

## Lucas revisited

*Phil Asquith*

*In the 1970s, Phil Asquith was a research engineer at Lucas Aerospace's plant in Burnley, Lancashire. He worked closely with Mike Cooley and others in formulating the alternative Corporate Plan of the Lucas Aerospace Combine Shop Stewards' Committee. This prioritised socially useful production, as Phil explained during a public discussion entitled 'Architect or Bee?' at Nottingham Contemporary in April 2016.*

July 2016 marked the 40<sup>th</sup> anniversary of the Open University film about Lucas Aerospace. I have a poster which we drew up in the drawing office at our plant in Burnley, advertising the launch of the Lucas Alternative Plan to our workforce. Last year, when I was approached by Steve Sprung, who's making a two-hour documentary film about the Lucas Plan, relating it to the issues of today, I was completely unaware that 2016 would actually be the 40<sup>th</sup> anniversary of the Plan's launch. That Steve, as an experienced documentary maker, wanted to do this 40 years later, was startling to me. I was touched when he pointed out the number of people from different interested organisations who were making plans for events and a big conference this year to celebrate the 40<sup>th</sup> anniversary. It's the first time I've spoken on this subject for years.

Steve pointed out that the issues raised in the Plan, particularly those around the use and abuse of technology and the structure of work, are perhaps more relevant today than they were in 1975, although they were big issues then. I've been asked to say a little about the Plan, but also to focus on a couple of issues, one briefly on socially useful production, but then on work organisation and how work was changing in the 1970s, because that really fits under the umbrella of *Architect or Bee?*

The Plan focused on three objectives. The first was, naturally, to save jobs. The second was to save jobs by the production of socially useful products. And the third, which perhaps is less well known, was about job redesign, and the way technology was being used to fragment and deskill the

design and production process.

What is a socially useful product? During discussions in the Lucas Aerospace Combine Committee [which brought together trade union representatives from the company's 17 plants around the UK] and on site in Burnley in the early 1970s, on what we might make if weapons were cancelled, it wasn't a great leap of imagination to work out '*if we don't make things that kill people, perhaps we ought to start making things that would actually enhance people's lives rather than detract from them, or even take their lives altogether*'. This is what many of our products did. Examples of socially useful products include the hybrid power-pack – I have the Lucas Aerospace directors' reply to the alternative corporate plan, essentially saying there was no future for hybrid vehicle technology. Another example of socially useful products was cheap heating systems. Thousands of pensioners, old people, die each year because they cannot afford to run the heating; it's either heating or eating. So our society had a contradiction where you had thousands of engineers on the dole whose skills weren't being utilised, when they could be used to meet the unmet needs of society. This could be done by heat pumps, which were in the Alternative Plan. It could be done by wind generators – since we made jet aircraft generators at Lucas, one small step would turn those into wind generators. Or these unmet needs could be met by solar technology – again, dismissed by the directors as having no future.

Perhaps the most obvious socially useful product is medical equipment. Mike Cooley makes a very good point which resonates most with people, and that is the political definition of profit. Lucas said to us that aircraft components were profitable; that kidney machines weren't profitable for them. Both paid for by the government, both financed by you and me, the taxpayer. This was a purely political definition of profit that we've been challenging ever since.

In some related work, we actually defined a socially useful product in these terms: that it must not waste energy and raw materials, neither in its manufacture nor its use; the product must be capable of being produced in a labour-intensive manner so as not to give rise to structural unemployment; and the product must lend itself to organisational forms within production that are non-alienating and without authoritarian giving of orders. Instead, the work should be organised so as to link practical and theoretical tasks and to allow for human creativity and enthusiasm. The last point was a direct challenge to the principle of scientific management. The father of that particular concept was Frederick Winslow Taylor, the inventor of Taylorism, which attempts to reduce the worker to a blind,

unthinking appendage to the machine or to the process. To quote Taylor, going back as far as 1945,

‘The workman’ – it’s a man, you notice – ‘is told minutely what he is to do, and how he is to do it, and any improvement he makes upon the orders given to him is fatal to success.’

This is what started coming through, the theory of scientific management, into the production processes in the 1950s, 60s, and definitely in the 70s. It was supplemented by a man called Robert Boguslaw in the 60s in a publication called *The New Utopians*, which gave a very revealing view of the designers of the production design systems that were being foisted upon workers in the industry. He said:

‘What we need is an inventory of the manner in which human behaviour can be controlled, and a description of some of the instruments which will help us achieve that control. If this provides us with sufficient handles on human materials, so that we can think of them as metal parts, electrical power or chemical reactions, then we have succeeded in placing human material on the same footing as any other material, and can begin to proceed with our problem of systems design.’

He goes on to say:

‘There are, however, many disadvantages in the use of these human operating units. They are somewhat fragile, subject to fatigue, obsolescence, disease and even death. They are frequently stupid, unreliable and limited in memory capacity. But beyond all this, they sometimes seek to design their own circuitry. This in a material is unforgiveable, and any system utilising them must devise appropriate safeguards.’

So, according to Boguslaw, that which is most precious in human beings – the ability to think and design their own circuitry – is something that should be suppressed. We thought that was a joke until one of our colleagues checked the actual publication. This thinking was applied throughout the 60s and 70s and so on, and it gave rise to what we refer to as structural unemployment: that is, jobs that were designed out of the production and design process, so that our employment was no longer cyclical as trade cycles would wax and wane – there was a gradual rise in structural unemployment, jobs that would go away and never come back. And that impacted on us in Lucas, where they were trying to replace human intelligence with machine intelligence. This was anathema to skilled workers; and then white-collar workers found that they were having their own medicine applied to them, in that they used to design

systems to speed up people on the production lines, and they were having the same treatment applied to white-collar professions, some of which explains the growth of white-collar trade unionism in the 1970s.

There was a *cause célèbre* at the Marston Green factory of Lucas Aerospace where a new computing system was bought for computer-aided design/manufacture. Like all computers, it was housed in a temperature and humidity-controlled environment whilst the draughtsmen actually had to work in draughts, in this cold, damp building. They threatened to strike for parity with the machines, and they won eventually.

I do have the original plan. It's a tattered, torn, duplicated thing. We proposed job redesign, an employee development programme, more traditional apprenticeships (because apprentices were actually being sacked at the end of their time), employing more women in technologies, and extending the skills and abilities of the workforce – particularly skills transference from the older workers to the younger workers.

Related to these developments, other things were going on in different parts of the world. Some examples: in 1972, the Union of Automotive Workers at Chrysler demanded talks on how to humanise assembly jobs and make that part of the collective bargaining process. As early as 1970, the same Union demanded talks on the elimination of pollution from car exhausts that they built, and of the plant's pollution, again in the collective bargaining process. That was an early example of people working in industry recognising their dual role, not just as producers but also as consumers of the products which their colleagues manufactured.

The Plan met with absolute hostility from the establishment. Mike Cooley put his finger on it: what they were reacting against was the Combine Committee working, in their eyes, outside the official structure. As part of research in the 1970s, we looked how many struggles the Confederation of Shipbuilding and Engineering Unions had won on plant closures within the preceding 20 years, and the answer was 'none'. So one of the real issues around the hostility was that here was an effective body that could take industrial action overnight, when they wanted to, but they were not prepared to work to the lowest common denominator imposed by the byzantine structure of the British trade union movement. In summary, and following on from that, the Lucas Corporate Plan says exactly this:

'Thus the question is a political one whether we like it or not. Perhaps the most significant feature of the Corporate Plan is that trade unionists are attempting to transcend the narrow economism which has characterised trade union activity in the past and extend our demands to the extent of questioning the products on which we work, and the way in which we work upon them. The

questioning of basic assumptions about what we should be producing, and how it should be produced, is the one that is likely to grow in momentum.'

That summed up most of the aspects of the Lucas Corporate Plan. Mindful that we're working under the *Architect or Bee?* heading, I'd like to read you the last paragraph of my 1980 signed version, which says:

'The alternatives are stark. Either we will have a future in which human beings are reduced to a sort of beelike behaviour, reacting to the systems and equipment specified for them, or we will have a future in which masses of people, conscious of their skills and abilities in both a political and technical sense, decide that they are going to be the architects of a new form of technological development which will enhance human creativity, and mean more freedom of choice and expression rather than less. The truth is, we shall have to make the profound political decision as to whether we intend to act as architects or behave like bees.'

*Transcribed by Nicole Morris.*

*Video of the event is available at:*

<http://www.nottinghamcontemporary.org/event/architect-or-bee>

