

## When the rise of the robots meets the limits to growth: Will the times actually be as 'newer' as we are being told that they will?

By Rupert Read, Chair of Green House

### *Introduction*

Andy Pearmain's 'Newer times' is a worthy heir to the original (<https://hatfulofhistory.wordpress.com/2013/10/03/i-like-your-old-stuff-better-than-your-new-stuff-marxism-todays-new-times-is-25-years-old/>). Andy's pamphlet is beautifully written; the time for it is right; the argument is compelling. As he says, it is g/Greens who are uniquely well-placed to take advantage of these newer times: of the rise of the robots, not to mention what others see as the rise of 'horizontal networks' and the breaking down of old hierarchies (see <http://www.compassonline.org.uk/publications/new-times/>). Labour is ill-placed to respond to such times, *especially*, as Andy notes, under a Leader like Jeremy Corbyn, who, for all his excellences, and they are many ([http://www.theecologist.org/blogs\\_and\\_comments/commentators/2984532/corbyn\\_is\\_great\\_but\\_the\\_greens\\_are\\_different.html](http://www.theecologist.org/blogs_and_comments/commentators/2984532/corbyn_is_great_but_the_greens_are_different.html)), is 'old Labour'. Above all, these times of (partly machine/robot-induced) precarity call for signature Green Party policies such as 'Citizens Income' (<http://singularityhub.com/2015/03/30/the-growing-precariat-why-a-basic-income-is-needed/>). The leisure society may, thankfully, be at hand; but only policies such as Citizens Income will stop it from being a radically unequal nightmare... A true leisure society only for the 1% - an enforced leisure/workfare/prison society for everyone else.

### *Peak Robot*

BUT; as my title presages, I am yet unconvinced that the times are actually or indeed ever will become as newer as Andy contends they will. For there is a vital and massive constraint, that Andy neglects in his piece, that may well mean that we will be at 'Peak Robot' sooner than one thinks. This constraint is Green House's bread and butter: it is the set of planetary boundaries that are popularly known as 'the limits to growth'. As we here in GH maintain and have detailed (<http://www.greenhousethinktank.org/page.php?pageid=postgrowth>), not only is it the case that economic growth is no longer *necessary* (For: there's enough stuff to go around already, if only we share it out better), it is also no longer *desirable* (For: it isn't making us happier; and it is destroying our collective future, by gradually destroying our planetary home, the ecosphere). What's more, it is only even *possible* now at heavy cost: i.e. it is possible only if one is prepared to create on balance a less desirable future. And before too long, it won't be possible at all (<http://rupertread.uk/next-stage-of-crisis/>).

What this means, in terms of Andy's 'Newer Times' thesis, is potentially profound. For *the 'march of the robots' idea relies tacitly on the assumption that the limits to growth are negotiable*, or indeed non-existent. For example: Andy opens his piece by telling us about Baxter, a robot who can do a load of menial tasks, and costs only £19k. But what does Baxter depend on, in order to be such good value for money? He depends upon a ready supply of metals and plastics. On a ready supply of concentrated energy, permanently. And much more. He will also without any shadow of a doubt produce far more GHG emissions than his blue-collar counterpart, to operate and to remain operable. And when he 'dies', he will need to be fully recyclable - which is a very very big ask, and again will be highly energy-consumptive if it is to be anything-like achieved.

In a world which takes seriously those limits to growth that are constituted by abundances of pollution - and if we do not fairly soon become such a world, then the whole discussion will become academic, as civilisation collapses -, then there will be ever-*rising* constraints on the rise of the robots. And in a world which takes seriously those limits to growth that are constituted by limits on fuel supplies, rare earths, etc etc. - and, while we are not yet in such a world as much as the original Club of Rome projected, the moment of truth here has only be delayed, not overcome - then, again, there will be yet further ever-rising constraints on the rise of robots. Whether one looks at the front or back end of the pipe, the limits to growth will place severe limits on the march of the robots.

If one reads too many sci-fi books, one imagines that it will be centuries or millennia (or never) until 'Peak Robot': One then fantasises, as *Dr. Who* and *Star Trek* and many many more do,

routinely, a cornucopian tech-based future. Or, at worst, a *Battlestar Galactica* style robot-apocalypse... But such scenarios, which have for instance exercised Saint Stephen Hawking recently (<http://www.bbc.co.uk/news/technology-30290540>), are of course premised on assuming, utterly rashly, that the limits to growth can be gainsaid. The clever people spending their time worrying about the robot-apocalypse (<http://www.lrb.co.uk/v37/n18/amia-srinivasan/stop-the-robot-apocalypse>) would be far better employed worrying about more down-to-Earth threats to our common survival - such as human-triggered runaway climate-change, reckless geo-engineering, reckless genetic engineering, and so forth.

If I were forced to bet, I would bet that, on an optimistic scenario for our future, Peak Robot will come within 20 years or so from now at the *most*. For we are already living as if we have more than one planet. How are we going to rein that in in time, and survive (let alone flourish), if we pour more and more resources into producing fragile metal men to replace our shelf-packers and call-handlers? The Club of Rome scenarios suggest that, unless we rein in impacts within a generation or so, then it will be too late to avert a crash (See <http://www.theguardian.com/commentisfree/2014/sep/02/limits-to-growth-was-right-new-research-shows-were-nearing-collapse>). A better, Greener route will of course be to reduce our impact and footprint pro-actively, to live more locally etc., to share more - and then we won't need very many either of shelf-stackers or of robots, and all without causing poverty.

On a pessimistic scenario for our future, I would guess at Peak Robot within 50 years or so (<https://www.rt.com/news/185168-limits-to-growth-updated-models/>). Because by then, if we haven't massively changed our way of life, climate chaos and others of our ongoing or incipient exceedings of planetary boundaries will have become so gross that the complex systems that robotisation relies on will be collapsing.

So, Andy is absolutely right that there are some serious coming challenges to our political economy from robotisation - challenges that, as he says, the Greens are uniquely well-equipped to respond to. But, at the very moment that the 'march of the robots' is forcing us to become aware of and to respond to such challenges, ecology is starting to force us to become aware of more fundamental challenges, that point in quite a different direction from robotisation. If we respond to *those* challenges swiftly enough, then the seemingly unstoppable march of the robots will be over almost before it began... If we don't, then the march will go on maybe a generation longer - and will contribute toward a devastating collapse which will bring the robots down along with everything else.

#### *Conclusion: The ultimate resource*

In the long run, as Herman Daly, the doyen of ecological economics, has shown us in his vital books, human labour is going to be in greater supply than 'raw materials', and than usable (low-entropy) energy. The extraordinary thing about people is, of course, that we are a truly renewable 'resource'.

The real challenge for the future, then, is to use our human ingenuity - what some have called 'the ultimate resource' - to navigate the difficulties presented by this time, a time when something worth calling a leisure society is possible, *if* we are willing to take our power back from the 1%, and ensure that the benefits of what automation is ecologically viable are fairly shared. Though of course it follows from what I have argued here that in any viable society there is always going to be an essential and substantial role for human work - especially once we take seriously that robots are not going to replace us for long without hastening our (and their) collective demise. The leisure society is going to be one in which we aren't working like mad to make more and more money for big corporates. But it isn't going to be a society in which we are lie around being served by robots. It is going to involve us doing a great deal of what we want to be doing: including such things as growing food.

My Green House colleague Molly Scott Cato and I have a favourite quote, from John Ruskin: "There is no wealth but life". In the long run, the amazing capacity of human and non-human life to organise ecological webs of activity with relatively low entropy and - potentially - with high well-being, is going largely to trump the novel fad that is robotisation.

Unless we fall fully afoul of the limits to growth. In which case, we'll all be trumped.