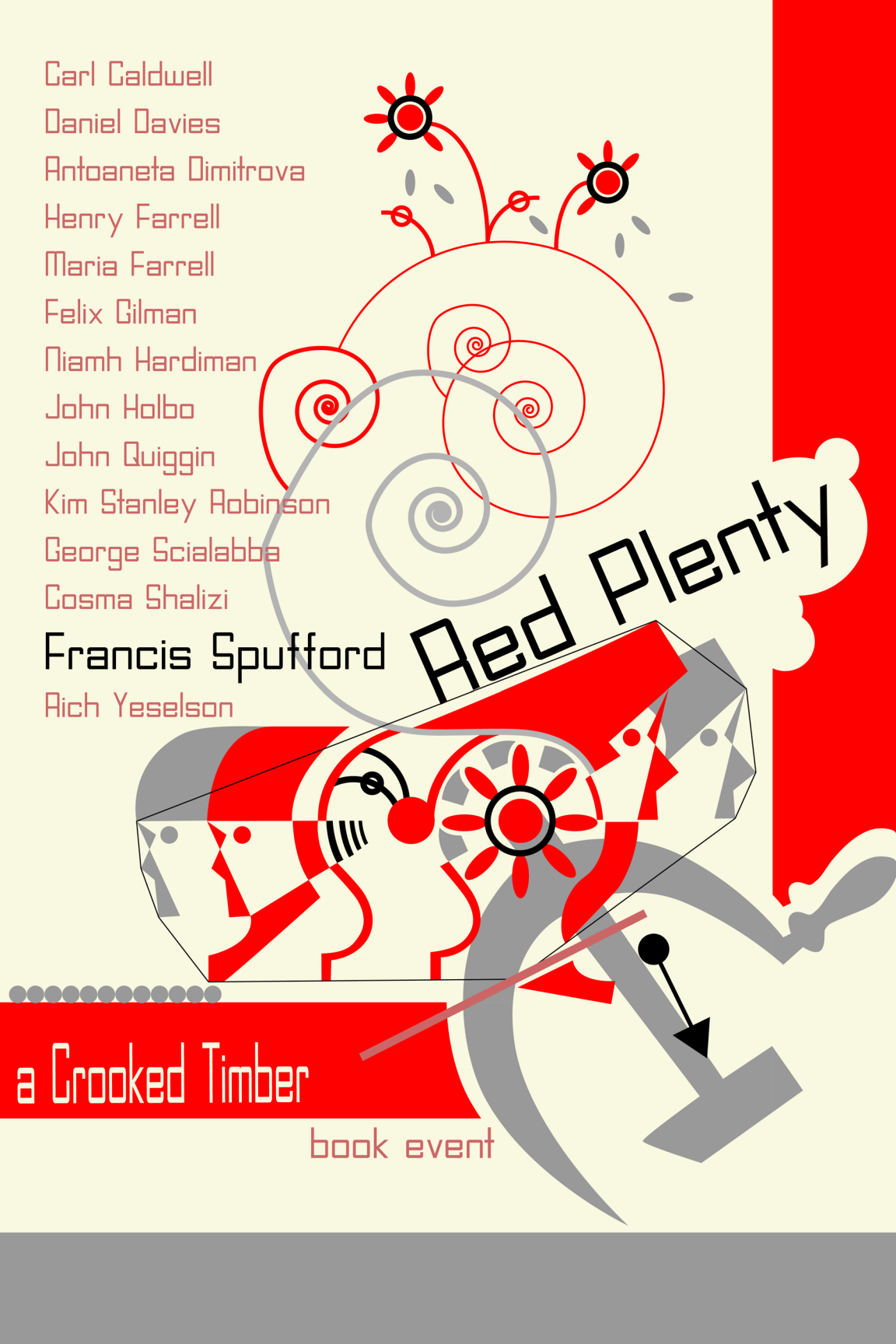


Carl Caldwell
Daniel Davies
Antoaneta Dimitrova
Henry Farrell
Maria Farrell
Felix Gilman
Niamh Hardiman
John Holbo
John Quiggin
Kim Stanley Robinson
George Scialabba
Cosma Shalizi
Francis Spufford
Rich Yeselson

Aed Plenty

a Crooked Timber

book event



Aed Plenty

a Crooked Timber

book event

The Red Plenty Book Event — a round-table discussion of Francis Spufford’s novel, *Red Plenty* — ran on [Crooked Timber](#) from May 29 to June 14, 2012.

online permalink:

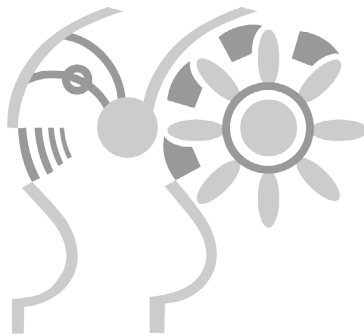
http://www.crookedtimber.org/categories/red_plenty_seminar

The Book Event was organized by Henry Farrell.

The book was edited by Henry Farrell and John Holbo,
and designed by John Holbo.

The Red Plenty Book Event is CC licensed:

Creative Commons
Attribution-NonCommercial-ShareAlike
3.0 Unported License.





Contents

Red Plenty is a Novel Kim Stanley Robinson	1
Red Plenty or Red Poverty? Reality versus ‘Psychoprophylaxis’: Reflections on Spufford’s Vision of The Rise And The Decline of The Communist System Antoaneta Dimitrova	3
To market, to market ... or not? George Scialabba	11
In Soviet Union, Optimization Problem Solves <u>You</u> Cosma Shalizi	21
On Narrating a System Carl Caldwell	47
Red Plenty – My Brush With Brezhnevism John Holbo	53
You Are Alone, In A Dark Wood. Now Cope. Henry Farrell	57

New Ideas From Dead Political Systems	
Daniel Davies	67
Worlds of Yesterday	
Felix Gilman	73
Good and Plenty	
Rich Yeselson	79
Will we ever know what otherwise is? Did we ever?Life, Fate and Irony	
Niamh Hardiman	85
Red Plenty:What WereThey Thinking?	
Maria Farrell	91
Red Plenty - or - Socialism Without Doctrines	
John Quiggin	97
Response	
Francis Spufford	101
Contributors	127



Red Plenty is a Novel

Kim Stanley Robinson

I LOVED FRANCIS Spufford's *Red Plenty*, which is a very beautiful novel.

There seems to be some unnecessary confusion as to its form or genre. You can see that in the front matter of the American edition, in which it is described as “like no other history book,” “a collection of stories,” “faction,” “part detective story,” “a set of artfully interwoven genres,” “the least promising fictional material of all time,” “reverse magical realism,” and “half novel/half history”. Of course it does not help that the first words of the novel are “This is not a novel. There is too much to explain..”

All wrong. There is always too much to explain, and yet novels are still novels. They have an immense capacity to include and shape all aspects of the real. *Red Plenty* is not even a particularly unusual novel, in terms of length, complexity, self-awareness, historical inclusions, bricolage technique, or any other matters of style or content. Shall we say *Moby Dick* is not a novel, or *War and Peace*? No we shall not. *Red Plenty* is a novel like they are, and should be discussed as one.

All right. Getting past the first sentence: what I particularly liked in *Red Plenty* is the way it humanizes a mysterious and convulsive mass of recent history. It's a tremendous demonstration of what a great diagnostic power the novel can wield in the hands of a strong novelist. You could call it an outstanding example of socialist realism, in that its critique of the Soviet experiment also contains a deep sympathy for the experiment's goals, and for the many people who continued to struggle for those goals to the end, despite the worsening circumstances.

It should be read together with F.V. Gladkov's *Cement* to make that point clear. It should also be read in the context of science fiction, historical fiction, alternative history, Soviet modernisms, and steampunk. This would be to put it in the context of other similar works, where it will always shine and illuminate.

And it is so full of characters I cared about, described in a precise emotional language. A moment came for me, in the chapter called "Midsummer Night, 1962," when the book took flight and soared into that space where we live other lives and hear other people's thoughts, and feel their feelings. Now I too have been there! This is what novels do, and I insist *Red Plenty* is a novel because it strengthens our sense of the form to have this book included in it.



Red Plenty or Red Poverty? Reality versus 'Psychoprophylaxis': Reflections on Spufford's Vision of The Rise And The Decline of The Communist System

Antoaneta Dimitrova

Despite being modestly defined as a Russian fairytale by its author, Francis Spufford's *Red Plenty* combines, in an original way, Russian style fiction and social science. Its originality lies in making the history of an idea into fiction and doing it in such a way that the combination of documentary and fiction does not come across as false history or as historical literature, but as a complex, engaging, exciting epic illuminating questions of economics and politics that are normally too dry for art. By interweaving the stories of numerous characters with historical events and a grand narrative describing economic and social processes of several decades, Spufford fits into the best traditions of Russian fiction, but his focus on ideas rather than emotions makes his approach profoundly un-Russian. This is, to my mind, rather a plus than a weakness of the book, since the great Russian writers of the 19th and 20th century are unrivalled in portraying the great mysteries of the human soul in turbulent times. What they have not done, what hardly anyone has done, is to make a calm, objective, almost scien-

tific investigation of the ideas and relationships that made the success of the Soviet regime possible in the 1950s and 1960s, at the genuine and idealistic belief of citizens and elites at the time that, as Spufford's Kantorovich character reasons, "if he could solve the problems people brought to the institute, it made the world a fraction better" (11).

Thus *Red Plenty* is a book for social scientists in more ways than one. First because it draws on history and uses a great amount of documentary material, economic and social history of the Soviet Union to tell the story of the communist dream of abundance for all. And second, and perhaps more important, because its evidence driven narrative aims to answer several typical social science questions, especially for a social scientists interested in communism's rise and fall. How could the Soviet planning economy be so successful in producing serious economic growth in the 1950s and 1960s, how could the Soviet system produce the science and innovation that led to space exploration and many other scientific achievements? And why did it then fail to continue doing so, to keep the pace of economic growth and scientific discovery?

Among Spufford's many achievements in this book is that he provides some direct and some indirect answers to these questions. Even though he leads us to the answers by telling the stories of characters that are convincing and fully capable of engaging the reader's interest in their destiny, he manages somehow to explore mechanisms that are structural and not personal. Despite the attention for Khrushchev and other historical figures from the Soviet Union, the personal vignettes are embedded in a narrative in which science, even more so than the idea of plenty — is the hero. This is perhaps best represented in by the prominent and fairly convincing character and the fate of the mathematician and economist Kantorovich. Other *Red Plenty* characters remain, as the planner Maksim Mokhov, "a confabulated embodiment of (the) institution" (395).

In contrast to many other books written about the Soviet period and especially about Stalinism, Spufford's account is not emotional, grim and dramatic, does not aim to show the suffering of ordinary people or their disillusionment with the system as has already been done with unrivalled mastery by the classical works of Solzhenitsyn, Pasternak or Bulgakov, to name but a few. Instead, he shows the various characters influenced not so much by the cruel decisions, but by the dreams of the communist leaders. The leaders who, in accordance with Marxist dogma, pretended (Stalin) or hoped (Khrushchev) that they were social scientists and in Spufford's interpretation harbored dreams of achieving abundance for all — Red Plenty. A dream that seemed to come true for a while by building on the idealism and enthusiasm of ordinary people and of talented scientists like the mathematician Kantorovich and his students and followers.

Spufford's approach to the period, in my view, is a success despite his self confessed lack of knowledge of Russian and the occasional unrealistic dialogue (for example, the dialogue between the 'fixer' Chekushkin and the factory director representative Stepovoi (234-245) rings somehow untrue pitched half way between the dry formal register of Soviet *apparatchiks* and the very informal everyday talk among drinking buddies). Even as his dialogue does not always achieve authenticity — and it seems that Spufford does not, rightly, aim to do so, (for example by using comrade instead of Mr. as a form of address) — the characters and their relationships are convincing and reveal a kind of deeper truth about human behavior. As all good fiction, the book achieves a truthful representation of the social forces and personal relationships and in doing so, helps the reader to understand the Soviet system better.

And as with all good fiction, *Red Plenty* provides, through the fate of its characters, the possibility of reaching for other conclusions than the author may have intended, of reflecting on other questions than the one defined as central by him. For

me, even more important than Spufford's quest to understand the Soviet planning economy and its failure, is the question what mechanisms and relationships caused the moral failure of the communist system, the political decline which, arguably, preceded the economic failure by destroying the initiative and idealism which gave the communist regimes their energy and strength at the beginning.

In the rest of this contribution I will highlight the characters and reflections in *Red Plenty* that, to my mind, contribute pieces to resolving the puzzle of the decline of communism as a political system and a set of social rules and relationships.

The character of the fixer, Chekushkin, represents the well known fact that as the planning economy did not work and neither did the formal rules by which communist bureaucracy and society were meant to operate, there were informal channels and ways to get things done, that served as the grease helping the turning of the heavy cogs and wheels in the machinery of the plan. I am not entirely convinced if it was really possible for anyone to play the exact role that Spufford imagined Chekushkin playing, of a spider in the middle of a web of economic relationships, trading favors to make the Plan work. In my personal experience, the trading of favors was a process that was so informal and embedded in everyday relationships that it could not be used for large scale, economic correction of the inflexibilities of communist planning. Still, the character is convincing even without being realistic as he fulfills a role that needed to be fulfilled for the system to function. His existence provides also some insights in the legacy of informality and corruption that plagues post communist regimes to this very day.

The party cadres and party secretaries — to whom Spufford devotes some of his documentary style, reflective sections — are also worth paying closer attention to. His portrayal of them as the managers of the planned economy — and the change in their character and recruitment over time — inspires

reflections on the gradual and to a great extent voluntary stifling of personal autonomy and initiative that led to societal and economic stagnation.

The systematic selection of the opportunistic young men and women for communist party membership and the selection of the most ignorant and opportunistic of these for higher level party posts was, to my mind, a key contributing factor to the decline of communism. The party secretaries: who were initially, in Spufford's description "progress chasers, fixers, seducers, talent scouts, comedians, therapists, judges, executioners..." (270), became later "the most ambitious, the most domineering, the most manipulative, the most greedy, the most sycophantic" elites of the communist regime. Spufford describes how this resulted in foul-mouthed language in Party meetings. But it is worth pausing to consider the more profound consequences for governance of the systematic, decades long selection of the most opportunistic and most mediocre members of society as its leaders. The party elites own ability to recognize innovation and brilliant inventions in all areas of society was limited and the party ideology made them also blind for the need to foster personal initiative and innovation.

To me, even if it may not be its main goal, *Red Plenty* shows how this organizational and structural principle of reproducing mediocrity combined with the role of Marxist-Leninist ideology led the communist system to stagnation and eventually, destruction.

As the ideology of Marxism-Leninism was indispensable for maintaining the collective belief in the bright future of communism, it remained enshrined by the party apparatchiks as unassailable social science doctrine that provided the only 'true' representation of real developments.

Spufford's book provides an excellent illustration how and why this fusion of opportunistic but ignorant elites and an ideology claiming to be the only social science became harmful for science, for the arts and for intellectual life and moral-

ity through the individual stories of the scientists, inventors and artists. The scientists saw their own initiatives, driven by idealism and the love of progress that fuelled the initial boom of the Soviet economy, abandoned and stifled as ideology became more important than real progress and mediocrity ruled without need for innovation or creativity. Brezhnev's advisor Kosygin, as the planner Mokhov explains to the economist Shaidulin, "has a lively sense that our system has better not be broken by we — meaning experiments" (298).

The vignettes of disappointed and disillusioned scientists become more prominent as the book progresses through the decades of Soviet history, from the Khrushchev to the Brezhnev era: the leading cybernetics research professor Lebedev (e.g. 337), who does not manage to convince Kosygin and Brezhnev to support the original Soviet computer industry, the brilliant geneticist Zoya, the economists and mathematicians that prepared the reform that was to rescue the planning economy itself only to come against Politburo's opposition against 'market prices'.

The fates of Spufford's scientists and his popular artist-turned-dissident, Galitch, ultimately turn out to be determined by the Party's ability to accept and utilize change. Through their stories he shows that one of the main causes of stagnation was not simply the impossibility of efficient central planning, but the political commitment to ideology above reality, the growing gap between the predictions and tenets of Marxism-Leninism and real developments in economy and society. Spufford illustrated this, for example, with his imagined dialogue between the economist Emil Shaidulin and Brezhnev's advisor Kosygin on the proposed pricing reform.

Not only did the Soviet system produce elites that were not equipped with any knowledge or tools to evaluate societal and economic trends (and Spufford comes with several extremely informative and perceptive passages on the educational reform that achieved this result), but the communist ideology,

masquerading as social science, required them to believe that what it predicted was actually happening, contrary to evidence supplied by their own experiences. As Spufford says, “By definition, friends of truth, friends of thought and reason and humanity and beauty were friends of the Party; friends of Stalin. To be opposed to the Party would be to become an enemy of truth...”(145). This excellent observation can be used as a definition of something close to a law of social behavior, guiding the elites and party apparatchiks through all the decades after the Stalin period, in all communist regimes until the very collapse of the system: to be opposed to the party was seen as to be opposed to truth and if truth, social reality appeared to be different from what the party was saying, then social reality was rejected in favor of the ‘higher truth’. In other words, all elites and ultimately, most citizens of these regimes learned to live in a state of deep hypocrisy: what we would think was happening was not happening, what was really happening was what the Party told us would happen.

Never mind that, as Spufford also reminds us, ‘the scientific method itself taught lessons’ and so did the reading of classics of Russian literature, so already by the 1960s it was possible for scientists to start realizing that, in Spufford’s succinct formulation, ‘what was enthroned in Russia, after all, might be stupidity’. Marxism Leninism turned out to be a perverse kind of post modernism — if the theory did not really make existence better, then it would construct a reality in which it did, in which pretense was all there was.

The consequences of this all pervasive hypocrisy, of the practice of ‘psychoprophylaxis’ (302) — pretending that the world was better than it was — Spufford’s most glaring example of it being the women giving birth who were required to pretend that it did not hurt — cannot be overestimated. Millions of people that have been born and socialized into the ‘pretend-the-world-better’ system of socialism find it, to this very day, near impossible to believe in the objective consequences of

their actions in a social context. Truth about society or the economy, facts and data are underestimated and suspected not to exist — after all, millions were taught facts they could observe did not really exist — only the party's version of them did. If everything is pretend, then no one can contribute much to society — take a new initiative, build something, start a business — and there is no need to try. This exuberant irrationality can be seen as the last revenge of communism on all of those who ever were reluctant participants in its experiment.



To market, to market ... or not?

George Scialabba

The tedious thing about being a book reviewer is your obligation to be fair, thorough, and concise. You're supposed to keep in mind that, quite possibly, all your readers will ever know about the book you're reviewing is what you say in the review, so the poor author, who may have spent years writing the book, is to that extent at your mercy. You're supposed to give a reasonably complete idea what's in the book, not just what you found interesting about it, since you don't know that what interests you will interest others. You're supposed to put the author's case in the most persuasive and plausible form, since she won't get to reply in more than a few, inevitably inadequate paragraphs. You can't just blather on, mentioning all the (often irrelevant) things the book made you think about and, in particular, dropping the names of other (often remotely) related books, just to demonstrate your cosmopolitan interests and vast erudition.

For all these reasons, a symposium like this is something of a holiday. There are lots of other people writing about the book, and one or another of them is bound to cover whatever you've left out. So much for thoroughness. The author gets to reply at great length, and commenters at moderate length, and someone will certainly seize the opportunity to correct anything you've misunderstood or misrepresented. So no need to worry overmuch about being scrupulously fair. And it's the Internet — concision is unheard of, and blathering/showing off is practically the name of the game. Ha, ha — screw all those tiresome reviewerly obligations!

A couple of observations arising directly from *Red Plenty*, though, before wandering off into matters only indirectly related. If anyone out there knows of any writing remotely comparable to the astonishing description strung across pages 329-340 of the genesis of a lung cancer tumor, please share. Once every few years, this grizzled and jaded book critic comes across a few pages that cause the pupils to widen, the pulse to quicken, the amygdala to flutter. This was one of those occasions. There is plenty of extremely good writing in the book — the immediately preceding chapter, about giving birth, for example; or the little fixer Chekuskin’s venture into the *banya*, or bathhouse, where the local criminals are playing cards, in order to buy scavenged copper pipe from them; or the visit of a Komsomol delegation to an American exhibition in Moscow’s Sokolniki Park in 1959. But the cellular mini-epic compressed between the sad, quotidian events of a chapter called “The Unified System, 1970” is way beyond extremely good. I would be willing to follow up any number of recommendations from commenters on the long chance of encountering a few pages that gave me anything like as much pleasure.

Another thing you’re not supposed to do in book reviews is plug your friends. Well, screw that too. Because *Red Plenty* is about so many things — economic reform, the culture of academe, bureaucracy, Russian history — the portrayal of everyday life and character, though skillful, is episodic and will leave some readers unsatisfied. To those readers I recommend the stories of Ludmilla Petrushevskaya, one of the foremost fictional chroniclers of Soviet life in the decades covered by *Red Plenty*. Petrushevskaya’s stories are being translated into English by my good friend Anna Summers, and one of them appears in *Baffler* 19.

Red Plenty doesn’t have a plot, exactly, but the narrative thread with the most continuity and the highest dramatic tension concerns the efforts of mathematical economists to rationalize the vast, ramshackle contraption that was the USSR’s

central plan. Once Khrushchev had publicly repudiated the worst excesses of Stalinist ultra-orthodoxy and police-state repression, the economists began speaking to Party leaders about ideas they had formerly only whispered about among themselves: in particular, “objectively determined valuations,” “shadow prices,” and even “enterprise profits.” They promised plenty, and plausibly, but at a cost: less Party control. At the climactic moment, while First Secretary Kosygin looks on, “tapping one set of dry fingertips against the other,” his aide challenges the economists’ spokesman: isn’t what’s being proposed essentially a market economy — the negation of Communism?

“No!” said Emil. “This would be an alternative to a market economy. The prices would represent genuine social utility. And calculating them would be well within the powers of existing technology. We have the software ready!

History seems to hang in the balance, but really, rejection is preordained. The First Bureaucrat taps his fingers a while longer and then speaks: “It’s a very pretty idea. Very clever. But not practical. Not a serious proposition.”

Whether it was a serious proposition — whether market and central plan could have been combined in roughly the way envisioned by the book’s protagonists — I leave to my fellow symposiasts. I would like instead to turn to a more recent and less historically significant debate, though one more relevant (I hope) to the American future: about the market vs. decentralized planning. David Schweickart, a mathematician and philosophy professor, is the author of *Against Capitalism, After Capitalism, Market Socialism, and Capitalism or Worker Control?* Michael Albert, co-founder of South End Press and ZNet, is the author (with Robin Hahnel) of *Looking Forward, The Political Economy of Participatory Economics*, and *Parecon*:

Life After Capitalism. The latter book (full text [online](#)), published by Verso, has had surprising success. It has been translated into 15 or 20 languages and is the subject of numerous dedicated websites.

In 2006 Schweickart wrote a long, harsh review of *Parecon*. Albert, who evidently loves a good argument, posted Schweickart's review on the ZNet website with a lengthy reply and invited a rejoinder from Schweickart, to which he again replied at length. The full exchange [here](#). (I've only read scattered pages of *Parecon*, but I reviewed the two earlier Albert/Hahnel volumes [at some length](#).)

It's a lengthy exchange, and it gets down to cases. In fact, Schweickart immediately gets down to a very extended case: he attempts to apply the Parecon model of "balanced job complexes" and "consumption bundles" to his own workplace, Loyola University, and his own everyday consumption. The necessary calculations — imagined in real-life detail, over many pages — are staggeringly complex. And this does not exhaust the difficulties. Wages, prices, and investments must also be decided on. Even if the deliberations involved were not prohibitively time-consuming, Schweickart claims, it is impossible to make such decisions in a non-arbitrary way without some measure of efficiency, like that provided by the results of market competition.

Albert concedes the difficulty, but not the impossibility. As he reasonably points out, doing anything for the second or fifth time is easier than doing it for the first time. After all, the costs of transition from craft production to industrial production were horrendous; the process was only accomplished through massive and prolonged coercion of the population by capitalists, managers, and the state. The costs of a voluntary transformation by a self-directing populace would be far easier to bear. If we can look past the difficulties, Albert urges, we will see a necessary egalitarian future that can be attained no other way:

Transition involves experimentation in job definition. It involves a flow of changes that give those doing only cushy and empowering work steadily more of the socially necessary but rote tasks, while giving some of their cushy and empowering labor over to those who were previously excluded...

The point is, if you look down the road some years from when serious redesign in pursuit of balanced job complexes begins, balanced job complexes can be attained and, moreover, the people who work at the new Loyola can have had enriching education in their youth — rather than about 80% of them being taught mostly to endure boredom and take orders, and 20% being taught productive skills and also to feel superior. In the new Loyola, all who work there are equipped to participate cooperatively and equitably in balanced jobs, and a few will not dominate the rest. And the same goes for other workplaces. We don't all do everything, of course. None of us do things beyond our capacities, naturally. We all, however, do some activity that is empowering and some that is not, in a socially balanced mix.

Albert's egalitarianism is unyielding and deeply admirable. Schweickart is an egalitarian too — it would be a far less worthwhile debate if he weren't. But, he counters, there are equally important values: privacy, most obviously, and the spirit of enterprise. Even more fundamentally, Albert's "strict egalitarianism is morally problematic. It undercuts the generosity of spirit a socialist ethic should provide."

Schweickart's favored alternative, expounded in *After Capitalism*, is "Economic Democracy." It has three elements:

- *Worker Self-Management*: Each productive enterprise is controlled democratically by its workers.

- *The market:* These enterprises interact with one another and with consumers in an environment largely free of government price controls. Raw materials, instruments of production, and consumer goods are all bought and sold at prices largely determined by the forces of supply and demand.
- *Social control of investment.* Funds for new investment are generated by a capital assets tax and are returned to the economy through a network of public investment banks.

It all comes down to one's view of markets. Schweickart and Albert agree that private financial markets must go; investment must be democratically decided on. But Schweickart insists that a market in goods and services is not a mere necessary evil, it is a positive good. Albert is implacable:

Markets aren't a little bad, or even just very bad in some contexts. Instead, in all contexts, markets instill anti-social motivations in buyers and sellers, misprice items that are exchanged, misdirect aims regarding what to produce in what quantities and by what means, misremunerates producers, introduces class divisions and class rule, and embody an imperial logic that spreads itself throughout economic life.

Schweickart's reply is eloquent:

Markets indeed have defects, but they have virtues as well. We need to think dialectically about markets. Markets are democratic (in that they respond to consumer preferences), and they are undemocratic (since they tend to exacerbate income inequality). Markets enhance the space of individual freedom (since consumer choices are not subject to the approval of others), and they

contract the space of individual freedom (since market choices often have third-party effects). Markets provide incentives for constructive behavior (efficient use of resources, innovation) and for destructive behavior (consumer manipulation, disregard of ecological consequences). Neither market fundamentalism nor market rejectionism is an appropriate response to the reality of economic complexity.

This was also the conclusion of the late Alec Nove, a leading scholar of Soviet economic history, whose witty, incisive, altogether invaluable *The Economics of Feasible Socialism* is a book anyone interested in the themes of *Red Plenty* will want to read. Nove quotes a “doubtless sarcastic Soviet author” on the shortcomings of planning: “Mathematicians have calculated that in order to draft an accurate and fully integrated plan for material supply just for the Ukraine for one year will require the labour of the entire world’s population for 10 million years.” Nove then asks, unsarcastically:

Is there then no possibility for democratic control over the processes of production and circulation? There most certainly is such a possibility, even a necessity ... But first one must make clear that the democratic process will *not* be relevant to a wide category of microeconomic decision-making. Those responsible for making pumps will *not* vote about where they should go. The elected assembly at the center which will adopt a general plan for society will, *of course*, have neither the time nor the knowledge to concern itself with such a detail as pumps, let alone where any particular consignment should be sent (unless some scandalous situation arises which is brought to their attention). Otherwise, as Antonov wrote, next year’s plan will be ready in several million years.

Perfection, whether conceived as “optimization” or “equilibrium,” is a chimera. “All institutional arrangements carry with them advantages *and* disadvantages. ... Competition has certain positive features: it is a consequence and pre-condition of choice; it also provides a stimulus, to the successful and laggards alike. ... Similarly, central planning enables the planners to see the total picture, but at the cost of a loss of vision of detail. Decentralization means clarity at micro level, but at the cost that wider effects may remain unperceived. The best solution is bound to be a compromise.” This is Schweickart’s “neither market fundamentalism nor market rejectionism.”

Nové’s model of “feasible socialism” closely resembles Schweickart’s, with five levels of economic activity:

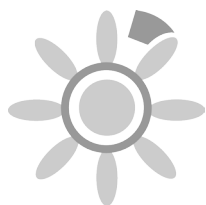
- State enterprises, centrally controlled and administered;
- Publicly owned (or socially owned) enterprises with full autonomy and a management responsible to the workforce;
- Enterprises owned and/or administered by the workforce (e.g., cooperatives, and other variants, employee shareholding, long leases, and so on);
- Private enterprise (subject to limits);
- Individuals (e.g., freelance journalists, plumbers, artists).

Investment would in general be publicly, democratically decided, though with a few more exceptions than Schweickart would allow. But unfettered private financial markets are out; to both writers it is obvious, as it must be to any thoughtful adult — there is some excuse, I suppose, for a thoughtful adolescent libertarian — that predominantly private control of investment is incompatible with a rational, humane society. To

Albert's ferocious hostility to hierarchy, Nove would reply that "it does seem likely that most human beings will continue to prefer to avoid responsibility and be glad to accept (appoint, elect) others to carry it," but that there is all the difference in the world between accountable and unaccountable authority. As long as management in most enterprises is responsible to the workforce, there is no need to abolish professional managers.

By "feasible," Nove explained in his introduction, he meant "a state of affairs which could exist in some major part of the developed world within the lifetime of a child already conceived." No doubt Nove's model, as well as Schweickart's and even Albert's, are *technically* feasible in that sense. But are they politically, psychologically, and morally feasible? Nove was writing in 1983, shortly after hundreds of millions of people had cast votes for Ronald Reagan and Margaret Thatcher. Not many of those people, or their children, seem to have learned much in the three decades since. The debates surveyed above will probably not be of practical relevance for quite a while: it will be a century or two, I fear, before the last Republican politician is hanged in the entrails of the last evangelical preacher.

So why are they worth having? Well, as Shelley wrote, the great instrument of moral good is the imagination. And imagination feeds on argument. Bellamy and Morris fed on Marx and Henry George; Ernest Callenbach fed on Paul Goodman and Lewis Mumford. Someone reading these arguments on ZNet or Crooked Timber may even now be meditating a utopian novel of a scope and beauty equal to theirs — or a semi-utopian fairy tale like *Red Plenty*. Perhaps we will feed her imagination.



In Soviet Union, Optimization Problem Solves You

Cosma Shalizi

Attention conservation notice: Over 7800 words about optimal planning for a socialist economy and its intersection with computational complexity theory. This is about as relevant to the world around us as debating whether a devotee of the Olympian gods should approve of transgenic organisms. (Or: centaurs, yes or no?) Contains mathematical symbols but no actual math, and uses *Red Plenty* mostly as a launching point for a tangent.

There's lots to say about *Red Plenty* as a work of literature; I won't do so. It's basically a work of speculative fiction, where one of the primary pleasures is [having a strange world unfold in the reader's mind](#). More than that, it's a work of science fiction, where the strangeness of the world comes from its being [reshaped by technology and scientific ideas](#) — here, mathematical and economic ideas.

Red Plenty is also (what is a rather different thing) a work of [scientist fiction](#), about the creative travails of scientists. The early chapter, where linear programming breaks in upon the Kantorovich character, is one of the most true-to-life depictions I've encountered of the experiences of mathematical inspiration and mathematical work. (Nothing I will ever do will be remotely as important or beautiful as what the real Kantorovich did, of course.) An essential part of that chapter, though, is the way the thoughts of the Kantorovich character

split between his profound idea, his idealistic political musings, and his scheming about how to cadge some shoes, all blind to the incongruities and ironies.

It should be clear by this point that I loved *Red Plenty* as a book, but I am so much in its target demographic that it's not even funny.¹ My enthusing about it further would not therefore help others, so I will, to make better use of our limited time, talk instead about the central idea, the dream of the optimal planned economy.

That dream did not come true, but it never even came close to being implemented; strong forces blocked that, forces which *Red Plenty* describes vividly. But could it even have been tried? Should it have been?

The Basic Problem of Industrial Planning

Let's think about what would have to have gone in to planning in the manner of Kantorovich.

- I. We need a quantity to maximize. This objective function has to be a function of the quantities of all the different goods (and services) produced by our economic system.**

Here “objective” is used in the sense of “goal”, not in the sense of “factual”. In Kantorovich's world, the objective function is linear, just a weighted sum of the output levels. Those weights tell us about trade-offs: we will accept getting one less bed-sheet (queen-size, cotton, light blue, thin, fine-weave) if it lets us make so many more diapers (cloth, unbleached,

1 Vaguely lefty? Check. Science fiction reader? Check. Interested in economics? Check. In fact: family tradition of socialism extending to having a relative whose middle name was “Karl Marx”? Check. Gushing Ken MacLeod fan? Check. Learned linear programming at my father's knee as a boy? Check.

re-usable), or this many more lab coats (men's, size XL, non-flame-retardant), or for that matter such-and-such an extra quantity of toothpaste. In other words, we need to begin our planning exercise with relative weights. If you don't want to call these "values" or "prices", I won't insist, but the planning exercise has to begin with them, because they're what the function being optimized is built from.

It's worth remarking that in Best Use of Economic Resources, Kantorovich side-stepped this problem by a device which has "all the advantages of theft over honest toil". Namely, he posed only the problem of maximizing the production of a "given assortment" of goods — the planners have fixed on a ratio of sheets to diapers (and everything else) to be produced, and want the most that can be coaxed out of the inputs while keeping those ratios. This doesn't really remove the difficulty: either the planners have to decide on relative values, or they have to decide on the ratios in the "given assortment".

Equivalently, the planners could fix the desired output, and try to minimize the resources required. Then, again, they must fix relative weights for resources (cotton fiber, blue dye #1, blue dye #2, bleach, water [potable], water [distilled], time on machine #1, time on machine #2, labor time [unskilled], labor time [skilled, sewing], electric power...). In some contexts these might be physically comparable units. (The first linear programming problem I was ever posed was to work out a diet which will give astronauts all the nutrients they need from a minimum mass of food.) In a market system these would be relative prices of factors of production. Maintaining a "given assortment" (fixed proportions) of resources used seems even less reasonable than maintaining a "given assortment" of outputs, but I suppose we could do it.

For now (I'll come back to this), assume the objective function is given somehow, and is not to be argued with.

IIA. We need complete and accurate knowledge of all the physical constraints on the economy, the resources available to it.

IIB. We need complete and accurate knowledge of the productive capacities of the economy, the ways in which it can convert inputs to outputs.

(IIA) and (IIB) require us to disaggregate all the goods (and services) of the economy to the point where everything inside each category is substitutable. Moreover, if different parts of our physical or organizational “plant” have different technical capacities, that needs to be taken into account, or the results can be decidedly sub-optimal. (Kantorovich actually emphasizes this need to disaggregate in Best Use, by way of scoring points against [Leontief](#). The numbers in the latter’s input-output matrices, Kantorovich says, are aggregated over huge swathes of the economy, and so far too crude to be actually useful for planning.) This is, to belabor the obvious, a huge amount of information to gather.

(It’s worth remarking at this point that “inputs” and “constraints” can be understood very broadly. For instance, there is nothing in the formalism which keeps it from including constraints on how much the production process is allowed to pollute the environment. The shadow prices enforcing those constraints would indicate how much production could be increased if marginally more pollution were allowed. This wasn’t, so far as I know, a concern of the Soviet economists, but it’s the logic behind cap-and-trade institutions for controlling pollution.)

Subsequent work in optimization theory lets us get away, a bit, from requiring complete and *perfectly accurate* knowledge in stage (II). If our knowledge is distorted by merely unbiased statistical error, we could settle for stochastic optimization, which runs some risk of being badly wrong (if the noise is

large), but at least does well on average. We still need this unbiased knowledge about everything, however, and aggregation is still a recipe for distortions.

More serious is the problem that people will straight-up *lie* to the planners about resources and technical capacities, for reasons which Spufford dramatizes nicely. There is no good mathematical way of dealing with this.

III. For Kantorovich, the objective function from (I) and the constraints and production technology from (II) must be linear.

Nonlinear optimization is possible, and I will come back to it, but it rarely makes things *easier*.

IV. Computing time must be not just too cheap to meter, but genuinely immense.

It is this point which I want to elaborate on, because it is a mathematical rather than a practical difficulty.

Numerical Methods for the Solution of Problems of Optimal Planning

It was no accident that mathematical optimization went hand-in-hand with automated computing. There's little point to reasoning abstractly about optima if you can't actually *find* them, and finding an optimum is a computational task. We pose a problem (find the plan which maximizes this objective function subject to these constraints), and want not just a solution, but a *method* which will continue to deliver solutions even as the problem posed is varied. We need an algorithm.

Computer science, which is not really so much a science as a branch of mathematical engineering, studies questions like this. A huge and profoundly important division of computer

science, the theory of computational complexity, concerns itself with understanding what resources algorithms require to work. Those resources may take many forms: memory to store intermediate results, samples for statistical problems, communication between cooperative problem-solvers. The most basic resource is time, measured not in seconds but in operations of the computer. This is something Spufford dances around, in II.2: “Here’s the power of the machine: that having broken arithmetic down into tiny idiot steps, it can then execute those steps at inhuman speed, forever.” But how many steps? If it needs enough steps, then even inhuman speed is useless for human purposes...

The way computational complexity theory works is that it establishes some reasonable measure of the size of an instance of a problem, and then asks how much time is absolutely *required* to produce a solution. There can be several aspects of “size”; there are three natural ones for linear programming problems. One is the number of variables being optimized over, say n . The second is the number of constraints on the optimization, say m . The third is the amount of approximation we are willing to tolerate in a solution — we demand that it come within h of the optimum, and that if any constraints are violated it is also by no more than h . Presumably optimizing many variables ($n \gg 1$), subject to many constraints ($m \gg 1$), to a high degree of approximation ($h \sim 0$), is going to take more time than optimizing a few variables ($n \sim 1$), with a handful of constraints ($m \approx 1$), and accepting a lot of slop ($h \approx 1$). How much, exactly?

The fastest known algorithms for solving linear programming problems are what are called “interior point” methods. These are extremely ingenious pieces of engineering, useful not just for linear programming but a wider class of problems called “convex programming”. Since the 1980s they have [revolutionized](#) numerical optimization, and are, not so coincidentally, among the intellectual children of Kantorovich (and

Dantzig). The best guarantees about the number of “idiot steps” (arithmetic operations) they need to solve a linear programming problem with such algorithms is that it’s proportional to

$$(m+n)^{3/2}n^2\log(1/h)$$

(I am simplifying just a bit; see sec. 4.6.1 of Ben-Tal and Nemirovski’s *Lectures on Modern Convex Optimization* [[PDF](#)].)

Truly intractable optimization problems — of which there are many — are ones where the number of steps needed grow exponentially.² If linear programming was in this “complexity class”, it would be truly dire news, but it’s not. The complexity of the calculation grows only polynomially with n , so it falls in the class theorists are accustomed to regarding as “tractable”. But the complexity still grows super-linearly, like $n^{3.5}$. Where does this leave us?

A good modern commercial linear programming package can handle a problem with 12 or 13 million variables in a few minutes on a desktop machine. Let’s be generous and push this down to 1 second. (Or let’s hope that Moore’s Law rule-

2 More exactly, many optimization problems have the property that we can check a proposed solution in polynomial time (these are the class “NP”), but no one has a polynomial-time way to work out a solution from the problem statement (which would put them in the class “P”). If a problem is in NP but not in P, we cannot do drastically better than just systematically go through candidate solutions and check them all. (We can often do a bit better, especially on particular cases, but not drastically better.) Whether there are any such problems, that is whether $NP=P$, is not known, but it sure seems like it. So while most common optimization problems are in NP, linear and even convex programming are in P.

of-thumb has six or eight iterations left, and wait a decade.) To handle a problem with 12 or 13 billion variables then would take about 30 billion seconds, or roughly a thousand years.

Naturally, I have a reason for mentioning 12 million variables:

In the USSR at this time [1983] there are *12 million identifiably different products* (disaggregated down to specific types of ball-bearings, designs of cloth, size of brown shoes, and so on). There are close to 50,000 industrial establishments, plus, of course, thousands of construction enterprises, transport undertakings, collective and state forms, wholesaling organs and retail outlets. — Alec Nove, *The Economics of Feasible Socialism* (p. 36 of the revised [1991] edition; Nove's italics)

This 12 million figure will conceal variations in quality; and it is not clear to me, even after tracking down Nove's sources, whether it included the provision of services, which are a necessary part of any economy.

Let's say it's just twelve million. Even if the USSR could never have *invented* a modern computer running a good LP solver, if someone had *given* it one, couldn't Gosplan have done its work in a matter of minutes? Maybe an hour, to look at some alternative plans?

No. The difficulty is that there aren't *merely* 12 million variables to optimize over, but rather many more. We need to distinguish between a "coat, winter, men's, part-silk lining, wool worsted tricot, clothgroup 29-32" in Smolensk from one in Moscow. If we don't "index" physical goods by location this way, our plan won't account for the need for transport properly, and things simply won't be where they're needed; Kantorovich said as much under the heading of "the problem of a production complex". (Goods which can spoil, or are needed at particular occasions and neither earlier nor later,

should also be indexed by time; Kantorovich's "dynamic problem") A thousand locations would be *very* conservative, but even that factor would get us into the regime where it would take us a thousand years to work through a single plan. With 12 million kinds of goods and *only* a thousand locations, to have the plan ready in less than a year would need computers a thousand times faster.

This is not altogether unanticipated by *Red Plenty*:

A beautiful paper at the end of last year had skewered Academician Glushkov's hypercentralized rival scheme for an all-seeing, all-knowing computer which would rule the physical economy directly, with no need for money. The author had simply calculated how long it would take the best machine presently available to execute the needful program, if the Soviet economy were taken to be a system of equations with fifty million variables and five million constraints. Round about a hundred million years, was the answer. Beautiful. So the only game in town, now, was their own civilised, decentralized idea for optimal pricing, in which shadow prices calculated from opportunity costs would harmonise the plan without anyone needing to possess impossibly complete information. [V.2]

This alternative vision, the one which Spufford depicts those around Kantorovich as pushing, was to find the shadow prices needed to optimize, fix the monetary prices to track the shadow prices, and then let individuals or firms buy and sell as they wish, so long as they are within their budgets and adhere to those prices. The planners needn't govern men, nor even administer things, but only set prices. Does this, however, actually set the planners a more tractable, a less computationally-complex, problem?

So far as our current knowledge goes, no. Computing optimal prices turns out to have the same complexity as computing the optimal plan itself.³ It is (so far as I know) *conceivable* that there is some short-cut to computing prices alone, but we have no tractable way of doing that yet. Anyone who wants to advocate this needs to show that it is possible, not just hope piously.

How then might we escape?

It will not do to say that it's enough for the planners to *approximate* the optimal plan, with some dark asides about the imperfections of actually-existing capitalism thrown into the mix. The computational complexity formula I quoted above already allows for only needing to come close to the optimum. Worse, the complexity depends only very slowly, logarithmically, on the approximation to the optimum, so accepting a bit more slop buys us only a very slight savings in computation time. (The optimistic spin is that if we can do the calculations at all, we can come quite close to the optimum.) This route is blocked.

Another route would use the idea that the formula I've quoted is only an upper bound, the time required to solve an

3 Most of the relevant work has been done under a slightly different cover — not determining shadow prices in an optimal plan, but equilibrium prices in Arrow-Debreu model economies. But this is fully applicable to determining shadow prices in the planning system. (Bowles and Gintis: “The basic problem with the Walrasian model in this respect is that it is essentially about allocations and only tangentially about markets — as one of us (Bowles) learned when he noticed that the graduate microeconomics course that he taught at Harvard was easily repackaged as ‘The Theory of Economic Planning’ at the University of Havana in 1969.”) Useful references here are Deng, Papadimitriou and Safra’s “On the Complexity of Price Equilibria” [[STOC’02. preprint](#)], Condenotti and Varadarajan’s “Efficient Computation of Equilibrium Prices for Markets with Leontief Utilities”, and Ye’s “[A path to the Arrow-Debreu competitive market equilibrium](#)”.

arbitrary linear programming problem. The problems set by economic planning might, however, have some special structure which could be exploited to find solutions faster. What might that structure be?

The most plausible candidate is to look for problems which are “separable”, where the constraints create very few connections among the variables. If we could divide the variables into two sets which had nothing at all to do with each other, then we could solve each sub-problem separately, at tremendous savings in time. The supra-linear, $n^{3.5}$ scaling would apply only within each sub-problem. We could get the optimal prices (or optimal plans) just by concatenating the solutions to sub-problems, with no extra work on our part. Unfortunately, as Lenin is supposed to have said, “everything is connected to everything else”. If nothing else, *labor* is both required for all production, and is in finite supply, creating coupling between all spheres of the economy. ([Labor is not actually extra special here](#), but it is traditional).⁴ A national economy simply does not break up into so many separate, non-communicating spheres which could be optimized independently.

4 In the mathematical appendix to *Best Use*, Kantorovich goes to some length to argue that his objectively determined values are compatible with the labor theory of value, by showing that the o.d. values are proportional to the required labor in the optimal plan. (He begins by assuming away the famous problem of equating different kinds of labor.) A natural question is how seriously this was meant. I have no positive evidence that it wasn't sincere. But, carefully examined, all that he proves is proportionality between o.d. values and the required consumption of the *first component* of the vector of inputs — and the ordering of inputs is arbitrary. Thus the first component could be any input to the production process, and the same argument would go through, leading to many parallel “theories of value”. (There is a certain pre-Socratic charm to imagining proponents of the labor theory of value arguing it out with the water-theorists or electricity-theorists.) It is hard for me to believe that a mathema-

So long as we are thinking like computer programmers, however, we might try a desperately crude hack, and just *ignore* all kinds of interdependencies between variables. If we did that, if we pretended that the over-all high-dimensional economic planning problem could be split into many separate low-dimensional problems, then we could speed things up immensely, by exploiting parallelism or distributed processing. An actually-existing algorithm, on actually-existing hardware, could solve each problem on its own, ignoring the effect on the others, in a reasonable amount of time. As computing power grows, the supra-linear complexity of each planning sub-problem becomes less of an issue, and so we could be less aggressive in ignoring couplings.

At this point, each processor is something very much like a firm, with a scope dictated by information-processing power, and the mis-matches introduced by their ignoring each other in their own optimization is something very much like “the anarchy of the market”. I qualify with “very much like”, because there are probably lots of institutional forms these could take, some of which will not look much like actually existing capitalism. (At the very least the firm-ish entities could be publicly owned, by the [state](#), Roemeresque [stock-market socialism](#), [workers’ cooperatives](#), or indeed other forms.)

Forcing each processor to take some account of what the others are doing, through prices and quantities in markets, removes some of the grosser pathologies. (If you’re a physicist, you think of this as weak coupling; if you’re a computer programmer, it’s a restricted interface.) But it won’t, in general, provide enough of a communication channel to actually compute the prices swiftly — at least not if we want *one* set

tion of Kantorovich’s skill did not see this, suggesting that the discussion was mere ideological cover. It would be interesting to know at what stage in the book’s “adventures” this part of the appendix was written.

of prices, available to all. Rob Axtell, in [a really remarkable paper](#), shows that *bilateral* exchange can come within h of an equilibrium set of prices in a time proportional to $n^2 \log(1/h)$, which is *much* faster than any known centralized scheme.

Now, we might hope that yet faster algorithms will be found, ones which would, say, push the complexity down from cubic in n to merely linear. There are [lower bounds on the complexity of optimization problems](#) which suggest we could never hope to push it below that. No such algorithms are known to exist, and we don't have any good reason to think that they do. We also have no reason to think that alternative computing methods would lead to such a speed-up.

I said before that increasing the number of variables by a factor of 1000 increases the time needed by a factor of about 30 billion. To cancel this out would need a computer about 30 billion times faster, which would need about 35 doublings of computing speed, taking, if Moore's rule-of-thumb continues to hold, another half century. But my factor of 1000 for prices was quite arbitrary; if it's really more like a million, then we're talking about increasing the computation by a factor of 10^{21} (a more-than-astronomical, rather a [chemical](#), increase), which is just under 70 doublings, or just over a century of Moore's Law.⁵ If someone like Iain Banks or Ken MacLeod wants to write a novel where they say that the optimal planned economy will become technically tractable sometime around the early 22nd century, then I will read it eagerly. As a serious piece of prognostication, however, this is the kind of thinking which leads to "where's my jet-pack?" ranting on the part of geeks of a certain age.

5 In particular, there's no reason to think that building a quantum computer would help. This is because, as [some people have to keep pointing out](#), quantum computers don't provide a general exponential speed-up over classical ones.

Nonlinearity and Nonconvexity

In linear programming, all the constraints facing the planner, including those representing the available technologies of production, are linear. Economically, this means constant returns to scale: the factory need put no more, and no less, resources into its 10,000th pair of diapers as into its 20,000th, or its first.

Mathematically, the linear constraints on production are a special case of *convex* constraints. If a constraint is convex, then if we have two plans which satisfy it, so would any intermediate plan in between those extremes. (If plan A calls for 10,000 diapers and 2,000 towels, and plan B calls for 2,000 diapers and 10,000 towels, we could do half of plan A and half of plan B, make 6,000 diapers and 6,000 towels, and not run up against the constraints.) Not all convex constraints are linear; in convex programming, we relax linear programming to just require convex constraints. Economically, this corresponds to allowing decreasing returns to scale, where the 10,000 pair of diapers is indeed more expensive than the 9,999th, or the first.

Computationally, it turns out that the same “interior-point” algorithms which bring large linear-programming problems within reach also work on general convex programming problems. Convex programming is more computationally complex than linear programming, but not radically so.

Unfortunately for the planners, increasing returns to scale in production mean non-convex constraints; and increasing returns are very common, if only from fixed costs. If the plan calls for regular flights from Moscow to Novosibirsk, each flight has a fixed minimum cost, no matter how much or how little the plane carries. (Fuel; the labor of pilots, mechanics, and air-traffic controllers; wear and tear on the plane, on runways; the lost opportunity of using the plane for something else.) Similarly for optimization software (you can’t make any copies of the program without first expending the programmers’ labor, and the computer time they need to write and debug

the code). Or [academic papers](#), or for that matter running an assembly line or a steel mill. In all of these cases, you just can't smoothly interpolate between plans which have these outputs and ones which don't. You must pay at least the fixed cost to get any output at all, which is non-convexity. And there are other sources of increasing returns, beyond fixed costs.

This is bad news for the planners, because there are no general-purpose algorithms for optimizing under non-convex constraints. Non-convex programming isn't roughly as tractable as linear programming, it's generally quite intractable. Again, the kinds of non-convexity which economic planners would confront might, conceivably, universally turn out to be especially benign, so everything becomes tractable again, but why should we think that?

If it's any consolation, allowing non-convexity [messes up the markets-are-always-optimal theorems](#) of neo-classical/bourgeois economics, too. (This illustrates [Stiglitz's contention](#) that if the neo-classicals were right about how capitalism works, Kantorovich-style socialism would have been perfectly viable.) Markets with non-convex production are apt to see things like monopolies, or at least monopolistic competition, path dependence, and, actual profits and power. (My university owes its existence to Mr. Carnegie's luck, skill, and ruthlessness in exploiting the non-convexities of making steel.) Somehow, I do not think that this will be much consolation).

The Given Assortment, and Planner's Preferences

So far I have been assuming, for the sake of argument, that the planners can take their objective function as given. There does need to be some such function, because otherwise it becomes hard to impossible to chose between competing plans which are all technically feasible. It's easy to say "more stuff is better than less stuff", but at some point more towels means fewer diapers, and then the planners have to decide how to trade off

among different goods. If we take desired output as fixed and try to minimize inputs, the same difficulty arises (is it better to use so less cotton fiber if it requires this much more plastic?), so I will just stick with the maximization version.

For the capitalist or even market-socialist firm, there is in principle a simple objective function: profit, measured in dollars, or whatever else the local unit of account is. (I say “in principle” because a firm isn’t a unified actor with coherent goals like “maximize profits”; to the extent it acts like one, that’s an achievement of organizational social engineering.) The firm can say how many extra diapers it would have to sell to be worth selling one less towel, because it can look at how much money it would make. To the extent that it can take its sales prices as fixed, and can sell as much as it can make, it’s even reasonable for it to treat its objective function as linear.

But what about the planners? Even if they wanted to just look at the profit (value added) of the whole economy, they get to set the prices of consumption goods, which in turn set the (shadow) prices of inputs to production. (The rule “maximize the objective function” does not help pick an objective function.) In any case, profits are money, i.e., claims, through exchange, on goods and services produced by others. It makes no sense for the goal of the economy, as a whole, to be to maximize its claims on itself.

As I mentioned, Kantorovich had a way of evading this, which was clever if not ultimately satisfactory. He imagined the goal of the planners to be to maximize the production of a “given assortment” of goods. This means that the desired ratio of goods to be produced is fixed (three diapers for every towel), and the planners just need to maximize production at this ratio. This only pushes back the problem by one step, to deciding on the “given assortment”.

We are pushed back, inevitably, to the planners having to make choices which express preferences or (in a different sense of the word) values. Or, said another way, there are values or

preferences — what Nove called “planners’ preferences” — implicit in any choice of objective function. This raises both a cognitive or computational problem, and at least two different political problems.

The cognitive or computational problem is that of simply *coming up* with relative preferences or weights over all the goods in the economy, indexed by space and time. (Remember we need such indexing to handle transport and sequencing.) Any one human planner would simply have to *make up* most of these, or generate them according to some arbitrary rule. To do otherwise is simply beyond the bounds of humanity. A group of planners might do better, but it would still be an immense amount of work, with knotty problems of how to divide the labor of assigning values, and a large measure of arbitrariness.

Which brings us to the first of the two political problems. The objective function in the plan is an expression of values or preferences, and *people have different preferences*. How are these to be reconciled?

There are many institutions which try to reconcile or adjust divergent values. This is a problem of social choice, and subject to all the usual pathologies and paradoxes of social choice. There is no universally satisfactory mechanism for making such choices. One could imagine democratic debate and voting over plans, but the sheer complexity of plans, once again, makes it very hard for members of the *demos* to make up their minds about competing plans, or how plans might be changed. Every citizen is put in the position of the solitary planner, except that they must listen to each other.

Citizens (or their representatives) might debate about, and vote over, highly aggregated summaries of various plans. But then the planning apparatus has to dis-aggregate, has to fill in the details left unfixed by the democratic process. (What gets voted on is a compressed encoding of the actual plan, for which the apparatus is the decoder.) I am not worried so much

that citizens are not therefore debating about exactly what the plan is. Under uncertainty, especially uncertainty from complexity, *no* decision-maker understands the *full* consequences of their actions. What disturbs me about this is that filling in those details in the plan is just as much driven by values and preferences as making choices about the aggregated aspects. We have not actually given the planning apparatus a tractable technical problem(*cf.*).

Dictatorship might seem to resolve the difficulty, but doesn't. The dictator is, after all, just a single human being. He (and I use the pronoun deliberately) has no more ability to come up with real preferences over everything in the economy than any other person. (Thus, Ashby's "law of requisite variety" strikes again.) He can, and must, delegate details to the planning apparatus, but that doesn't help *the planners* figure out what to do. I would even contend that he is in a worse situation than the *demos* when it comes to designing the planning apparatus, or figuring out what he wants to decide directly, and what he wants to delegate, but that's a [separate argument](#). The collective dictatorship of the party, assuming anyone wanted to revive *that* nonsense, would only seem to give the worst of both worlds.

I do not have a knock-down proof that there is no good way of evading the problem of planners' preferences. Maybe there is some way to improve democratic procedures or bureaucratic organization to turn the trick. But any such escape is, now, entirely conjectural. In its absence, if decisions must be made, they will get made, but through the sort of internal negotiation, arbitrariness and favoritism which Spufford depicts in the Soviet planning apparatus.

This brings us to the *second* political problem. Even if everyone agrees on the plan, and the plan is actually perfectly implemented, there is every reason to think that people will not be happy with the outcome. They're making guesses about what they actually want and need, and they are making guesses

about the implications of fulfilling those desires. We don't have to go into "Monkey's Paw" territory to realize that getting what you think you want can prove thoroughly unacceptable; it's a fact of life, which doesn't disappear in economics. And not everyone is going to agree on the plan, which will not be perfectly implemented. (Nothing is ever perfectly implemented.) These are all signs of how even the "optimal" plan can be improved, and ignoring them is idiotic.

We need then some systematic way for the citizens to provide feedback on the plan, as it is realized. There are many, many things to be said against the market system, but it *is* a mechanism for providing feedback from users to producers, and for propagating that feedback through the whole economy, without anyone having to explicitly *track* that information. This is a point which both Hayek, and Lange (before the war) got very much right. The feedback needn't be just or even mainly through prices; quantities (especially inventories) can sometimes work just as well. But what sells and what doesn't is the essential feedback.

It's worth mentioning that this is a point which *Trotsky* got right. (I should perhaps write that "*even Trotsky sometimes got right*".) To [repeat a quotation](#):

The innumerable living participants in the economy, state and private, collective and individual, must serve notice of their needs and of their relative strength not only through the statistical determinations of plan commissions but by the direct pressure of supply and demand. The plan is checked and, to a considerable degree, realized through the market.

It is conceivable that there is some alternative feedback mechanism which is as rich, adaptive, and *easy to use* as the market but is not the market, not even in a disguised form. Nobody has proposed such a thing.

Errors of the Bourgeois Economists

Both neo-classical and Austrian economists make a fetish (in several senses) of markets and market prices. That this is crazy is reflected in the fact that even under capitalism, immense areas of the economy are not coordinated through the market. There is a great passage from [Herbert Simon in 1991](#) which is relevant here:

Suppose that [“a mythical visitor from Mars”] approaches the Earth from space, equipped with a telescope that reveals social structures. The firms reveal themselves, say, as solid green areas with faint interior contours marking out divisions and departments. Market transactions show as red lines connecting firms, forming a network in the spaces between them. Within firms (and perhaps even between them) the approaching visitor also sees pale blue lines, the lines of authority connecting bosses with various levels of workers. As our visitors looked more carefully at the scene beneath, it might see one of the green masses divide, as a firm divested itself of one of its divisions. Or it might see one green object gobble up another. At this distance, the departing golden parachutes would probably not be visible.

No matter whether our visitor approached the United States or the Soviet Union, urban China or the European Community, the greater part of the space below it would be within green areas, for almost all of the inhabitants would be employees, hence inside the firm boundaries. Organizations would be the dominant feature of the landscape. A message sent back

home, describing the scene, would speak of “large green areas interconnected by red lines.” It would not likely speak of “a network of red lines connecting green spots.”⁶

This is not just because the market revolution has not been pushed far enough. (“One effort more, shareholders, if you would be libertarians!”) The conditions under which equilibrium prices really are all a decision-maker needs to know, and really are sufficient for coordination, are so extreme as to be absurd. (Stiglitz is good on some of the failure modes.) Even if they hold, the market only lets people “serve notice of their needs and of their relative strength” up to a limit set by how much money they have. This is why careful economists talk about balancing supply and “effective” demand, demand backed by money.

This is just as much an implicit choice of values as handing the planners an objective function and letting them fire up their optimization algorithm. *Those values are not pretty.* They are that the whims of the rich matter more than the needs of the poor; that it is more important to keep bond traders in strippers and cocaine than feed hungry children. *At the extreme, the market literally starves people to death,* because feeding them is a less “efficient” use of food than helping rich people eat more.

I don’t think this sort of pathology is *intrinsic* to market exchange; it comes from market exchange plus gross inequality. If we want markets to signal supply and *demand* (not just tautological “effective demand”), then we want to ensure not just that everyone has access to the market, but also that they have (roughly) comparable amounts of money to spend. There is, in

⁶ I strongly recommend reading the whole of this paper, if these matters are at all interesting. One of the most curious features of this little parable was that Simon was red-green color-blind.

other words, a strong case to be made for egalitarian distributions of resources being a complement to market allocation. Politically, however, [good luck](#) getting those [to go together](#).

We are left in an uncomfortable position. Turning everything over to the market is not really an option. Beyond the repulsiveness of the values it embodies, markets in areas like [healthcare](#) or [information goods](#) are always inefficient (over and above the usual [impossibility of informationally-efficient prices](#)). Moreover, working through the market imposes its own costs (time and effort in searching out information about prices and qualities, negotiating deals, etc.), and these costs can be very large. This is one reason (among others) why Simon's Martian sees such large green regions in the capitalist countries — why actually-existing capitalism is at least as much an organizational as a market economy.

Planning is certainly possible within limited domains — at least if we can get good data to the planners — and those limits will expand as computing power grows. But planning is only possible within those domains because *making money* gives firms (or firm-like entities) an objective function which is both unambiguous and *blinkered*. Planning for the whole economy would, under the most favorable possible assumptions, be intractable for the foreseeable future, and *deciding on a plan* runs into difficulties we have no idea how to solve. The sort of efficient planned economy dreamed of by the characters in *Red Plenty* is something we have no clue of how to bring about, even if we were willing to accept dictatorship to do so.

That planning is not a viable alternative to capitalism (as opposed to a tool within it) should disturb even capitalism's most ardent partisans. It means that their system *faces no competition*, nor even any plausible threat of competition. Those partisans themselves should be able to say what will happen then: the masters of the system, will be tempted, and more than tempted, to claim more and more of what it produces as monopoly rents. This does not end happily.

Calling the Tune for the Dance of Commodities

There is a passage in *Red Plenty* which is central to describing both the nightmare from which we are trying to awake, and vision we are trying to awake into. Henry has quoted it already, but it bears repeating.

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, Emil presumed. 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.

There is a fundamental level at which Marx's nightmare vision is *right*: capitalism, the market system, whatever you want to call it, is a product of humanity, but each and every one of us confronts it as an autonomous and deeply *alien* force. Its ends, to the limited and debatable extent that it can even be understood as having them, are simply inhuman. The ideology of the market tell us that we face not something inhuman but superhuman, tells us to embrace our inner zombie cyborg and loose ourselves in the dance. One doesn't know whether to laugh or cry or running screaming.

But, and this is I think something Marx did not sufficiently appreciate, human beings confront *all* the structures which emerge from our massed interactions in this way. A bureaucracy, or even a thoroughly democratic polity of which one is a citizen, can feel, can *be*, just as much of a cold monster as the market. We have no choice but to live among these alien powers which we create, and to try to direct them to human ends. It is beyond us, it is even beyond all of us, to find "a human measure, intelligible to all, chosen by all", which says how everyone should go. What we *can* do is try to find the specific ways in which these powers we have conjured up are hurting us, and use them to check each other, or deflect them into better paths. Sometimes this will mean more use of market mechanisms, sometimes it will mean removing some goods and services from market allocation, either through public provision⁷ or

7 Let me be clear about the limits of this. Already, in developed capitalism, such public or near-public goods as the protection of the police and access to elementary schooling are provided universally and at no charge to the user. (Or they are supposed to be, anyway.) Access to these is not regulated by the market. But the inputs needed to provide them are all bought on the market, the labor of teachers and cops very much included. I cannot improve on this point on the discussion in Lindblom's *The Market System* (Yale Nota Bene (2002), so I will just direct you to that (i, ii).

through other institutional arrangements.⁸ Sometimes it will mean expanding the scope of democratic decision-making (for instance, into the insides of firms), and sometimes it will mean *narrowing* its scope (for instance, not allowing the *demos* to censor speech it finds objectionable). Sometimes it will mean leaving some tasks to experts, deferring to the internal norms of their professions, and sometimes it will mean recognizing claims of expertise to be mere assertions of authority, to be resisted or countered.

These are all going to be complex problems, full of messy compromises. Attaining even **second best** solutions is going to demand “bold, persistent experimentation”, coupled with a frank recognition that many experiments will just fail, and that even long-settled compromises can, with the passage of time, become confining obstacles. We will not be able to turn everything over to the wise academicians, or even to their computers, but we may, if we are lucky and smart, be able, bit by bit, make a world fit for human beings to live in.

8 To give a concrete example, neither scientific research nor free software are produced for sale on the market. (This disappoints some aficionados of both.) Again, the inputs are obtained from markets, including labor markets, but the outputs are not sold on them. How far this is a generally-viable strategy for producing informational goods is a very interesting question, which it is quite beyond me to answer.



On Narrating a System

Carl Caldwell

Francis Spufford's sprawling mosaic of the Soviet Union in the 1960s at first reminds one of Vasily Grossman's account of Stalinism and the Second World War in *Life and Fate*. Both use a variety of characters — workers and soldiers, technical elite and normal party cadre — to shift places and perspectives, in order to reveal the hopes, contradictions, and failures of the periods they describe. Both are eminently historical novels, based on extensive scholarly reading in Spufford's case and vast journalistic experience in Grossman's.

But there the similarity ends; each novel has a quite different point. *Life and Fate* is horribly tragic. The Red Army soldiers in Stalingrad are marked for death by the Germans and by “resolute” party cadre behind the lines at the same time. Juxtaposed to the horrific image of the woman hugging the child in the gas chamber is the postwar anti-Semitism that seeps through the pores of late Stalinism. *Red Plenty*, by contrast, despite the wretched fates of some of its characters, reads like a comedy, at times a dark one. The hopes of the mathematicians and cyberneticians prove mere wishful thinking within the real system of state socialism — the actual subject of the novel. In the first chapter, the prodigy Leonid Kantorovich thinks his deep thoughts on how to optimize the Soviet system—“All he would have to do was to persuade the appropriate authorities to listen”—while tuning out the reality of the bus. “He could tune up the whole Soviet orchestra, if they'd let him. His left foot dripped. He really must find a way to get new shoes.” Idea confronts reality; were this filmed, it could be slapstick.

Comedy in this sense need not be free of pain and despair; it need not be happy. Nor need the employment of a fictional genre imply a lack of historical rigor. The “emplotment” of historical moments, to use Hayden White’s term from so many years ago, is not arbitrary; genres are necessary parts of historical work, serving to provide the broader meanings that connect historical actors with their moment. By using fiction, Spufford is able to make abstract accounts of how the Soviet system operated concrete, and concretely horrible. The collage of stories allows him both to portray individuals striving to reach goals and the overarching system that encompasses those individuals.

The two chapters of Part Three, for example, work by juxtaposing two places: the new, isolated Akademgorodok, which Spufford wonderfully translates as “Academyville,” and the grimy industrial town of Novocherkossk. Akademgorodok is a place of freely available food and liquor, even an automobile at the disposal of Kantorovich; here thought can be free from party restraints, even love can be free. The connection between the two chapters appears as the young thinkers influenced by systems theory declare the need for “optimal pricing”—and the newcomer, the biologist Zoya Vaynshteyn (i.e. a German-Jewish name; like Grossman, Spufford weaves ethnicity into his account), thinks: “Spoken like somebody who doesn’t do the shopping” (178). Juxtaposition: Novocherkossk, the workers and citizens use the symbols of the regime to protest price hikes, and the political leadership, which the young cyberneticians would like to convince, can do nothing but swear, panic, and retaliate against their apparent enemies, shooting them down. The young party cadre Kolodya has expected something better, something less brutish at the top; the top turns out to be as brutish and violent as the party cadres at the bottom. Akademgorodok dreaming slams into the hard cement floor of dictatorship.

The method works even better in Part Four, which makes its way through the reality of the “planning” process: the arbitrary judgment of the Gosplan official; the game of the plant managers, aptly rendered as a version of the Prisoner’s Dilemma; the reality of how the economy functions through favors (the infamous Russian term “blat”), described in the form of one man with connections to managers, planners, gangsters, truckers, and waiters. Yes, Chekushin is not quite believable as a single person. But through him Spufford can crystallize the marvelous stories that the late Joseph Berliner found when he undertook his interviews of managers who had defected from the Soviet Union, during the height of the Cold War. Kantorovich hoped to optimize the plan; by the end of Part Four, one can see little optimization in practice, and indeed not much in the way of a plan.

By the time one finishes Part Four, the novel has made its point — before the Kosygin reforms have even begun. The last two parts of the book read like an extended death sentence on the Soviet Union. “Externalities” weave their way in — cancer and environmental degradation, everyday anti-Semitism and the demoralizing political trials in the academy. The last part of the book is no longer describing optimal and suboptimal socialism; it’s describing the grimy realities of a modern, industrial dictatorship. If the novel’s chief protagonist is the system itself, then the novel is a kind of anti-Bildungsroman, a narrative of de-formation.

In this context, I must admit that the last words of the novel seemed out of place to me. “Hope” in the sense of hoping for redemption through planning has not just been ground into the dust by events, it has lost its connection to reality; Red Plenty seems like “wishful thinking,” i.e. an unfounded yearning for a different world, rather than a “concrete utopia,” a vision of the future grounded in the possibilities of the present, to use Ernst Bloch’s terms. When the economist Emil Arslanovich Shaidullin confronts Kosygin in Part Five on how the plan for

shadow pricing requires coherent inputs to start with — when he in fact calls for the planners to give up their power and also their security — he is shocked by the incomprehension of the party leadership. A confrontation occurs between the economist and the politician, between the theorist of optimal pricing and the politician who knows that radical price shifts can occasion civil unrest. Emil is left despondent. The section ends (301): “‘Can I hope, then?’ said Emil, despite himself. ‘Oh, you can always hope,’ said Mokhov [of Gosplan] warmly. ‘Be my guest.’” And then the final words of the novel (361): “‘The Soviet Union falls. The dance of commodities resumes. And the wind in the trees of Akademgorodok says: can it be otherwise? Can it be, can it be, can it ever be otherwise?’”

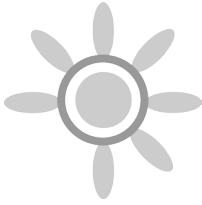
But what does “hope” mean in this context? And why should Akademgorodok be the place where hope is embodied? After all, didn’t Academyville rather embody the logic of the system — its claim to scientifically plan from above, its faith in science and industry, its separation of the privileged from the unprivileged? Didn’t it serve both to symbolize progress and to isolate possible dissent from technical experts? And why should the most important change with the end of the Soviet Union be “the dance of commodities,” i.e. capitalism — not the opening of possibilities for challenging environmental pollution, corruption, official arrogance, and dictatorship?

These rhetorical questions point back to the formal question about the relationship between historical and fictional writing that Spufford has posed throughout the book. The relationship is in fact quite close. The historian must also consider the mode of representing a historical moment: as a system, as a linear narrative, as a moment of crisis? He or she must also consider the viability of challenges, the meaning of twists in the plot line. In some cases, the historian develops fictional characters as well, such as the average worker or average party

cadre. Without such abstractions, social history is pretty much impossible. So there isn't much distance between the genres in many respects.

But in *Red Plenty*, the two genres remain distinct. The fictional account here seeks to describe through events and dialogue; the over 50 pages of historical notes that accompany the fictional one describe through assertive statements. The difference is at times jarring. In the confrontation between Shaidullin and Kosygin mentioned above, for example, Spufford's note suggests that Kosygin's counter argument consisted "of shrewd realism as well as self-interest and incomprehension" (405). I think that he's probably right from a historical perspective, but the note seems to dictate to the reader how to understand the writer. Similarly, when the young Shaidullin visits a collective farm near the start of the book, he asks, "Did something bad happen here?" (75). The question seems to come out of the blue; the historical note (375) fills the gap by providing an authoritative reference to Conquest's *Harvest of Sorrow*. In other words, the scholarly annotation claims an objective voice, in contrast with the voices *in* history in the main text.

Which brings me back to the contrast between *Life and Fate* and *Red Plenty*. There is no place outside of the text in *Life and Fate*; precisely the all-encompassing nature of the narrative makes the results so horrible, indeed forces the reader to put the book down at times, unable to face the next scene. The narrative of historical fiction and the narrative of history in *Red Plenty*, however, have an asymmetric relationship: the historical notes stabilize the fiction. Therefore the reference to hope at the end of the novel seems so out of place. Because the omniscient historian has in fact eliminated hope from the narrative.



Red Plenty — My Brush With Brezhnevism

John Holbo

Apparently some readers have been confused about *Red Plenty*, thinking it is non-fiction. I had the opposite problem, or possibly it wasn't one. I knew it was fiction but I had the wrong idea about what kind. This error persisted, uncorrected. I actively avoided all reviews or summaries. I solicited no assistance, along the way, from “the panther-footed Mr. Google,” as he is described in Spufford's “Acknowledgement” section. As a result, I didn't know what the hell was going on — *at all* — until the end. Because the one thing I thought I knew about the book — no, I don't know where I mis-acquired this notion — was that it is a fictional alternative history of how Red Plenty, the fairytale dream, *came true*.

WARNING: Contains plotspoilers. (It turns out the Soviet Union lost the Cold War!)

I thought the premise of the book was: technical-political obstacles to an efficient Soviet-style planned economy somehow overcome. Some Platonically profound mathematico-industrial linear-programming la-dee-da alternative to the price mechanism is discovered that is, stipulatively, consistently superior, in practice. The first chapter, ‘The prodigy’, about Kantorovich's bright plywood notion, confirmed for me that this was indeed where we were going. *Now* you tell the story of how, just as Krushchev predicted, the USSR buries the West — in washing machines. How would the West have reacted if, in 1980, the income of the average Soviet worker passed that of his Western counterpart? How would the philo-

sophical defense of capitalism and Western democracy have held up if the Soviets had managed to keep the growth rate up around 6-8%, year on year on year. I imagined, on the Soviet side, we might be treated to the fictional spectacle of some Steel-and-Concrete Glass Bead Game cybernetician Magister Ludi thrillingly shuffling all the productive pieces around, to the appreciative *oohs* and *aahs* of an audience of knowing fellow academicians.

Oh, to be an economist who can perfectly, rationally, plan a whole economy! Such sensitivity! The music of the spheres is a tin whistle to this! Ah, the delicious counterpoint that shall play out if this PNSh-180-14s continuous-action engine for viscose production is placed *just so*, its twin output streams of sweater yarn and tire cord marching and braiding, one over the other, joining this yet-more-harmonious overall stream, flowing on into a vast ocean of production and distribution!

The less lovely counterpoint to this would, naturally, be an inevitable degree of oppressive, Soviet-style unfreedom, or at least political/cultural alienation of the average workers from the planners, whose heads are in the Marxist clouds. But lots of washing machines! Would you prefer Western freedom and inequality to rule by genuine Soviet Philosopher Kings, if the philosophers could provide cheaper, better washing machines?¹

Why did I imagine the book was going to go this way? I haven't the faintest, but it fired my imagination. I was kind of jazzed to read about it.

1 After writing these words, I happened to be rereading Hayek's *The Constitution of Liberty*. "If there were omniscient men, if we could know not only all that affects the attainment of our present wishes but also our future wants and desires, there would be little case for liberty." Sub-omniscient success, along Kantorovichian lines, would do as well, by the terms of Hayek's officially utilitarian philosophy of freedom. I would read a novel about Hayek's crisis of conscience in a world in which the USSR consistently made more washing machines.

So I was reading and reading and, like Mr. Khrushchev, started to feel a bit confused that things weren't working out. Bad harvest in '63. But I figured the followers of Kantorovich were going to pull off some tremendous last-minute technical save. How not, if we were actually going to get to what the title promised? With Mr. K. sidelined, it was going to have to turn out the Brezhnev of this, fictional world, was a go-getting reformer, and the linear programming would deliver the goods, just like Mr. Scott always manages to get the engine running on *Star Trek*. (The basically sensible-seeming objections put forth in the woods by the pragmatist-cynic stick insect Mokhov would be stipulated to meet some fitting technical-political death.)

And then it was, like ... *over*. And the communists *lost*. The final pages of the book, which I had been counting on to relate the glorious futurity of Red Plenty, stretching perhaps even to the stars, turned out to be devoted to notes and acknowledgements. Man, was I one confused kid!

But I don't mind having played the fool. I feel I have lived the dream, to an even fuller degree than the author himself can reasonably have hoped. So I suggest you give a copy of the book to a suitably sheltered and suggestible friend, and *lie* about what it's about. Let them enjoy the fairy tale, for as long as it lasts. *I* did. (But I never believed in Lysenkoism! Not even for a page!)



You Are Alone. In A Dark Wood. Now Gope.

Henry Farrell

Francis Spufford's earlier semi-autobiographical book on childhood and reading, *The Child that Books Built*, talks about fairytales. It tells us about Propp, Bettelheim and the others, relates fairy tales to Robert Holdstock's Ryhope Wood (the *ur* source of all stories) and to his own childhood, and finishes by arguing that fairytales pose a challenge. They transport us to a dark wood; alien; removed from the comfortable assumptions of home and family and ask: now, what do you do? *Red Plenty* is explicitly written as a fairytale in which the hero is "the idea of Red Plenty as it came hopefully along the high road." The high road dwindles into a path, then a track, and ends in a tangle of brambles and thorns. The idea not only does not know where to go; it does not know if there's anywhere left that it *could* go, or even whether there *was* somewhere that it could have gone had it only taken the right road at the beginning. By entering the world, it's become hopelessly ensnared in it.

This allows one to read *Red Plenty* not only as a science fiction novel, or exercise in steampunk, as Kim Stanley Robinson argues, but also as a fantasy combined with a metacommentary on fantasy, along the lines of the kinds of novels that M. John Harrison was writing in the late 1980s and early 1990s (e.g. *The Course of the Heart*, *Climbers*, *Signs of Life*, "A Young Man's Journey to London," "The Horse of Iron and How We May Come to Know It and Be Changed By It Forever"). The juxtaposition might seem unusual, but helps to elucidate a pattern, perhaps not of influence (I don't know whether Spufford

has read Harrison, although it's quite likely that he has), but of shared narrative arc. Of course, Harrison is often repurposing more traditional genre tropes than Spufford is, and is using a smaller, more personal canvas (his politics are emphatic, but oblique, and refracted almost entirely through the specific and individual). Harrison's stories and novels, including the 'realistic' ones like *Climbers*) have a roughly shared definition of fantasy. A collision between the real world and an imagined one, which somehow seems better, denser, more 'real' than reality itself, but is in fact a reflection of it. A moment of choice, connected with that collision, in which everything seems to be possible. The falling away, as reality reasserts itself, so that the moment of choice recedes forever into the past, but still haunts the world, present as a sense of possibility and of failure, each entwined so closely with the other that you cannot tell where the one ends and the other begins.

Consider several passages from *Red Plenty* in this light. First — the closing sentences of the opening chapter:

Seen from that future time, when every commodity the human mind could imagine would flow from the industrial horn of plenty in dizzy abundance, this would seem a scanty, shoddy, cramped moment indeed, choked with shadows, redeemed only by what it caused to be created. Seen from plenty, now would be hard to imagine. It would seem not quite real, an absurd time when, for no apparent reason, human beings went without things easily within the power of humanity to supply, and lives did not flower as it was obvious they could. Now would look like only a faint, dirty, unconvincing edition of the real world, which had not yet been born. And he could hasten the hour, he thought, intoxicated. He gazed up the tram, and saw everything and everybody in it touched by the transformation to come, rippling into new and more generous forms, the number 34 rattlebox

to Krestovsky Island becoming a sleek silent ellipse filled with golden light, the women's clothes all turning to quilted silk, the military uniforms melting into tailored grey and silver: and faces, faces the length of the car, relaxing, losing the worry lines and the hungry looks and all the assorted toothmarks of necessity. He could help to do that. He could help to make it happen, three extra percent at a time, though he already understood that it would take a huge quantity of work to compose the necessary dynamic models. It might be a lifetime's work. But he could do it. He could tune up the whole Soviet orchestra, if they'd let him.

His left foot dripped. He really must find a way to get new shoes.

There's a lot of work being done here — the argument moves back and cross between at least three levels. The first is the grim material reality of Soviet life in the late 1930's — the passengers' faces indented by “the associated toothmarks of necessity” (a lovely phrase); the leaking shoe. The second is a dream, not just of simple material prosperity, but of, as Spufford describes it, a cornucopia, a plenty that is fundamentally transformative, building a future that is somehow more *real* than the world of ordinary privations that reflects it, as in a mirror, darkly. The third is the techniques of linear programming, which will shuttle back and forth between the two, weaving the latter more closely with the former, by 3 percentage points in each movement. *Red Plenty* here is much the same kind of artefact as Harrison's *Viriconium* or *Couer* — a fantasy that promises somehow to redeem and transform a grubby, messy material existence, making it more itself, and hence better than itself

The second passage presents a different version of the myth.

But 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. That was Marx's description, anyway. And what would be the alternative? The consciously arranged alternative? A dance of another nature, Emil presumed. 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.

The irony of this passage is more grim than the Chaplin-esque comedy of the leaking shoe — the economist articulating these ideas is about to come up against the aftermath of the collectivization process. Yet Emil believes that economics can transform what had been brutish political relations — “primi-

tive extraction ... very nearly robbery,” by making the economy into the kind of narrative where everything somehow ties together.

he was having a new idea. He was thinking to himself that an economy told a kind of story, though not the sort you would find in a novel. In this story, many of the major characters would never even meet, yet they would act on each other's lives just as surely as if they jostled for space inside a single house, through the long chains by which value moved about. Tiny decisions in one place could have cascading, giant effects elsewhere; conversely, what most absorbed the conscious attention of the characters — what broke their hearts, what they thought ordered or justified their lives — might have no effect whatsoever, dying away as if it had never happened at all. Yet impersonal forces could have drastically personal consequences, in this story, altering the whole basis on which people hoped and loved and worked. It would be a strange story to hear. At first it would seem to be a buzzing confusion, extending arbitrarily in directions that seemed to have nothing to do with each other. But little by little, if you were patient, its peculiar laws would become plain. In the end it would all make sense. Yes, thought Emil, it would all make sense in the the end.

Again, there is a fantasy being spun here — that human history can be not only be made legible, but can be redeemed. The Marx here is the Marx of the *Economic and Philosophic Manuscripts*, the Marx who is primarily concerned with alienation and its human consequences. And again, both these passages work on multiple levels. The dance of another nature is juxtaposed with the aftermath of famine. The aspiration to a novel in which the causal logics are traced through economic relations that are sometimes nearly invisible to the characters

entangled in them is, very obviously, a comment on the form of *Red Plenty* itself. It is a novel of just this kind (so too, the extraordinary sequence on lung cancer towards the end of the book serves both as a metaphor and as a reminder that the causes shaping human destinies do not always lie in intelligible human action). Yet the hope that it will all make sense in the end is mistaken. As the closing sentences of the book make clear, it doesn't.

Three thousand kilometres east it is already night, but the same wind is blowing, stirring the dark branches of the pines around the upstairs window where Leonid Vitalevich is sitting by himself, optimising the manufacture of steel tubes. Five hundred producers. Sixty thousand consumers. Eight hundred thousand allocation orders to be issued per year. But it would all work out if he could persuade them to measure the output in the correct units. The hard light of creation burns within the fallible flesh; outshines it, outshines the disappointing world, the world of accident and tyranny and unreason; brighter and brighter, glaring stronger and stronger till the short man with square spectacles can no longer be seen, only the blue-white radiance that fills the room. And when the light fades the flesh is gone, the room is empty. Years pass. The Soviet Union falls. The dance of commodities resumes. And the wind in the trees of Akademgorodok says: can it be otherwise? Can it be, can it be, can it ever be otherwise?

Optimization was supposed not only to produce material abundance, but to decommodify the world. The golden transformative light of the idea's beginning, which seemed capable of turning rags into finery, becomes the absent blue-white glare of the book's last sentences, into which its imagined future forever falls away. The zombified pavane of the commodities

resumes. Did it ever stop? Could linear programming — even if it had worked — have reversed the transformations that made human skin into metal, and metal into human skin, or was it just its own dehumanizing alchemy? Wasn't the whole thing faintly ridiculous from the beginning? Leonid Vitalevich's shoes let the rain in, and always were going to. The world is obdurate; the idea is too good for it. Which is, of course, another way of saying that the idea wasn't ever as good as we thought it was going to be.

And yet, the wind still whispers: can it be otherwise? Even as the moment of possibility disappears, it haunts the present with the suspicion that things could have been different, perhaps might be different in the future. Under this reading (which is, of course, only one of many possible readings), the final sentences do not claim that if things had worked out better at the beginning, if Kantorovich had been better able to persuade, bureaucrats better able to use shadow prices and so on, the whole damn thing could have worked. They instead suggest something much more equivocal — that the simple *possibility* that it could somehow be better, that the world could be moulded closer to the heart's desire, will continue to haunt us. If the dream of Red Plenty was a fantasy, this reading suggests that it was a fantasy of just the sort that Harrison has laid out on the operating table and dissected, and that *Red Plenty* contains the fantasy and the dissection both.

This may help explain why the book is resonating so much better than I had dared to hope when I first read it, over a year ago, and planned out this event. I'd *love* to live in a world where genius (and Spufford's book is at the least touched by genius and arguably entirely riddled through with it) invariably got its due, and where a deliberately uncategorizable book about the socialist calculation debate could get two glowing reviews in the *New York Times* as a matter of course. But we don't live in that idyllic world, any more than we live in Khrushchev's

workers' paradise. Instead, we live in a world with its own shattered illusions. As a different writer, John Summers, says in the most recent issue of *The Baffler*.

The fable that we are living through a time of head-snapping innovation in technology drives American thought these days — dystopian and utopian alike. But if you look past both the hysteria and the hype, and place the achievements of technology in historical perspective, then you may recall how business leaders promised not long ago to usher us into a glorious new time of abundance that stood beyond history. And then you may wonder if their control over technology hasn't excelled mainly at producing dazzling new ways to package and distribute consumer products (like television) that have been kicking around history for quite some time. The salvos in this issue chronicle America's trajectory from megamachines to minimachines, from prosthetic gods to prosthetic pals, and raise a corollary question from amid all these strangely unimaginative innovation: how much of our collective awe rests on low expectations?

Perhaps, the reason why Spufford's book is receiving so much attention is because it can be made stand in as an elegy for capitalist plenty too. As Summers says, capitalism too had its animating fable, and thought to transform the world, so as to conduct us "into a glorious new time of abundance that stood beyond history." Its heroes were entrepreneurs — Schumpeterian visionaries who saw the possibilities of the future and seized them willy-nilly. The disciplines of Chicago orthodoxy and the Washington consensus, like Emil's new economics, were supposed to free the world from the shackles of feudalism and backwardness. Yet the heroic age of capitalism is over. Free trade orthodoxy has devolved into squabbles about intellectual property, procurement and technical standards; the WTO is

as inward-focused and as tedious as the Holy Roman Empire when it began its long course of decline. Neo-liberalism flared into the harsh actinic blaze of the 2008 crash, and now it too is sputtering and fading away in an empty room. The defenders of neo-liberal orthodoxy (now articulated in the West through the demand for ever more ‘austerity’) are mostly too embarrassed to claim that more liberalization and deregulation will spur further great transformations; the best they can do is [blame the hippies](#), or look down at their shoes and mutter that well, you know, there really isn’t much of an alternative, or if there is, they can’t see it. The old system is still strong enough to strangle anything new that might threaten it. Yet it surely doesn’t look strong enough to renew itself.

Spufford’s analysis of the failed dreams of the Khrushchev era seems so compelling then because we (in the advanced, industrialized West) are living in our own version of Brezhnevism, a system that has depleted its organizing mythology, but that lacks the imagination to conceive of a new one. Like both Harrison and China Miéville (*The City and the City*), Spufford is taking the intellectual tools of fantasy-as-a-genre and applying them to the fantasies-that-structure-the-world-that-we-live-in. On the one hand, this is done obliquely to the extent that it is done intentionally at all — the relationship between the Soviet Union in the 1960s and the capitalist system today is not directly obvious. On the other, the dream of Red Plenty is a darkened mirror reflecting our current situation. The fairy tale is over. We find ourselves lost in the woods, with no obvious path home. Now cope.



New Ideas From Dead Political Systems

Daniel Davies

Back in the days before I had realised that a guy who takes five years to deliver a simple book review probably ought to rein in the ambition a bit when it comes to larger-scale projects, I occasionally pitched an idea to publishers of management books. It was going to be called “Great Ideas From Failed Companies”, the idea being that when you have the perspective of the entire history of a corporate story, you’re probably going to get a more honest appraisal of its strengths and weaknesses, and that although companies like Enron, Northern Rock and Atari clearly had major problems, they quite likely also had some good points too, or how did they ever get so big in the first place?

Obviously, carrying out a similar exercise on failed social and political systems is a bit of a minefield, since most social and political systems which have been tried and failed have tended to take down a hell of a lot of innocent lives with them as they did so. I don’t think anyone but the most studiously mindless (and tasteless) contrarian would bother to ask the question “but what did the Nazis get *right*?” at any great length.¹ But there’s always a temptation to do so with Soviet

1 At short length, the answer is “monetary policy”. The rather embarrassing introduction to the first German-language edition of the *General Theory* is quite thoroughgoing in its endorsement of Hitler and Schacht’s adoption of broadly Keynesian policies. So now you know.

communism.[^communist]² It killed quite a lot more people than Nazism but (for the most part, and after the 1920s) in a less obviously criminally insane way, and as a system it does have the characteristic that lots of people and countries at various times did want to have a go at it for themselves, more or less of their own free will. Which is why one of the big draws of *Red Plenty* is the promise to take us, as the subtitle of my edition reads, “Inside the Fifties Soviet Dream”, or even to help us learn “[lessons from the Soviet dream](#)”.

But this cheque never really gets cashed by the book. “Red Plenty” *isn't*, or at least not directly, a book about the Fifties, Gargarin and the years of 7% growth. Only two of its chapters are set before Sputnik; one is a vignette of the career of Kantorovich as he was starting the work on linear programming, and the other is set out in a recently famine-stricken rural area of the sort that never really had the boom in the first place. By the time the action gets going in *Red Plenty*, the dream is basically over. Some of the characters seem to realize this and some don't; as always the economists are the most romantic and least realistic of characters, persisting way up into the 1960s with the dream that the underlying model is basically sound, and a few technical changes will make it possible to achieve the vision of plenty. Elsewhere across the system, people cheat and swindle, do what they must do to survive, and often fail and get crushed by the system, in a terribly realistic and human way which is all the more elegiac because we know how it all turned out. I'm fascinated (as in the Greece choose-your-own-adventure

2 The exercise is probably best carried out by someone who, like Francis Spufford, has never been a Communist themselves. As Mark Steel notes in his autobiography “Reasons to be Cheerful”, on the subject of old Stalinists constantly finding themselves post-1989 in conversations where they ended up backsliding into wondering whether there weren't a few progressive elements, Communism is like smoking in this way, you've really just got to give it up cold turkey.

post we ran a while back) with this approach to history — in many ways the novelistic method gives a much truer picture of what it must have been like than a simple recitation of facts and acts. Nearly all of Spufford’s characters, even most of the baddies, are not acting out of sheer cackling evil; they’re trying to find a way through a set of constraints and incentives put in front of them, often making decisions that are morally shitehouse and obviously so, but always explicable as decisions that you can see a normal person making. The massacre at Novocherkassk, for example, appears in a normal history book as a senseless atrocity. Which it was, of course, but *Red Plenty* helps you think your way into it and it becomes an at least slightly comprehensible senseless atrocity (the very long reports of inquiries, such as those into Bloody Sunday and the Stockwell shooting also have this characteristic). And then of course, there are one or two characters who are just pure and simple motiveless bastards. Because they exist too.

It makes me wonder what a sort of prequel to *Red Plenty* which did actually deal with the go-go-Gargarin years would be like. A lot of the dysfunctional behavior described in the Soviet system of the Khrushchev years (particularly the gaming of targets and the wheeling and dealing between factory managers for spare parts) would have totally different mood music if we knew that it was leading up to the triumphs of industrialization, saving the world from Hitler and the Space Race, just as a lot of the behavior in “The Right Stuff” and “Patton” is actually pretty unforgiveable when you consider it in isolation from the overall project. But I don’t think that such a book would actually be an honest work. As I hinted above, the novelistic first-person-shooter approach to history is so potentially powerful that you have to be careful about the sort of character and system you’re humanizing, and the sad truth of Soviet communism is that the only honest way

to write about the “Fifties dream” is in a way which makes it clear it was a great big lie, and that the only lesson from that system is not to do that again.

Because, as the book makes clear, there was no bloody great economic miracle. The Soviet economy grew because of the vast increase in resources thrown at it; there was an enormous increase in investment, much of it highly suspect in its productivity. There never could have been a golden future of plenitude and consumption just the other side of the hill, because the economic growth and the repression of domestic consumption were the same thing. It was all a con game.

And in my view, the original mistake made was the one which is also covered wonderfully in the chapter on the visit to the World’s Fair — the decision to adopt America as the competition. It just makes no sense for Russia in 1950 to be thinking of the USA as its benchmark for performance. It’s like a small town football club deciding that they’re going to regard Manchester United City as their rivals. If Russia had been judging the improvements in output and living standards by reference to Spain, or Ireland, there might have been more sensible and realistic decisions made. But comparing to the USA was immediately setting an impossible goal to achieve. And comparing against the USA also meant that the Soviets had to be unduly wedded to having their own economic system and tactics — after all, if you started using market prices, you would end up with similar allocations of resources to those used by the USA, and given the massive difference in initial endowments, this would have written defeat into the numbers. In order to have a nonzero chance of overtaking the USA, the USSR had to use different tactics, and this fact was a major psychological obstacle to ever realising that those tactics were fundamentally — even mathematically — mistaken.

So although I like the idea, I don’t think that there are any really great ideas to be learned from the Soviet system, and *Red Plenty* is basically correct in finding the whole thing to be

similar to one of those rather depressing Russian fairy tales in which the moral is “try not to be an idiot all your life”. A better world is, and was, possible — but this wasn’t it.



Worlds of Yesterday

Felix Gilman

More than two centuries ago, our Founders laid out a charter that assured the rule of law and the rights of man. Through times of tranquility and the throes of change, the Constitution has always guided our course toward fulfilling that most noble promise that all are equal, all are free, and all deserve the chance to pursue their full measure of happiness. America has carried on not only for the skill or vision of history's celebrated figures, but also for the generations who have remained faithful to the ideals of our forebears and true to our founding documents. On Loyalty Day, we reflect on that proud heritage and press on in the long journey toward prosperity for all.

-Loyalty Day Presidential Proclamation, May 1 2012

Red Plenty is so unusual in its structure and concerns, and it does what it does so well, that after reading it one wonders if there's a *Red Plenty* Method that could — should — be generalized to tackle other problems. Teams of graduate students could construct knock-off *Red Plenties*, not as good as the original but still pretty good and efficiently targeted to meet increasing requirements. First I want to see how the *Red Plenty* method would tackle the above proclamation. The stories of a generation of US policy wonks — earnest, careerist, idealistic, and/or cynical — required to press on in the long journey toward Prosperity, first figuring what Prosperity means,

while doing so in a way that is faithful to the ideals of our forebears and true to our founding documents, as interpreted by political actors in the most bloody-minded way possible, in the context of political institutions that reduce every idea to crudely weaponized slogans. Anyway I suppose this is as good a place as any to make a formal request for Red Plenty Extended Universe franchise fiction.

Here (NY) they seem to generally shelve the book under Russian History. It probably works well as history, though I really don't know enough about Russian history to judge. It certainly has the *feel* of the best kind of history - it captures what it (probably) felt like for the people under examination when the past was modern, and exciting, and uncertain and contingent, and all those other things that we have trouble imagining the past as.

I was primed by the coverage I'd seen to approach the book as science fiction. On a second read it felt like satire — part satire of the academic life, part black political comedy — The Tin Men with real peoples' lives at stake — but on first read it was SF. Spufford's introduction sets the reader up for a “fairytale,” a fairytale of a particularly science-fictional sort, with flying carpets that might be aeroplanes, the endless cornucopia of movie screens and television and supermarkets, etc. In the acknowledgments he namechecks Kim Stanley Robinson, and this, like Red Mars, is a book about science making a new world.

(In fact the title *Red Plenty* is evocative enough of “Red Planet” that at least two people I've recommended the book to later told me that they misheard me and went out and bought the Heinlein book of that name instead. It's a great title but it turns out to have mixed effects on word of mouth. Is the title's evocation of Mars deliberate? Mars, the object of a solid half-century of scientific utopian unlimited-frontier speculation, all of which slowly, tragically failed, and in hindsight looks ridiculous, in sort of the same way that 1960s hopes for Soviet

prosperity now look absurd, almost camp, so that it takes a huge effort of the imagination to remember that they weren't, once upon a time...)

It has something of the structure of good old-fashioned Big-Idea science fiction. It has shifting points of view, characters briefly coming on stage as the Big Idea passes through their lives — for some of them the Big Idea is the central organizing principle in their lives, for some of them it briefly connects with them and jerks them about a bit — all these shifting POVs and vignettes building a world, tracing its rise and fall — classic SF stuff. It has several key scenes in which men and women in lab coats stand around having what are *almost* As-You-Know-Bob exchanges about Science. (They're probably not actually in lab coats, but I often pictured lab coats, and a wall of gray old-timey computers behind them, like in the movies). These scenes should be required reading for anyone writing hard SF or big-idea-driven SF; Spufford does a fantastic job of keeping these sort of exchanges dramatic and moving and human, through careful attention to voice and character and the role that the ideas play in the speakers' lives and careers and dreams; and through setting up interesting and unexpected oppositions among the speakers.

Like the best sort of SF worldbuilding, there's always a sense that there's more going on than we see in the foreground. I mean on one level of course there is, this is sort-of Russia, there were more than 58 people in it. This isn't a made-up secondary world; then again it sort of is, and not just in the way that all fiction is; this is set in a sub-world of Russia, a shadow of Russia, made out of the fantasy and reality of Plenty. That sub-world feels populous. Part of the trick here is in the way Spufford selects his POV characters, with restraint and with just the right level of arbitrariness, suggesting all the millions of others we might be following, on each of whose carefully individuated lives the Big Idea will have slightly different effects. A judicious handful of digressions from the usual structure

and theme also hint at the bigger world (e.g. Part VI Ch. 1, “The Unified System,”; by the way, this also stands alone as probably the most terrifying anti-smoking PSA I have ever seen, in case you or a loved one are trying to quit smoking).

I don’t know if this is this the normal reading experience, but I spent a lot of time wondering if the book was or wasn’t science fiction while I was reading it in part because I’d been led by my vague half-reading of the buzz about it to think that it really was actually science-fictional in a different way. I thought the idea was that it was a what-if kind of science fiction, in which central-planning prosperity really did take off the way they thought it might back in the ‘60s. I was expecting the book to be an attempt to depict what that utopia might have been like. I kept expecting a turn into fantasy — something maybe a little like the Neil Gaiman *Miracleman* utopia, almost. Or in another sense, a bit like those SF novels that ask *what if they’d got a proper analytical engine to work in 1830?* Or etc. I have a thing about the idea that the fad for steampunk in SF/F is in part the result of science fiction running up against the end of utopian frontiers and futures, turning instead to counterfactuals, not *what might the world of tomorrow be like?* but *what if the world of yesterday had been magically somehow a bit less awful?* I thought *Red Plenty* might have been in that vein. I read it with the same sort of slow cold realization that the characters have. Right up until the final section I thought, maybe, maybe. It doesn’t happen. The space for utopia shrinking, with mathematical inevitability, as the pages run out — and more of it is end notes than you expect, at the end — until it becomes clear that there simply isn’t room for it. And was this part of the choice to make “shadow prices” the central economic notion in the book — the shadow of what isn’t done hanging over what actually is, the one-more-thing that doesn’t happen, the cost of missed opportunities? (Or was

it just a happy accident?) In the end what you get instead is that heartbreaking final line — *can it be otherwise? Can it be, can it be, can it ever be otherwise?*

The shadow changes shape as the story progresses. As it becomes less likely to be realized it gets bigger; realistic hopes are denied and fantastic yearnings take their place. From the carefully quantifiable 3%, “only a marginal gain, an abstemious eking out of a little bit more from the production process” of the first chapter; through “Midsummer Night, 1962,” where dreamers hold an idly fantastic debate on what human nature might be like under post-scarcity conditions; through to “The Pensioner, 1968,” where it turns out that what we’re talking about now is no longer just more and cheaper stuff but something positively eschatological, a change that would leave the world “redeemed . . . transfigured”. The transfiguring potential of economic organization here goes beyond mere plenty, into purpose. *Red Plenty* is full of the blunders and irrationality and inefficiency of Soviet industry, the sheer *pointlessness* of so much of what people did all day. It’s also full of characters appalled at the pointless nature of so much of what people do in capitalist economies, driven by the arbitrary and meaningless demands of money — and while we do have a lot more plenty these days in capitalist economies (most of us, at least), the sensation of pointlessness persists (for many of us, much of the time, at least). If we were just a little bit cleverer, if we were just a little bit more rational, perhaps we might figure out a way of organizing the world of work so that everything we do would be worthwhile, nobody’s efforts or lives would be wasted, everyone would know that their efforts were significant, because it could be proven, mathematically. . . Well, maybe not. It’s a lot of weight to put on statistics. In fact it’s sort of impossible even to put into words, so you’re left with the wind asking, at the end, vaguely and plaintively, *Can it be, can it be, can it ever be otherwise?*



Good and Plenty

Rich Yeselson

There's a mordant joke running thru Francis Spufford's spectacular *Red Plenty* that can be illustrated in the following story. A self-taught Armenian monk travels to Oxford to importune the most distinguished mathematician in England. The monk eagerly presents his findings to the grand Don. After listening to the monk, and observing some of his formulas, the mathematician says to him, "I have good news and bad news." The monk replies, "What's the good news?" "You are a genius," says the mathematician, "and you've invented geometry." "Great!" says the breathless monk. "What's the bad news?" "Euclid invented it a couple of thousands years before you did." (I know, I know — please don't post comments noting that Euclid didn't actually *invent* geometry — the story is heuristic!)

And so it is with the monkishly asocial mathematician, Nobel Laureate, and loyal Marxist, Leonid Vitalevich Kantorovich. Kantorovich spends a good portion of his career trying to construct a simulacrum to the market axiom of supply and demand that will be compatible with Marxist doctrine and the political exigencies of the Soviet leadership class. That simulacrum is only necessary because the original formulation is so, well, un-Marxist. Kantorovich and his protégés are revisited throughout the book as they feverishly refine their findings, always seeking to have an answer to the inevitable question from the alternatively bored and bombastic bureaucrats along the lines of, "This isn't a market concept, is it?"

What a theme this is, managing to contain the touching, the ridiculous, and the world historical all rolled into one. Can

you imagine how much cognitive firepower these scholars had to have to reconfigure supply and demand, and via “shadow prices” contrive to fit it into a Soviet Marxist schema? The difference between Kantorovich and the Armenian monk is that Kantorovich understands that he’s trying to work around an already existing operational mechanism. But, if anything, that only makes his prodigious efforts that much more astonishing, yet absurd.

Of course, you might say that the real joke is that, not only do the militant mathematicians and economists believe in the utopian dream of Soviet Marxism, but so do (in their violent, often cynical way) some of the Party higher ups, notably Nikita Khrushchev himself. But reality also imbues *Red Plenty* with even more poignancy. While there are a full component of knaves and con artists populating *Red Plenty* (and a couple of erstwhile party stalwarts who become, over the decades, courageous dissidents) it is the idealists of two stripes who provide the book with its ballast. One group is composed of people like Kantorovich and his colleagues. These are techno-idealists, not that different in form, if not content, from their “end of ideology” post-scarcity contemporaries like Daniel Bell and Clark Kerr in the United States.

And there are also the naïve believers. From the starry eyed students who grow up to be depressed, mid level bureaucrats to First Secretary Khrushchev. The latter has a simple faith in the Soviet Union as the potential (if not yet actual) embodiment of a scientific ideology which contains humane answers to the problems of economic need and thus, inexorably, social alienation. *Red Plenty* is thus a lament for several different strands of leftist utopian thinking as their adherents pushed up against the first Marxist state, which in its post-Terror iteration had become, in one of Spufford’s most arresting phrases, an “empire of inertia.”

And, neither as a work of fiction nor as a synthetic history (more on this immediately below) does the slightest sense of

anachronism mar the narrative. We readers are really returned to a post-Khrushchev moment when economic reformers and intellectuals could imagine that Brezhnev and Kosygin would allow them — only unreliable eggheads, after all — to usher in a new era of broadly based prosperity and artistic and intellectual creativity.

The form of the book has received a lot of attention, and that is both understandable, yet somewhat overplayed. On the cover — for those who still indulge book covers — Kirkus calls *Red Plenty* a “genre-resisting history.” Another review says that the Spufford “maps out a literary genre of his own.” I don’t think this is right. *Red Plenty* neither resists its true genre — historical fiction — nor do its historiographical end-notes make it a history. Augmenting the known historical record with invented interior monologues for “real” historical characters like Khrushchev and Kantorovich (how could they be anything but invented?), and, beyond that, creating fictional characters and scenes is fiction. But the book’s deep grounding in history makes its genre familiar to us. We’ve known what to call books like this since Lukacs’s *The Historical Novel*. They are...historical novels. For the hell of it, I started thinking of novelists at least some of whose work could be categorized as historical. Unbidden, the following names randomly popped into my head and I noted them in my iPhone:

Sebald
Vidal
Doctorow
DeLillo
Dos Passos
Malraux
Tolstoy
Pynchon
TC Boyle
Mailer

Frederick Exley
Stendhal
Hilary Mantel
Flaubert
James Ellroy
Melville

Then I got tired of the exercise, but you get the point. The one formal breakthrough that the book perhaps has made — and I'm betting somebody will mention other novels that have done this too — is a completely factual, meta kind of footnoting (not at all playfully and self-referentially “literary” as in *Infinite Jest* or *Pale Fire*). The notes list precisely the sources (all of which are secondary — Spufford can't read Russian) of everything in the book that is, in fact, part of the historical record. They also indicate which characters, scenes, and dialogue are invented. This is the magician showing us exactly how he pulled the rabbit out of the hat, a kind of less abrasive, Brechtian distancing effect.

The endnotes are a great service to a reader interested in the underlying history — as I am — but, if they did not exist, *Red Plenty*, no less than, say, *Libra*, would stand as a wonderful work of fiction. Spufford can seemingly write any kind of scene that any writer might possibly try. I wonder if he assigns his own prose to his university writing classes. The book, like Jennifer Egan's recent, deservedly acclaimed, *A Visit from the Good Squad*, is a series of interrelated short stories with a cast of (mostly) recurring characters which compose an organic, connected world across time and space. This is a world recognizably an analogue to “our” world, but whose emotional resonances are inherently its own. All of it is an artifact of the author's imagination. To claim that this is a dramatically “new” genre is to diminish Spufford's extraordinary artistic accomplishment and turn it into merely a kind of formal trickery.

And, like Egan, Spufford has a gift for inhabiting the consciousness of many, vastly different characters. Spufford is particularly good at writing in the voice of women at different points in their lives. Two stand out: Galina is a party stalwart (and invented character) who is first seen as a firebrand university student whose job it is to humiliate a young, African American spokesman for an American trade show in Moscow. (The multiple social and ideological ironies in this episode are among the many great set pieces in the book). Later in time, Spufford shows us the same woman, now in her thirties, pregnant and despondent, and faced with the dawning realization that her life will forever be tied to the charming mediocrity who swept her off her feet years earlier. There is also Zoya, a scientist (based, as Spufford tells us, loosely on an actual, prominent scientist, Raisa Berg, but entirely fictionalized here). We first see Zoya as young single mother and no nonsense geneticist. At a party with new colleagues, she finds herself growing attracted to a grad student in economics. Spufford exquisitely depicts the dance of desire that these partners tentatively enter. Later, Zoya puts her career on the line by signing the famous letter in protest of the trial of the dissident, Alexander Ginsburg. And, for whip cream on top of the sundae, Spufford includes the first description of the process of reification I have ever read coming from the mind of a fictional character, an exhausted, young economist walking thru a rural backwater to visit the family of his fiance: "...anytime you start to mistake the big enclosing terms you use for the actions and things they represent, just you remember this."

Red Plenty concludes with the image of Khrushchev, alone and forgotten, wondering if things might have been different. "So much blood", the old dictator muses. It could only have been justified "if it had all been prologue, all only the last spasms in the death of the old, cruel world, and the birth of the kind, new one." To me, Spufford here evokes Brecht again, more directly and specifically his great, disquieting poem,

“To Posterity,” narrated by an aging, rueful, yet unrepentant Stalinist who says, “Alas, we who wished to lay the foundations of kindness could not ourselves be kind.” And then Brecht’s narrator asks for forgiveness.

It is not so cut and dried for Spufford’s Khrushchev. He is deeply uncertain — caught on the contingencies of both history and fiction — in a way that his Brechtian comrade is not. And he cannot shake the feeling that merely routinizing the machinery of autocracy, halting (mostly) Stalin’s death machine, cannot justify either his life or the grandiose illusions to which he dedicated it. Spufford leaves almost the last word to his genius mathematician, Kantorovich — Kantorovich, working the production formulas thru in his head over and over again — surely, one day he will figure it all out! And then the omniscient close, a Joycean yearning, but for something much larger than the self: “Can it be, can it be, can it ever be otherwise?”



Will we ever
know what otherwise is?
Did we ever?
Life, Fate and Irony

Niamh Hardiman

Not long before I read Francis Spufford's *Red Plenty*, I happened to read *Life and Fate* by Vasily Grossman (prompted by BBC Radio 4's excellent [13-part dramatization](#)), so I was very struck by the parallels in scale and approach between the two works. Both are conceived on a vast scale; both draw the reader into the lives of a large number of characters at all strata of society. In both books, real historical people mingle with fictional characters. The long shadow of Tolstoy is apparent in both. Grossman had a real advantage over Spufford in that he'd lived through the siege of Stalingrad which features so centrally in his novel, and he'd had exceptional freedom as a war reporter to talk to people from many different backgrounds. Of course Tolstoy had to recreate Napoleon's invasion of Russia from research and imagination, but he too was immersed in his own society and culture, and was able to avail of first-hand encounters with veterans of the campaign. Spufford has had to re-imagine the world of Khrushchev's Soviet Union much more thoroughly, through extensive engagement with scholarly literature, memoirs and other sources, in this vivid and beautifully written book.

But it's the contrasts between Grossman's and Spufford's books that are perhaps more striking.

Grossman's storylines explore the interwoven lives of the relatives and friends of the Shaposhnikov family, and they also

weave to and fro across the battle-lines dividing the Russian and German sides. An ordinary German soldier reflects on the allure of Nazi ideology, and a Nazi interrogator confronts a Soviet prisoner with the many parallels between their respective totalizing worldviews. In a chilling vignette, Eichmann stops for an impromptu picnic in the middle of inspecting a new crematorium; we are taken right into this terrible place with another character. The war perverts and destroys everyone's lives. But it's the corrupting effect of political oppression that stands out most clearly. Ambitious apparatchiks subvert military logic just by doing their job. Career progression in the physics lab depends on political conformity. Everyone knows about the night-time disappearances, but self-preservation cauterizes their willingness to understand what they have seen. Soviet anti-semitism exactly mirrors Nazi ideology in its effects if not on its scale. The moral core of the book is Viktor Shtrum, a flawed and uneasy man. He longs, above all, for the freedom to make his own choices, for tolerance of the many oddities and peculiarities of human nature, for the space to think without restraint. In Shtrum and in others, Grossman plays out the recurring theme that the deepest human values are not found in world-changing great ideals, but in ordinary human empathy and in everyday small kindnesses.

Red Plenty is also animated by a deeply humane sensibility. But its core themes don't emerge implicitly from the inner life of its characters. Rather, the book could be said to be the biography of an idea: it's about the moment of optimism in the USSR when real material wealth in a non-market setting seemed achievable, and about the first concerted efforts to overturn the crushing inertia of centralized planning. The central characters who frame the arc of the storyline are two real historical individuals, whose stories both open and close the book. The first person we meet is the brilliant young mathematician and economist Leonid Vitalevich, suffering everyday hardships on a packed Moscow tram, while he develops the

algorithms that should transform the irrationalities of the planned economy. By the end of the book, he is politically marginalized despite his eminence, and his intellectual and moral courage has taken a huge toll on him. He is a man ever driven to test the ‘wobbling plank’ of what might be possible, and as he shared a light, ‘his fingers were trembling’. Similarly confident at the book’s beginning, Khrushchev’s brash challenge to the USA seems to mark a new direction for the USSR. By the book’s last pages, he is a failure, stripped of power, living in isolation.

Between these bookending stories, we are drawn into a whole host of people’s lives, vividly evoked and enormously diverse. Some of the characters recur at intervals, but others have more or less self-contained stories of their own. The groups of stories are framed by commentary on the part of the omniscient author. But this narrative voice is not inside the novel, it is rather the voice of a very well-informed, quite opinionated and unusually sprightly historian; the pleasures of these sections are very like the pleasures of good fiction.

Two things strike me about the effects Spufford can achieve with this unusual mix of techniques. One is the pervasive presence of irony. The other is, perhaps surprisingly (because irony is the product of completed knowledge), the [open-endedness](#) of the characters’ experiences as we witness them.

The effects of irony are not found in the tone of the narrative itself. Rather, they come from the tension between the big story, which is the drive to make the planned economy more responsive to people’s needs, and the experiences of the individuals who have to live in the world as it is. Spufford has made the most of the opportunities to show us how people’s lives were moulded and maimed by the constraints of the system that Stalin had built. It’s hard to forget some of the people we encounter along the way, and it’s a tribute to the writing that we remember them as characters and not as morality tales. Emil, for example, as he trudges across the dusty trackless fields to

the village near Moscow, travelling back in time with each step. Galich the writer, who is all too aware of his artistic and personal compromises, and who shows us the advantages of party connections. Galina, whose orthodox Soviet ambition is derailed by a vision of Tupperware, but who also has the spirit to provoke her black American interlocutor; she reappears later in a memorably awful labour ward. Chekuskin the fixer, who plugs the supply gaps with his elaborate barter system, who has to negotiate with the real hard-core criminals to make everything work. Volodya the career party man (and Galina's ex), who is traumatized by the brutal suppression of a food riot caused by the attempted price reform.

Notwithstanding the horror of this latter event, the most dramatic depiction for me of the stupidity and cruelty of the planned economy is the story about the viscose spinning plant. Here, the victims of the system are the plant managers themselves. Facing unrealizable production targets, they attempt a perfect crime in order to get permission to build a new and better production line. But their plans are foiled in a plot twist that is almost slapstick in nature. The perversities of Soviet pricing policy could hardly be illustrated more clearly or to funnier effect. They follow directly from the attempt to find what Spufford has [elsewhere](#) called 'software solutions to hardware difficulties'.

But the characters' stories never descend to the merely formulaic. Spufford does them the credit of giving them an open-ended story, something that is shared by the good historian and the good novelist alike. We know it ends for them; while it is still unfolding, they do not. Spufford construes Marx as making exactly this point: human beings make history, but not in circumstances of their own choosing. At the very end of the book, both Viktor Leonodivich and Khrushchev are brought to reflect ruefully on — well, on life and fate I suppose. And so, having seen all that we have seen, even as the

author brings the well-crafted arc of his story to a close, the final thoughts of both men take the form of a plangent and now heavily ironic question, 'can it be otherwise?'



Red Plenty: What Were They Thinking?

Maria Farrell

In August 1991, the Soviet Union collapsed. Television screens in the early days of the 24-hour news cycle told and re-told the confused but familiar tale of tanks in Red Square and a damaged leader confined to his dacha. I watched from Hofstra University, where I was working that summer, visiting America for the first time. I watched Oprah, went to the mall and rescued textbooks from campus bins, astonished at just how much of everything there was in America. In October, I flew back to Ireland at the last possible moment, excitedly telling first-day classmates at University College Dublin that I'd only arrived in that morning. And then the iron fist of reality came down with a thump.

There hadn't been time to replace the compulsory second year course, Soviet Politics. In January 1992, we knuckled down to learn the defunct super-power's committee structures, nominal reporting lines and some elementary Kremlinology. The lecturer delivered it in a state of mumbling hopelessness, his life's work having evaporated in the middle of his career. The following summer, almost a year after the Soviet Union's collapse, I regurgitated into three scrawled exam essays the precise textbook details of how the USSR had been governed. I may even have used the present tense. It was easily the most pointless and brain-numbing thing I've ever done.

Francis Spufford's *Red Plenty* is the precise and delightful opposite of all that. It should be dull — a not-quite-novel about economic planning in the USSR — but it's as stimulating for the

policy wonkery as it is for the human drama. A progression of characters waxes prolific on topics such as shadow pricing, linear programming and genetics, managing not to be boring or didactic. Spufford combines neat sketches of fictional and historical characters with well-chosen moments of crisis and exposition to dramatise how planning for abundance was conceived, cultivated and ultimately killed off.

Red Plenty is the *Bildungsroman* of an idea, starting at the moment it became possible to believe that a planned economy could transform Russia's violently bootstrapped heavy industry into a responsive system to bring everyday luxury to non-apparatchiks. Khrushchev arrives in New York and in his boorish confusion insults the assembled capitalists who don't realize how much America and the Soviet Union have in common. The poorly dressed mathematician Leonid Vitalevich struggles home on a rush hour metro, inventing linear programming as he goes. Only in a planned economy, he believes, can complexity be modeled and results optimized to bring about a golden age in which he imagines 'faces, faces the length of the car, relaxing, losing the worry lines and the hungry looks and all the assorted toothmarks of necessity.'

The idea ultimately dies off-stage, murdered by Russian fatalism and political necessity (and perhaps also the falling price of oil, though that's not much discussed). After Khrushchev's dismissal, Gosplan's chair, Kosygin, declares the worst possible fudge; factories will be told to measure output by quality, but prices will still be set by committee and goals by Gosplan. Kosygin elects to buy a few more decades of political stability with artificially low prices, instead of trying to reverse its productivity death spiral. Fictional economist Emil naively lectures Kosygin and returns home to witness the snuffing out of a brief moment of academic freedom. The ending is as poignant as the beginning is exciting. Notably, the only note of hope for the future is Max, Zoya's son, who leans toward literature, not science.

In introducing us to this epic scale and bulging dramatis personae, Spufford subtly confounds Western readers' expectations of Russian literature. We are attracted to the greatness of the so-called Slavic soul; its vastness, cruelty and improbably fine sensibility. Russian characters embrace their tragic ends because they simply cannot conceive of being other than who they are. But Spufford's interlocutors are technocrats and academics whose tidy personal lives funnel their passions toward political and intellectual spade-work. The mathematician, Leonid Vitalevich and the economist, Emil, live in unremarked domestic set-ups. The biologist, Zoya, dismisses an early marriage and decamps with her son to the intellectual paradise of Akademgorodok. Only would-be apparatchik Galina, whose resentment and envy at her limited prospects are unleashed in a painful clash with a black American man, messes up her personal life and comes, professionally, to nothing. In *Red Plenty*, willfulness against society and all odds belongs to the ideal, not the individual.

Several times, I thought I saw Spufford give an ironic nod to the imaginary Russia of the Western imagination. Galich, the doubting apologist and literary gadfly, takes a taxi with a newspaper editor to the Writers Union for a slap-up lunch. In a scene ironically reminiscent of Bulgakov, two foreigners finally gain access to the culinary riches within. But instead of wild antics and loving descriptions of multi-course meals, we get two Soviet insiders cagily determining how many political misgivings they dare to confide. Bemoaning the imaginative poverty of the Soviet elite, Galich dismisses the notion of the consumerist utopia to be reached by the 1980s:

'That's it?' he said. 'That's it? The dream of the ages and it all comes down to mashed potatoes, wooly socks and shared use of a trombone?'

Earlier, the furtive excitement of the post-Stalin thaw is dramatised by Emil, a gifted young economist who walks excitedly through the countryside to his fiancée's collective farm in the summer of 1953. The wonder of that moment is lyrically expressed:

‘Every time he put a foot down, it muted the insects in a circle round about it, as if he had a disc of silence attached to each leg, but the moment he'd passed they started up again. In the air, dopplered strands of song flitted by.’

As Emil hikes a rutted track for miles in high summer, the young technocrat curses the Russian countryside. His best suit is ruined by dust and pollen. We can smell the composty vapours and sweat. It's a comical inversion of Tolstoy's famous scene of Levin swinging his scythe joyfully alongside his peasants, perfectly at peace with his place in the world. The lesson is the same for both men, though; the cultivated mind shouldn't even yearn to escape from earthy reality. Emil tells himself: ‘Just you remember, Mr. Economist, any time you start to take the big enclosing terms you use for the actions and things they represent, just remember that the world is really sweat and dirt.’

Red Plenty is stocked with tasty morsels; Russia's central planners almost invent the Internet, women scientists are shunted into low status fields like medicine, and Soviet economists are said to know the value of everything and the price of nothing. Over 360 pages and through the eyes of a dozen main characters, Spufford builds up the effect of what it was to be Soviet.

Defamiliarisation here isn't just a novelist's trick, but the whole effect of the book. Spufford shows us America through the eyes of the Soviets, and dramatizes how that made them feel. (The recent and marvelous *Orphan Master's Son* also makes the reader experience how truly bizarre Texas appears to a North Korean.) *Red Plenty* brought me right back to how sinfully odd TV America appeared to me as a child; the shocking size and abundance of its fridges, orange juice

every day and not just for Christmas, toys so numerous they were counted in armfuls and stored in trunks. Seen from a distance in time or ideology, the market economy really does appear bizarre. When Spufford writes that, for Soviets, 'for a society to produce less than it could, because people could not 'afford' the extra production, was ridiculous,' it does, for a moment, seem strange that this is so. More than anything else I've read, *Red Plenty* answers the question we all asked in the immediate aftermath of the Soviet Union's collapse; 'what were they thinking?'

Red Plenty is a fairy tale of magic carpets and cooking pots, set in a place 'like' Russia. It recalls an impossibly distant time when governments — both capitalist and communist — regarded the economy as something that served the people, and not the other way round. How do you describe the birth, life and death of a system or an idea? By memorizing org charts and carefully articulated distinctions between party and power structure? No, you do it by meeting the people who nurtured, disdained, lived and mourned the idea of communist abundance. If we read because life is too rich and varied to only be experienced from the confines of our own heads, then *Red Plenty* is a means to live, through the imagination, as others have and never will again.



Red Plenty or Socialism Without Doctrines

John Quiggin

Among the many reasons I enjoyed Francis Spufford's *Red Plenty*, one of the most important is that the story it tells is part of my own intellectual development, on one of the relatively few issues where my ideas have undergone an almost complete reversal over the years. I was once, like most of the characters in the book, a believer in central planning. I saw the mixed economy and social democracy as half-hearted compromises between capitalism and socialism, with history inevitably moving in the direction of the latter.

While I was always hostile to the dictatorial policies of Marxist-Leninism, I thought, in the crisis years of the early 1970s, that the Soviet Union had the better economic model, and that the advent of powerful computers and new mathematical techniques would help to fix any remaining problems. At the same time, I was critical of the kinds of old-style methods of government intervention (tariffs, subsidies and so on) that are now called 'business welfare'.

Over time, and with experience of actual attempts at planning on a smaller scale, I became steadily more disillusioned with the idea. On the whole, I concluded Hayek and Mises had the better of the famous socialist calculation debate of the 1920s and 1930s, and that their arguments about the price mechanism had a lot of merit. This didn't, however, lead me to share their free-market views, particularly in the dogmatic form in which I encountered them studying economics at the Australian National University.

Although I hadn't read him at the time (and I wonder what Corey Robin would have to say on the subject), I agree pretty much with Oakeshott when he says 'This is, perhaps, the main significance of Hayek's Road to Serfdom — not the cogency of his doctrine, but the fact that it is a doctrine. A plan to resist all planning may be better than its opposite, but it belongs to the same style of politics.' This aspect of Hayek is even more pronounced in Mises, for whom free-market economics is a matter of logical deduction, and taken to a ludicrous extreme by their propertarian followers today.

The same kind of thinking was evident in much of the financial 'rocket science' that gave us the global financial crisis. The belief was that sufficiently sophisticated financial 'engineering' could overcome the realities of risk and uncertainty, producing untold wealth for its practitioners while making society as a whole more prosperous — only the first part of the promise was delivered.

So, rather than switching from central planning to free-market capitalism, I'm now, in Andre Metin's description of Australia in early C20, a believer in 'socialism without doctrines', starting from the historical premise that Keynesian social democracy has delivered better outcomes than either free-market dogmatism or central planning, and looking for ways to develop a new social democratic vision relevant to our current circumstances.

As *Red Plenty* shows, my enthusiasm for and disillusionment with central planning was about fifteen years behind the same developments in the Soviet Union itself. Spufford gives us a sympathetic picture of their hopes, and of the promise generated by new mathematical techniques like linear programming and optimal control (although entirely free of actual math, the book does a better job than any I've read of conveying the feel of these techniques). In 1956, Khrushchev makes his famous promise of overtaking the US, and it seems quite credible, but a decade later, all belief in the promise of plenty has

been lost. As the book ends, the mathematical programmers charged with making the plan work are pushing the benefits of prices — some at least, like Janos Kornai, would complete the journey to the free-market right, and advocacy of the ‘shock therapy’ approach to post-Communist transition.

Red Plenty is a great book. It would be fascinating to see Spufford tackle the post-Soviet transition and particularly the way in which liberal reformers like Chubais and Berezovsky transformed themselves into oligarchs, with the aid of Western academic economists like Andrei Shleifer. The pattern of naïve faith and disillusionment with free-market economics would make a perfect counterpoint to the story of central planning presented here.

Francis Spufford

For a novel about utopias, there's something almost disconcertingly utopian about being read this way. All this generous attention; all this ideal intelligence. Thank you, everybody. There's even a Soviet rationalisation available to me to ease the moral strain of being in receipt of this pocket-sized, individual portion of critical happiness. Like the inhabitants of Akademgorodok, the privileged science city in Siberia which plays such a large part in *Red Plenty*, I can choose to tell myself that being Crooked Timberized is only an early and individual manifestation of a good fortune that is shortly to become universal. One day, every book will be read like this. In the radiant future, every author will be ringed by symposiasts asking demanding yet perceptive questions. Every topic will have its conceptual underpinnings set into casually dazzling order by a Cosma Shalizi essay. And all the springs of co-operative wealth will flow abundantly.

Pragmatically, though, I'm going to have to group my responses a bit in order to talk about the main themes that have come up here. As separate critiques are aggregated for planning purposes and then disaggregated again, you may experience a slight loss of information. We aim to compensate for this, comrades, in sheer volume.

1. Unicorn husbandry

As Cosma points out in his 'attention conservation' notice, *Red Plenty* is wilfully devoted to the deadest of dead issues: the planning problems of a no-longer existent system which has no prospect of ever becoming existent again. Unicorn husbandry,

biplane manufacture, sermon publishing — take your pick of impractical comparisons. This seems like a good place to start. Because though the imp of the perverse played a major part in my decision to write the book; and I was positively attracted to the whole business of being the first person in thirteen years to consult Cambridge University Library's volumes of *The Current Digest of the Soviet Press*; and in general to the challenge of taking on the most outrageously boring subject-matter I could find, and wrestling it to the floor, and forcing it to disgorge its hidden jewel of interestingness; despite all this, I did also have some sensible motives for going where I did, and they have a lot to do with the kind of generational trajectories that Maria and John Quiggin have sketched out in their pieces.

Maria, I think I'm about ten years older than you. John, I think I'm about ten years younger than you. So I fall neatly between the two perceptions of the USSR you describe. I was 27 when the Soviet Union fell, ceased to be, shuffled off this mortal coil. I was too young to have experienced John's sense of it way back in the 1970s as a place which, barbarous and dictatorial though it was, nevertheless was essentially on the reasonable side of the economic argument; somewhere that, by opting for planning, had chosen the better economic model. On the other hand, I was too old to have Maria's experience of it as a will-o'-the-wisp, vanishing as I studied it, and leaving nothing behind but tedium and stale air. For me, as a teenager in the early 80s, having the traditional nuclear annihilation dream at regular intervals — my friends would usually drive past me in a bus while the asphalt melted just behind my fleeing heels — the USSR was not a possible object of admiration, but it was an object of solidity. Its defining feature was its permanence. It was an inevitable part of the planet's architecture: obsolete but immovable. And then it did move, and when it went its going suddenly disclosed a set of hidden linkages that pulled various aspects of my familiar, home experience away

after it. It seemed that my Western socialism — the unbarbarous kind — had had an unsuspected dependence on the existence of the Soviet model. And not just because the USSR was definitionally useful to social democrats, letting us point and say “Not that!” It had also served, it turned out when it was gone, as a sort of massive concrete tentpeg, keeping the Overton Window (not that it was called that, yet) tethered at its lefthand edge in a way that maintained the legitimacy, in western discussion, of all kinds of non-market thinking. When the USSR vanished, so with amazing speed in the 1990s did the entire discourse in which there were any alternatives to capitalism that had to be taken seriously. This was the biggest intellectual change of my lifetime — the replacement of one order of things, which I had just had time to learn and to regard as permanent, with a wholly different one, in radical discontinuity with it. The before/after photographs of my time might as well be pictures of different people, it seemed to me. And once we were in After, Before receded faster in the culture than it did in actual chronology, until the previous edition of the world came to seem not just remote but improbable, an unlikely past for the present to have had.

This seemed a subject worth my while to take as seriously as I could. From this point of view *Red Plenty* is not a perverse project. It was supposed to be a way of registering the scale of the change narratively, imaginatively, by restoring at least some of the weight of what had vanished. By immersing people in Before, I wanted to remind us of the strangeness of After; to point out that our present looks at least as odd from the vantage point of the past as vice versa.

Okay, perversity immediately re-entered with the decision to take the voyage to the heart of dullness. Maria is absolutely right that I am playing on purpose in the book with a kind of deliberate inversion of the familiar stereotype of Russian novels. I have relocated the intense drama, the anguishes, the thwarted hopes, from the private lives of the characters to the

fate of the system itself — though I hope I've left space for the characters to be plausibly happy and unhappy too. It has meant, in a curious way, reading Soviet life with a sort of deliberate naivety: taking the system at its official valuation in order then to keep crashing it into the obstructions of the actual.

It's had one other consequence too, which I want to mention up front here. Henry was kind enough, when trailing the seminar a few weeks ago, to promise that *Red Plenty* passes the Bechdel test. I'm not so sure. I have certainly done my best to take my female characters seriously, and to make them something other than the orbital appurtenances of the men: but the book's commitment to following out the public business and the public claims of Khrushchev's Soviet Union has also meant that I'm echoing, albeit satirically, the priorities of an intensely patriarchal society. This was a place that required the economic participation of women, but removed none of the traditional family burdens from them; didn't promote them, didn't give them positions of power, didn't bother to save their labour with domestic technology, and celebrated International Women's Day as an occasion for the gallant presentation, by men, of little bouquets. Any profession women dominated, like medicine, was by definition a low-status profession, and even the rare woman with a senior and prestigious job was expected to function as her colleagues' skivvy too. For example: I thought about bringing in as a character the pioneer Akademgorodok sociologist Tatiana Zaslavskaya, who was an early and significant adviser to Gorbachev. I didn't in the end — it would have been too diffusing to bring in another discipline, on top of economics and computer science and so on — but I got a nice email recently from a retired American academic who had dined at her flat in Akademgorodok in the mid-80s. She was the only woman present, as well as the grandest person in the room: and after the meal, the men chatted while she went to the kitchen and washed up. That's the world *Red Plenty* reproduces.

2. Mirrorball

One of the things I have been entertained by over the last couple of years has been the steady trickle of reviews by Trotskyists which explain that, despite my hostility to socialism, I accidentally offer a portrait of it which makes the reader feel a bit sceptical about capitalism too. Through mighty feats of self-denial I have managed not to write in and say: yes, and isn't it lucky the way that major rivers so often run right through the middle of cities?

For the record, I absolutely did intend *Red Plenty's* USSR to function as a distorting mirror in which the reader would be able to recognise realities much closer to home in time and place. It can certainly 'be made to stand in as an elegy for capitalist plenty too', as Henry puts it. It wouldn't be working if it couldn't. The backing for the mirror, as it were, is the historical USSR's strange and genuine Americophilia: the angrily unrequited love of Khrushchev's generation for the USA as they distantly understood and misunderstood it, the continent apart from the zero-sum rivalries of the Old World, where the ketchup came from, and the burgers, and the ice cream, and the roller coasters, and the Buick plants, and the Taylorist management techniques. (All of which the Soviet Union imported.) And I have strengthened the similarity as much as I can with small decisions of vocabulary and emphasis. This USSR, written in English, is deliberately as American in nomenclature as I can make it, with a layer of distractingly explicit ideological speech stripped out of Soviet reality to reveal what apparatchiks calling each other 'comrade' can hide: that Khrushchev and co are, above all, managers. Bloodstained ones, yes, but still recognisable mid-20th-century organisation men, working for a bureaucratised conglomerate so vast it stretches to the edge of their world (and denies them any guidance from an exterior world of prices). I wanted it to be possible to read Soviet life as a kind of Dilbert cartoon printed all the way to

the margins, a saga of corporate idiocy from which the citizens of the USSR never got to go home, because, with the firm and the country being coterminous, the management could pursue them 24 hours a day with bullshit about productivity and lean inventory management. For that matter, it makes perfect sense to think of the gridlocked planned economy as following a parodically over-achieving version of the Toyota Way, where you go one better on just-in-time and arrive at always-too-late.

But I wanted something more disquieting than just a fun-house glass in which the Other was displayed as a dysfunctional exaggeration of Self. That would be much too comfortable. Instead I had in my mind as an ideal a kind of impossible mirrored surface in which, whatever you brought to the book, you'd see something to recognise, and something you hadn't bargained for as well, which the recognition would entail. I wanted anyone, with any variety of politics, to be able to see their own face looming dimly in the metalled surface of events. So for a start I tried to eliminate as many as possible of the markers of my own views; and then, as a matter of literary ambition as well as of satiric reach, to try and make the human sympathy of the book for the characters as impersonally near-universal as I could, so you couldn't as a reader track liking or warmth as a surrogate for authorial endorsement; and then, as an exercise in critical self-discipline, to try to see an irony for every conceivable assertion, an exception for every truth, a complication for every simplicity. The Marxian utopia had to be genuinely attractive. The Hayekian objection to it had to be allowed its full disruptive force. Kantorovich's work-around of the price mechanism had to have its beauty demonstrated. I was trying to stitch together a sort of story that paid more attention than usual to the economic motives for human behaviour, but even there, I wanted my account of causes to be as broad and open as possible, and not to collapse without residue into any single one of the rival diagrams of economic behaviour. Basically, I wanted to be awkward. I

could take advantage of fiction's built-in tolerance of over-determination, in which multiple possible causes for an outcome can be allowed to exist alongside each other without being resolved, or even given definitive weights. Storytelling lets you bring negative capability into economics. And this effort to stay plural in my understanding of the story, though it was a conscious discipline, didn't feel as I was doing it like some willed suspension of a more naturally argumentative or analytical state. My interest in the things I write about seems to be a narrative one, deep down. Far more than as paraphraseable ideas, I tend to perceive material that excites me in terms of possible patterns of story; often ironic ones. It would not be possible to overstate my incompetence at dealing with any of the science in *Red Plenty* in a quantitative or even genuinely abstract way. Person after person who was kind enough to talk to me for the book encountered a mumbling, stumbling individual who, not being able to talk in the language of maths, had no way to convey the scribbled cloud of nouns joined by arrows in his head.

But of course the book is not opinionless, and the ironic reflections of the present it offers back are not universal, or anything like it. It clearly channels its ironies within very definite bounds, and the non-fictional sections are blatantly partial in their shaping of Soviet historians. You can tell the limits of my capacity for negative capability by who the book doesn't work for, politically. Conservatives can find their faces glimmering in the mirrorball, and so can social democrats and independently-minded Marxists; but Trotskyists can't,¹⁰ probably because, of all the critiques of Soviet history, the one that doesn't interest me at all is Trotsky's. I'm with Keynes, where Trotsky is concerned:

He assumes that the moral and intellectual problems of the transformation of Society have already been solved — that a plan exists, and nothing remains except to put it into operation.

If you can't even see that there's a deep and rich unanswered technical question in the Soviet record, then all that's left to talk about are the tedious differences between Stalin's and Trotsky's cults of will. I think, myself, that the Bolsheviks in both their varieties were a bunch of murdering scumbags, who turned Marx's bad habit of rhetorical contempt, via Lenin, into a warrant for ending arguments with a bullet to the skull, and who diverted what should have been the civilised history of 20th-century socialism towards atrocity and disaster. But I do them the justice of taking them seriously, as conductors of humanity's longest, largest-scale experiment in the non-market operation of an industrial economy: and that's where there still something worth talking about.

Henry suggests that the relationship the book reflects back between Khrushchev's dreams and those of the present must be 'oblique', because 'the relationship between the Soviet Union in the 1960s and the capitalist system today is not directly obvious'. I don't think I agree. What the relationship isn't, is structural. For all the historical cousinhood between capitalist and communist idylls, the quality they share isn't a similar causal pattern of breakdown; it's a deliciously parallel consequence of mistaking the map for the territory, of proceeding as if the system — either system — were fully specified, and could be reliably manipulated through its formalisations. It's a shared illusion of control, whether the control is to be exercised through Gosplan's card indexes or through the Black-Scholes formula. What I meant the book to indict by reflection, to satirise by reflection, was the whole family of schemes of dangerous perfection. Here I find John Quiggin's quotation of Oakeshott on Hayek fascinating, and very useful. I hadn't thought of it, but

the implication is that a genuinely doctrine-less conservatism, some kind of little-platoons preference for the small and local and unsystematisable, perhaps a la Front Porch Republic but without the loony lucubrations on monarchism and contraception, would escape the mocking reflection, as would the ‘socialism without doctrines’ which is my politics too.

Oops. Oh come on, though; of course it’s written from the left. Why would anyone who wasn’t on the left have enough at stake, feel enough of a sense of unfinished business, to go picking through the rubble that was left when the 20th-century wind stopped blowing out of paradise, to see if there was anything there that was worth salvaging? Despite the [interesting suggestion](#) that I might have written the whole 450 pages to put young Occupy activists off socialism — we bourgeois liberals are fiendish, and patient — I have to report that the Soviet model was already sufficiently dead not to need assassinating again. If the book has an ideological objective, it is simply that I would like the issue of economic alternatives to become a little more prominent again. As I’ve said in discussion with Ken Macleod elsewhere, I am almost entirely a nice, demand-managing, taxes ’n labour unions European parliamentary social democrat. But the other little piece of me wants to know if we can’t, some day, do better than that. I was charmed recently to see that Philly Socialists have decided to call their free-food-for-the-homeless operation ‘Red Plenty’. They don’t need my permission, but they certainly have my blessing.

3. Pretending to be Russian, pretending (not) to be a novelist

I’m delighted that that Antoaneta Dimitrova finds my portrait of late-Soviet mediocrity in the Party authentic. It seemed to me to be one of the most immediate anti-ideal forces in the Soviet environment, working briskly from the get-go against all beautiful dreams, that the perverse incentives of the place

on the human level had made it inevitable, after the revolutionary generations were gone, that it would be staffed at the top by those who were best at getting along in a tyranny, rather than by those who were most devoted to the tyranny's aims. Hence the rise under Stalin of Brezhnev's generation of *vydvizhentsy*, 'promotees', scrambling to seize the chance for upward mobility represented by the purges, and then that generation's reproduction of itself in the 1960s and 70s, once it was setting the incentives, from among the greediest, most amiably shameless, most opportunistic of the young.

This wasn't the whole story, of course. One of the most fascinating features of the later Soviet decades is the way that apolitical opportunism never quite displaced idealism altogether from the hierarchy; couldn't, in fact, because it depended for its legitimacy on some kind of lingering, ever-more-diluted reference to the system's supposed intentions, leading to the situation in which, as Stephen Kotkin puts it, the Party in the 1980s was still 'booby-trapped with idealism'. Nor were the successful mediocrities necessarily stupid. Low cunning was certainly part of the job description, and they must also have possessed a good sceptical feel — probably better than the various reformers had — for the present-tense possibilities of the system they milked. But it does mean that, when it came to assessing Brezhnev and Khrushchev and their cronies as philosopher kings, it seemed to me that you didn't have to wait for the Hayekian or Popperian objections to the system's knowledge problems to kick in. The theory of rule by steely, 'conscious' guardians of the public good arrived pre-vitiated, grotesquely self-cancelled, by having the actual representatives of the theory turn out to be beefy backslappers with the mental horizons of warthogs.

More than that, I'm delighted that she finds the book reasonably authentic in general, and not the kind of outsider's fantasy that turns to ridiculous tinsel-dust and blows away at the mere touch of actual experience of life in the USSR or the

satellites. I've been gradually letting out a held breath since the book came out, on this point; and it's just come out in Russian without reviewers pointing and laughing, so maybe I've got away with the absurdity of taking on the subject-matter from where I am, with the equipment at my disposal. (It's been a book which steeply compounds the standard author's sensation that you're trying to put one over on people, and will be found out at any moment.) As anyone who has ever encountered the pink Englishness of me in the flesh will testify — aha, title for a future memoir: Pink Englishness — I am not even slightly Russian. I don't speak Russian or read Russian. I've visited the places I write about, but I haven't ever lived in them. I don't have close Russian friends. Nor do I have the alternative route in of intimacy with the science of the story. My only qualification is a kind of gift for pattern recognition, for seeing where, in the distributed mass of events and ideas and personalities, there is narrative sense to be made. Everything in the book had to be second-hand. Everything was obtained by reading, by staring as hard as I could through the narrow aperture available to me, and by using every last scrap of the pertinent experience I have had, to what has sometimes felt like a ridiculous degree. It wasn't just that I contrived to use the whole buffalo. I didn't even leave a smear of blood on the pavement where the buffalo had been. It was all turned into black pudding. There are things in *Red Plenty* that originate in remarks taxi-drivers made to me. Yes, I am the Thomas Friedman of Khrushchev's USSR. So while it is, indeed, 'evidence-based', as Antioaneta kindly says, in the sense that the factual, the real, has been the fundamental stimulus to my imagination, the book's relationship to fact is a little complex; and the first complication that needs to be admitted is that it is not evidence-based in the sense of being a considered, selective response to some large, patient massing of data. The book does not represent a selection of detail drawn from a deep knowledge of the Soviet Union. It contains substantially everything I found out, with the direc-

tions in which I went looking for data often being dictated by my sense, in advance, that there was a piece of the narrative that needed to be supported. As the great Serbian writer Danilo Kis said, when an interviewer praised the indetectability of the inventions in his Borgesian memorial to the Gulag, *A Tomb for Boris Davidovich* — ‘Really? They seemed very visible to me.’ *Red Plenty* is like the Ob Sea that the Akademgorodok scientists swim in: convincing as a pocket ocean in terms of width, but only a few feet deep at any point. It contains just enough facts, at any point, to make it hold together.

And how much ‘just enough’ is, was always a literary judgement. It was a world-building consideration, of a kind familiar to anyone writing SF or fantasy, and asking themselves what the minimum level of detail is that a reader can be fed to seed her or his imagination with a perception of solidity. The secret of even the thingiest SF, the most solid-walnut-to-the-knuckles fantasy, is that you don’t need much to summon worlds out of air, so long as the details are the right ones. But — and I’m wary here of rushing too fast into the question of what kind of fiction the book is, which flattering genre claim to succumb to — there was also always the pressure on fact-selection, on imaginative shaping, exerted by the need to arrange the world of the USSR for comprehension. *Red Plenty* isn’t just a book by an outsider. It’s primarily for outsiders too. (Even if Russia it seems to be being read partly as a guide to what’s generationally exotic. One of the reviews says, ‘It’s a great book to read to understand your parents.’)

Antoaneta picks out the dialogue between Chekuskin the fixer and Stepovoi the naive executive as an area of artificiality in the book. Yes, because I had source-problems there in trying to work out what a conversation between the licit and illicit worlds should sound like. Yes as well, though, because this was one of the scenes in which the advantages of having someone be naive enough to require explicit initiation into a process I needed the reader to understand outweighed the

potential for doing something more psychologically particular and individual with the characters. This kept happening. The explanatory load on the book kept pushing it towards trying to clarify the whole social function of some category of event we were just seeing one of. Most novels, I felt as I was writing, were not so foreign to the modes of human interchange they portrayed that they had to explain the basic definitions of things as they went along. It was as if I had to dip my steel-nibbed pen into the inkwell and say, 'It is a truth universally acknowledged that a single man in possession of a fortune must be in want of a wife; a wife being the female partner in a pair-bonded relationship for life, sanctioned by religion and integrated into systems of inheritance, child-rearing and regulated sexuality; a fortune being a quantity of money at a high multiple of the society's average income, usually but not invariably available as a liquid resource; money being...'

Here was a large reason for the first sentence of the book. When I wrote, 'This is not a novel. It has too much to explain to be one of those', I was partly teasing. And partly I was negotiating a particular difficulty that had arisen during the original publication, which made it important to assert that whatever it was, it wasn't a failed novel. But I meant it, too. I was — am — genuinely uncertain over whether, as a piece of writing in which individual experience ceaselessly takes second place to idea, and some kind of documentary purchase on the world is being asserted, it should really qualify. Heaven knows, I'm glad to be contradicted by Kim Stanley Robinson, and if my having done my best to through-imagine it all as a kind of concrete (and viscose) poetry saves it in other people's eyes from occupying the place I feared it had in the uncanny valley, zombily half-alive itself — I'm certainly not going to argue. Alright, it's a novel. I would be proud to be carrying the suitcases of anyone on Rich Yeselson's formidable list of predecessors, and likewise to carry on the noble, multigenerational struggle Felix Gilman indicates against too blatantly visible

As-You-Know-Bob-hood. (Which goes back to Shakespeare, and all those prologues in which Count Robert tells the Duke of Boberino that my lord the king hath late return'd from Florence, where wood' he 'gainst all good advice the lady Eleanor. Exeunt both.) A friend of mine, on reading it in manuscript, said, 'It's like one enormous infodump, isn't it? In a good way.'

But — historical novel, as Rich Yeselson and Carl Caldwell urge, or SF, where Gilman and Robinson are beckoning? I think the two genres are basically isomorphic, as Ken Macleod's point about history being SF's secret weapon suggests. They share the increase in the story's explanatory load, and in the need to create familiarity from a standing start for the reader, and in the increased prominence of world-as-character. In terms of characteristic difficulties, they share the problem of how to make characters something other than just an expression of researched or invented perspectives. They both aim to transport. Where they differ is in whether they transport us to a combination of human possibilities which has already existed, or to one that only might exist, elsewhere or -when. Since the Soviet Union in 1960 existed all too solidly, it looks like an open and shut case for the historical. And yet...

4. Otherwise

And yet it was a haunted solidity I was after. Solidity with a spectre in it, a will-o-the-wisp which nevertheless had power to promise, torment, console, frighten, cost, cause. The misapprehension John Holbo read the book under — that it was an alt-hist spectacular, in which cybernetics would come to save planning at the last possible moment, and the sky would fill with happy citizens in autogiros — was an accidental artefact of *Red Plenty's* marketing, and of the decision to lead the descriptions of it with what-iffery. But I'm not at all sorry it happened. It made him, in some respects, a kind of ideal reader for the book, able to take literally and therefore at full

expectant force what has to be metaphorical, a ghost you can be confident of seeing through, if you read it in the usual way, in the firm persuasion that the Cold War is going to be won by Ronald Reagan. (Joke.) The glass bead game future in which Masters of the Plan delicately adjust shadow-priced destinies to their optimum on n -dimensional abaci of perspex is exactly in the spirit of the future that the now-dusty House of Scientists in *Akademgorodok* genuinely anticipated. By taking on the past's expectation as a real possibility (within the world of the text) he accidentally transported himself to something approaching the subject-position, as I understand it, of actual mathematical-economical true believers looking forward from 1962. He put himself into a state of the world which, like all states of the world, is partially composed of what it is and partially of what might be. Counterfactuals aren't just an implied presence in historical explanations — I was glad Neville Morley in the comments brought up David Lewis' Possible Worlds, which I read a long time ago and have had seeping about my mind ever since — they're surely also the form, or one of them, in which we put our sense at any particular moment that a potential is present for things to change. They are the floating home of 'otherwise'.

The picture of the future world is also, almost always, a picture of an alternative present: a state of things in terms of which, from the standpoint of which, it is possible to critique daily reality, or to find it more bearable, or to justify it. Which are three very different psychological uses for the counterfactual, rolled together and made available together, even when, as in the Soviet case, the future in question is a compulsory one, an organising destination which everyone is supposed to apply to make narrative sense of present events. The Soviet Union in the 50s-60s seems to me to have been a society haunted by its hopes in a peculiarly powerful, equivocal way. It was a place that in its very recent past had granted a hopeful goal an unlimited precedence over actual human lives,

and then stepped back from mass murder without ever fully acknowledging what had happened, leaving hope tethered in private experience to a layer of sorrow and suffering; and it was a place that ceaselessly mobilised hope as self-deception, 'psychoprophylaxis', compulsory pretending, applied to push you into ignoring all the defects of reality; and yet it was also a place that admitted louder and louder, the harder it lent on hope as anaesthetic, the need for the present to be redeemed or transcended. Hope revealed and concealed the nature of the times. The USSR was haunted by horror and utopia at the same time. I wanted, by picking the most sympathetically geeky and cybernetic version of hope, to make us feel the force of the haunting. (Us now; us outside the experience chronologically, or geographically, or politically.)

Henry seems to me to be describing just the same phenomenon, only in different terms, when he give his aetiology of the infection of the real by the fantastic. This is dead-on, by the way, in its description of the perceptual sequence I wanted to draw the reader into:

A collision between the real world and an imagined one, which somehow seems better, denser, more 'real' than reality itself, but is in fact a reflection of it. A moment of choice, connected with that collision, in which everything seems, for a moment to be possible. The falling away of that moment, as reality reasserts itself, so that the moment of choice recedes forever into the past, but still haunts the world, present as a sense of possibility and of failure, each entwined so closely with the other that one cannot tell where the one ends and the other begins.

The fairy-tale frame brings the magical interpretation of the counterfactual to the surface. Or rather, the book's insistence that the dream of planned plenty is twentieth-century magic, a

cultural script or spell (grammar, grimoire) with connections stretching back to the hunger-dreams of the ancestors, has the effect, I hope, of suggesting that enchantment of this kind is normal, universal. That the entwined sense of possibility/failure is threaded through times of change or choice in all sorts of societies at all sorts of times. Its presence is not to be taken as confirmation of the absurdity of any particular hope it gets attached to. History is made with refractory, recursively-patterned material, always.

I wasn't thinking of M. John Harrison, though, who I haven't read enough of, and clearly should read more of. My model for the intrusion or infection of the fantastic was much more John Crowley, whose Aegypt novels are all about the passage through, and then fading aftermath of, moments when the world seems bursting with the possibility of being otherwise; and whose Great Work of Time contains a marooned time-traveller who experiences the actual course of the 20th century as the nightmarish crumbling, year by year, of the safer timeline he came from. Again the idea that the imaginary is realer than the real, and is the standard by which the real is judged, and found wanting.

And surely this is right, as well as dangerous. Surely we have to grant imagination the power to keep interrogating what happens to exist, and to keep asking if it couldn't be better. The 'otherwise' at the end of the book is supposed to be open enough to gather into it, as in Felix Gilman's essay, our general suspicion that some kind of less wasteful and destructive composition of the human pattern is possible, as well the specific longing of the socialist tradition for some kinder measure to dance to than the zombie-hop of the commodities. It isn't in there just as an all-purpose rhetorical dreamcatcher, or as an exercise in the novelist's impersonal sympathy. That's my yearning you hear in the *Akademgorodok* wind, too. But it seems to me that to keep faith with the power of the imaginary

requires you also to keep the most honest tally you can of its costs. Which is notoriously hard to do, of course, without reliable prices.

5. History and comedy

I agree strongly with Rich Yeselson that praise for the novelty or innovativeness of the book's form has been overplayed. The overall patterning of it is fiddly, but the pieces of which the pattern is made are as straightforward as I could make them, and not just because as I get older, I increasingly think that simple is more interesting (and difficult to achieve) than complicated. It's also, as he says, that I had lots of very well-established precedents to draw on. On the historical novel side, the whole Tolstoy-does-Napoleon recipe for dramatising the viewpoints of the grand historical figures, and the equally available rule of thumb that tells you how to mix the documented and the imagined to create the illusion of comprehensiveness. And, drawing on SF, I had the scientist-fictions of Ursula Le Guin and Kim Stanley Robinson to follow. My Kantorovich very clearly has the DNA of Le Guin's Shevek and Robinson's Sax Russell in him. Not to mention — as I've carefully confessed in the notes — that the whole alternation of character-driven scenes with italicised authorial narration is lifted straight out of *Red Mars*. And collections of linked short stories that fill in different vertebrae of a narrative spine are not exactly unheard-of, either, from Kipling to Alice Munro. I am proud of the two 'machine' sections, set in Lebedev's logic and Lebedev's lungs, one in which determinacy produces indeterminacy, the other in which the arrow goes the other way; and the messages of approval from George Scialabba's amygdala cause fluttering in my own; but it's not like Don DeLillo doesn't already exist, and Pynchon, and for that matter Nicolson Baker. It's not as though there isn't a blazed trail for paying imaginative attention to system.

But Vassily Grossman's *Life and Fate* occupies a special place for me, as a object of admiration and source for borrowable techniques. For one thing, it is a masterclass in how the toolkit of socialist realism can be turned to heterodox purposes. For another, to be more frivolous, the novel is a monument of imaginative and moral witness — I can't read Sofya Levinton's journey to the gas chamber without weeping helplessly — but line by line the prose is not so fabulous that it forces you the way reading Tolstoy does into endless Waynes World-ish cries of 'I'm not worthy!' Grossman seems to be a more assimilable master from whom to learn.

So I'm fascinated to read Niamh Hardiman's and Carl Caldwell's twin comparisons of *Red Plenty* to *Life and Fate*, with their basically opposite conclusions. Both agree that *Red Plenty*'s mode is comedy, unhappy comedy, in distinction to the tragedy of *Life and Fate*, but for Niamh the result is 'the open-endedness of the characters' experiences as we witness them', while for Carl, the consequence is closure, a sealing shut of the possibilities of the fictional strand of the book because the story all takes place under the overhang of non-fictional certainties, which suck all genuine life out of words like 'hope' in the story, leaving only ironic slapstick behind. Needless to say, I'd rather Niamh was right. But I can't adjudicate. The way the book assembles itself in other minds, the patterns of effect that my intentions settle into there, aren't within my competence at all. I haven't got any interpretative authority over the thing.

What I can say is that the whole interrelation of the fictional and non-fictional elements in the book was set up as my improvised solution to the problem of allowing a story with a known end — failure — to take on some unpredictable life. I wanted to permit some space for hope, for expectancy, in a situation which would, I thought, be perceived by most people as self-evidently over, done with, a closed ledger, productive of neither interesting questions nor sympathetic human emotion.

It seemed to me that if I stipulated to the facts, and used them as a kind of authoritative backdrop or sounding-board, I might then allow myself a cleared space next to them in which there was room for something else to expand, something looser, composed of moments of experience rather than of reasoning about outcomes. And experience isn't teleological, even if it's the experience of hope. Its truth as experience doesn't depend on what happens next. But to create this zone of not-fact, free as story because of what it wasn't, I had to create a 'historical' narrative which represented solidity, which was to be taken as the singular and dependable truth, even when I was being highly opinionated and questionable in my judgements, as in the italicised sections' dismissal of the Bolsheviks before 1914 as a tiny political cult. In a conjured-up tension with a certain truth, fiction could billow out into undetermined life. (I hoped.)

But as Colin Danby and Neville Morley have discussed in the comments, that isn't what history is. History as practised by historians is not an invocation of unquestionable fact, at all. It's a vast collective text, implicitly discursive, in a state not only of continual revision but of continual argument over method. Even in its most narrative, singly-authored forms, it poses, as Carl Caldwell points out, continual questions about representation, and in this respect is not so very far away from fiction at all. The reason why, in *Red Plenty*, 'the two genres remain distinct', with a historical apparatus (italicised intros + footnotes) of 'assertive statements', is that both strands of the book, both components, are in truth equally rhetorical. The 'history' does not contain anything that I know or believe to be untrue. But it is there to help fiction live, to pull open the space of not-certainty. If, instead, it has the effect of capping off and closing down the fiction, that will be — well, not the first time in my writing that I have managed to contrive the reverse of my intentions.

On the subject of comedy, though, and its not-necessarily-happy qualities, can I bring in Henri Bergson? He talks about the internal equivalent to the ‘mechanical inelasticity’ of the pratfall being the state of adapting ourselves ‘to a past and therefore imaginary situation, when we ought to be shaping our conduct with the reality which is present’. Hence the comedy of absent-mindedness. Bergson sticks to the past for his example: but it would work too as an explanation of what happens when a person (or a whole society) gives priority to the future. Comedy is one of the effects of ceaselessly pretending — or under compulsion, pretending to pretend — that the ideal society to come should shape conduct more than the disappointing present one. If you try to live in the palace that hasn’t been built yet, you’ll collide with the furniture of your actual tenement, over and over, and then be obliged to pretend not to notice. The USSR, on this account, could be seen as a society of compulsory absent-mindedness, stepping through the slapstick of the plan under pain of worse. Or maybe you don’t even need the future. The present would do, if you existed in a sufficiently imaginary relationship to it. Then ideology is comedy. But again, as the person performs their compulsory mime of surprise at the discovery that the soup-plate, for the umpteenth time, has glue or ink in it, I think — I hope — that a space opens for less predictable feeling. For the person alongside the tyrannical joke, as it does for the person alongside the closed history.

6. Feasibility studies

I have a powerful urge just to point Daniel Davies and Cosma Shalizi at each other. The 7800 words of “In Soviet Union, Optimization Problem Solves You” provide an answer to the question in “New Ideas from Dead Political Systems” about what if anything we can learn from the Soviet case which is orders of magnitude more elegant, powerful and mathemati-

cally-informed than anything I could manage. I wish the essay had existed before I wrote the book. It would have saved me months if not years of clumsy attempts to think through the underlying intellectual issue: whether, in any possible world, and not just under the hampering constraints of the Soviet environment, anything resembling the Kantorovich scheme for optimisation through prices could power a planned cornucopia. In science-fictional terms, whether Iain M. Banks' Culture Minds, and the nanoscale Babbage engines of the Solar Union in Ken Macleod's Cassini Division, and the computers of the Mondragon Accord in Kim Stanley Robinson's *2312*, can plausibly be imagined to be running a programme for post-scarcity consisting of millions of linear equations. I'll take it as a vindication of my whole daft project that it has prompted such a beautiful piece of intellectual path-finding to exist. I'm not competent mathematically to challenge the conclusion it arrives at — which in any case squares with my own inchoate conclusion, gained from reading Stiglitz's *Whither Socialism?*, that optimised allocation of resources, even if possible, solves the wrong problem — but like a lot of people who have commented, I'm glad that Paul Cockburn has called by to bring the expertise of someone who has been thinking seriously for some while about ways and means to deal with, at least, the computational difficulty. I would be delighted, and excited, to read a more sustained Shalizi-Cockburn exchange. (Especially if they would both be kind enough not to apply too strenuous a data-compression algorithm, and to keep talking in terms I can understand.)

So I think what I can usefully do is to make a couple of points off to one side of Cosma's argument.

But first let me engage with Daniel on more narrowly historical ground. I don't agree that the only lesson from the Soviet experience is 'not to do that again'. The USSR was 'a great big waste of everybody's time', but not just that, I think. The Soviet case doesn't tell you much about the feasibility of

optimal planning, because for a thick array of reasons to do with power and path-dependency and the lack of foothold for the reformers' ideas in the actual conduct of the economy, they never came close to being applied in anything but the most truncated form. (Perhaps luckily.) But it does provide a kind of appallingly costly control study for the 20th-century experiences of capitalist industrialisation, in which we get to see what happens when an industrial revolution is run again with some key institutions missing or different. The USSR is something close to a real-world history experiment, a really nasty lab-test of an alternative time-stream, and negative results of an experiment are still results. And I don't believe these results all reduce to: if you steal 95% of a society's income and invest the proceeds, badly, in heavy industry, you get a temporary boom in outputs entirely detached from human welfare, and a toxic wasteland. Okay, so some of the lessons are stupidly obvious. Such as, don't conclude from the fertility of mass production that you can run an economy consisting entirely of large units; you need units of all sizes simultaneously, shoe factories and cobblers, or you run into a kind of economic equivalent of Henry James' late style, so cruelly described by H. G. Wells as being like watching a hippopotamus trying to pick up a pea; you get a whole world of clumsily pea-chasing hippos. But even that offers an opportunity for critical reflection on the forces in our present world that are pushing for less economic diversity, for one model of corporate organism to replace the mixture of public and private structures. And then there's the result to do with the staging of industrial take-off, and the different informational demands of the different stages, which doesn't seem to have been investigated much by anyone, except in a non-quantitative or cultural-studies-ish kind of a way by people like Manuel Castells. There clearly is a difference between the informational load placed on a planning system by early industrialisation (viable) and by the later turns up the spiral (not viable), which there don't seem to be easy grounds

to explain in Von Mises-style or Hayekian arguments that all planning as such must be defeated by co-ordination problems. Yes yes, product differentiation, diversification, growing service sector: but there's something tangible to be known here, I think, about the phase changes of development. However, I with my literature degree and my detailed understanding of the powers of the adjective am not the person to know it.

Back to Cosma.

First, a biographical point. I can't tell you how interesting the demonstration is, from the shallowness of the maths itself, that Kantorovich's denial of the market-like properties of his system must have been knowingly opportunistic. So far as I know (and of course I'm confined to the universe of English-language materials) this is the first light on the question of how self-aware he was about what he was doing: how much he was in on Rich Yeselson's 'mordant joke' about him laboriously re-inventing market relations in mystified Marxian terms. I've had to choose an interpretative side here, more or less in the dark, since Kantorovich so carefully bit back expression of any political consequences to his work. I chose to go with the idea of him as a true believer that's suggested by his tenacity at offering his optimising services through more than four decades of changing Soviet politics, and his demonstrable innocence in dealing with the politics of the academy. But this is evidence for the other case: for the idea of him as someone aware of a market-mainstream of economics to which he was trying to inch back, which is supported by his long friendship (not in *Red Plenty*) with the Leningrad survivor of pre-revolutionary economics, V. V. Novozhilov. It is utterly, wonderfully elegant that a piece of surprisingly crude argumentation by someone we know to have been a (mathematical) sophisticate should send an ungainsayable signal of intent from out of the Stalinist fug. It's rather like Zoya Vaynshteyn/Raissa Berg finding the unsuppressable genetic signal of the collectivisation famines in her mutation data.

Then a point about the desirability of the cybernetic cornucopia, independent of its feasibility. The power of the Kantorovich result, as I understand it, is that it proves that a set of prices exists for any plan which would allow it to be coordinated in a decentralised way, by having local actors simply maximise profits; which in turn, if the system worked, would allow a whole economy to be steered towards an agreed goal, rather than just passively following a trajectory determined piecemeal, by all the aggregated decision-making going on in it. Result: emancipation, or at least greater human choice about our collective destiny. But, but, but. Not only are there the insurmountable problems of the Soviet context — for the system, to calculate the prices, would require the same impossibly complete information about capabilities which Gosplan had been failing to gather for decades — and the computational obstacles Cosma lays out. There is then also the question of whether, by shifting from our captivity to the zombie dance of commodities to a captivity to the plan, we have really done any more than relocated our passivity, and gained any emancipating ground. If we don't like our unplanned subservience to the second-order consequences of our collective life (market, government, family), why would we like a planned, first-order subservience to the masters of the bead game any better, even if they were acting as instruments of our collective choices? Even granted the perfect execution of a probably impossible computational task, wouldn't the quality we were trying to escape promptly re-enter the system under another name? The latter part of the commonwealth forgets its beginning, as ~~Count Boberino~~ a useful patsy of Shakespeare's said, on another island, long ago.

Finally, a point about rhetoric. If we're deciding instead that, like all panaceas, wildly overpraised at first and then shrinking to the size of their true usefulness, Kantorovich's insight has a future as something more modest, a tool of human emancipation good for some situations but not others — and

aiming too for a more modest (and safer) politics that gains the more human world of our desires in pragmatic stages, which is what Cosma ends up with, and George Scialabba has found in the Nove-Albert-Schweikart nexus — then we have a presentational problem. It's a lot easier to build a radical movement on a story of transformation, on the idea of the plan that makes another world possible, than it is on a story of finding out the partial good and building upon it. The legitimacy of the Soviet experiment, and of the ecosystem of less barbarous ideas that turned out to tacitly depend upon it, lay in the perception of a big, bright, adjacent, obtainable, obvious, morally-compelling other way of doing things. Will people march if society inscribes upon its banners, 'Watch out for the convexity constraints'? Will we gather in crowds if a speaker offers us all the utopia that isn't NP-complete? Good luck with that. Good luck to all of us.

And thank you.



Contributors

Carl Caldwell is the Samuel G. McCann Professor of History at Rice University. He is the author of *Dictatorship, State Planning, and Social Theory in the German Democratic Republic* (Cambridge UP, 2003), as well as *Popular Sovereignty and the Crisis of German Constitutional Law* (Duke UP, 1997) and *Love, Death, and Revolution in Central Europe: Ludwig Feuerbach, Moses Hess, Louise Dittmar, Richard Wagner* (Palgrave, 2009).

Daniel Davies blogs at Crooked Timber and works in The City.

Antoaneta Dimitrova is Associate Professor of European Policy and Public Administration at Leiden University.

Henry Farrell blogs at Crooked Timber and is Associate Professor of Political Science and International Studies.

Maria Farrell blogs at Crooked Timber. She is a writer and consultant in Internet policy and communications.

Felix Gilman is a lawyer and novelist. He has written *Thunderer*, *The Gears of the City*, *The Half-Made World*, and the forthcoming *The Rise of Ransom City*.

Niamh Hardiman blogs at Crooked Timber and is Senior-Lecturer in Politics at University College, Dublin.

John Holbo blogs at Crooked Timber and is Associate Professor of Philosophy at the National University of Singapore. He is the author of *Reason and Persuasion: Three Dialogues By Plato* (Pearson 2010).

John Quiggin blogs at Crooked Timber and is John Quiggin is Federation Fellow in Economics and Political Science at the University of Queensland. He is the author of *Zombie Economics: How Dead Ideas Still Walk Among Us*, Princeton UP (2010).

Kim Stanley Robinson has written many books but is best-known for the award-winning Mars trilogy. His new novel is *2312*.

George Scialabba is a writer and critic. He is the author of *What Are Intellectuals Good for?* (Pressed Wafer, 2009).

Cosma Shalizi is Associate Professor of Statistics at Carnegie Mellon University and a blogger.

Francis Spufford is the author of *Red Plenty*. His other books include *I May Be Some Time*, a cultural history of the British obsession with polar exploration, and *The Child That Books Built*, a memoir of growing up as a compulsive reader. His next will be *Unapologetic*, published in the UK in September 2012..

Rich Yeselson Rich Yeselson worked as a strategic researcher in the labor movement for 23 years. He has written for *TNR*, *Salon*, and *The American Prospect* and, decades ago when it mattered, *The Village Voice*.

