler's and Galbraith's) version of value, rather, the organization decides what it wants to produce based on the interests of its hierarchy, and then uses its organizational power to secure the stability and control it needs to carry out its self-determined goals without interference from the people who actually buy the stuff.

¹ Chandler, *The Visible Hand*, p. 487.

² William Lazonick, *Business Organization and the Myth of the Market Economy* (Cambridge, 1991).

This parallels Chandler's view of "organizational capabilities," which he seemed to identify with an organization's power over the external environment. A telling example, as we saw in Chapter One, is Chandler's book on the tech industry.¹ For Chandler, "organizational capabilities" in the consumer electronics industry amounted to the artificial property rights by which the firm was able to exercise ownership rights over technology and over the skill and situational knowledge of its employees, and to prevent the transfer of technology and skill across corporate boundaries. Thus, his chapter on the history of the consumer electronics industry through the mid-20th century is largely an account of what patents were held by which companies, and who subsequently bought them.

The "innovation" Chandler and Lazonick lionize means, in practice, 1) developing processes so capital-intensive and high-tech that, if all costs were fully internalized in the price of the goods produced, consumers would prefer simpler and cheaper models; or 2) developing products so complex and prone to breakdown that, if cartelized industry weren't able to protect its shared culture from outside competition, the consumer would prefer a more durable and user-friendly model. Cartelized, over-built industry deals with overproduction through planned obsolescence, and through engineering a mass-consumer culture, and succeeds because cartelization restricts the range of consumer choice.

The "innovative products" that emerge from Chandler's industrial model, all too often, are what engineers call "gold-plated turds": horribly designed products with proliferating features piled one atop another with no regard to the user's needs, ease of use, dependability or reparability. For a good example, compare the acceptable Word 2003 to the utterly godawful Word 2007.²

Chandler's version of "successful development" is a roaring success indeed, if we start with the assumption that society should be reengineered to desire what the technostructure wants to produce.

Robin Marris described this approach quite well. The bureaucratic culture of the corporation, he wrote,

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]."³

As the satirist John Gall put it, the large organization tends to redefine the consumption of inputs as outputs.

A giant program to conquer cancer is begun. At the end of five years, cancer has not been conquered, but one thousand research papers have been published. In addition, one million copies of a pamphlet entitled "You and the War Against Cancer" have been distributed. These publications will absolutely be regarded as Output rather than Input. A giant program to conquer cancer is begun. At the end of five years, cancer has not been conquered, but one thousand research papers have been published. In addition, one million copies of a pamphlet entitled "You and the War Against Cancer" have been distributed. These publications will absolutely be regarded as Output rather than Input.⁴

1 Alfred D. Chandler, Jr., *Inventing the Electronic Century* (New York: The Free Press, 2001), pp. 13-49.

2 Alan Cooper's *The Inmates are Running the Asylum: Why High-Tech Products Drive Us Crazy and How to Restore the Sanity* (Indianapolis: Sams, 1999) is an excellent survey of the tendency of American industry to produce gold-plated turds without regard to the user.

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

4 John Gall, *Systemantics: How Systems Work and Especially How They Fail* (New York: Pocket Books, 1975), p. 74.

The marketing "innovations" Chandler trumpeted in *Scale and Scope*—in foods, for example, the techniques for "refining, distilling, milling, and processing"¹—were actually expedients for ameliorating the inefficiencies imposed by large-scale production and long-distance distribution: refined white flour, inferior in taste and nutrition to fresh-milled local flour, but which would keep for long-term storage; gas-ripened rubber tomatoes and other vegetables grown for transportability rather than taste; etc. The standard American diet of refined white flour, hydrogenated oils, and high fructose corn syrup is in large part a tribute to Chandler.

F. The Pathologies of Sloanism

Not only are the large and capital-intensive manufacturing corporations themselves characterized by high overhead and bureaucratic style; their organizational culture contaminates the entire system, becoming a hegemonic norm copied even by small organizations, labor-intensive firms, cooperatives and non-profits. In virtually every field of endeavor, as Goodman put it, there is a "need for amounts of capital out of proportion to the nature of the enterprise." Every aspect of social life becomes dominated by the high overhead organization.

Goodman classifies organizations into a schema. Categories A and B, respectively, are "enterprises extrinsically motivated and interlocked with the other centralized systems," and "enterprises intrinsically motivated and tailored to the concrete product or service." The two categories are each subdivided, roughly, into profit and nonprofit classes.

The interesting thing is that the large institutional nonprofits (Red Cross, Peace Corps, public schools, universities, etc.) are not counterweights to for-profit culture. Rather, they share the *same* institutional culture: "status salaries and expense accounts are equally prevalent, excessive administration and overhead are often more prevalent, and there is less pressure to trim costs."

Rather than the state and large nonprofits acting as a "countervailing power" on large for-profit enterprise, in Galbraith's schema, what happens more often is a coalition of the large for-profit and large nonprofit:

...the military-industrial complex, the alliance of promoters, contractors, and government in Urban Renewal; the alliance of universities, corporations, and government in research and development. This is the great domain of cost-plus.²

Goodman contrasts the bureaucratic organization with the small, libertarian organization. "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

1 Alfred Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism* (Cambridge and London: The Belknap Press of Harvard University Press, 1990), p. 262.

2 Paul Goodman, *People or Personnel*, pp. 114-115.

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.

Instead of expensive capital outlays, the ad hoc organization uses spare capacity of existing small-scale capital goods its members already own, along with recycled or vernacular building materials. The staff of a small self-managed organization are free to use their own judgment and ingenuity in formulating solutions to unforeseen problems, cutting costs, and so forth. And because the staff is often the source of the capital investments, they are likely to be quite creative in finding ways to save money.

A couple of things come to mind here. First, Friedrich Hayek's treatment of distributed knowledge: those directly engaged in a task are usually the best source of ideas for improving its efficiency. And second, Milton Friedman's ranking of the relative efficiencies achieved by 1) people spending other people's money on other people; 2) people spending other people's money on themselves; 3) people spending their own money on other people; and 4) people spending their own money on themselves.

The staff of a small, self-directed undertaking can afford to throw themselves into maximizing their effectiveness, because they know the efficiency gains they produce won't be appropriated by absentee owners or senior management who simply use the higher productivity to skim more profit off the top or to lay off some of the staff. Most of the features of Weberian bureaucracy and hierarchical systems of control—job descriptions, tracking forms and controls, standard procedures, and the like—result from the fact that the workforce has absolutely no rational interest in expending effort or working effectively, beyond the bare minimum required to keep the employer in business and to avoid getting fired.

Goodman's chapter on "Comparative Costs" in *People or Personnel* is a long series of case studies contrasting the cost of bureaucratic to ad hoc organizations.¹ He refers, for example, to the practices at a large corporate TV station ("the usual featherbedding of stagehands to provide two chairs," or paying technicians "twice \$45 to work the needle on a phonograph")—jobs that would be done by the small permanent staff at a nonprofit station run out of City College of New York.² The American Friends' Voluntary International Service Assignments carried almost no administrative costs, compared to the Peace Corps' enormous cost of thousands of dollars per volunteer.³

The Housing Board's conventional Urban Renewal proposal in Greenwich Village would have bulldozed a neighborhood containing many useful villages, to be replaced by "the usual bureaucratically designed tall buildings," at a cost of \$30 million and a net increase of 300 dwelling units. The neighborhood offered a counter-proposal that ruled out demolishing anything salvageable or relocating anyone against their wishes; it would have provided a net increase of 475 new units at a cost of \$8.5 million. Guess which one was chosen?⁴

Most of the per pupil cost of conventional urban public schools, as opposed to alternative or

1 Ibid., pp. 94-122.

2 Ibid., pp. 102-104.

3 Ibid., pp. 107-110.

4 Ibid., pp. 110-111.

experimental schools, results from administrative overhead and the immense cost of buildings and other materials built to a special set of specifications at some central location on some of the most expensive real estate in town. His hypothetical cooperative prep school cost about a third as much per pupil as the typical high school.¹ This is a thought experiment I'd repeatedly conducted for myself long before ever reading Goodman: figuring the cost for twenty or so parents to set up their own schooling cooperative, renting a house for classroom space and hiring a few part-time instructors, and then trying to imagine how one could *possibly* waste enough money to come up with the \$8,000 or more per-pupil that the public schools typically spend.

In the nearby town of Siloam Springs, Ark., not long after voters rejected a millage increase for the schools, the administration announced the cancellation of its planned purchase of new computers and its decision instead to upgrade existing ones. The cost of adding RAM, it was said, would be a small fraction of replacement—and yet it would result in nearly the same performance improvement. But it's a safe guess the administration would never have considered such a thing if it hadn't been forced to.

Another similar case is Goodman's contrast of the tuition costs of the typical large, institutional college, to those of an “alternative” school like Black Mountain College (run by the faculty, on the same “scholars' guild” model as the medieval universities). Much of the physical plant of the latter was the work of faculty and staff, and indeed for its first eight years (1933-1941) the “campus” consisted of buildings rented from a YMCA. Without any endowment or contributions, the tuition was still far lower than that of a conventional college.²

A more contemporary example might be the enormous cost of conventional Web 2.0 firms compared to that of their free culture counterparts. The Pirate Bay's file-sharing operations, for example, cost only \$3,000 a month—compared to estimated *daily* operating costs for YouTube ranging from \$130,000 to a million!³

The contrasting styles of the ad hoc, self-managed organization and the bureaucratic, institutional organization were brought home to me in my personal experience with two libraries.

At the University of Arkansas (Fayetteville), until a few years ago, non-students were discouraged from applying for library cards by an application form that asked whether their needs could not be met instead by, among other things, relying on Interlibrary Loan services. Then the policy changed so that a library card (with \$40 annual fee) was required to use Interlibrary Loan. Never mind that a library official professed unawareness (while hardly bothering to conceal her disbelief), in her best “Oceania has always at war with Eastasia” manner, that the library had ever promoted Interlibrary Loan as an *alternative* to a library card. The interesting thing was that she justified the new card purchase requirement on grounds of equity: it cost, she claimed, some \$25 to process every Interlibrary Loan request. I was utterly dumbfounded. If this were true, you'd think the ILL bureaucracy would be *ashamed* to admit it. How does Amazon.Com or AbeBooks manage to stay in business when *buying* a used book and shipping it cross-country usually costs me less than that—shipping and handling included? The only answer must be that the library bureaucracy has far higher levels of bureaucratic overhead than even a large bureaucratic corporation, for performing an analogous function.

1 Ibid., p. 105.

2 Ibid., p. 106; “Black Mountain College,” *Wikipedia* <http://en.wikipedia.org/wiki/Black_Mountain_College> (captured March 30, 2009).

3 Janko Roettgers, “The Pirate Bay: Distributing the World's Entertainment for \$3,000 a Month,” *NewTeeVee.Com*, July 19, 2009 <<http://newteevee.com/2009/07/19/the-pirate-bay-distributing-the-worlds-entertainment-for-3000-a-month/>>.

At the Springdale, Ark. public library, I submitted a written complaint to their Technology Coordinator regarding the abysmally poor performance of their new desktop software after the recent “upgrade,” compared to what they had had before.

Comment: Please don't automatically upgrade the desktops to the latest version of Windows and other MS accessories.

In general, if you already have something from Microsoft that works in a minimally acceptable manner, you should quit while you're ahead; if Bill Gates offers you something "new" and "better," run in the opposite direction as fast as you can.

Since you "upgraded" the computers, if you can call it that, usability has suffered a nosedive. I used to have no problem emailing myself attachments and opening them up here to work on. Now if I want to print something out, I have to open it as a Google Document and paste it into a new Word file. What's more, I can't edit the file here and save it to the desktop so I can email it to myself again. Any time I attempt to save a textfile on your computers I'm blocked from doing so.

In addition, if you compare Word 2007 to the Word 2003 you previously had on the desktop menu, the former is a classic example of what engineers call a "gold-plated turd." It's got so many proliferating "features" that the editing dashboard has to be tabbed to fit them all in.

To summarize: your computers worked just fine for all my purposes before the so-called "upgrade," and now they're godawful. Please save yourselves money in future and stick with what works instead of being taken in by Microsoft's latest poorly designed crap.

The Coordinator, C.M., replied (rather lamely in my opinion) that “the recent upgrade to MicroSoft Office 2007 on both the Library's public and staff computers is in line with what other libraries and companies across the country currently offer/use as office productivity software.” And the refusal to save files to desktop, which the previous software had done without a problem, was “a standard security feature.”

Now, this would be perfectly understandable from a grandma, who uses the computer mainly to read email from her grandkids, and buys her granddaughter a PC with Vista and Word 2007 installed because “I heard it's the latest thing.” But this was an IT officer—someone who's supposed to be at least vaguely aware of what's going on.

So I told her the software was a piece of crap that didn't work, and Ms. C. M. (although I'm sure it wasn't her intention) told me *why* it was a piece of crap that didn't work: Springdale's library adopted it because it was what all the other libraries and corporations use. I replied, probably a little too testily:

...I'm afraid the fact that an upgrade "in line with what other libraries and companies across the country currently offer/use" actually made things worse reflects unflatteringly on the institutional culture that predominates in organizations across the country, and in my opinion suggests the folly of being governed by the institutional culture of an industry rather than bottom-up feedback from one's own community of users.

I've worked in more than one job where company policy reflected the common institutional culture of the industry, and whatever "best practice" du jour the other CEOs solemnly assured our CEO was working like gangbusters. Had there been less communication between the people at the tops of the pyramids, and more communication between the top of each pyramid with those below, the people in direct contact with the situation might have cut through the... official happy talk and told them what a total clusterf**** their policies had resulted in.

For some reason, I never heard back.

The state and its affiliated corporate system, by mandating minimum levels of overhead for supplying all human wants, creates 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.¹

Radical monopoly is first established by a rearrangement of society for the benefit of those who have access to the larger quantity; then it is enforced by compelling all to consume the minimum quantum in which the output is currently produced....²

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. He 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.

People have a native capacity for healing, consoling, moving, learning, building their houses, and burying their dead. Each of these capacities meets a need. The means for the satisfaction of these needs are abundant so long as they depend on what people can do for themselves, with only marginal dependence on commodities....

These basic satisfactions become scarce when the social environment is transformed in such a manner that basic needs can no longer be met by abundant competence. 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.³

The overall process is characterized by “the replacement of general competence and satisfying subsistence activities by the use and consumption of commodities;”

the monopoly of wage-labor over all kinds of work; redefinition of needs in terms of goods and services mass-produced according to expert design; finally, the arrangement of the environment... [to] favor production and consumption while they degrade or paralyze use-value oriented activities that satisfy needs

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

2 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>.

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

directly.¹

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.”² Or as Paul Goodman put it, “decent poverty is almost impossible.”³

For example: subsidized fuel, freeways, and automobiles generate distance between things, so that “[a] city built around wheels becomes inappropriate for feet.”⁴ 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.

Radical monopoly has a built-in tendency to perpetuate itself and expand. First of all, those running large hierarchical organizations tend to solve the problems of bureaucracy by adding more of it. In the hospital where I work, this means that problems resulting from understaffing are “solved” by new tracking forms that further reduce nurses' available time for patient care—when routine care already frequently goes undone, and nurses stay over two or three hours past the end of a twelve-hour shift to finish paperwork.

They solve problems, in general, with a “more of the same” approach. In Illich's excellent phrase, it's an attempt to “solve a crisis by escalation.”⁵ It's what Einstein referred to as trying to solve problems “at the same level of thinking we were at when we created them.” Or as E. F. Schumacher says of intellectuals, technocrats “always tend to try and cure a disease by intensifying its causes.”⁶

The way the process works, in Paul Goodman's words, is that “[a] system destroys its competitors by pre-empting the means and channels and then proves that it is the only conceivable mode of operating.”⁷

The effect is to make subsistence goods available only through institutional providers, in return for money earned by wages, at enormous markup. As Goodman put it, it makes decent poverty impossible. To take the neoliberals' statistical gushing over increased GDP and stand it on its head, “[p]eople who were poor and had food now cannot subsist on ten or fifty times the income.”⁸ “Everywhere one turns... there seems to be a markup of 300 and 400 percent, to do anything or make anything.”⁹ 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.”¹⁰

Goodman points to countries where the official GDP is one fourth that of the U.S., and yet “these

1 Illich, *Vernacular Values* (1980), “Part One: The Three Dimensions of Social Choice,” online edition courtesy of The Preservation Institute <<http://www.preservenet.com/theory/Illich/Vernacular.html>>.

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

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

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

5 Illich, *Tools for Conviviality*, p. 9.

6 E. F. Schumacher, *Small is Beautiful: Economics as if People Mattered* (New York, Hagerstown, San Francisco, London: Harper & Row, Publishers, 1973), p. 38.

7 Goodman, *People or Personnel*, p. 70.

8 *Ibid.*, p. 70.

9 *Ibid.*, p. 120.

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

unaffluent people do not seem four times 'worse off' than we, or hardly worse off at all."¹ 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.²

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...."³

Leopold Kohr gave the example of a skyscraper: the taller the building, the larger the percentage of floorspace that must be 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 gave the example in the 1960s of a \$25 billion increase in GNP, \$18 billion (or 72%) of which went to administrative and support costs of various sorts.⁴

G. Mandatory High Overhead

As a pathology, this phenomenon deserves a separate section of its own. It is a pathology not only of the Sloanist mass-production economy, but also of local economies under the distorting effects of zoning, licensing, "safety" and "health" codes, and other regulations whose primary effect is to put a floor under overhead costs. 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.⁵

Such artificial property rights enable the privileged to appropriate productivity gains for themselves, rather than allowing their benefits to be socialized through market competition.

But they do more than that: they make it possible to collect tribute for the "service" of *not* obstructing production. As John R. Commons observed, the alleged "service" performed by the holder of artificial property rights, in "contributing" some "factor" to production, is defined entirely by his ability to obstruct access to it. As I wrote in *Studies in Mutualist Political Economy*, marginalist economics

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

2 Ibid., p. 117.

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

4 Kohr, *The Overdeveloped Nations*, pp. 36-37.

5 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.

treated the existing structure of property rights over "factors" as a given, and proceeded to show how the product would be distributed among these "factors" according to their marginal contribution. By this method, if slavery were still extant, a marginalist might with a straight face write of the marginal contribution of the slave to the product (imputed, of course, to the slave-owner), and of the "opportunity cost" involved in committing the slave to one or another use.¹

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?²

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 obstruct production.³

At the level of the national corporate economy, a central function of government is to artificially inflate the levels of capital outlay and overhead needed to undertake production.

The single biggest barrier to modular design for common platforms is probably "intellectual property." If it 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.

What's more, with the barrier to such competition removed, there would be a great deal of competitive advantage from designing one's product so as to be conducive to production of modular components by other companies. In a market where the consumer preferred the highest possible degree of interoperability and cross-compatibility, to maximize his own freedom to mix 'n' match components, or to maximize his options for extending the lifetime of the product, a product that was designed with such consumer behavior in mind would have a leg up on competing products designed to be incompatible with other companies' accessories and modules. In other words, products designed to be easily used with other people's stuff would sell better. Imagine if

* Ford could produce engine blocks that were compatible with GM chassis, and vice versa;

* if a whole range of small manufacturers could produce competing spare parts and modular accessories for Ford or GM vehicles;

1 Kevin Carson, *Studies in Mutualist Political Economy* (Blitzprint, 2004), p. 79.

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

3 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.

* such small companies, individually or in networks, could produce entire competing car designs around the GM or Ford engine block;

* or many small assembly plants sprang up to put together automobiles from engine blocks ordered from Ford or GM, combined with other components produced by themselves or a wide variety of other small companies on the Emilia-Romagna networked model.

Under those circumstances, there would be no legal barrier to other companies producing entire, modularization-friendly design platforms for use around Ford or GM products, and Ford and GM would find it to their competitive advantage to facilitate compatibility with such designs.

In keeping with Sloanism's emphasis on planned obsolescence to generate artificially high levels of product turnover, products are deliberately designed to discourage or impede repair by the user.

... [A]n engineering culture has developed in recent years in which the object is to "hide the works," rendering the artifacts we use unintelligible to direct inspection.... This creeping concealedness takes various forms. The fasteners holding small appliances together now often require esoteric screwdrivers not commonly available, apparently to prevent the curious or the angry from interrogating the innards. By way of contrast, older readers will recall that until recent decades, Sears catalogues included blown-up parts diagrams and conceptual schematics for all appliances and many other mechanical goods. It was simply taken for granted that such information would be demanded by the consumer.¹

Julian Sanchez gives the specific example of Apple's iPhone. The scenario, as he describes it, starts when

1) Some minor physical problem afflicts my portable device—the kind of thing that just happens sooner or later when you're carting around something meant to be used on the go. In this case, the top button on my iPhone had gotten jammed in, rendering it nonfunctional and making the phone refuse to boot normally unless plugged in.

2) I make a pro forma trip to the putative "Genius Bar" at an Apple Store out in Virginia. Naturally, they inform me that since this doesn't appear to be the result of an internal defect, it's not covered. But they'll be only too happy to service/replace it for something like \$250, at which price I might as well just buy a new one....

3) I ask the guy if he has any tips if I'm going to do it myself—any advice on opening it, that sort of thing. He's got no idea....

4) Pulling out a couple of tiny screwdrivers, I start in on the satanic puzzlebox casing Apple locks around all its hardware. I futz with it for at least 15 minutes before cracking the top enough to get at the inner works.

5) Once this is done, it takes approximately five seconds to execute the necessary repair by unwedging the jammed button.

I have two main problems with this. First, you've got what's obviously a simple physical problem that can very probably be repaired in all of a minute flat with the right set of tools. But instead of letting their vaunted support guys give this a shot, they're encouraging customers--many of whom presumably don't know any better--to shell out a ludicrous amount of money to replace it and send the old one in. I appreciate that it's not always obvious that a problem can be this easily remedied on site, but in the instance, it really

¹ Matthew B. Crawford, "Shop Class as Soulcraft," *The New Atlantis*, Number 13, Summer 2006, pp. 7-24
<<http://www.thenewatlantis.com/publications/shop-class-as-soulcraft>>.

seems like a case of exploiting consumer ignorance.

Second, the iPhone itself is pointlessly designed to deter self service. Sure, the large majority of users are never going to want to crack their phone open. Then again, most users probably don't want to crack their desktops or laptops open, but we don't expect manufacturers to go out of their way to make it difficult to do.¹

The iPhone is a textbook example of a "blobject," the product of industrial design geared toward the cheap injection-molding of streamlined plastic artifacts. Eric Hunting writes:

Blobjects are also often deliberately irreparable and un-upgradeable -sometimes to the point where they are engineered to be unopenable without being destroyed in the process. This further facilitates planned obsolescence while also imposing limits on the consumer's own use of a product as a way to protect market share and technology propriety. Generally, repairability of consumer goods is now impractical as labor costs have made repair frequently more expensive than replacement, where it isn't already impossible by design. In the 90s car companies actually toyed with the notion of welding the hoods of new cars shut on the premise that the engineering of components had reached the state where nothing in the engine compartment needed to be serviceable over a presumed 'typical' lifetime for a car. (a couple of years) This, of course, would have vastly increased the whole replacement rate for cars and allowed companies to hide a lot of dirty little secrets under that welded hood.²

"Intellectual property" in onboard computer software and diagnostic equipment has essentially the same effect.

As cars become vastly more complicated than models made just a few years ago, [independent mechanic David] Baur is often turning down jobs and referring customers to auto dealer shops. Like many other independent mechanics, he does not have the thousands of dollars to purchase the online manuals and specialized tools needed to fix the computer-controlled machines....

Access to repair information is at the heart of a debate over a congressional bill called the Right to Repair Act. Supporters of the proposal say automakers are trying to monopolize the parts and repair industry by only sharing crucial tools and data with their dealership shops. The bill, which has been sent to the House Committee on Energy and Commerce, would require automakers to provide all information to diagnose and service vehicles.

Automakers say they spend millions in research and development and aren't willing to give away their intellectual property. They say the auto parts and repair industry wants the bill passed so it can get patented information to make its own parts and sell them for less....

Many new vehicles come equipped with multiple computers controlling everything from the brakes to steering wheel, and automakers hold the key to diagnosing a vehicle's problem. In many instances, replacing a part requires reprogramming the computers ---- a difficult task without the software codes or diagrams of the vehicle's electrical wires....

Dealership shops may be reaping profits from the technological advancements. A study released in March by the Automotive Aftermarket Industry Association found vehicle repairs cost an average of 34 percent more at new car dealerships than at independent repair shops, resulting in \$11.7 billion in additional costs for consumers annually.

1 Julian Sanchez, "Dammit, Apple," *Notes from the Lounge*, June 2, 2008 <<http://www.juliansanchez.com/2008/06/02/dammit-apple/>>.

2 Eric Hunting, "On Defining a Post-Industrial Style (1): from Industrial blobjects to post-industrial spimes," *P2P Foundation Blog*, November 2, 2009 <<http://blog.p2pfoundation.net/on-defining-a-post-industrial-style-1-from-industrial-blobjects-to-post-industrial-spimes/2009/11/02>>.

The association, whose members include Autozone, Jiffy Lube and other companies that provide replacement parts and accessories, contend automakers want the bill rejected so they can continue charging consumers more money.

"You pay all this money for your car, you should be able to decide where to get it repaired," said Aaron Lowe, the association's vice president of government affairs.

Opponents of the bill counter that the information and tools to repair the vehicles are available to those willing to buy them.¹

As Mike Masnick sums it up:

Basically, as cars become more sophisticated and computerized, automakers are locking up access to those computers, and claiming that access is protected by copyrights. Mechanics are told they can only access the necessary diagnostics if they pay huge sums -- meaning that many mechanics simply can't repair certain cars, and car owners are forced to go to dealers, who charge significantly higher fees.²

One of Masnick's readers at *Techdirt* pointed out that a primary effect of "intellectual property" law in this case is to give manufacturers "an incentive to build crappy cars." If automakers have "an exclusive right to fix their own products," they will turn repair operations into a "cash cow." (Of course, that's exactly the same business model currently followed by companies that sell cheap platforms and make money off proprietary accessories and spare parts.) "Suddenly, the money made from repairing automobiles would outweigh the cost of selling them."

In a free market, of course, it wouldn't be necessary to pay for the information, or to pay proprietary prices for the tools, because software hacks and generic versions of the tools would be freely available without any legal impediment. That Congress is considering legislation to mandate the sharing of information protected by "intellectual property" law is a typical example of government's Rube Goldberg nature: all that's really needed is to eliminate the "intellectual property" in the first place.

One effect of the shift in importance from tangible to intangible assets is that a growing portion of product prices consists of embedded rents on "intellectual property" and other artificial property rights rather than the material costs of production. Tom Peters cited former 3M strategic planner George Hegg on the increasing portion of product "value" made up of "intellect" (i.e., the amount of final price consisting of tribute to the owners of "intellectual property"): "We are trying to sell more and more intellect and less and less materials." Peters produces a long string of such examples:

...My new Minolta 9xi is a lumpy object, but I suspect I paid about \$10 for its plastic casing, another \$50 for the fine-ground optical glass, and the rest, about \$640, for its intellect...³

It is a soft world.... Nike contracts for the production of its spiffy footwear in factories around the globe, but it creates the enormous stock value via superb design and, above all, marketing skills. Tom Silverman, founder of upstart Tommy Boy Records, says Nike was the first company to understand that it was in the

1 Daisy Nguyen, "High tech vehicles pose trouble for some mechanics," *North County Times*, December 26, 2009 <http://nctimes.com/news/state-and-regional/article_4ea03fd6-090d-5c2e-bd91-dfb5508495ef.html>.

2 Mike Masnick, "How Automakers Abuse Intellectual Property Laws to Force You to Pay More For Repairs," *Techdirt*, December 29, 2009 <<http://techdirt.com/articles/20091228/0345127515.shtml>>.

3 Tom Peters, *The Tom Peters Seminar: Crazy Times Call for Crazy Organizations* (New York: Vantage Books, 1999), p. 10.

lifestyle business.... Shoes? Lumps? Forget it! Lifestyle. Image. Speed. Value via intellect and pizzazz.¹

"Microsoft's only factory asset is the human imagination," observed The New York Times Magazine writer Fred Moody. In seminars I've used the slide on which those words appear at least a hundred times, yet every time that simple sentence comes into view on the screen I feel the hairs on the back of my neck bristle.²

A few years back, Philip Morris purchased Kraft for \$12.9 billion, a fair price in view of its subsequent performance. When the accountants finished their work, it turned out that Philip Morris had bought \$1.3 billion worth of "stuff" (tangible assets) and \$11.6 billion of "Other." What's the other, the 116/129?

...Call it intangibles, good-will (the U.S. accountants' term), brand equity, or the ideas in the heads of thousands of Kraft employees around the world.³

Regarding Peters' Minolta example, as Benkler points out the marginal cost of reproducing "its intellect" is virtually zero. So about 90% of the price of that new Minolta comes from tolls to corporate gatekeepers, who have been granted control of that "intellect." In an economy where software and product design were the product of peer networks, unrestricted by the "intellectual property" of old corporate dinosaurs, 90% of the product's price would evaporate overnight. To quote Michael Perelman,

the so-called weightless economy has more to do with the legislated powers of intellectual property that the government granted to powerful corporations. For example, companies such as Nike, Microsoft, and Pfizer sell stuff that has high value relative to its weight only because their intellectual property rights insulate them from competition.⁴

The same goes for Nike's sneakers. I suspect the amortization cost of the physical capital used to manufacture the shoes in those Asian sweatshops, plus the cost of the sweatshop labor, is less than 10% of the price of the shoes. The wages of the workers could be tripled or quadrupled with negligible impact on the retail price.

How many extra hours does the average person work each week to pay tribute to the owners of the "human imagination"?

The Consumer Product Safety Improvement Act (CPSIA) is a good illustration of how regulations put a floor under overhead. To put it in perspective, first consider how the small apparel manufacturer operates. According to Eric Husman, an engineer who blogs on lean manufacturing and whose wife is in the apparel industry, a small apparel manufacturer comes up with a lot of designs, and then produces whatever designs sell, switching back and forth between products as the orders come in. Now consider the effect the CPSIA has on this model. Its most onerous provision is its mandate of third party testing and certification, not of materials, but of every component of each separate product.

The testing and certification requires that finished products be tested, not materials, and that every component of every item must be tested separately. A price quote from a CPSIA-authorized testing facility says that testing Learning Resources' product Let's Tackle Kindergarten, a tackle box filled with learning tools—flash cards, shapes, counters and letters—will cost \$6,144.

1 Ibid., pp. 10-11.

2 Ibid., p. 11.

3 Ibid. p. 12.

4 Michael Perelman, "The Political Economy of Intellectual Property," *Monthly Review*, January 2003 <<http://www.monthlyreview.org/0103perelman.htm>>.

Items made from materials known not to contain lead, or items tested to other comparable standards, must still be tested. A certified organic cotton baby blanket appliquéd with four fabrics must be tested for lead at \$75 per component material. Award-winning German toy company Selecta Spielzeug—whose sustainably harvested wood toys are colored with nontoxic paints, sealed with beeswax, and compliant with European testing standards—pulled out of the United States market at the end of 2008, stating that complying with the CPSIA would require them to increase their retail prices by at least 50 percent. Other European companies are expected to follow suit.

The total cost of testing can range from \$100 to thousands of dollars per product. With this level of mandated overhead per product, obviously, the only way to amortize such an enormous capital outlay is large batch production. So producing on a just-in-time basis, with low overhead, using small-scale capital goods, is for all intents and purposes criminalized.¹

NAIS, which requires small family farms to ID chip their livestock at their own expense, operates on the same principle.

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 what they already own anyway, 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. Consider all the overhead costs imposed on this chef, who wanted to open a restaurant on the first floor of a hotel:

That's when the fun began.

I sketched some plans and had them drawn up by an architect (\$1000).

I submitted them for review to the County building Dept. (\$300).

Everything was OK, except for the bathrooms. They were not ADA compliant. Newly built bathrooms must have a 5' radius turning space for a wheelchair. No problem. I tried every configuration I could think of to accommodate the larger bathroom space without losing seating which would mean losing revenue. No luck. I would have to eat into my storage space and replace it with a separate exterior walk-in cooler(\$5,000). I would also have to reduce the dining room space slightly so I had to plan on banquettes along the exterior wall to retain the same number of seats (banquettes vs. separate stand alone tables (\$5,000) Revised plans (\$150). Re-review (\$100)

Next came the Utility Dept. It seems the water main was insufficient even for the current use, a 24 suite hotel, and would need to be replaced (\$10,000).

Along comes the Historical Preservation Society, a purely advisory group of starched collar, pince nez wearing fuddy-duddies (well, not literally) to offer their "better take it or else" advice, or maybe lose the Historic Status tax break for the hotel.

¹ Kathryn Geurin, "Toybox Outlaws," *Metroland Online*, January 29, 2009
<http://www.metroland.net/back_issues/vol32_no05/features.html>.

It seems that the mushroom for the kitchen exhaust fan would be visible from the street, so could I please relocate it to the rear of the building? Pretty please? Extra ducting and more powerful fan (\$5,000).

Hello Fire Dept! My plans showed a 40 seat dining room, 2 restrooms, a microscopic office, and a kitchen. My full staffing during tourist season was 4 servers, 1 dishwasher and 1 seasonal cook-total occupancy 47, myself included.

The Fire Inspector said the space could accommodate 59. "But I only have 40 seats. I want luxurious space around the tables." I pleaded. "No. It goes by square footage. 48 seats, 4 servers, 3 cooks, one dishwasher, 1 person in the office and 2 people in the restrooms." "Why would I need 4 cooks for 40 seats when I am capable of doing that alone? And if the cooks are cooking, the servers are serving, the officer is officing, the diners are dining, then who the H#\$% is in the bathrooms?"

"Square footage. Code!" And therefore it went from Class B to Class A, requiring a sprinkler system for the dining room and a third exit (\$10,000) in addition to the existing front door and the back kitchen door. It would have to be punched through the side wall and have a lit EXIT sign.

Could it be behind the screen shielding the patrons from viewing the inside of the bathrooms every time the door opened? Oh, no! It might not be visible. The door would have to be located where 4 guests at the banquette plus their opposite companions were seated-loss of 20% of seating unless I squeezed them into smaller tables destroying the whole planned luxurious ambience.

Pro Forma:

\$250K sales.

\$75K Food and Beverage purchases

\$75K Labor cost

\$75K Expenses

\$25K net before taxes.

Result of above experience=Fugget About It!!!

Loss to community-\$100K income plus tips +\$20K Sales tax.

Another "Gifte Shoppe" went into the space and closed a month after the end of tourist season. When we left town 2 years later to go sailing the Caribbean, the space was still vacant.

I might add that I had advice in all this from a retired executive who volunteered his time (small donation to Toys 4 Tots gratefully accepted) through a group that connected us. He said that in his opinion that my project budgeted at \$200K would cost upward of \$1 million in NYC and perhaps SF due to higher permits and fees.¹

At the smaller end of the spectrum, consider restrictions on informal, unlicensed daycare centers operated out of people's homes.

MIDDLEVILLE, Mich. (WZZM) - A West Michigan woman says the state is threatening her with fines and possibly jail time for babysitting her neighbors' children.

Lisa Snyder of Middleville says her neighborhood school bus stop is right in front of her home. It arrives after her neighbors need to be at work, so she watches three of their children for 15-40 minutes until the bus

¹ Quoted by Charles Hugh Smith, in "The Travails of Small Business Doom the U.S. Economy," *Of Two Minds*, August 17, 2009 <<http://charleshughsmith.blogspot.com/2009/08/he-travails-of-small-business-doom-us.html>>.

comes.

The Department of Human Services received a complaint that Snyder was operating an illegal child care home. DHS contacted Snyder and told her to get licensed, stop watching her neighbors' kids, or face the consequences.

"It's ridiculous." says Snyder. "We are friends helping friends!" She added that she accepts no money for babysitting.

Mindy Rose, who leaves her 5-year-old with Snyder, agrees. "She's a friend... I trust her."

State Representative Brian Calley is drafting legislation that would exempt people who agree to care for non-dependent children from daycare rules as long as they're not engaged in a business.

"We have babysitting police running around this state violating people, threatening to put them in jail or fine them \$1,000 for helping their neighbor (that) is truly outrageous" says Rep. Calley.

A DHS spokesperson would not comment on the specifics of the case but says they have no choice but to comply with state law, which is designed to protect Michigan children.¹

Another good example is the medallion system of licensing taxicabs, where a license to operate a cab costs into the hundreds of thousands of dollars. The effect of the medallion system is to criminalize the countless operators of gypsy cab services. For the unemployed person or unskilled laborer, driving carless retirees around on their errands for an hourly fee seems like an ideal way to transform one's labor directly into a source of income without doing obsequiance to the functionaries of some corporate Human Resources department.

The primary purpose of the medallion system is not to ensure safety. That could be accomplished just as easily by mandating an annual vehicle safety inspection, a criminal background check, and a driving record check (probably all the licensed taxi firms do anyway, and with questionable results based on my casual observation of both vehicles and drivers). And it would probably cost under a hundred bucks rather than three hundred thousand. No, the primary purpose of the medallion system is to allow the owners of licenses to screw both the consumer and the driver.

Local building codes amount to a near-as-dammit lock-in of conventional techniques, regulating the pace of innovation in building techniques in accordance with the preferences of the consensus of contracting firms. As a result, building contractors are protected against vigorous competition from cheap, vernacular local materials, and from modular or prefab designs that are amenable to self-building.

In the case of occupational licensing, a good example is the entry barriers to employment as a surveyor today, as compared to George Washington's day. As Vin Suprynowicz points out, Washington had no formal schooling until he was eleven, only two years of it thereafter, and still was able to learn enough geometry, trigonometry and surveying to get a job paying \$100,000 annually in today's terms.

How much government-run schooling would a youth of today be told he needs before he could contemplate making \$100,000 a year as a surveyor—a job which has not changed except to get substantially easier, what with hand-held computers, GPS scanners and laser range-finders? Sixteen years, at least—18, more likely.²

1 Jeff Quackenbush, Jessica Puchala, "Middleville woman threatened with fines for watching neighbors' kids," WZZM13.Com, September 24, 2009 <http://www.wzzm13.com/news/news_story.aspx?storyid=114016&catid=14#>.

2 Vin Suprynowicz, "Schools guarantee there can be no new Washingtons," *Review Journal*, February 10,

The licensing of retailers protects conventional retail establishments against competition from buying clubs and other low-overhead establishments run out of people's homes, by restricting their ability to sell to the general public. For example, a family-run food-buying co-op in LaGrange, Ohio, whose purpose was to put local farmers into direct contact with local consumers, was raided by sheriff's deputies for allegedly operating as an unlicensed retail establishment.

A spokeswoman at the Department of Agriculture said its officers were at the scene in an advisory role. A spokeswoman at the county health agency refused to comment except to explain it was a "licensing" issue regarding the family's Manna Storehouse.¹

Never mind the illegitimacy of the legal distinction between a private bulk food-buying club and a public retail establishment, or the licensing requirement for selling to the general public. The raid was a textbook entrapment operation, in which an undercover agent had persistently badgered the family to sell him eggs. Apparently the family had gotten on the bad side of local authorities by responding in an inadequately deferential manner to peremptory accusations that they were running a store.

The confrontation began developing several years ago when local health officials demanded the family hold a retail food license in order to run their co-op. Thompson said the family wrote a letter questioning that requirement and asking for evidence that would suggest they were operating a food store and how their private co-op was similar to a WalMart.

The Stowers family members simply "take orders from (co-op) members ... then divide up the food," Thompson explained.

"The health inspector didn't like the tone of the letter," Thompson said, and the result was that law enforcement officials planned, staged and carried out the Dec. 1 SWAT-style raid on the family's home.

Thompson said he discussed the developments of the case with the health inspector personally.

"He didn't think the tone of that letter was appropriate," Thompson said. "I've seen the letter. There's not anything there that's belligerent."

Thompson explained the genesis of the raid was a series of visits to the family by an undercover agent for the state agriculture agency.

"He showed up (at the Stowers' residence) unannounced one day," Thompson explained, and "pretended" to be interested in purchasing food.

The family explained the co-op was private and they couldn't provide service to the stranger.

The agent then returned another day, stayed for two hours, and explained how he thought his sick mother would be helped by eggs from range-fed chickens to which the Stowers had access.

The family responded that they didn't sell food and couldn't help. When he refused to leave, the family gave him a dozen eggs to hasten his departure, Thompson explained.

Despite protests from the family, the agent left some money on a counter and departed.

2008 <<http://www.lvrj.com/opinion/15490456.html>>.

1 Bob Unruh, "Food co-op hit by SWAT raid fights back," *WorldNetDaily*, December 24, 2008 <<http://www.wnd.com/index.php?fa=PAGE.view&pageId=84445>>.

On the basis of that transaction, the Stowers were accused of engaging in the retail sale of food, Thompson said....

He said the state agency came from "nowhere" and then worked to get the family involved "in something that might require a license."...

Pete Kennedy of the Farm-to-Consumer Legal Defense Fund said the case was government "overreaching" and was designed more to intimidate and "frighten people into believing that they cannot provide food for themselves."

"This is an example where, once again, the government is trying to deny people their inalienable, fundamental right to produce and consume the foods of their choice," said Gary Cox, general counsel for the FTCLDF. "The purpose of our complaint is to correct that wrong."¹

As much as I love the local brew pub I visit on a weekly basis, I was taken aback by the manager's complaint about street hot dog vendors being allowed to operate during street festivals. It was unfair for the city to allow it, he said, because an established indoor business with all its associated overhead costs couldn't compete.

The system is effectively rigged to ensure that nobody can start a small business without being rich. Everyone else can get by on wage labor and *like* it (and of course that works out pretty well for the people trying to hire wage labor on the most advantageous terms, don't you think?). Roderick Long asks,

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.²

1 Bob Unruh, "SWAT raid on food co-op called 'entrapment'," *WorldNetDaily*, December 26, 2008 <<http://www.wnd.com/index.php?fa=PAGE.view&pageId=84594>>. See also Andrea Zippay, "Organic food co-op raid sparks case against health department, ODA," *FarmAndDairy.Com*, December 19, 2008 <<http://www.farmanddairy.com/news/organic-food-co-op-raid-sparks-court-case-against-health-department-oda/10752.html>>.

2 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>>.