

Book Review: Red Plenty

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I

I decided to read [Red Plenty](#) because my biggest gripe after reading [Singer's book on Marx](#) was that Marx refused to plan how communism would actually work, instead preferring to leave the entire matter for the World-Spirit to sort out. But almost everything that interests me about Communism falls under the category of “how communism would actually work”. *Red Plenty*, a semi-fictionalized account of the history of socialist economic planning, seemed like a natural follow-up.

But I'd had it on my List Of Things To Read for even longer than that, ever after stumbling across a quote from it on some blog or other:

Marx had drawn a nightmare picture of what happened to human life under capitalism, when everything was produced only in order to be exchanged; when true qualities and uses dropped away, and the human power of making and doing itself became only an object to be traded.

Then the makers and the things made turned alike into commodities, and the motion of society turned into a kind of zombie dance, a grim cavorting whirl in which objects and people blurred together till the objects were half alive and the people were half dead. Stock-market prices acted back upon the world as if they were independent powers, requiring factories to be opened or closed, real human beings to work or rest, hurry or dawdle; and they, having given the transfusion that made the stock prices come alive, felt their flesh go cold and impersonal on them, mere mechanisms for chunking out the man-hours. Living money and dying humans, metal as tender as skin and skin as hard as metal, taking hands, and dancing round, and round, and round, with no way ever of stopping; the quickened and the deadened, whirling on.

And what would be the alternative? The consciously arranged alternative? A dance of another nature. A dance to the music of use, where every step fulfilled some real need, did some tangible good, and no matter how fast the dancers spun, they moved easily, because they moved to a human measure, intelligible to all, chosen by all.

Needless to say, this is Relevant To My Interests, which include among them [poetic allegories for coordination problems](#). And I was not disappointed.

The book begins:

Strange as it may seem, the gray, oppressive USSR was founded on a fairy tale. It was built on the twentieth-century magic called “the planned economy,” which was going to gush forth an abundance of good things that the lands of capitalism could never match. And just for a little while, in the heady years of the late 1950s, the magic seemed to be working. *Red Plenty* is about that moment in history, and how it came, and how it went away; about the brief era when, under the rash leadership of Khrushchev, the Soviet Union looked forward to a future of rich communists and envious capitalists, when Moscow would out-glitter Manhattan and every Lada would be better engineered than a Porsche. It’s about the scientists who did their genuinely brilliant best to make the dream come true, to give the tyranny its happy ending.

And this was the first interesting thing I learned.

There’s a very settled modern explanation of the conflict between capitalism and communism. Capitalism is good at growing the economy and making countries rich. Communism is good at caring for the poor and promoting equality. So your choice between capitalism and communism is a trade-off between those two things.

But for at least the first fifty years of the Cold War, the Soviets would not have come *close* to granting you that these are the

premises on which the battle must be fought. They were officially quite certain that any day now Communism was going to prove itself *better* at economic growth, better at making people rich quickly, than capitalism. Even unofficially, most of their leaders and economists were pretty certain of it. And for a little while, even their capitalist enemies secretly worried they were right.

The arguments are easy to understand. Under capitalism, plutocrats use the profits of industry to buy giant yachts for themselves. Under communism, the profits can be reinvested back into the industry to build more factories or to make production more efficient, increasing growth rate.

Under capitalism, everyone is competing with each other, and much of your budget is spent on zero-sum games like advertising and marketing and sales to give you a leg up over your competition. Under communism, there is no need to play these zero-sum games and that part of the budget can be reinvested to grow the industry more quickly.

Under capitalism, everyone is working against everyone else. If Ford discovers a clever new car-manufacturing technique, their first impulse is to patent it so GM can't use it, and GM's first impulse is to hire thousands of lawyers to try to thwart that attempt. Under communism, everyone is working together, so if one car-manufacturing collective discovers a new technique they send their blueprints to all the other car-manufacturing collectives in order to help them out. So in capitalism, each companies will possess a few in-

dividual advances, but under communism every collective will have every advance, and so be more productive.

These arguments make a lot of sense to me, and they *definitely* made sense to the Communists of the first half of the 20th century. As a result, they were confident of overtaking capitalism. They realized that they'd started with a handicap – czarist Russia had been dirt poor and almost without an industrial base – and that they'd faced a further handicap in having the Nazis burn half their country during World War II – but they figured as soon as they overcame these handicaps their natural advantages would let them leap ahead of the West in only a couple of decades. The great Russian advances of the 50s – Sputnik, Gagarin, etc – were seen as evidence that this was already starting to come true in certain fields.

And then it all went wrong.



Grant that communism really does have the above advantages over capitalism. What advantage does capitalism have?

The classic answer is that during communism no one wants to work hard. They do as little as they can get away with, then slack off because they don't reap the rewards of their own labor. *Red Plenty* doesn't really have theses. In fact, it's not really a non-fiction work at all. It's a dramatized series of episodes in the lives of

Russian workers, politicians, and academics, intended to come together to paint a picture of how the Soviet economy worked.

But if I can impose a thesis upon the text, I don't think it agreed with this. In certain cases, Russians were very well-incentivized by things like "We will kill you unless you meet the production target". Later, when the state became less murder-happy, the threat of death faded to threats of demotions, ruined careers, and transfer to backwater provinces. And there were equal incentives, in the form of promotion or transfer to a desirable location such as Moscow, for overperformance. There were even monetary bonuses, although money bought a lot less than it did in capitalist countries and was universally considered inferior to status in terms of purchasing power. Yes, there were [Goodhart's Law](#) type issues going on – if you're being judged per product, better produce ten million defective products than 9,999,999 excellent products – but that wasn't the crux of the problem. *Red Plenty* presented the problem with the Soviet economy primarily as one of allocation. You could have a perfectly good factory that could be producing lots of useful things if only you had one extra eensy-weensy part, but unless the higher-ups had allocated you that part, you were out of luck. If that part happened to break, getting a new one would depend on how much clout you (and your superiors) pulled versus how much clout other people who wanted parts (and their superiors) held.

The book illustrated this reality with a series of stories (I'm not sure how many of these were true, versus useful dramatizations). In one, a pig farmer in Siberia needed wood in order to build sties for his pigs so they wouldn't freeze – if they froze, he would fail to

meet his production target and his career would be ruined. The government, which mostly dealt with pig farming in more temperate areas, hadn't accounted for this and so hadn't allocated him any wood, and he didn't have enough clout with officials to request some. A factory nearby had extra wood they weren't using and were going to burn because it was too much trouble to figure out how to get it back to the government for re-allocation. The farmer bought the wood from the factory in an under-the-table deal. He was caught, which usually wouldn't have been a problem because *everybody* did this sort of thing and it was kind of the "smoking marijuana while white" of Soviet offenses. But at that particular moment the Party higher-ups in the area wanted to make an example of someone in order to look like they were on top of their game to *their* higher-ups. The pig farmer was sentenced to years of hard labor.

A tire factory had been assigned a tire-making machine that could make 100,000 tires a year, but the government had gotten confused and assigned them a production quota of 150,000 tires a year. The factory leaders were stuck, because if they tried to correct the government they would look like they were challenging their superiors and get in trouble, but if they failed to meet the impossible quota, they would all get demoted and their careers would come to an end. They learned that the tire-making-machine-making company had recently invented a new model that really *could* make 150,000 tires a year. In the spirit of [Chen Sheng](#), they decided that since the penalty for missing their quota was something terrible and the penalty for sabotage was also something terrible, they might as well take their chances and destroy their own machinery

in the hopes the government sent them the new improved machine as a replacement. To their delight, the government believed their story about an “accident” and allotted them a new tire-making machine. However, the tire-making-machine-making company had decided to cancel production of their new model. You see, the new model, although more powerful, weighed less than the old machine, and the government was measuring their production *by kilogram of machine*. So it was easier for them to just continue making the old less powerful machine. The tire factory was allocated another machine that could only make 100,000 tires a year and was back in the same quandary they’d started with.

It’s easy to see how all of these problems could have been solved (or would never have come up) in a capitalist economy, with its use of prices set by supply and demand as an allocation mechanism. And it’s easy to see how thoroughly the Soviet economy was sabotaging itself by avoiding such prices.

IV

The “hero” of *Red Plenty* – although most of the vignettes didn’t involve him directly – was Leonid Kantorovich, a Soviet mathematician who thought he could solve the problem. He invented the technique of [linear programming](#), a method of solving optimization problems perfectly suited to allocating resources throughout an economy. He immediately realized its potential and wrote a nice letter to Stalin politely suggesting his current method of doing economics was wrong and he could do better – this during a time

when everyone else in Russia was desperately trying to avoid having Stalin notice them because he tended to kill anyone he noticed. Luckily the letter was intercepted by a kindly mid-level official, who kept it away from Stalin and warehoused Kantorovich in a university somewhere.

During the “Khrushchev thaw”, Kantorovich started getting some more politically adept followers, the higher-ups started taking note, and there was a real movement to get his ideas implemented. A few industries were run on Kantorovichian principles as a test case and seemed to do pretty well. There was an inevitable backlash. Opponents accused the linear programmers of being capitalists-in-disguise, which wasn’t helped by their use of something called “shadow prices”. But the combination of their own political adeptness and some high-level support from Khrushchev – who alone of all the Soviet leaders seemed to really believe in his own cause and be a pretty okay guy – put them within arm’s reach of getting their plans implemented.

But when elements of linear programming were adopted, they were adopted piecemeal and toothless. The book places the blame on Alexei Kosygen, who implemented [a bunch of economic reforms that failed](#), in a chapter that makes it clear exactly how constrained the Soviet leadership really was. You hear about Stalin, you imagine these guys having total power, but in reality they walked a narrow line, and all these “shadow prices” required more political capital than they were willing to mobilize, even when they thought Kantorovich might have a point.

V

In the end, I was left with two contradictory impressions from the book.

First, amazement that the Soviet economy got as far as it did, given how incredibly screwed up it was. You hear about how many stupid things were going on at every level, and you think: *This was the country that built Sputnik and Mir? This was the country that almost buried us beneath the tide of history?* It is a credit to the Russian people that they were able to build so much as a screwdriver in such conditions, let alone a space station.

But second, a sense of what could have been. What if Stalin *hadn't* murdered most of the competent people? What if entire fields of science *hadn't* been banned for silly reasons? What if Kantorovich *had* been able to make the Soviet leadership base its economic planning around linear programming? How might history have turned out differently?

One of the book's most frequently-hammered-in points was that there was a brief moment, back during the 1950s, when everything seemed to be going right for Russia. Its year-on-year GDP growth (as estimated by impartial outside observers) was somewhere between 7 to 10%. Starvation was going down. Luxuries were going up. Kantorovich was fixing entire industries with his linear programming methods. Then Khrushchev made a series of crazy loose cannon decisions, he was ousted by Brezhnev, Kantorovich was pushed aside and ignored, the "Khrushchev thaw" was

reversed and tightened up again, and everything stagnated for the next twenty years.

If Khrushchev had stuck around, if Kantorovich had succeeded, might the common knowledge that Communism is terrible at producing material prosperity look a little different?

The book very briefly mentioned a competing theory of resource allocation promoted by Victor Glushkov, a cyberneticist in Ukraine. He thought he could use computers – then a very new technology – to calculate optimal allocation for everyone. He failed to navigate the political seas as adroitly as Kantorovich's faction, and the killing blow was a paper that pointed out that for him to do everything *really* correctly would take a hundred million years of computing time.

That was in 1960. If computing power doubles every two years, we've undergone about 25 doubling times since then, suggesting that we ought to be able to perform Glushkov's calculations in three years – or three days, if we give him a lab of three hundred sixty five computers to work with. There could have been this entire field of centralized economic planning. Maybe it would have continued to underperform prices. Or maybe after decades of trial and error across the entire Soviet Union, it could have caught up. We'll never know. Glushkov and Kantorovich were marginalized and left to play around with toy problems until their deaths in the 80s, and as far as I know their ideas were never developed further in the context of a national planned economy.

VI

One of the ways people like insulting smart people, or rational people, or scientists, is by telling them they're the type of people who are attracted to Communism. "Oh, you think you can control and understand everything, just like the Communists did."

And I had always thought this was a pretty awful insult. The people I know who most identify as rationalists, or scientifically/technically minded, are also most likely to be libertarian. So there, case dismissed, everybody go home.

This book was the first time that I, as a person who considers himself rationally/technically minded, realized that I was super attracted to Communism.

Here were people who had a clear view of the problems of human civilization – all the greed, all the waste, all the zero-sum games. Who had the entire population united around a vision of a better future, whose backers could direct the entire state to better serve the goal. All they needed was to solve the engineering challenges, to solve the equations, and there they were, at the golden future. And they were smart enough to be worthy of the problem – Glushkov invented cybernetics, Kantorovich won a Nobel Prize in Economics.

And in the end, they never got the chance. There's an interpretation of Communism as a refutation of social science, here were these people who probably knew some social science, but did it

help them run a state, no it didn't. But from the little I learned about Soviet history from this book, this seems diametrically wrong. The Soviets had practically no social science. They hated social science. You would think they would at least have some good Marxists, but apparently Stalin killed all of them just in case they might come up with versions of Marxism he didn't like, and in terms of a vibrant scholarly field it never recovered. Economics was tainted with its association with capitalism from the very beginning, and when it happened at all it was done by non-professionals. Kantorovich was a mathematician by training; Glushkov a computer scientist.

Soviet Communism isn't what happens when you let nerds run a country, it's what happens when you kill all the nerds who are experts in country-running, bring in nerds from unrelated fields to replace them, then make nice noises at those nerds in principle while completely ignoring them in practice. Also, you ban all Jews from positions of importance, because fuck you.

Baggy two-piece suits are not the obvious costume for philosopher kings: but that, in theory, was what the apparatchiks who rule the Soviet Union in the 1960s were supposed to be. Lenin's state made the same bet that Plato had twenty-five centuries earlier, when he proposed that enlightened intelligence gives absolute powers would serve the public good better than the grubby politicking of republics.

On paper, the USSR was a republic, a grand multi-ethnic federation of republics indeed and its constitutions (there were

several) guaranteed its citizens all manner of civil rights. But in truth the Soviet system was utterly unsympathetic to the idea of rights, if you meant by them any suggestion that the two hundred million men, women and children who inhabited the Soviet Union should be autonomously fixing on two hundred million separate directions in which to pursue happiness. This was a society with just one programme for happiness, which had been declared to be scientific and therefore was as factual as gravity.

But the Soviet experiment had run into exactly the difficulty that Plato's admirers encountered, back in the fifth century BC, when they attempted to mould philosophical monarchies for Syracuse and Macedonia. The recipe called for rule by heavily-armed virtue—or in the Leninist case, not exactly virtue, but a sort of intentionally post-ethical counterpart to it, self-righteously brutal. Wisdom was to be set where it could be ruthless. Once such a system existed, though, the qualities required to rise in it had much more to do with ruthlessness than wisdom. Lenin's core of Bolsheviks, and the socialists like Trotsky who joined them, were many of them highly educated people, literate in multiple European languages, learned in the scholastic traditions of Marxism; and they preserved these attributes even as they murdered and lied and tortured and terrorized. They were social scientists who thought principle required them to behave like gangsters. But their successors – the *vydvizhentsy* who refilled the Central Committee in the thirties – were not the most selfless people in Soviet society, or the most principled, or

the most scrupulous. They were the most ambitious, the most domineering, the most manipulative, the most greedy, the most sycophantic: people whose adherence to Bolshevik ideas was inseparable from the power that came with them. Gradually their loyalty to the ideas became more and more instrumental, more and more a matter of what the ideas would let them grip in their two hands...

Stalin had been a gangster who really believed he was a social scientist. Khrushchev was a gangster who hoped he was a social scientist. But the moment was drawing irresistibly closer when the idealism would rot away by one more degree, and the Soviet Union would be governed by gangsters who were only pretending to be social scientists.

And in the end it all failed miserably:

The Soviet economy did not move on from coal and steel and cement to plastics and microelectronics and software design, except in a very few military applications. It continued to compete with what capitalism had been doing in the 1930s, not with what it was doing now. It continued to suck resources and human labour in vast quantities into a heavy-industrial sector which had once been intended to exist as a springboard for something else, but which by now had become its own justification. Soviet industry in its last decades existed because it existed, an empire of inertia expanding ever more slowly, yet attaining the wretched distinction of absorbing more of the total effort of the economy that hosted it

than heavy industry has ever done anywhere else in human history, before or since. Every year it produced goods that less and less corresponded to human needs, and whatever it once started producing, it tended to go on producing ad infinitum, since it possessed no effective stop signals except ruthless commands from above, and the people at the top no longer did ruthless, in the economic sphere. The control system for industry grew more and more erratic, the information flowing back to the planners grew more and more corrupt. And the activity of industry, all that human time and machine time it used up, added less and less value to the raw materials it sucked in. Maybe no value. Maybe less than none. One economist has argued that, by the end, it was actively destroying value; it had become a system for spoiling perfectly good materials by turning them into objects no one wanted.

I don't know if this paragraph was intentionally written to contrast with the paragraph at the top, the one about the zombie dance of capitalism. But it is certainly instructive to make such a contrast. The Soviets had originally been inspired by this fear of economics going out of control, abandoning the human beings whose lives it was supposed to improve. In capitalist countries, people existed for the sake of the economy, but under Soviet communism, the economy was going to exist only for the sake of the people.

(accidental [Russian reversal](#): the best kind of Russian reversal!)

And instead, they ended up taking “people existing for the sake of the economy” to entirely new and tragic extremes, people being sent to the gulags or killed because they didn’t meet the targets for some product nobody wanted that was listed on a Five-Year Plan. Spoiling good raw materials for the sake of being able to tell Party bosses and the world “Look at us! We are doing Industry!” [Moloch](#) had done some weird judo move on the Soviets’ attempt to destroy him, and he had ended up stronger than ever.

The book’s greatest flaw is that it never did get into the details of the math – or even more than a few-sentence summary of the math – and so I was left confused as to whether anything else had been possible, whether Kantorovich and Glushkov really could have saved the vision of prosperity if they’d been allowed to do so. Nevertheless, the Soviets earned my sympathy and respect in a way Marx so far has not, merely by acknowledging that the problem existed and through the existence of a few good people who tried their best to solve it.