

The realism of our time

Interview with Kim Stanley Robinson

Kim Stanley Robinson and Helena Feder

Kim Stanley Robinson is the author of more than twenty works of fiction, including the celebrated Mars trilogy (*Red Mars*, *Green Mars* and *Blue Mars*), *Forty Signs of Rain*, *The Years of Rice and Salt*, *2312* and, his latest novel, *New York 2140*. A former student of Fredric Jameson, Robinson's work is consistently anti-capitalist. His novels evince not only his deep interest in global economy and ecology, but also a belief that fiction may venture into spheres where theory fears to tread. For Robinson, science fiction is uniquely placed to do this, rooted both in what is and what could be. In the best tradition of the genre (H.G. Wells, Isaac Asimov, Ursula K. Le Guin), it can consider critically both the politics and possibilities of technology, and the social, ideological and ecological systems that give rise to it. Science fiction has, in this sense, a particular responsibility not only to imagine the future but to imagine *how we might change its direction*. In Robinson's *New York 2140*, a series of connected characters, centred around the MetLife tower in a future inter-tidal world, a financially and physically liquid city, come together to do just this. Sea levels have risen in two catastrophic 'pulses' of ten and forty feet, transforming planetary and human geography. In the midst of this ecological and refugee crisis, lower Manhattan becomes 'a veritable hotbed of theory and practice, like it always used to say it was, but this time for real.'

Robinson champions science fiction as 'the realism of our time.' And the reality, if not the realism, of our time is grim. The moment we inhabit has become inhospitable, terrifying and disorienting to contemplate. The Earth, 'the wholly enlightened', is, as Adorno and Horkheimer argued in *Dialectic of Enlightenment*, truly 'radiant with triumphant calamity.' Violence to humans and other animals seems to proliferate rhizomatically, slow and fast: the escalation of anthropogenic damage to the planet and its atmosphere, the Sixth Mass Extinction, the consolidation of wealth and power in the hands of fewer and fewer people, the waves of ideologically motivated attacks on the poor, people of colour, Jews, Muslims, women, democracy, secular thought and the secular world, all over the world.

Realism itself is a complex and disorienting category, multiply defined against other periods, genres, aesthetics and modes of thought; a kind of ideological palimpsest. As Jameson argues in *The Antimonies of Realism*, it is 'a hybrid concept, in which an epistemological claim (for knowledge or truth) masquerades as an aesthetic ideal, with fatal consequences for both of these incommensurable dimensions. If it is social truth or knowledge we want from realism, we will soon find that what we get is ideology; ... if it is history we are looking for ... then we are at once confronted with questions about the uses of the past and even the access to it which, as unanswerable as they may be, take us well beyond literature and theory and seem to demand an engagement with our own present' (London: Verso, 5–6). Robinson's work is such

an engagement with the present.

Just as *New York 2140* reclaims pre-flood artefacts, narratives, and social forms, Robinson's vision of the future is archeological, uncovered from within the possibilities of our current moment and its manifold pasts. Building up or forward means also digging down. If we cannot dispense with realism, it is because we cannot dispense with another conceptual problem: that of *the real*. While the real may at times seem as fictive as Thoreau's 'Realometer', it is as necessary to us, as that 'hard bottom, rocks in place, which we can call reality, and say, This is, and no mistake; and then begin, having a *point d'appui*, below freshet and frost and fire ... that future ages might know how deep a freshet of shams and appearances had gathered from time to time' (*Walden; or, Life in the Woods*). As the old radical intones, 'Be it life or death, we crave only reality.' Even in its most ethereal moments, Robinson's work conveys the truth of this craving. In the key image from his favourite of his own novels, *2312*, animals return to a post-climate change Earth from protective biomes (inside hollowed-out asteroids) in slow, giant bubbles. Elephants and orangutans, shimmering like dandelion seeds, drift home.

The interview with Robinson took place at his home in Davis, California in October 2016, a few months before the publication of *New York 2140*.

Helena Feder In a 1993 interview with Bud Foote, you said that 'science fiction proclaims more than it can do'; that, at its best, it is an 'enjambment of facts and values that our culture desperately needs right now because our culture develops and enacts change without much regard for underlying values.' *New York 2140* is just such an enjambment, in terms of form and content. Could you speak to this, to the novel's sections on history and ecology, your 'citizen' subchapters? At one point you warn the reader to skip ahead if she's the sort of person who cares only about smaller, human dramas.

Kim Stanley Robinson This is simplistic, but science is where we establish facts and fiction is where we establish values. The name 'science fiction' is very powerful because it seems to say we can bridge the fact/value conundrum. It's a question whether or not the genre can or does do that, but it seems set up for it. It tries. When you talk about the future you're always talking about history. A novel always does this, but science fiction does so explicitly, through thought experiments: 'If we do this we'll get here. If we do that we'll get there.' Also, whereas the nineteenth-century novel traditionally speaks to the individual's relationship to society and history, science fiction adds the nonhuman and the planet [to that list]. The content of science fiction helps to make biophysical systems and problems visible. Humans do not simply make their own history on a *tabula rasa*; [the world is] an actor network where nonhuman actors are important players too. We've hit the limits of carrying capacity, in some ways, on the planet. And what type of fiction that can tell this story best? I've been saying, for many years now, that science fiction is the realism of our time.

HF As you mentioned actor networks, do you like the work of Bruno Latour?

KSR I think *Laboratory Life* and *Science in Action* are crucial texts, and they taught me a lot. When people talk about the Latourisation of science studies, I see what they're talking about. He's an important thinker, but like a lot of European theorists, he seems to need to invent his own system, his own vocabulary. Theory thus continues to get harder to understand, weirder, more provocative. I read science studies with enormous interest. Science studies is now theory applied to the sciences, it's changed from an earlier sociology or philosophy of science. And this

new science studies has now turned again and changed literary studies. Now literature includes ecocriticism as a kind of science studies applied to literature itself.

HF *2140* imagines the ‘*Werteswandel*’ you’ve called for elsewhere. In fact, it imagines a new idea of value itself. Is that what you’re trying to do?

KSR For Marxism, ‘*Werteswandel*’ is in dialectical relation with changes in material circumstances and systems, not just modes of production, but also modes of exchange, or modes of valuation. Mode of production isn’t really the whole story anymore. I’ve been interested in some radical economists, like Dick Bryan, Randy Martin and others, who argue that we should nationalise the banks, that global finance is *the* great danger to the planet. They also suggest there’s a way to trigger another crash and then, by nationalising the banks, you could both create and then solve the crisis. And by solving the crisis in this way you would actually have done something useful, rather than papering over the problems and going on as before, as we did in 2008. That’s the storyline of *New York 2140*.

HF Capitalism disregards facts as well as non-economic values. Many Americans seem to ignore the findings of fact-checking, while many politicians ignore, or pretend to ignore, the facts themselves. Given this, what do you think of the schizophrenic role of science in capitalist culture?

KSR I think of them as in conflict for control. I’m very pro-science, but everything can be bought, and even science is in danger. I thought, because science was doing the real work, that capitalism was its parasite, like the puppet masters in the Heinlein story. I still think that’s true, but in global capitalism, money really can direct scientific research; we still have the war machine, for instance. And big pharmaceuticals direct a lot of biological research, ignoring certain problems and paying attention to others, depending on the potential for profit. Just because science is doing the real work it doesn’t mean it’s in control; the puppet master can call the shots, the parasite could be strong enough to kill the host. That happens a lot in nature. It’s a scary, scary century.

Science is a contested space. The AGU (the American Geophysical Union) is an example. Do they take money from Exxon or not? They voted on it, and they are still taking money from Exxon. They think it is better to have that money to put to good use than to make a symbolic statement against Exxon. This is just one small example of a constant battle.

The enormous, elaborate community of scientific institutions is trying to figure out how can they save the world without becoming revolutionaries, or without becoming political. This is funny, because they’re acting politically without admitting it. What they’re doing is intensely political, but they’re still caught in a paradigm in which facts aren’t political. Generally speaking, the psychological mindset of science is astonishingly naive, philosophically simplistic: ‘What I do is very straightforward. I gather data, and then I analyse it, and I make a theory and I explain, then I go back and do more experiments.’ On the other hand, many scientists are highly sophisticated and know more about the humanities than most people in the humanities know about the sciences. Many are actually more well-rounded intellectually than most people in the humanities.

The first wave of scientific efforts to alert the world to climate change was a painfully instructive moment for scientists. When scientists saw that just announcing the problem didn’t change people’s behaviour, they were shocked and dismayed because they thought that people

would look at the facts and then change their values. Even now they are still trying to find a way to move forward, to be both scientists and effective political actors.

HF That's a nice segue to a question I want to ask about H.G. Wells. I know you're a fan. Anyone who works on Wells has a difficult task of trying to think through his visionary socialism alongside his authoritarian tendencies. Is there anything you want to say about *The Shape of Things to Come*, *The Work, Wealth and Happiness of Mankind* or, if by chance you've read it, *The Croquet Player*?

KSR No, I haven't read *The Croquet Player*, but I've read *Star Born*, another late work from the thirties. In the thirties they could see that another war was coming, and it probably felt apocalyptic to think that they were heading towards a war even worse than the First World War. I admire the way Wells tried to continue to be hopeful in that situation. It was a very totalitarian time; as with Leninism, people thought if you could just seize control long enough to do what's right, then democracy could come later. His version of taking over is usually a scientific meritocracy. It's almost like Silicon Valley today, which thinks 'If we could just ignore politics and tech our way out of all these problems ...' Of course, Wells was much cannier than that. The libertarian Silicon Valley view is lame. They're not geniuses. I would say that your average scientist is more politically savvy than your average computer geek making tons of money down in Silicon Valley. But, again, it depends who you're talking to. I've seen computer world attitudes range from sophisticated concern to a siloed in [view of the world], 'We're so smart that we can ignore other problems; maybe we'll set up a colony on Mars, and then we'll be okay.' That kind of thinking is terribly inadequate.

HF 'Siloed in' is a good metaphor, because there's a solipsism that comes with living in an environment that is more and more human-made, more and more closed off to the complex more-than-human world. We're open organic systems, and all the normal 'input' we'd be getting from the universe is less and less present in systems of our own creation. How can we think politically, think about relations between subjects, human and nonhuman, when all we see is more of ourselves staring back at ourselves?

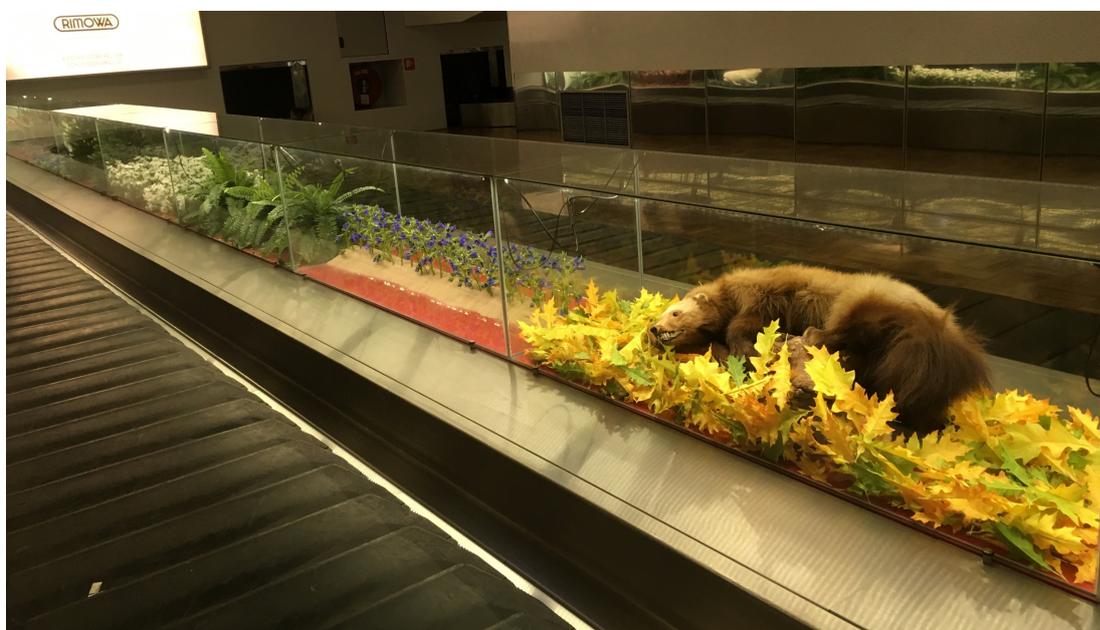
KSR It's a problem. People who sit on their butts looking at screens all day might think they're happy doing just that. But these people have problems with the third dimension, with ecology. This crowd thinks that they could live in a similar room on Mars, thirty feet underground, and be happy, that it'd be so cool to be Martians, and then there would be a lifeboat for humanity if by some impossibility all life on Earth were to disappear, which is another bad ecological thought. They aren't really thinking. It's more of a fantasy, and it goes back to the early science fiction fantasy of 'If only I could clear this situation and start over, and simplify it down to just what I like, everything would be okay.'

HF One of the horrible places in Wells has to do with population; Wells had phases of eugenic thinking. In *New York 2140*, there is a refugee crisis, but I don't recall seeing the word overpopulation in your novel. Did the first and second pulses (of rising sea levels) significantly diminish the population or are you trying to make people rethink the question of population in ecological terms?

KSR Population per se is not the problem. Population still matters, but it is only part of the equation. Ehrlich's 'IPAT' formula [$I = P \times A \times T$] or, impact is determined by population times affluence

times the 'greenness' of the technology] shows that the ordinary westerner uses thirty times the resources of someone in Asia. When you do the math, 300 million people in the United States times thirty, you get a stupendous figure that makes India and China look like paltry little populations in terms of consumption or impact on the earth.

But it shouldn't be an A for affluence or appetite in that equation, it should be an E, for economics; in other words, the 'IPET' theory. I talked to Ehrlich about this, and he was interested. You don't want to talk about affluence or appetite, because everybody should have a refrigerator so they don't get sick, and what is true affluence is a value judgement. Thoreau was affluent. So, what's messy in this equation, between population and the cleanness or dirtiness of technology? What's the thing that makes us use too much? Our economic system, the middle term. It's more important than population per se, and tech is getting cleaner and cleaner. Re-rigging the economic system for our survival is the focus of *New York 2140*, but all my writing, going back almost thirty years now, has been about imagining various post-capitalisms. I don't characterise it with any one term because they're weighted with baggage from the past, so I'm perfectly happy to talk about any post-capitalist future, social democracy or democratic socialism, communism ...



HF Social-anarchism?

KSR I'm a statist; I don't believe anarchism is a way to get through the next couple of centuries. I thoroughly approve of anarchism's ultimate goal of the total horizontalisation of power but, to me, anarchism is a horizon that is centuries out.

HF At least one literary critic has coupled your name with Murray Bookchin.

KSR I've read Bookchin and I admire his work. I'm thinking more of anarchisms that conflate capitalism and the state. I separate them, just as I separate capitalism and science. I'm also thinking of the anti-humanism of certain anarchisms, those that turn into libertarianism very easily in an ugly way, those that say it doesn't matter if six billion people die because then we'd have a sustainable number. What's good in anarchism is the idea of a complete horizontalisation of power and prosperity. It's a great long-term horizon to aim for. It's like utopia itself. I'm a

utopian, but I wouldn't say I'm an anarchist because I don't think a state monopoly on violence is a bad thing at this point in history. It's better than the alternatives, better than chaos, better than the freedom to burn as much carbon as I want. I think that carbon use should be legislated and controlled and priced, and anarchy doesn't provide a way of doing that.

HF There are two new books out on post-capitalism that seem problematic in this regard, to varying degrees: *Post-Capitalism: A Guide to Our Future* by Paul Mason, and *Inventing the Future: Post-Capitalism and a World Without Work* by Nick Srnicek and Alex Williams. What did you make of these?

KSR They struck me as weak because they called for tech solutions only. In one, robots would do all the work ... but both failed to address the two big problems: what is the post-capitalist economic system, and how do we get there? The only good thing they're doing is putting the word out there. Ten years ago you could google the word post-capitalism and get practically nothing. We need [the concept of] post-capitalism. I'm not a theorist myself, but if you give me a theory I can turn it into a science fiction novel. I'm like a magpie.

HF Exactly what I thought when I read *New York 2140*. It's like New York itself, full of everything from everywhere: wide-ranging epigraphs, cultural history, economic history, literary history ... In places it felt a little like *The Arcades Project*.

KSR It was fun to use the city as a way to make all that stuff relevant to a single story. It's amazing what New York can do. I love it. But when you look for good post-capitalist plans, it's not that they're completely missing, because people like Robin Hahnel and Michael Albert have proposals, and a lot of them are co-ops, worker owned co-ops similar to the Yugoslavian industries, or the Mondragon cooperatives, or various successful city states, like Bologna. But we still lack global solutions, and this is one of the many complaints I have about the field of economics per se: it's not speculative. It doesn't try to imagine what would be better; it's just an analysis of a legal system. The spectacular lack of imagination in economics is painful because we need it. We need both a functional system people could believe in and a way to get there. It seems to me this should be the work of a school of economics. Yet many economics departments are completely hidebound, only analytical. It's painful because they're missing their necessary work: political economy. During the Cold War it was impossible to discuss political economy without being labelled a communist. And with the Milton Friedman crowd taking over during the Reagan/Thatcher revolution, we've lost thirty years to Ayn Rand stupidity. Whenever you see economics based on the ideas of a bad science fiction writer, you know you're in trouble.

HF Since we're on this terrain, you've mentioned the importance of interdisciplinary thought – not just political economy but leftist sociobiology – in the past. Could you talk a little more about this? Are you thinking of E.O. Wilson, often misread as deterministic, or his detractors, Richard Levins and Richard Lewontin, the authors of *The Dialectical Biologist*?

KSR No, I'm thinking of Wilson himself. I'm a big fan. The attack on Wilson by Levins and Lewontin after he brought out *Sociobiology* was mostly departmental politics. It was stupid, because he wasn't saying that biology is deterministic. It's not Social Darwinism. Wilson is, I think, like Ben Franklin or William James – he's going to be remembered as a major intellectual figure of our time, and the attacks on him were unfortunate because they made a lot of leftist humanists think, 'oh no, another Herbert Spencer,' without reading Wilson's text, without thinking it

through. Some really useful work here was done by Sarah Hrdy, who was a student of Wilson. She taught here in Davis. In *Mother Nature*, she points out that if you look at the scientific evidence gathered by primatologists, you don't simply see alpha-male power; you see enormous female power, political power, power over things that really matter, like who gets born. She was a great corrective [to patriarchal primatology], and slowly but surely a leftist sociobiology, a feminist sociobiology, came into being under the umbrella of Wilson's first approaches, as elaborations and extensions, but not in opposition to him.

HF This brings to mind another undialectical relation. You've said in the past that capitalism is feudalism in disguise, that one of the problems with Marxist historiography is the sense that we've moved further in the dialectic than we actually have. Is it the case that we're stuck in feudalism or is it that capitalism never had any truck with democracy whatsoever?

KSR Capitalism is still very feudal in its distribution of wealth. One of the great triumphs of Marxist historiography is to describe accurately the transition from feudalism to capitalism, why it happened and the differences. At a presentation I once gave with Jameson, I said something like capitalism is just feudalism liquidified. In the break he said, 'Kim, it's actually a big accomplishment for Marxists to be able to describe the change from feudalism to capitalism.' I then brought up something he had taught me, Raymond Williams's concept of the residual and the emergent, and said, 'but there's a lot more residual than people have imagined.' That's one of the only times I saw Fred startled by something I said. Although I think there's an exchange of ideas between us, mainly he's the teacher, I'm the student. He's explained things that I never would have understood, and I treasure him for that. So it was nice to see him think, 'Mmm, that's an interesting thought.'

The residuals out of feudalism would be the power gradient and the actual concentration of wealth per se. In the feudal period, kings might not even have been as proportionally rich as top executives are now in relation to the poor. And if peasants weren't murdered by passing soldiers, they were living with their food source at hand and working a somewhat decent human life. That isn't largely true now of the dispossessed. So, capitalism is like feudalism in that, but worse.

HF *New York 2140* is an alternative future history. It tries to imagine, as you've said, how we get from a capitalist to a post-capitalist world, but through one building, the MetLife Building, and all the actors (people, human systems, ecosystems) in this network. Is the building also a microcosm of the relation between the money sphere and the biosphere?

KSR It was the way to tell that story, and it was an experiment in form, in the genre of the French apartment novel, used by Zola and others (recently by Thomas Dish, Geoff Ryman and John Lanchester). At the start of the story the characters don't know each other, but they live in the same apartment building. In my version of it, they eventually get to know each other to make the plot more interesting, rather than just a collection of short stories. It turned out to be quite a long novel, as you saw, because there were eight points of view and a dozen important characters, more than I usually deal with. Well, the Mars trilogy has scores of characters, but this was a single novel.

By the end of the story I try to make what's going on in lower Manhattan scale up to the national and the global. You can't have a local solution [to national and global problems]. You hear this focus on local solutions in Naomi Klein, in the work of all kinds of critics: 'At least

there'll be resistance movements, there'll be these little pockets.' In global capitalism those are allowable discharge zones where energy gets dispersed; [they allow] people to think things are changing, while global capitalism continues its destruction. You need a global solution.

At the end of the novel the householder's union causes a financial crash; the crash causes the federal government to take over the banks. Essentially it's 2008 again, which indeed will happen again, and the question then will be, do we settle for a little fix or a big one? A big fix would be like what we did when we took over General Motors; we got it back to health and then sold it back to private ownership. When the banks crash again, instead of giving them a hundred cents on the dollar and telling them to go out and do more, we need to nationalise them. When I say nationalise them, there are specific plans as to how this might be done, how they might become fully owned subsidiaries of the American people, how finance might become a tool rather than a master.

What I like about *New York 2140* is that it describes something that could happen in the real world. The mechanisms are in place. Congress could make the laws and the president could enact them. It's not grossly dissimilar to what Bernie Sanders was advocating during his campaign.

HF Why do you think so many people don't seem or want to think globally? Is it a matter of fear and frustration, or has the systemic complexity and scale of global problems become truly incomprehensible?

KSR People want to be able to do something in their own lives. Also, [we suffer from] the feeling that the system is completely locked in. The story we've all been told is that the system is robust, permanent and massively entrenched, backed by guns and laws and prison sentences. If you resist it, you might spend the rest of your life in jail and nothing at all will change. And so you try to find a personal pocket utopia, where you can at least have a decent life for yourself and feel like you're not actively damaging the world compared to the ordinary capitalist life.

You need [places like] Village Homes, my own pocket utopia, that burn only 40% as much energy as an ordinary American suburb. But that's still ten times the energy of a peasant village in India, so it's not a solution. This place was built forty years ago, and nothing like it has ever been built since because it isn't as profitable as an ordinary suburb.

No local solution is sufficient. We need the World Trade Organisation and the International Monetary Fund, the World Bank and the G20, to do smart, ecological, democratic things. This sounds like a big task but, as I said in *New York 2140*, the number of laws that matter are few. They are human laws and laws change all the time, and a lot of these laws are heavily influenced by the USA, China, and five or six other really big national economies. So it could be done.

HF *New York 2140* depicts a constellation of connected systems, financial, biological, ecological, technological, and their analysis, from Gen's patterns of human behaviour and detection, Franklin's patterns of metaphor in numbers, Charlotte's patterns of emigration and Amelia's animal migration. If science fiction is the new realism, what constitutes the real in *2140*?

KSR The value of the apartment novel is that each of the eight points of view has a take on what is real. Combined, they're a mega-system. I suppose Jameson would just call it history, though it is important to include the planet, which I'm not sure that Fred often does; surplus value has always been appropriated out of the natural world in increasing circles, and now we've run out of circles, so the expansion crashes and the biosphere too. The real is too big of a term to be

comprehended, and so you break it down into lots of smaller systems that are trying to explain the whole. Together, you get a mega-system or a stack of systems.

HF It's been theorised in many different disciplines that systems tend to formally mirror the organisational structures that produce them. For example, the systems created by IBM will mirror the organisational structure of IBM, or, in the sphere of Marxist philosophy, Neil Larsen would say the form of thought is the form of the social.

KSR Interesting. It is definitely the case, as Marxism [teaches], that ideology is crucial. To me, ideology is simply the stories that you believe in.

HF For *some* Marxists, capitalism is total and *totalising*. Nothing can change; nothing can happen.

KSR That's right in terms of what they believe, and this is something that Jameson is always wrestling with. But here it helps to keep science and its worldview in mind. Capitalism can't persist because it doesn't conform to the limits of physical reality. So, in every novel I write, I try to tell a story that's plausible, provocative *and* would allow everything to change. That's the utopian problem.

HF Capitalism has *natural* limits. Of course, it helps if there's sunken treasure, as in *New York 2140*.

KSR But there's always sunken treasure, right? That's the capital of the past. That is capital itself, freed from capitalism's system of ownership.

HF Literally, the gold without the ship? Because your canvas is the history of New York, you've also a wealth of literary treasure, writers from New York or visiting New York, which helps situate the text in a system of literary meaning. As your novel suggests, meaning is an alternative form of value. I was particularly interested in the way you use Melville; *Moby-Dick* comes up many times and Melville himself appears as a ghost. Two other things occurred to me as I read. The citizen sections seem almost like an Ishmael voice bearing witness to something. Also, *New York 2140* seems to invoke 'Bartleby, the Scrivener: A Story of Wall Street' as it does *Moby-Dick*. In the end, people speak with one voice to power, saying, 'I prefer not to.'

KSR I definitely wanted Bartleby [in the mix] since he worked right down in there, very close to my building, and Melville lived very close to my building. The first edition of *Moby-Dick* I read was abridged and I didn't know that. It had been thrown away, and I picked it up out of the gutter. I never looked at the title page, and so I had to re-read it later. Now I've read it many times. Melville is the Great Spirit of American Literature. In my mind I have a great novel about Herman Melville's life as a customs inspector, working on the docks. I may never write it, so I inserted it into this novel as a story told by a character.

HF In *New York 2140*, it's Jeff who claims that you could distil financial code into sixteen laws that could be altered to fix the global financial system. A coder might say it's the right order of magnitude, but might also invoke the notion of 'the great rewrite in the sky' for a system like this. Meaning that it is too complex to fix, that you'd have to start over.

KSR This is what Jeff finds out the moment that he tries. What he does with code, as eventually he admits, is more like graffiti than a hack. He marks what could be done but without actually

doing it, like a note to the SEC [the US Securities and Exchange Commission]. It's a desperate gesture and it gets them in trouble, but it isn't real politics. This is what I'm saying to the tech community, the coders [who think] it's all just code. It's not all just code, because laws and codes aren't the same. They have formal similarities, but it's a question of power. What kinds of guns are behind them? How much do people live by them? How visible are they?

This is what's interesting about this Trans Pacific Treaty. How do we behave on a global scale between nations? How much do we try to enforce labour fairness and environmental intelligence into our global trading laws beyond the nation states? More would be better, and improvement by increments isn't to be scoffed at. So, the means by which that treaty was negotiated were obviously bad, a secretive little cabal. 'Let us, a few technocrats get it right, and trust us that we've got it right.' I haven't seen the details of what the Treaty would enact, so I don't know if I'm for or against the content, but I'm against the method of its coming into being. Nevertheless, I like the idea of international treaties, because we need to tie the bad actors into the good actors' value systems. We do not want liquid capital, global finance, to just slide into the worst [country], the worst actor in the network.

HF Speaking of liquid capital, I couldn't help but enjoy the pairing of global and financial liquidity (rising sea levels and financial crashes). Did you have the pairing, literally and metaphorically in mind from the start?

KSR Yes. People say I like floods. All of my big novels include floods, the Mars Trilogy, *The Years of Rice and Salt*, *Green Earth*, and now this book. And in *2312*, the drowned Manhattan appears for the first time as a set piece. It always struck me as funny that we might drown in our own liquidity.

HF In *New York 2140*, we have, on the one hand, dark economic pools and then, on the other, nature as Mother Ocean. In one of the Amelia chapters you invoke Aldo Leopold's land ethic, in which he exhorts us to think like a mountain. Is this novel trying, in places, to ask us to think like an ocean?

KSR Maybe. Leopold is very important. I think his phrase, 'What's good is good for the land' is a baseline value, a value that we should base everything else on. If you take care of the land, then people will also be okay. This is crucial, transformative ecological thinking.

KSR Essentially, what's good for the planet is good for the people who are co-existent with it. The inter-tidal is a great metaphor as well as a great real space. As a real space, it's complicated, messy, lively, and you can't legislate it. In many legal systems it's an unorganised public space.

HF Living in this post-second pulse, inter-tidal space requires some interesting future technology, including very resilient carbon negative building materials and infrastructure. Is any aspect of this technology in development?

KSR Right now it's at the level of venture capital, these graphene sheets, basically carbon nanotubes flattened out. It's science fiction tech right now, but people with money are interested in it because the source material is carbon.

HF *New York 2140* is a work of speculative fiction, speculating on the technology we need for a better future, which sheds light on another, related form of speculation: futures markets.

KSR ‘The Volatility Index’ is *already* a science fiction story set one month out! Risk assessment for investors is a matter of making predictions. Since it can’t be done [accurately], the risk is high; the volatility is high. In that realm, what you want is to be able to win whether the market goes up or down.

HF This is interesting, because some of the earliest climate data we have comes from insurance companies.

KSR The insurance companies, especially the re-insurance companies, could be part of the story of post-capitalism, because they’re going to be the ultimate holders of the costs. They are going to say to the world, ‘Sorry, these are not payable costs.’ I have friends in the Natural Catastrophe Division of Swiss Re who say, ‘Wait, our whole industry is doomed, because we can’t pay out what’s going to come due,’ and therefore [the world’s now] uninsurable. They would have said, up to this point, everything’s insurable, you just need to set the rate right. When you can’t set the rate right, it would break civilization to pay the premiums. You get into the mass extinction event, you get into the stupidity of ‘we can’t afford to survive.’

HF *New York 2140* seems to reconfigure value as the products of the labour of inhabitation, of love. This is how real value is created in the inter-tidal space, by people who inhabit and stick it out. I was thinking of Gary Snyder’s remark that ecology is a problem of love; they have the same root of course, ecology and economics, from the Greek *oikos*: home, dwelling. I was wondering if you were pointing to that by choosing the Householders Union for the very centre of the novel, not just this one big house, the Met Building, but the Householders Union.

KSR The Householders Union comes out of the work of the radical economists I mentioned earlier: the idea that everybody is a householder, everybody is illiquid. You want illiquidity, in that you want your house, your job and your health, but finance wants liquidity and can beat you at the game of liquidity. When you realise that global finance depends on us making our payments, there is hope for some kind of democratic control from below by way of a strike. But unions have been marginalised and turned into unimportant actors because they were always involved with one trade, a plumber’s union.

But unions were important and still can be if you think that everybody’s already in the union of the dispossessed. A Householders Union is a way of saying that everybody could be in the same union, and there’s enormous power there. You become a *refusenik*, and if everybody were to do it at once, it becomes politics rather than personal default. This is, to me, a workable plan. Everybody would be really happy not to pay their bills one month and see what happened.

HF That would be interesting. If we’re thinking about politics and transparency, I think it’s clear to many people that we don’t live in a democracy in the United States. Emma Goldman said a long time ago that if voting really mattered they wouldn’t let you do it. What if everybody decided, ‘In a two party-system monopolised by the same corporate money, I’m not going to vote.’

KSR I don’t agree with Goldman. We could use the Democratic Party, as the one that is ostensibly closer to people’s values, to elect a majority in Congress to enact a New Deal flurry of changes. Corporations could squeal but they couldn’t make the army go onto the streets against the people. In this country the corporations can’t do that. So voting does matter.

If you believe democracy is impossible, that corporations will always rule, money always rules, then that is self-fulfilling. Actually, corporations are massively overly leveraged, which

is to say they're hanging over an abyss of bankruptcy. They often have fifty to a hundred times as much money out in loans as they do in assets in hand. If a call went out where they had to pay all their loans at once, they would instantly crash. That was 2008, so 2008 is analysable and reproducible, and it could lead to a different political result. This is not an entrenched, concrete bunker of a system. It's a house of cards, and the people at the bottom could bring the whole thing down. Do we then say, 'We do need capital, we do need banks, we do need investment, we do need some kind of market'? I'm not so sure what we do or don't need. But in post-capitalism, those things could all be transformed.

HF One reason people feel that the system is totalising is because we live in a surveillance society. People feel encompassed by power; their lives are collectible data.

KSR The surveillance that matters is your credit rating. The rest of surveillance is balkanised. It's also government. It's not all corporation's power. It's too much information to be analysed in human time. This is one of those science fiction fantasies of the computer that knows all, but there still need to be humans to process the data into useful information.

My feeling is that surveillance is a false issue, that there's no problem except for the credit rating. And this is where the Householders Union comes in; if everybody were to default at once, then everybody's credit rating would take a hit, but it's always differential value that matters. It's another case of we either hang together or we hang separately: the great American political realisation, which is that solidarity matters.

The real surveillance is your credit rating. It's public knowledge about you and it shouldn't be out there, but it is. The secret stuff, though, your private conversations, those don't matter because no one is ever going to listen, because there's too many of them, probably five hundred trillion conversations. What algorithm would they use to get data from them?

HF Speaking of problems of scale, the complex ecological effects of the industrial revolution and Great Acceleration, what do you think of the term Anthropocene, and the idea of Anthropocene literature?

KSR It's interesting to historicise it as a term. It began with scientists trying to say, 'Look, climate change is real, and we're having a profound impact as a species.' But when academia picked it up, it drops into the swamp of semantics, it loses political force. It's best as a geological term, but it has already been defused. It's become just another term like sustainability.

HF Yes, 'sustainability' has been co-opted. Do you think Anthropocene literature might rescue the term?

KSR Whenever science fiction gets interesting, then people try to give it another name. It's the anti-science fiction prejudice raising its head again. If its content becomes relevant, you call it cyberpunk, cli fi, Anthropocene literature or dystopian fiction. These are all science fiction. It's a very big, powerful genre. As soon as you say, 'we're going to talk about the future', you're saying you're going to talk about history. You're going to talk about the planet. You're going to talk about everything. *That's what science fiction does.*

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