Robin Hahnel's *Of the People, By the People: The case for a participatory economy* (Soapbox Press, 2012, distributed by AK press, www.akpress.org) is the latest and most accessible presentation of his argument that a new economy—based on equality, participation, solidarity, and self-management—is both desirable and possible. Originally formulated by Hahnel and Michael Albert more than two decades ago, the model has been continually refined and improved, addressing problems raised by critics. This is precisely the way vision for the future should be developed: through an ongoing process of criticism and revision.

In this new book, Hahnel offers two revisions to his previous exposition. In previous versions, the planning process—participatory planning—made no distinction between the current annual plan and more long-term plans. Here Hahnel acknowledges that the latter involve some special complications that need to be addressed. In particular, our estimates of opportunity and social costs become less reliable the further off into the future we are projecting, and therefore long-range planning will have to rely more on discussion and debate among delegates to federations of consumer and worker councils. This will require finding means of maintaining popular involvement in the long-run planning process in the face of less direct participation.

The second revision involves the annual consumption requests. How can people know what they want for an entire year, many critics asked? They can't, Hahnel says. But if their beginning-of-year guesses—which might just be "same as last year"—turn out to be wrong, then mid-year corrections can be made. There is no assurance, of course, that everybody can get whatever they want and are entitled to exactly when they want it, but not even a market system can guarantee that.
This new book doesn't end the cycle of critique and revision, and in that spirit, I posed a number of questions to Robin Hahnel that came to me as I read Of the People, By the People. My questions and his responses follow.

**Shalom:** Let me start on this question of the annual consumption requests of individuals. Submitting a "same as last year" request certainly simplifies matters. But there are still reasons to think this wouldn't be an easily manageable process. Seth Ackerman, notes, for example, that there are more than two million products in Amazon.com's 'kitchen and dining' category alone. [Seth Ackerman, "The Red and the Black," The Jacobin, no. 9, Winter 2013, p. 39.] Not all products are consumed within a year (so last year, for example, I bought an electric razor; I don't want "same as last year" for that). The sneakers that I bought two years ago have worn out; so I'd need to amend last year's request. And what about products that change over time? I had avoided a snack food last year because it had too much salt, but this year there's a low-salt version. And of course books, music, movies, video games, software—I don't want the same as last year.

**Hahnel:** The two million products in the Amazon.com "kitchen and dining" section is a wonderful example of how consumers can become aware of the tremendous variety of products that will be available in a participatory economy. Just as Amazon.com can list millions of products—providing pictures and details about their characteristics—consumer federations can provide this service to consumers in a participatory economy for any who wish to shop online. And for those who prefer what some of my students once told me were "the pleasures of malling it" in person, consumer federations can host shopping malls where anyone who wishes can go, see what is available, and walk away with whatever strikes their fancy. Information about product improvements can be provided in these ways as well.
If you remember that the sneakers you bought two years ago have now worn out you will add a pair of sneakers to your consumption request this year that were not on your consumption list last year. You will also not request an electric razor this year. Since I will not remember I need new sneakers but do not need another electric razor, and I would not bother submitting a revised request even if I did, my initial consumption request will be the same as last year and not include a pair of sneakers but will include an electric razor. Moreover, when my neighborhood consumption council sends me the revised indicative prices in the second round of the planning procedure and asks me if I want to revise my consumption proposal I will not respond again, whereas you may choose to modify some of your requests in response to updated indicative prices—perhaps requesting two pair of sneakers if their indicative price has fallen, or postponing your replacement sneakers another year if their indicative price rose significantly.

The important thing is that no matter what you or I choose to do individually there will be an initial consumption proposal for the entire neighborhood submitted by our consumer council, and there will be revised neighborhood consumption proposals submitted in every subsequent round as well. And that is all that matters as far as how the planning procedure "works." What will happen when I discover during the year that I want a new pair of sneakers I didn't order but don't need the electric razor I did order? I will order a pair that looks suitable online, or pick up a pair at a distribution center or mall run by a consumer federation, and be charged the same indicative price you are for the item you ordered in advance and I neglected to order. I will not pick up an electric razor and therefore I will not be charged for one.

It's important to distinguish between what we need to accomplish and what we do NOT need to accomplish in the annual participatory planning process. When the year starts worker
councils need to know what they are expected to produce and what inputs they have been authorized to use to do that. If they know these two things they can get started producing when the year begins, so that is all the participatory planning process must accomplish. Before it can begin production on January 1, does a shoe making company in a capitalist economy know how many size 9 vs. size 11 shoes to make? How many brown vs. black shoes to make? How many high quality vs. low quality shoes to make? It has no way of knowing the answers to these "how much of each slightly different product should I make" questions, nor does it need to. Based entirely on its own guesses and research about trends in consumer demands, a capitalist shoe making company starts to produce shoes in January at a faster or slower pace than last year and then adjusts to unanticipated changes in the overall demand for its shoes, and shifts in demand for different sizes, colors, and qualities, on the fly as new information arrives. Shoemakers in a participatory economy will do this as well, except the annual plan provides them on January 1 with much better information about what to expect.

It's important also to be clear about how workers and consumers are credited and charged for what they do. The planning procedure "approves" the behavior agreed to in the plan—for both worker and consumer councils. However, worker councils are credited for the outputs they actually produce and charged for the inputs they actually use during the year.[1] So if their approved production plan had a SB/SC ratio of 1.09 but their actual ratio at year's end turns out to be 1.03 the cap on average effort ratings for workers in the council next year is 1.03 not 1.09. Similarly, consumers, and consumer councils and federations are charged for what they actually consume during the year, not what was approved for them in the plan. Any differences are recorded as increases or decreases in the debt or savings of individual consumers, neighborhood councils, and consumer federations.
We need to distinguish between how to adjust to unforeseen changes as the year proceeds and how to formulate the annual production plan in the first place. These are two different issues in all planned economies. The first issue is how to formulate the plan in the first place. And that is what advocates of participatory planning have written about—a way to arrive at an annual production/consumption plan that is qualitatively different from authoritarian, or central planning, and also quite different from most notions of how to go about democratic economic planning. But no matter how the annual production plan is formulated, any planned economy must come up with some way to make adjustments during the year. I have written very little about adjustments because the unique proposal we have made has to do with how to formulate the plan in the first place. What I have said about making adjustments during the year is: (1) Imagine people swiping debit cards at cash registers (or online), and being asked if they want to announce a change in their approved consumption plan when the pace of their actual consumption deviates by say 20% from what they ordered. (2) Remember that computerized inventory management systems linked to cash registers and "real time" supply changes are already features of the global economy. (3) Envision consumer federations as clearing houses for consumption just as regional Federal Reserve Banks clear checks for private banks operating in their region. (4) When changes in consumption among all consumers do not cancel then consumer federations will have to negotiate with industry federations for changes in production during the year. Which leaves one question to answer: Will indicative prices, which are the basis for crediting producers and charging consumers, also be changed during the year whenever desired changes in production cannot be made, or cannot be made in full? I can think of arguments for and against.

If we want consumers to influence the annual plan we need input from consumers during the planning process. If we want worker councils to have a better idea of what to produce than
firms in market economies this must come from the annual plan. In a participatory economy consumers influence production decisions primarily through the "self-activity" proposals of consumer councils and federations during the planning procedure. Consumer councils and federations respond to estimates of the social costs of producing different final goods and services by indicating how much they want, knowing they will be charged according to the prices "indicating" what it costs society to provide them. As those estimates of social costs are adjusted during the planning procedure by the IFB, presumably consumer councils and federations will change the amounts of different things they request when they submit revised consumption proposals.

**Shalom**: Say there are 100 workplaces that produce product X. In the planning procedure it is determined that there is only demand for the output of 90 workplaces. (Assume it is determined that this represents a long-term trend, not just a one-time drop in demand for which it might make sense to keep 10 unneeded workplaces going to minimize transaction costs.) Assume that the workers all want to continue producing X (they enjoy doing so more than they do producing Y, a product with excess demand; or they don't want to incur the disruptions of having to be retrained; etc.). Which 10 workplaces will be closed or converted? Is this a matter of some objective measure (e.g., the social benefit to cost ratio, SB/SC) or of democratic vote? If the former, won't there be pressure on workers to "exploit themselves" in order to increase their ratio (just as under capitalism, bosses will try to increase the exploitation of workers in a competitive industry)? I don't mean that workers will feel pressure to increase a ratio that is less than 1 to a ratio that is greater than 1—that of course makes sense—but to go from 1.31 to 1.33 in order to beat out the workplace with a 1.32 ratio.

**Hahnel**: There are a lot of issues contained in this one question, so let me break it up into pieces.
You write: "Say there are 100 workplaces that produce product X. In the planning procedure it is determined that there is only demand for the output of 90 workplaces. (Assume it is determined that this represents a long-term trend, not just a one-time drop in demand for which it might make sense to keep 10 unneeded workplaces going to minimize transaction costs.)"

That is not exactly how it would become apparent that roughly 10% of those working to produce X should no longer be doing so. Suppose each of the existing 100 workplaces making X submit initial proposals to make as much as they did last year, requesting the same inputs including different kinds of labor they currently employ. At the end of the first round of the planning process it turns out that there is only demand for 90% of the output that the X industry has proposed to supply. In the next round of the planning procedure the indicative price of X will be lowered by the Iteration Facilitation Board (IFB). To keep it simple, suppose it is lowered by 10%. This will change the incentives for both those offering to produce or supply X, and for those asking to consume or demand X. In the next round of proposals, because the estimate of the social cost of producing X is now lower, the aggregate demand for X should increase—presumably not as much as 10%, but some. So the excess supply will no longer be as great as 10%. But there will most likely still be excess supply, let's say 8%. However, each worker council proposing to supply X now only receives "credit" for increasing social benefits by 90% of what they used to for every unit of X they propose to supply. So if they persist in making the same proposal in the second round as they did in the first round the social benefits in their social benefit to social cost ratio will now be 10% lower than they were before, and their proposal would be even less likely to meet with approval. This "pressure" to reduce production of X, and/or switch over to producing Y, will fall heaviest on the worker councils with the lowest SB/SC ratios in the first place. Presumably, these are the least efficient X producers and they will be the ones
most likely to reduce their production of X in subsequent rounds. So there is what we might call a "natural" process of selection among the 100 workplaces regarding who is going to drop out of X production.

You write: "Assume that the workers all want to continue producing X (they enjoy doing so more than they do producing Y, a product with excess demand; or they don't want to incur the disruptions of having to be retrained; etc.). Which 10 workplaces will be closed or converted? Is this a matter of some objective measure (e.g., the social benefit to cost ratio) or of democratic vote. If the former, won't there be pressure on workers to 'exploit themselves' in order to increase their ratio (just as under capitalism, bosses will try to increase the exploitation of workers in a competitive industry)?"

So my answer, above, is that this would normally be taken care of by what you are calling "some objective measure" rather than "a democratic vote"—by which I assume you mean of all workers in the X industry.

About what you call "self-exploitation": In capitalism "self-exploitation" is not really self-exploitation at all. It is exploitation of workers by their employers. Employers go to their employees and say if you don't accept wage and/or benefit cuts or increases in work intensity I will lay off some of you, or shut down the plant altogether and move to where employees are more compliant. A better analogy would be a worker-owned cooperative producing X in a predominantly capitalist economy. If the members of this coop really liked making X more than Y or, if they really didn't want to have to change jobs—which can be personally costly since no capitalism other than Scandinavian capitalism has ever tried to minimize the transition costs of moving people from one job to another and socialize the costs of doing so—they could opt for a higher level of what you call "self-exploitation" to remain in business. I suppose the same holds in a participatory economy,
which would allow a worker council producing X to continue to do so if they were willing to accept a lower than average SB/SC ratio, and any lower average consumption allowance that went along with it. Do I think this would happen often? Perhaps in the case of craft production. But if the transition costs of moving to a new workplace are minimized and socialized—as they would be in a participatory economy—I don't see why workers would want to "self-exploit" when they don't have to, unless they were very much attached to producing a particular product. After all, what the iterative, social planning procedure is signaling them is that product Y benefits society more than X. Why would workers reject this signal at their own expense? Craft, performance art... perhaps. In which case, I see nothing wrong with it. It is similar to allowing people to make their own "effort/sacrifice" vs. "consumption" choice. As long as you are being socially responsible—i.e. in this case working harder and/or accepting a lower effort rating and therefore consumption allowance in exchange for producing a particular product that society does not find to be as socially valuable as others, go for it!

You write: "I don't mean that workers will feel pressure to increase a ratio that is less than 1 to a ratio that is greater than 1—that of course makes sense—but to go from 1.31 to 1.33 in order to beat out the workplace with a 1.32 ratio."

It is SB/SC ratios less than 1 that are generally socially irresponsible and unlikely to be approved by others. Even in that case a group of workers could truthfully report so many people-years of welding labor, etc. to produce so many units of good X and get the SB/SC ratio up to 1 by planning on exerting above average effort on the job, and therefore be able to stay in business. That would be what you call "self-exploitation." Any councils with SB/SC ratios in ANY industry in the 1.30, 1.31, 1.32, 1.33 range ARE behaving in a socially responsible way and WILL have their proposals approved by others, so that is not a concern. But in the spirit of your
question, a worker council deciding to exert above average effort/intensity to boost their SB/SC ratio from 0.98 to 1.00 to stay in business, while a worker council with a ratio of 0.99 who do not choose to "self-exploit" is the one that must switch to Y or shut down so its members have to find new jobs, is free to do so. And I don't think there is a problem with that.

Shalom: You say (p. 76) that people hired as members of worker councils get full and equal rights from the moment they arrive. Does this preclude any sort of trial period? If so, won't this mean (a) more hiring errors, and (b) more reluctance to "take chances" in hiring?

Hahnel: I did not mean to exclude the possibility of trial periods for new members—which is a common practice in many worker-owned cooperatives, and even in worker-owned enterprises self-consciously practicing all the norms of participatory economics, such as the Mondragon collectives in Winnipeg, Canada. But there cannot be second-class citizens in workplaces. A participatory economy does not tolerate this, though regrettably it is a practice in some cooperatives today, where there are members—with full voice, vote, and profit shares—who then hire others as their employees. That is what I intended to say was forbidden.

Shalom: One of the interesting observations in your book The ABCs of Political Economy: A Modern Approach (London: Pluto Press, 2002, p. 70) is that small amounts of unequal sacrifice become permanent inequalities because the capital accrued from the extra work makes subsequent labor more productive. Is this a problem in a participatory economy? That is, might small differences in effort or small differences in interest-bearing savings (p. 83) lead via this same mechanism to income inequalities that will grow exponentially?

Hahnel: I certainly hope not. But fortunately I don't believe this would be a problem. In the models you mention any extra
sacrifice in an early time period is transformed into more capital to work with in the future—which is not bad in and of itself since more tools as well as better tools makes us more socially productive as time goes on. In the models you mention the most egregious case of turning this good thing into a bad thing arises when the additional capital that comes from an early extra sacrifice is used to hire an employee whose greater productivity when working with the additional capital is appropriated as profits by her employer, or when the additional capital is loaned to someone whose greater productivity when working with the additional capital is captured as interest by the lender. In these cases I think the term "exploitation" is appropriate. As you mention, in these cases inequality that quickly exceeds the amount required to compensate for an initial extra sacrifice increases "exponentially" over time. However, in the models you mention even in the case when there is no labor or credit market, if the person who made the extra early sacrifice in week 1 uses it to work with more capital than others have to work with, after a certain number of weeks they will have benefited far more compared to others than can be justified by their one-time, early sacrifice. In this case the unequal outcome each week stays the same (i.e. does not increase exponentially), but as the weeks march on the cumulative injustice increases. In this last case, since there is no unequal social relationship that creates the unjust outcome I think it is contrary to common usage to call the outcome "exploitative," but it is unfair nonetheless.

What happens in a participatory economy?

In a participatory economy any increase in the capital stock during a year—which is the result of the investment plan—is added to society's stock of productive capital for the following year. And once it is there it belongs no more to one group of workers than to another. Every year all worker councils "propose" which parts of society's capital stock they
wish to use, and the decision regarding who finally gets to use what is made when worker and consumer councils approve proposals. Ultimately, one worker council may well end up with more or better parts of society's capital stock than another. However, (1) this will be because they demonstrated an ability to make better use of it, and (2) they will be "charged" for the extra quantity or quality of capital stock used according to the estimates of the opportunity cost of those inputs as generated by the participatory planning procedure. Any worker council with more or better "capital" will have a higher SC in the denominator of their SB/SC ratio than a worker council with less or worse capital, which will require them to generate a higher SB to warrant being allowed to use it. So the expected value of the SB/SC ratio for a worker council that has more or better capital should be no higher than the expected value of the SB/SC ratio for a worker council with less or worse capital. And therefore differences in quantity and quality of capital used in different worker councils should not generate any differences in consumption rights for people in a participatory economy. This is not true in economies with labor and/or credit markets. It is not even true in economies where everybody is completely self-sufficient and where those who make more sacrifices early on are allowed to keep the extra capital that results as their own to work with in the future—as the models you cite in the ABCs of Political Economy demonstrate.

There can be no increase in society's capital stocks for next year unless society produces investment goods rather than only consumption goods this year. How much, and what kind of investment goods to produce, and therefore how much not to consume, but "save" this year, is decided through the investment planning procedure in a participatory economy. In other words, this means that society's tradeoff between consumption now and in the future is determined by the investment plan.
Every year individual consumers—and federations of consumers—have the choice of whether or not to save, borrow, or consume exactly the amount of income they are allotted in a participatory economy. But every year they do this in the context of whatever amounts of consumption goods will be produced that year. If the investment plan calls for 40% investment this year and only 60% consumption, there will be fewer consumption goods for consumers to bid on than if the investment plan called for only 10% investment leaving 90% for consumption. This means that the higher the rate of investment the higher the indicative prices for consumption goods will be that year. That is the context in which individual consumers are free to decide if they want to save or borrow in any given year.

What about interest? Should consumers who save be paid a rate of interest and consumers who borrow be charged a rate of interest? And if so, what should this rate of interest be? Notice that whatever rate of interest is chosen can have no effect on the division of production between investment goods and consumption goods since that is determined by the investment planning process. So all that the rate of interest does is re-distribute income among consumers. Society does not require a high rate of interest to stimulate investment. The simple choice is to make the rate of interest zero. In this case the answer to your question is that nobody could increase their consumption rights over time by saving—saving is simple deferral. However, one could also make an argument for setting the rate of interest equal to the expected rate of increase in overall economic well-being per capita. In this case an individual could increase her total consumption rights by using less of them early in life since saving earns deferral plus interest. However, this in no way increases her expected income in future years since that is determined every year according to whatever sacrifices or effort she makes when working. In sum, even if a frugal Calvinist saved a great deal of her consumption rights during the first 20 years of her
work life, and even if her savings were not merely deferred but were paid a rate of interest, and therefore grew "exponentially," all she would be able to do is consume more in her later years. I suppose she could also retire earlier than others. If those who borrowed early in life were charged interest it would simply reduce the amount they could consume later in life more than it would have had the rate of interest been zero.

**Shalom:** When a particular workplace is inefficient and must be disbanded, you say (p. 110) that the annual production plan provides for full employment, so there will be jobs for these workers in more successful worker councils. You add that "their expected income working elsewhere should be as high, or higher than it was in the council that was disbanded." I don't understand this. If they're working at the same effort level as they were before, why won't their incomes always be exactly the same?

**Hahnel:** Because a participatory economy is a planned economy there will be jobs for everyone in the workforce in the annual plan every year. That is something no market economy can guarantee. That was what I meant when I said that there would always be new jobs for any workers who lose their jobs. If the participatory economy chooses to stipulate that the average effort rating in all worker councils must be the same, then you are correct that everyone's expected income remains the same when they move from one worker council to another. On the other hand, if the participatory economy decides to set the average effort rating in a worker council equal to the council's SB/SC ratio, then workers' expected income is equal to the council's SB/SC ratio. The planning procedure will generally shift resources—in this case workers—from workplaces with lower SB/SC ratios to ones with higher ratios. This is what I meant when I said that laid off workers might even expect their incomes to rise from their change in employment.

**Shalom:** You say (p. 111): "In a participatory economy new
worker councils bid for the resources they need to get started in the participatory planning process. If they submit a proposal that is accepted, they're good to go. Otherwise not. Is there any preference given to existing worker councils? That is, if the demand for widgets is being precisely met and a new worker council proposes to make widgets (more efficiently, they claim), will their proposal be accepted, replacing an existing worker council? Imagine if every worker in the US today were under constant threat of being replaced by a marginally more effective worker. Fear of disruption and sabotage might prevent this, but in a participatory economy shouldn't there be a certain deference paid to continuity?

Hahnel: These are matters that people living and working in a participatory economy would have to decide for themselves. After all, whatever any of us write about these choices today is nothing more than a recommendation based on some argument. You have presented the case for a preference for existing worker councils over new entrants. On the other hand, discriminating against new entrants too severely, even if it means that some existing worker councils must shed employees, or be shut down altogether, could be a recipe for discouraging productive innovation. In chapter 15 practical issues regarding the birth and death of worker councils are briefly discussed. I argued there that industry federations who monitor changes in industry production would have to review applications from new groups of workers who want to enter an industry to make sure that they are "credible" in any case. That would be the appropriate place for applying "scrutiny."

Shalom: When discussing the challenges of doing long-term investment and development planning, you point out the problem of not having accurate data on opportunity and social costs for the future. In a footnote you comment that:

"This is not a problem unique to participatory planning. Authoritarian planning and market systems face the same
But how do you reply to the following pro-market argument? In a market system, no one knows the future and therefore everyone just has to make guesses. But the system rewards those who make the best guesses over time, so the system selects for good guessers, making them the ones most likely to make guesses in the future. Apple has gotten amazingly rich making good guesses. So the market has enabled them (rather than, say, the maker of the Edsel) to make future guesses.

Hahnel: I was referring to a particular area—investment and long-term development planning—where there was a particular problem: estimates of social rates of return will involve more guesswork than estimating opportunity costs during participatory annual planning. But in this situation why can't WE, THE PEOPLE, when WE engage in OUR long-term investment and development planning, keep track of who among the experts who advise us regarding estimates of social rates of return prove to be more prescient and who prove to be less so? And why can't WE take their track records into account when we evaluate their opinions? I know the present system rewards failure at high levels with promotions more often than not, but WE needn't do so.

More generally, your question has to do with the proper role for expertise and whether ordinary people can make wise decisions, or whether we are better off allowing some "superior" elite to make our decisions for us. I argue in chapter 11 that there is a role for expertise in a participatory economy. But that role is to advise about the predictable consequences of different choices when those dilemma but in effect, simply pretend the problem does not exist. Nobody knows what future costs and prices will be. So people look at present costs and prices, and make adjustments using more or less complicated forecasting methodologies. But in the end these are simply more or less accurate guesses." [p. 116n1]
predictions are complicated and require expertise we cannot all have. Once WE have heard expert opinion—including dissenting opinions among experts—I believe WE, THE PEOPLE, not only have the right to make our own decisions, but WE are the best "experts" to judge how WE feel about the consequences experts can help us estimate.

Besides, as you point out, in capitalism there have been Edsels as well as Apples. In other words, we can look at the track record of the captains of industry—and more importantly the admirals of finance these days—and ask how well they have done making decisions for us. I think more and more of us are realizing that the track record of our ruling capitalist elites is checkered, to say the least. Have the Wizards of Wall Street channeled the savings of the world into investments that make our economies more productive and sustainable, or instead steered savings into one destructive asset bubble after another over the past 30 years?

Shalom: In discussing who is affected by some environmental pollutant, your examples (pp. 124-26) are essentially concentric circles. When just the innermost circle, Ward 2 of Washington DC, is affected, you say let the Ward 2 council consider the cost-benefit trade-offs. If the next circle, all of Washington DC, is affected, then you say let the Washington DC council consider the trade-offs. And if it's the next circle, the entire Chesapeake Bay watershed region, that is affected, then you say let the Chesapeake Bay council decide. But what if the pollution affects just Ward 2 and Ward 3? There's no separate federation for those two wards alone. But if the Washington DC council makes the decision, most of those voting are not affected. In other words, the impact of a pollutant need not coincide with the boundaries of a federation. So doesn't it seem that some means is needed for allowing two ward-level councils to make a decision that does not affect all the other wards (and not just for environmental issues)?
Hahnel: You are correct. In an article under review at the Eastern Economic Journal, "Wanted: A Pollution Damage Revealing Mechanism," I treat this issue at greater length. There I argue that it will be necessary to determine what I call the "community of affected parties" (CAP) for different pollutants. I explain why these CAPs may not always coincide with neighborhood consumer councils and federations, which is inconvenient. And I point out that we should not expect the definition of CAPs to always be easy. Which of many possible concentric circles is the most appropriate for each pollutant may be contentious for exactly the reason you point out. I conclude:

"Since membership in a CAP entitles one to extra consumption rights people might well claim to be adversely affected and deserve membership in a CAP even though they are not. This means the process of defining CAPs—deciding who should, and who should not be included—must be carefully monitored. It might even be necessary to create a formal 'judicial' system for settling disputes over membership in CAPs. Presumably expert testimony of scientists and medical personnel would be relevant, along with testimony on the part of individuals petitioning for membership, as well as testimony from current members contesting their claims."

Shalom: Apart from the concentric circle issue, the procedures you describe for dealing with environmental questions seem to have a further problem. You seem to assume (pp. 124-26) that everyone is either affected by a pollutant or not, but no consideration is given to different degrees of being affected. So if a pollutant affects only Ward 2, they decide alone. But if there's the slightest effect as well on other Washington DC wards, then all the wards together get to decide even though residents of Ward 2 are overwhelmingly more affected. Moreover, the residents of the other wards who are just barely affected have an incentive to allow the pollution (since they get a boost in their consumption allowance, the same boost as
the folks in Ward 2 who are gravely affected).

Hahnel: Again, you are correct. However, in this case it turns out there are better remedies: Again, quoting at greater length from the same article:

"Even after membership is settled, might there not be a perverse incentive for members of a CAP to exaggerate the degree to which they are adversely affected by a pollutant? This depends on how CAPs decide to distribute their extra consumption rights among members. If extra consumption takes the form of more collective consumption of some kind by CAP members there is no incentive for individual members to exaggerate damages. Or, if extra individual consumption rights are distributed equally to all members of a CAP, there is no incentive for anyone to exaggerate damages. Only if a CAP tried to distribute more individual consumption rights to members who were presumed to be more adversely affected is it possible that individuals would seek to take advantage by exaggerating their damages. Conventional wisdom in public economics long held that there was no way around this perverse incentive to 'report untruthfully.' However, path breaking work by Clark, Groves, Ledyard and others in the 1970s revealed that, surprisingly, this turns out not to be the case. The key is to break the link between an individual's reported damage and how much she receives by using a formula to assign compensation based not on her own declared damages, but instead on the damages reported by others in the CAP. For example, an individual's payment could be set equal to the average payment minus the sum total damages reported by all others in the CAP. In this way: (1) An individual cannot affect the size of her own payment by her own reported damages because her reported damages do not appear in the formula for calculating her compensation. (2) By misreporting damages an individual would only cause the total amount of emissions to deviate farther from what she would truly prefer. (3) Yet an individual reporting more
damages than others would receive a higher payment since what is subtracted for her is lower than what is subtracted for others since what is subtracted for others includes her higher damages; while an individual reporting less damages than others would receive a lower payment since what is subtracted in her case is higher than what is subtracted for others since what is subtracted for others includes her lower damages. In any case, a CAP that wished to award more consumption rights to members who are more damaged could avoid creating perverse incentive to exaggerate claims by using any of a half dozen incentive compatible mechanisms now available.

**Shalom:** You say (p. 127) that councils and federations have incentives to truthfully reveal the extent to which they are damaged by pollution. By why isn't there an incentive to overstate pollution damage? When you know others want to pollute because they will benefit from it, it is in your interest to exaggerate the degree to which you are harmed by the pollution because you will be compensated for it.

**Hahnel:** Again, you have a point. It turns out that if CAPs have enough information about the demand for permission to pollute and if CAPs behave strategically we may end up with sub-optimal levels of pollution. But while economists are likely to rue this "inefficiency" environmentalists may well feel otherwise! Again, quoting from the same article:

"If both enterprises asking for rights to emit pollutants and communities of affected parties granting emission rights behave as 'price takers' in the participatory planning procedure—as all worker and consumer councils, federations, and CAPs are directed to do when submitting proposals during the participatory planning process—neither will misrepresent how they are affected by emissions and the procedure will settle on the efficient level of emissions. So the issue reduces to whether or not either polluters or CAPs are likely
to violate the directive to treat indicative prices quoted during a round of the planning procedure as 'parametric,' and if so, what the consequences would be. In most cases there will be many different enterprises asking to emit a pollutant in an area, none of which is likely to have information about how much the members of the CAP supplying the emission rights are truly affected. So not only would polluters lack information about the supply curve for emission rights necessary for strategic maneuvering, their status as one among many seeking emission rights would prevent them from taking advantage of any such information even if they had it, unless they were able to form a 'polluters cartel.' On the other hand, in a participatory economy there is a single supplier of emission rights for any pollutant—the community of affected parties. If a CAP knew what the aggregate demand curve for emission rights looked like, instead of treating the indicative price quoted by the IFB as a given it might be tempted to behave like a monopolist in a market where the monopolist knows the market demand curve. In this case the CAP would supply fewer emission rights than are socially optimal to gain what is traditionally called 'monopoly profits,' even though this means the loss of some of what is traditionally called 'producer surplus' due to failure to grant permission to emit additional units for which the CAP would have been paid more than the damage they caused its members. Therefore, if a CAP is willing to ignore the directive to behave as a price taker, and if a CAP knows what the aggregate demand for emission rights looks like, a CAP might restrict emissions below the optimal level. While this would be undesirable, one must admit that at least it would be an interesting new problem to contend with—an economic system with a potential tendency to pollute too little."

**Shalom:** There is a lot of philosophical debate about what we owe to future generations and, as you discuss (pp. 129-31), this is an issue in a participatory economy as in any other.
What do you think about giving extra votes to those with minor children? (Note that when we apportion representation in the United States today, it is based on population—not voting age population—even though the representation is put into the hands only of those of voting age.) Might this be a reasonable approximation to a method for factoring in the concerns of future generations? (Each person would be counted only once, and we would be counting only those actually alive, not the as-yet unborn future generations. In a participatory economy, parents already submit consumption requests for themselves and their children—at least in nuclearish households.) This might also be a neat way to deal with the current problem in some towns, where whenever there's a vote on a school budget, those with school-age kids are more likely to be in favor than are those without, and when the latter are numerous, the school budget is often rejected.

**Hahnel:** While true that those with school age children are often more likely to vote "yes" on school bond referenda than the childless, no political system that I am aware of has decided to give some people more votes than others on this issue. Of course that doesn't mean we should not do so. After all, if we went according to custom very little proposed in the vision of a participatory economy would be done! On the other hand, why not give grandparents more votes as well? Perhaps on environmental issues we should give every person as many votes as they have children, grandchildren, and great grandchildren in grand total—although that would be a lot of votes for some of us who are now closer to the end than the beginning of our own lives. Instead of suggesting giving people a different number of votes what I pointed out is that this potential problem demonstrates that there remains a role for committed environmentalists and environmental organizations in participatory economies, precisely to speak up, like the Lorax, for the interests of future generations and the natural environment itself—shaming their peers should they be tempted to behave selfishly when the living deliberate
democratically. The difference is that in a participatory economy the information that reveals intergenerational injustice is right in front of people when they make long run investment, development, and environmental plans.

I would like to thank you and New Politics for this opportunity to further explore how we can best organize our economic affairs once we have shed the albatross of capitalism that hangs ever more heavily around our necks. In some cases I feel there are very sound answers to questions you pose. In other cases my answers are more tentative. Hopefully, if not us, our children and grandchildren will have the opportunity to find out what does truly work best.

Note

1To be more exact, they are credited for production that is accepted as meeting specification. Consumers who find products faulty return them to consumer federations. If the consumer federation agrees with the consumer it refuses to credit the producer for the delivery. Through its industry federation a worker council can protest this decision if it wishes, leaving the matter to be settled between the industry and consumer federations.