

The Milroy Lecture

Secure, healthy, inclusive and green – four dividends of a healthier future

Professor John Middleton

It is a great pleasure and a great honour to be here. It is humbling and inspiring to see the list of people who have given this lecture in the past. My friends, my colleagues and my heroes of the public health, people like Sir Michael Marmot and Sian Griffiths, Richard Lilford, Martin McKee and I'd like to say a particular thank you to John Ashton who gave me the encouragement and the support to be here making this presentation today.

The Faculty of Public Health is one of your faculties, we share parents with the Royal Colleges of Edinburgh and Glasgow and we are a membership organisation, we have about 4000 people who are part of the Faculty of Public Health. We have a growing number of categories of student, associate members, honorary and international members and if you are interested in the kind of things I am going to talk about then we'd very much like you to join us. Our aim is to improve and protect the health of the public and we do that through maintaining standards, training, developing the workforce and through advocacy.

Introduction- 'Medicine is politics'

Dr Milroy gave this endowed lecture to promote the advancement of medical science along with the interests of philanthropic benevolence and of social welfare. (1) I would give in my opening remarks a kind of health warning or a perhaps a politics warning; this is big politics that I'm going to be talking about today. It's not party political. It's not red, it's not blue. It's not east, it's not west, but it will certainly be a bit green, I hope as we go through.

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Dr Milroy understood fully the pressures of unsanitary conditions and unwholesome living and he had particular concerns for the public's hygiene in 1886. He wanted to see an amelioration of the food that was supplied to the working classes. He wanted an internal improvement of their dwellings. He wanted to amend their habits and personal domestic cleanliness and temperance and coupled with that the drainage of malarial lands near to their habitations. And he wasn't talking the disease '*malaria*' at the time, he was talking '*bad air*'; we can all see how topical that is to this present day.

Public health has been defined in similar ways to the definition American Public health hero Winslow used in 1927. It was adopted by the WHO in 1948 and used by Acheson and by the Faculty of Public Health ever since. It is: "the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society". (2) Public Health isn't just about doctors, it isn't just about health services, it is about the *organised efforts of society*. One of Milroy's contemporaries, Rudolph Virchow was a great politician in Berlin; he was also a brilliant pathologist and physician. He described medicine as a social science, and famously said that 'politics was nothing else but medicine on a large scale'. (3)

" Medicine is a social science and politics is nothing else but medicine on a large scale.

Rudolf Virchow



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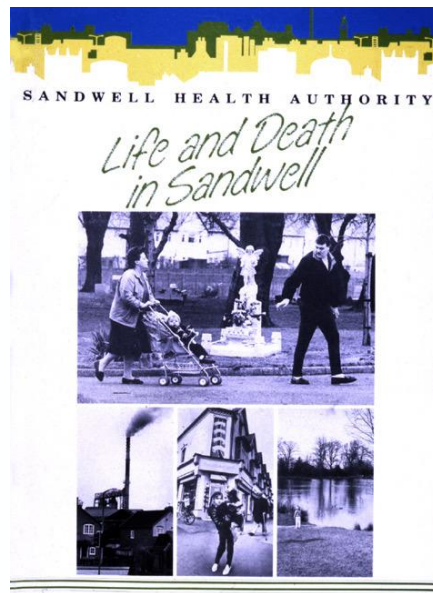
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Somewhat more humbly perhaps in my first annual report for Sandwell I said: *“it’s not who your doctor is, it’s who you vote for that most affects your health”*. And the next sentence was: *‘Your doctor may be able to treat some illnesses and prevent others but cannot alter the major factors influencing health.’*

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***it's not who your
doctor is, it's who
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Four pointers to national and global public health

In the big world of the current politics, I will use just four examples to describe the state of the health of the world - starting with one on the health of the UK.

Austerity

We are in a period of considerable and lengthy austerity and we are acutely aware of the huge inequalities and the widening inequalities in health that we’ve seen in the

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UK growing in the last 8 years. Michael Marmot writing in the BMJ just a couple of weeks ago said that we should be concerned about the levelling off of life expectancy in the UK and the differential effect of that in different parts of the country and across different social classes. Even if it wasn't all attributable to austerity, there was an urgent need to act to look at the causes of those inequalities in health and to address the poverty of health, the poverty of the NHS and the severe cuts to social care support. (5) We've seen a growth of things we'd never have imagined in the post Second World War welfare state of the UK; food banks, children collapsing in school through hunger (6) and a million young unemployed people who are perhaps the next health crisis in about 20- or 30-years' time.

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Views And Reviews

The UK's current health problems should be treated with urgency

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- [Article](#)
- [Commentary](#)
- [Editorial](#)
- [Response](#)
- [Case report](#)
- [Image](#)

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Health inequalities, the slow-down in life expectancy, and the north-south divide all need tackling

Alarm about the nation's health is a rational response to recent evidence. Current national health problems should be treated with as much urgency as a winter bad crisis in the NHS. The recent evidence has three components that are a probably linked improvement in life expectancy, going on for 100 years, has slowed since 2010; health inequalities, which probably reduced during the 2000s, have grown again since about 2012; and the persistent north-south divide in health—particularly marked among younger people.

Life expectancy

Between 1920 and 2010, life expectancy increased from 55 to 78 in men, and from 58 to 82 in women. We simply got much healthier as a society, remarkably quickly. Over this period, life expectancy increased by about one year every four years. To see how remarkable that is, think that if you rose at 6 in the morning, by noon you still have as long to live as you did when you woke—six hours every 24 hours. That is wise, however, a marked slowing of the rise after 2010. From 2011 to 2016 life expectancy increased by about one year for every 6.5 years in men and one year for 10 in women.



Global burden of disease 2017

The global burden of disease study is a major enterprise looking at health across countries in the world. In the most recent report, they report a favourable picture. (7)

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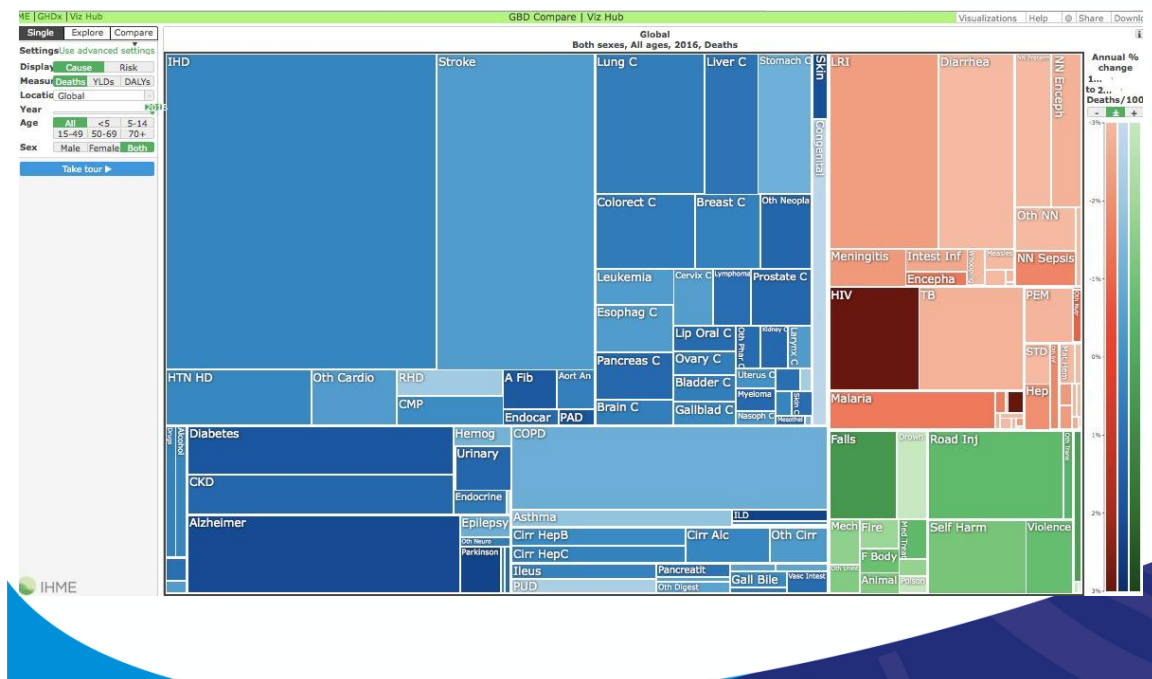
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People are living longer, there are fewer deaths, fewer years of life with disability and a large proportion of that has come about through improvements to new-born babies and reduction on deaths in the under 5s. We are also seeing inequalities within countries, across countries and that benefit of health improvement is not being shared across the world.

A *table diagram* from the Global Burden of Disease study is all you need to describe what people are dying from, or living disabled, or shortened lives with. The major burden of disease in the world is non-communicable, in rich and poor worlds alike, more than 60% of deaths are from non-communicable disease.

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The causes of death and disability that are increasing according to the global burden of disease study are violence, obesity-related disease, mental health problems including dementia and diabetes. Not every improvement is happening equally; there are major inequalities and challenges still to be addressed. (7)

Rockefeller-Lancet Commission on Planetary Health 2015

The Rockefeller Lancet commission on planetary health described the improvements that we've seen in human health and life expectancy and a reduction in poverty. (8) This has been at the expense of the health of the planet: in every indicator, we are greatly abusing the resources of the planet. Our energy use is going up, water use is going up, domesticated land is increasing; fertiliser use, marine fish exploitation, tropical forest loss are all getting worse and we are also in extreme water shortage in some parts of the world. Acidification of the ocean is getting worse, CO₂ change in the atmosphere, temperature change in the atmosphere and perhaps the single the biggest loss is our loss of biodiversity, loss of pollinators on which we depend for the great bread baskets of the world and for the maintenance of our existence.

Interconnectedness of problems of health, environment, economics, and conflict

With the planetary health commission and in many other ways, people are seeing the interconnectedness of our health, our dependence on the environment, and the relationship between adverse economic, environmental, and social conditions across the planet. (9) If we just take this example of the Syrian war, there is evidence that climate change has reduced the available arable land in the Middle East; crop failure led to the bread shortages in the Middle East, the food riots, the Arab spring and then the Syrian war. Mass migration then arose leading to the rise of right-wing

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politics in Europe. (10) All these things are interrelated, interconnected problems in ways we as a health community must face.

So that was my very rapid tour of global health and UK health.

A life in local public health

I'll take us back a little bit in my story now to my time as a Director of Public Health in the West Midlands of the UK, in a small area called Sandwell, to the left of Birmingham in many ways. It is an area of high deprivation, a multi-cultural community and 6 very distinct towns. (11)

In case we think there has been no progress in public health here is a picture of me, exhorting Sandwell parents to get their children immunised against measles in 1987.

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We had 2000 cases of measles in 1987, 20,000 probably taking account of non-notification and we had a death of a child in one of our hospitals. Now, just in the last few weeks, WHO have declared UK free of measles by their definition of in-country transmission, so this is a major benefit and a major improvement for the public health.

In heart disease, we've seen a massive improvement in heart disease mortality, across the world, and in this country. Sandwell was traditionally much higher than the national rates. Your former College Registrar, Dr Patrick Cadigan was one of Sandwell's cardiology heroes, part of the enterprise to reduce coronary disease across the board, whether it was in prevention, in smoking control, in healthy

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nutrition, and indeed, in clinical intervention and rehabilitation. By 2014, we had also seen a massive reduction in our teenage pregnancy rates. (12)

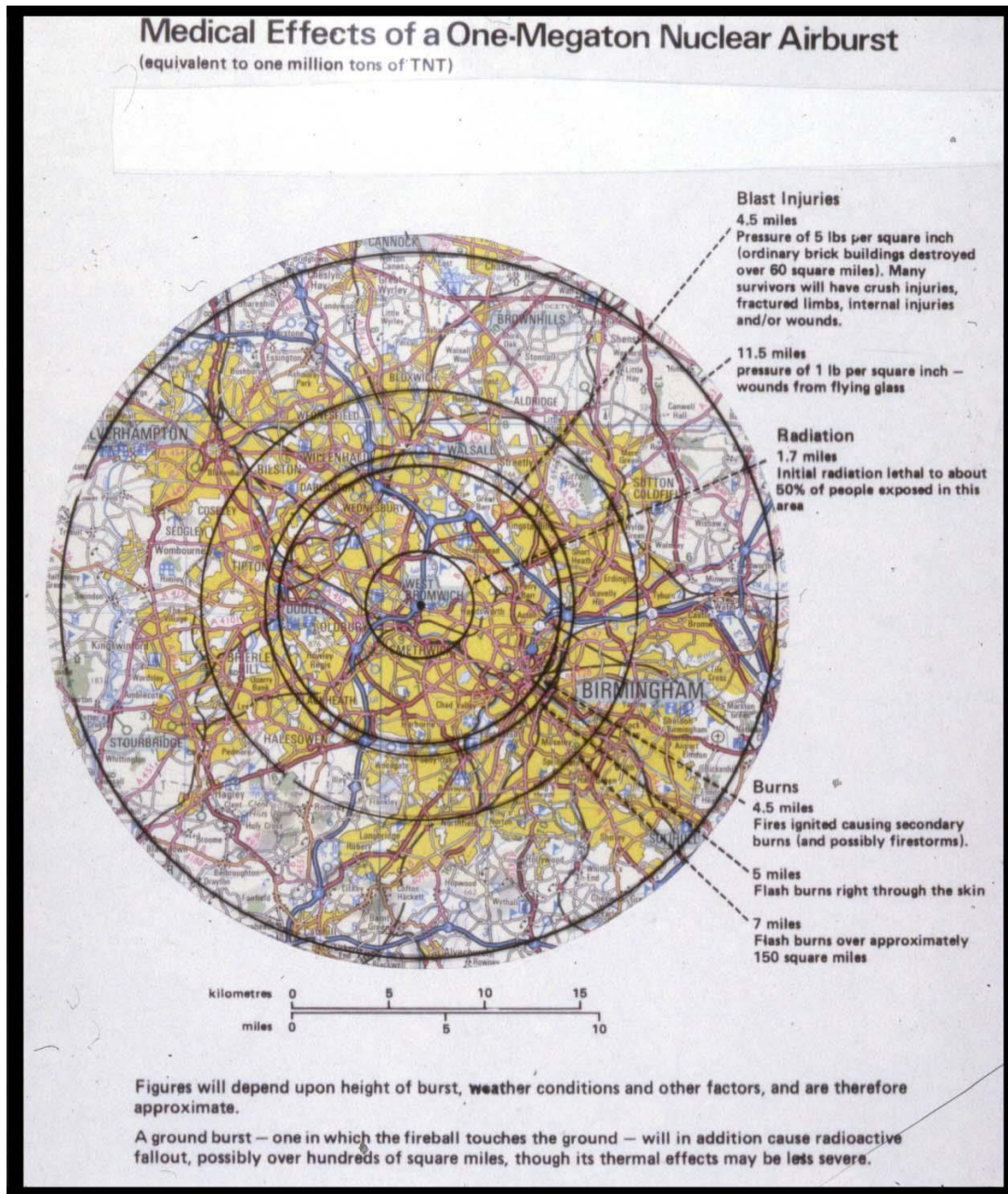
Four dividends: the peace dividend

In my first annual report I reported on the environmental legacy of Sandwell and its relation to poor health. (4,11) When I arrived there, I was confronted with 21 foundries, 88 scrap yards, a major open cast coal site and over 120 high rise blocks. Also in my annual report for 1989, I did a chapter on violence in all its manifestations- child abuse, domestic abuse, alcohol-related violence, community violence and being in the height of the cold war, it was still highly relevant to talk about global threat. I published a graphic of the medical effects of a nuclear attack on West Bromwich. Some people at the time thought it might look better in fact. (4)

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At that time, across the world, medical organisations were involved in bringing to the attention of the public the extraordinary and catastrophic effects of what nuclear weapons might do. (13)

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In 1985, the International Physicians for the Prevention of Nuclear War, IPPNW, and their UK affiliate, the Medical Campaign Against Nuclear Weapons started to get into a public debate about what funds were invested by government in health, or in war.

(14) A big demonstration outside St Thomas' became part of the *Trident or Health* campaign (15). Issues of opportunity cost of where governments put their money became important; the WHO enshrined this in Article 10 of the Alma Ata declaration about releasing funds used for the military to improve and increase primary care:

‘An acceptable level of health for all the people of the world by the year 2000 can be attained through a fuller and better use of the world's resources, a considerable part of which is now spent on armaments and military conflicts. A genuine policy of independence, peace, détente and disarmament could and should release additional resources that could well be devoted to peaceful aims and in particular to the acceleration of social and economic development of which primary health care, as an essential part, should be allotted its proper share.’ (16)

The UN in 1981 produced the Thorsson report on disarmament and development.

(17) It was a general theme at the time that as this period of intense recession was going on, military expenditure was at a very high peak and military spending was not protecting jobs in military industry. These kinds of arguments are as relevant today.

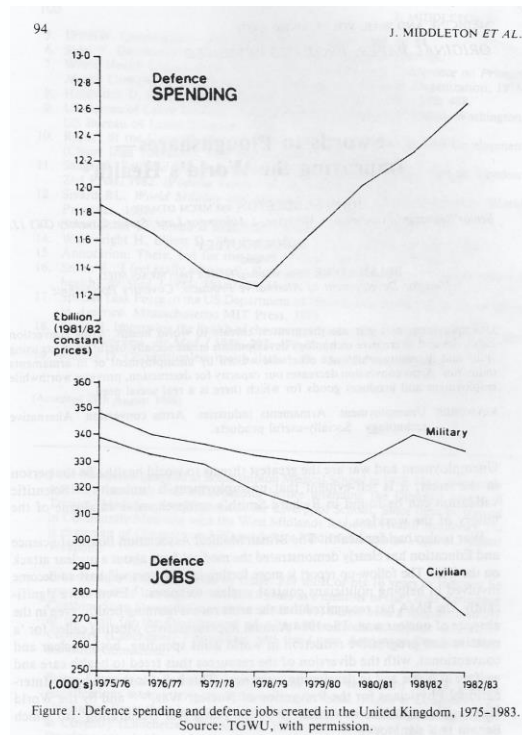
Government investment in health, education, recreation, environment, is a positive multiplier. If you put a pound into health, you get more than a pound back for what you invest, if you put your money into defence, you don't; you get a negative investment, because once those weapons go out of date, you must get new ones.

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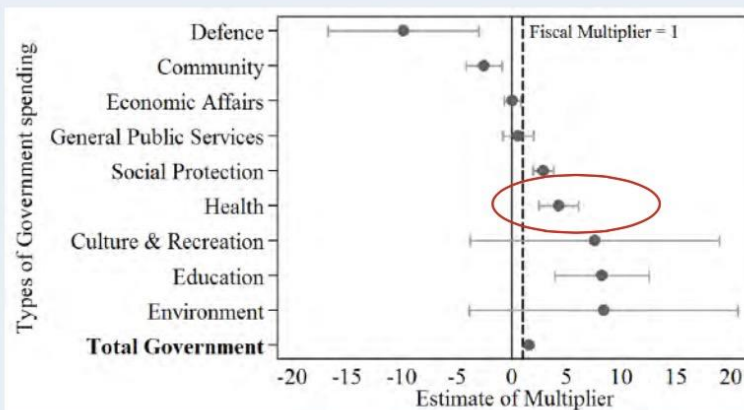
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Fiscal Multipliers



Source: Reeves et al 2013

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This led to the idea of the Peace dividend - the idea represented in the statue in the UN gardens of the *beating of swords to plowshares*.

'The Peace dividend'

[Yevgeny Vuchetich](#) 'Let us beat swords into plowshares' United Nations Art Collection, 1959



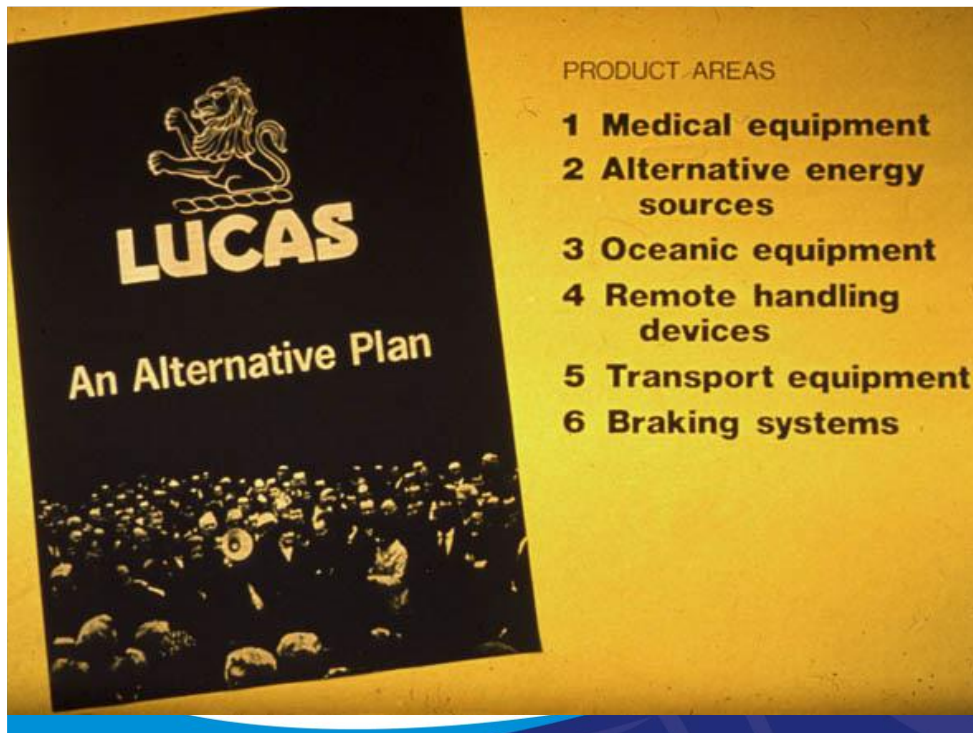
I was very fortunate in 1985, working in Coventry, I met Phil Asquith and John Routley.

They were members of the LUCAS shop stewards combine who had produced the alternative plan in 1976 which was arguing to protect jobs in LUCAS aerospace but divert those to a peaceful and socially useful purposes. (18) They showed how products in medical equipment, alternative energy, oceanics, remote handling devices, transport and braking systems were all possible with the skills and knowledge of the workforce and with the equipment that they had.

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The iconic road-rail bus, a bus that could be run on railways or on streets, a solution perhaps still to some of our problems to this day with public transport.

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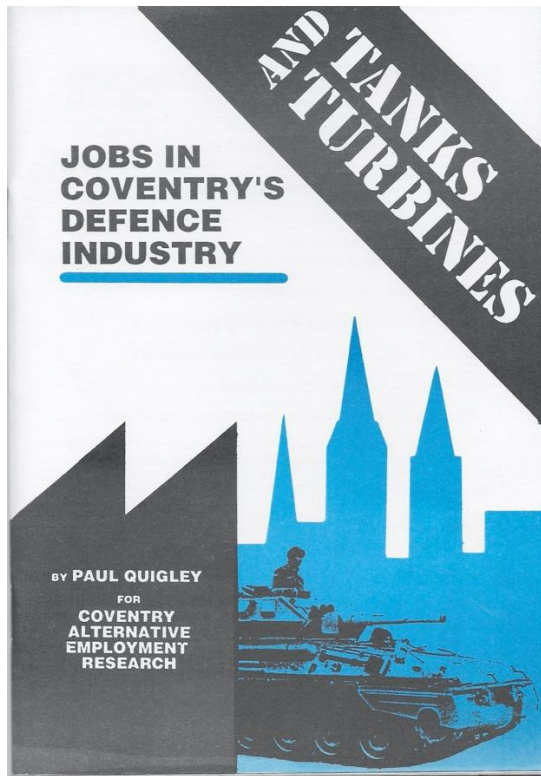


In Coventry we looked at a large number of defence installations and possible alternatives for military production. My colleague Paul Quigley produced the first report for Coventry Alternative Employment Research (CARE), 'Tanks and Turbines'. (19) At the time, GEC, Marconi, Rolls Royce, British Telecom, LUCAS, Dunlop were all working on Ministry of Defence contracts, sadly virtually all of them except Rolls Royce no longer work in Coventry. We argued for investment into peaceful and socially-useful production but it actually didn't happen, we had a case of swords to shopping centres, rather than swords to plowshares. Some of those plants (pics), Rolls Royce, LUCAS and Alvis, in Coventry began as civil production sites, Alvis cars became Alvis armoured vehicles.

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Out of that campaign by the LUCAS shop stewards, other activities took place, a lot of the shop stewards found themselves working in polytechnics or in campaigns to protect jobs. In Sheffield, a lot of emphasis on medical equipment as a skill that military could get into. Electric cars were ubiquitous and kidney machines and aids and adaptations for people with disability were also widespread. (20)

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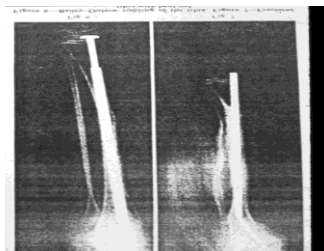
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Royal College
of Physicians



Health and care
related products
from Lucas Shop
stewards supported
projects 1978-1990



By the time of the fall of the Berlin wall, the idea of the peace dividend was generally accepted. Politicians of all colours believed there should be a reinvestment, a move from military to peaceful investment and briefly, that was what we saw; the decline of military investment through the 90s but now it's come back bigger and better, or bigger and worse. The USA accounts for over a third of all that investment and the USA alone covers the same amount as the next 10 countries, so a huge arms race wasn't prevented or reversed through the Obama years. (21) In terms of those opportunity costs, all the investment required for sustainable development goals would not come to more than 60% of what's currently invested in the military. (22)

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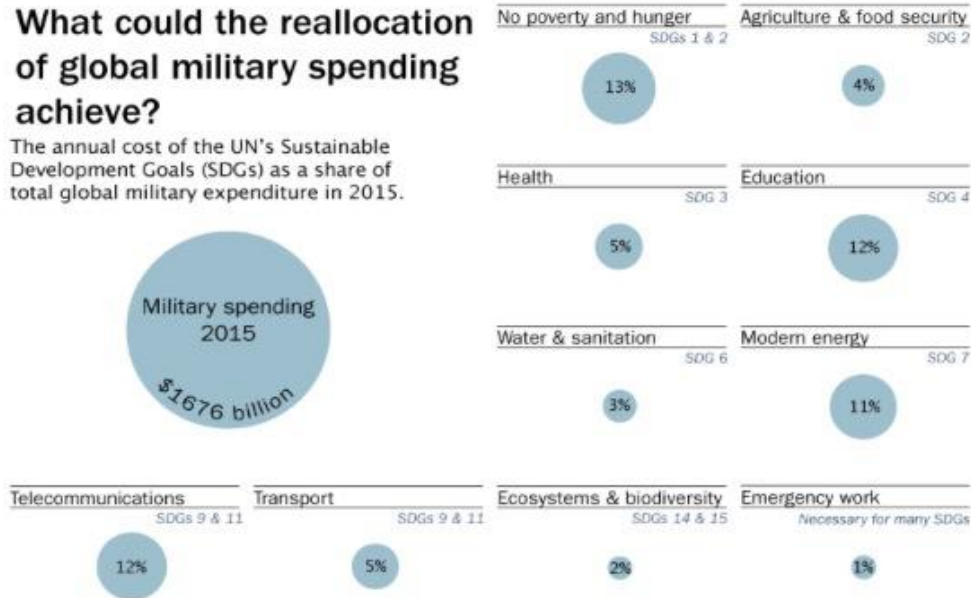
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Opportunity cost

What could the reallocation of global military spending achieve?

The annual cost of the UN's Sustainable Development Goals (SDGs) as a share of total global military expenditure in 2015.



Sources: SIPRI, Sustainable Development Solutions Network and UN Food and Agriculture Organization

www.sipri.org
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The cost of different SDGs as a share of global military expenditure in 2015.

The road-rail technology demonstrated by the Lucas Shop Stewards is in operation in Japan today, and in Germany.



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Recently our government has been revisiting the issues of Trident or health. The new Trident will create jobs of course, but for the £206bn they will be the most expensive jobs ever created. (23)

Four dividends: the health dividend

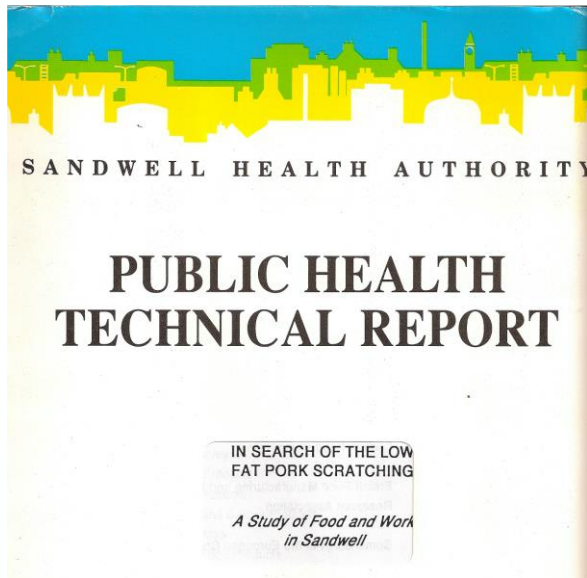
So, armed with the principle of the peace dividend, when I went to Sandwell, we started talking about a *Health Dividend*: what could the food and alcohol industry, tobacco retailers do for health? (24) Couldn't they do something different that might grow a healthier industry? - My first report in this vein was *In search of the low fat pork scratching*. (25) We were investigating the food industry in Sandwell looking at the jobs it created and how it might benefit the local economy. One of the people we interviewed said he would create a low-fat pork scratching if we'd sell it. Food firms at the time encouraged the fatty banger - '*drop the fatty banger*' was the local headline.

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Sandwell Express and
Star, 1st December 1989

That report spawned a whole range of economic activity – not the low-fat pork scratching... but food cooperatives, community agriculture at the Salop Drive site, and now at Barlow Road, and considerable local investment and time and energy going into growing food locally.(26)

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Growing Healthy Communities

A Community Agriculture Strategy for Sandwell 2008 – 2012



"Sandwell as the garden of England is a bit far fetched, but it is not impossible for Sandwell to increase the food we can supply to ourselves."

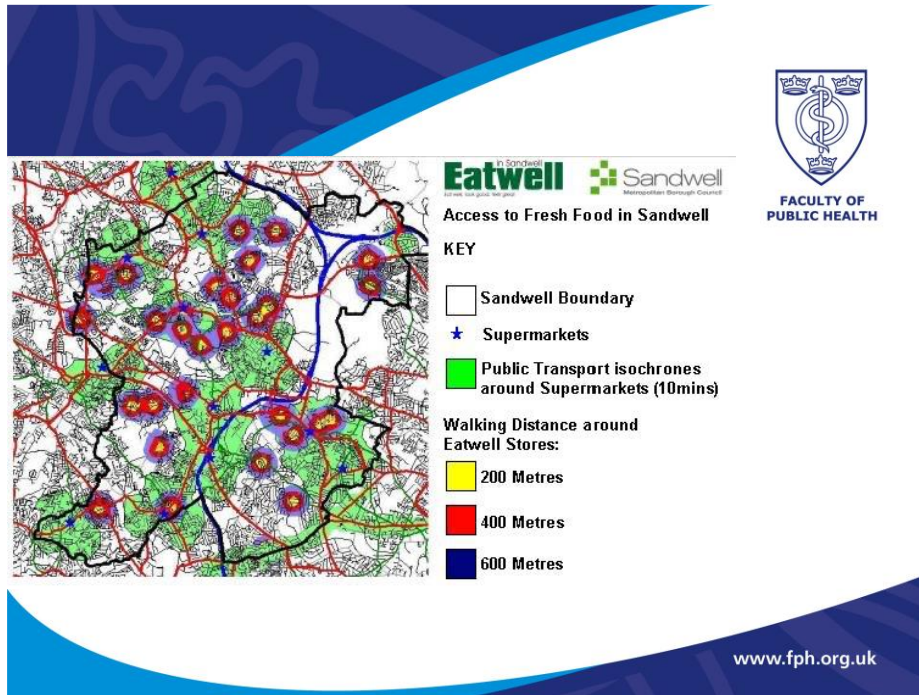
Dr John Middleton, in *Regenerating Health: a challenge or a lottery?* The 8th Annual Report of the Director of Public Health, 1996.

We worked with local retailers to create a map where local people could access fruit and vegetables, the green lines via 10 minutes on a bus, the targets being shops that we worked with so that people only had to walk 5 minutes to get fruit and vegetables. (27)

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And over a succession of plans with economic partners, economic development, we've come to the point where the Black Country Local Economic Plan (LEP) has food as one of its growth areas and is using skills and knowledge from the public health department.

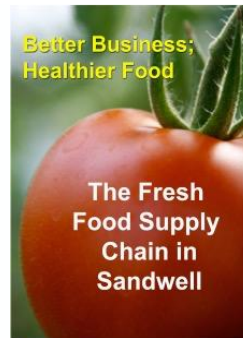
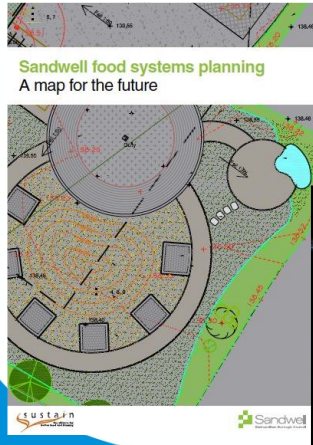
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Sandwell study and strategy for jobs and health in the food industry, including retail :

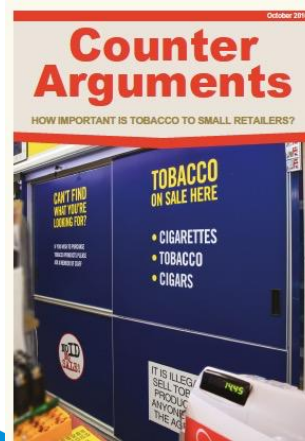
Now adopted by the Black Country Local Economic Partnership (LEP)



In 1990, we published a report '*Curing the tobacco economy*'. We weren't very persuaded by the idea that we needed jobs in tobacco retail and as we did this investigation, sure enough we found that it was a perverse social service. (28)



Curing the Tobacco Economy, Sandwell Health Authority, 1989



Counter arguments Action on Smoking and Health 2016,

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Most of the tobacco retailers had profit margins of only 2%, some went up to 10% but the idea that an industry in which more jobs were being created in local stores and in convenience stores needed tobacco to save their jobs simply wasn't borne out. Much more recently, ASH has done a similar report looking at how the jobs really aren't protected or created selling tobacco at the local level. (29)

We also did the *Good Health?* report on alcohol retail, many of the things that we said in there have –been taken up, but this report pre-dated the drive for more family friendly pubs, for more food being served and a more diverse offer from local pubs and clubs. That was probably the least prominent of the reports on this but never the less, did have an effect. (24)

Four dividends: the Inclusion Dividend

As time went by in 1999, in the Heath Action Zone we were able to explore another dimension of the dividend for better health. It was the *inclusion dividend*. We had funding from the Health Action Zone, for what we called the Agency for health and economic development, 'AHEAD' and we used it to support local businesses who were trying to employ local people in social enterprises. We started Medilink which was an agency to advise and support West Midlands businesses who had ideas for healthcare technology, we had the inclusive design strand and we also looked at alternative models of local economy - the Time banks. (30)

Medilink was established in about 1999, Chris Ramsden was the founder of it and worked for us in the Health Action Zone. In INCLUSIVE design we described 5 principles: that technology should serve people, not people serving technology;

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disabled people have been made disabled by the services that have been designed to exclude them and make them dependent; disabled people should be involved in design and bring their insights to make better products; that better design for disabled people is actually better design for all; and that manufacturing systems should be adapted so that we weren't just making one piece of kit for one person, that actually modular systems could enable people of all abilities to benefit.

We did a demonstration project on housing which was a key part of this work. We produced a Smart Housing Manifesto in 2004. The i-House demonstration project (2007-2013) was a 1918 house upgraded and retro-fitted for high standards of environmental and social accessibility. This showcased locally manufactured new technologies through until 2013.



One of my colleagues in this venture Rob Chesters, subsequently moved into NHS Innovation (31) and he's been working with a number of the NHS entrepreneurs - don't know if we've got any in the room today? - There are many people in the NHS with ideas about patient safety, people with ideas about new technology and new

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applications. These are some of the ideas - wheelchairs, still lots to be done on that front, patient safety devices, remote or mobile ECG and new designs in ultrasound.



This is something which the Academic Health Science Networks (32) should be and are taking on, seeing a role very much in economic development and improving the local economy through realisation of new health ideas.

Mike Cooley was another of the LUCAS shop stewards. He was one of the Designers Union people who was very much a thinker and a doer. In his book *Architect or Bee?*, he described human-centred technology and very much saw

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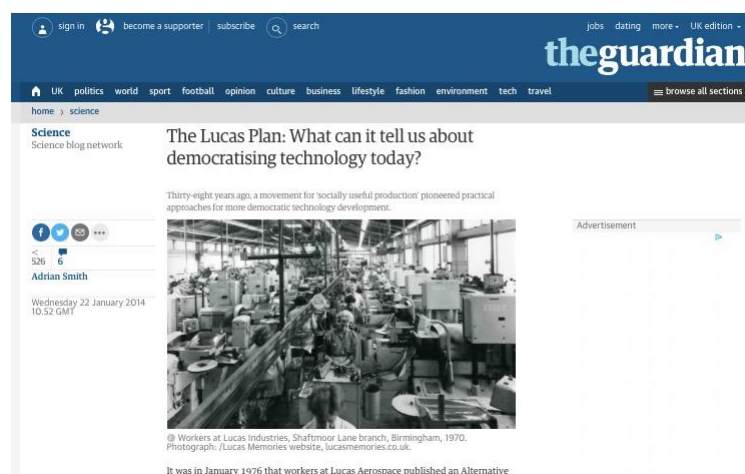
computer-aided design as a means by which there could be a greater democracy about how the users would work with the producers to get the products that they needed and that best suited their needs. (33)

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Mike Cooley: Author of ***Architect or Bee?***

One of the leaders of the Lucas Shop Stewards Combine and mastermind of Human Centred Technology



"A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality."

Interest in this kind of work has extended. It was to my pleasant surprise that I learnt about the *Makers' Movement*. (34) There are over 25 Makers' units in the country. An example is Institute of Making at the University College London. Liz Corbyn leads this facility. It includes a library of materials where people can experiment with different materials, they can use 3D printers and they can use a range of high-tech equipment that wouldn't be affordable for small businesses or individuals that are springing up around the country now as part of economic development.

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The notion of inclusion in design is being propelled forward for example, with the *Wikihouse* website, (35) you can now go online, look at the materials, design your own house and get them in B&Q.

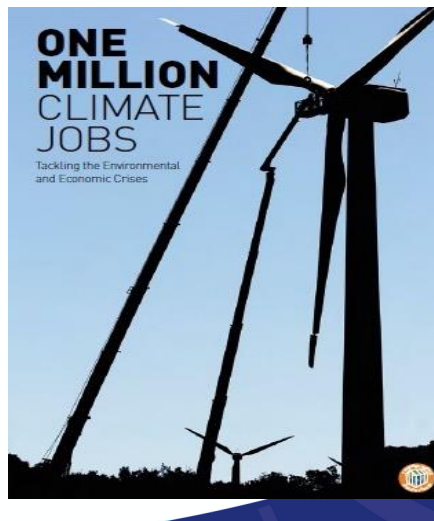
Related to the *Makers Movement* around the world there are other organisations, *FAB Labs* and *Hackerspaces*, very often more related to IT, free software development and so on, but nevertheless an opportunity to get a wider involvement in economic development. (36,37)

Four dividends: the green dividend

Finally, of my 4 dividends - the Green Dividend. Certainly from the time of the credit crunch there has been growing concern and interest in the scope for green jobs (38)

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http://www.campaigncc.org/sites/data/files/Docs/one_million_climate_jobs_2014.pdf



Examples include these from the Birmingham Post, and from a Washington demonstration early in Obama's administration.

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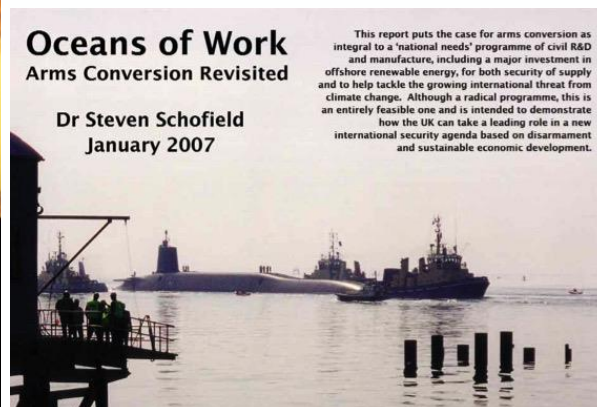
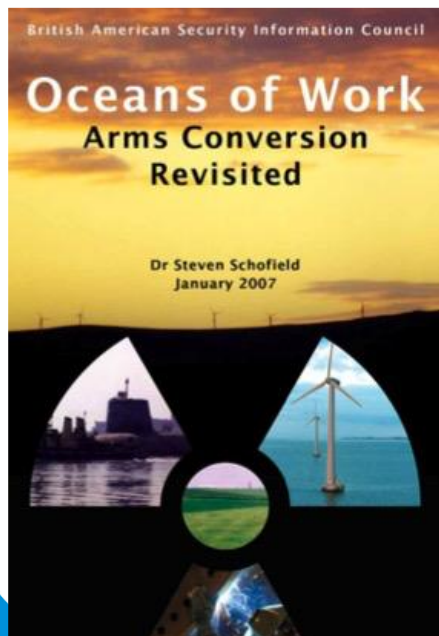
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Another of the offspring of the LUCAS shop stewards was the *Oceans of Work* reports at the Barrow shipyard in the 1980s and revisited in 2006. (39) There continues to be huge interest in converting military and marine shipyards, dockyards for marine energy generation.

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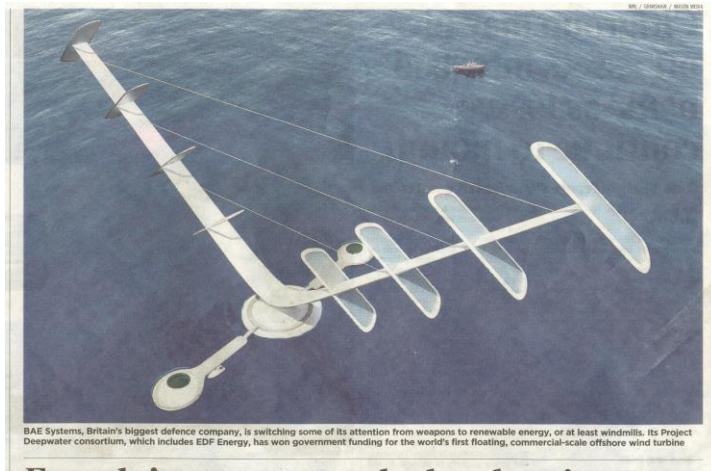
British Aerospace finally 20 years after the Lucas Combine, got into offshore wind development.

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The green recovery ?

A range of organisations including Boeing and the Scottish defence initiative of the trade unions have been looking at how marine, tidal, wind and wave power could all be used to support, re-use of the industries that were faced with closure.

The Scottish Enterprise Board produced a report about green conversion in 2011. Trade unionists and local campaigners are looking at alternatives to Trident submarines in the Devonport docks, including use of the dockyards there for marine power generation. (40)

This comes of course at a time when renewable energies are becoming more and more affordable, more and more efficient at a time when the price of coal fired electricity is now higher than solar power. And where the *Oceans of Work* report suggested only 40% of our energy might come from wind and wave (39), in Machynlleth, they think we could have a zero carbon future, in their report - *Making it happen, a toolbox for local energy generation and conservation*. (41)

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The million climate change jobs campaign is operating in four or five different countries again looking at alternatives to the fossil-fuel related power and one of the chapters of this UK version of the book is about the alternatives to fracking in Lancashire and the great many jobs that could be created in other alternative and green power sources. (38)

Ecotricity have rather cheekily put in planning applications for grass harvesting as a means for producing natural gas, where fracking applications have also been put in.

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Ecotricity submits planning applications for Green Gas Mills on Lancashire fracking sites



Green energy specialist files two planning applications to build biogas plants on proposed shale gas sites in bid to highlight that 'there's an alternative to fracking'

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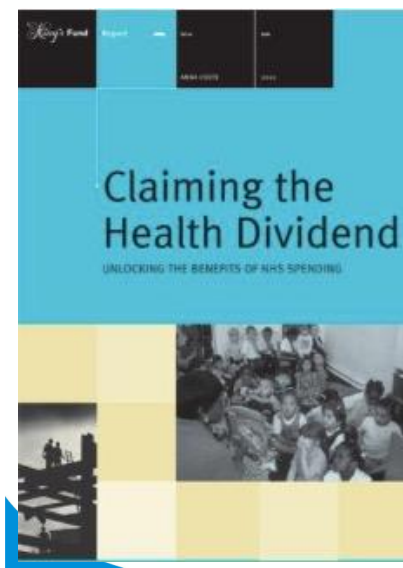
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The health dividend, corporate citizenship, and asset-based community development

In 2002, the *Kings Fund* borrowed our *Health Dividend* idea. (42) They made it something bigger, valuable, and useful from it which was more recognisable and practical to health services managers. What they were describing was really idea of the corporate citizenship role for health services. We are the biggest employer, the biggest procurer of goods and services, a huge landowner. All these things needed to be brought into operation with a view to supporting the local economy and local jobs.

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The NHS is the largest single organisation in the United Kingdom. Its potential impact on our lives is huge, as an employer, purchaser, cause of travel, producer of waste, consumer of energy, and commissioner of building works. This publication shows how the NHS could use its resources more wisely to sustain health in the long term. It argues that the NHS can, and must, make better use of its resources to reduce inequalities, build stronger local economies and safeguard the environment for the benefit of whole communities. To do this, it will need to tackle the challenge of raising service standards and changing attitudes and patterns of behaviour in all of its corporate activities.

For me in working in Sandwell, so much of that was a direct involvement of the Sandwell community, sometimes the services that were developed with our local community were not expensive; they are hugely rewarding, they treat people as

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assets of health not as victims of disease and they are extremely important. Whether it's the youth cabinet, young people getting involved, Agewell, getting the champions of older people's health needs and rights, the community agriculture I talked about, Cycle Action in Sandwell, the Independent Living Centre which for many years was owned and run by a Board of people with disabilities and is still functioning now.

(11,30)



This particularly sums up for me, the idea of people as assets, *Options for life* is the biggest independent provider of services for people with learning disability and people with learning disability and their carers built the community centre on your left and made something that was very much theirs, using the self-build housing methods. (43)

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Asset based community
development :Options
for life self built
community centre



The NHS will develop its corporate citizen role. The college's future hospital campaign and programme offers a major opportunity to see hospitals in that corporate citizen role. In my blog in 2014, I described some of this and certainly looking at the Midland Metropolitan hospital due to open in 2018. (44) There have been major efforts there to employ local people in construction, train people for jobs in the hospital when it opens, and there are major efforts to build with a low carbon footprint for the 21st century. Reducing the carbon footprint will also be achieved by appropriate relocation of services, transport and key worker housing near to the site.

Young people are also involved in a health dividend, through the Health Futures University Technical College in West Bromwich. It is sponsored by the Ambulance Service and 20 hospital trusts; they have all agreed to give the 19-year-old graduates of this college an interview and a job opportunity and they learn skills not only of a health related nature, some public health projects but they also have to do

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their A-levels and their GCSEs. A very promising and very positive initiative, I think.

(45)

The Royal North Midlands hospital in Stoke have turned their roof over to solar energy generation and with that they get an income which they give to a community enterprise which provides affordable warmth and energy advice to people who are coming out of the geriatric and chest wards, so one of the major readmission causes being a cold house. (46) That for me is a very positive example of what hospitals can be involved in on a green or a health dividend.



'Saving lives with Solar' Royal North Midlands Hospitals, Stoke.



Louise Stockdale and Charlie Cox from the University Hospitals of North Midlands 'Saving lives with Solar' scheme.

Coventry and Warwickshire hospital have created natural capital - the run-off of water from car parks, doesn't go down the drains to grow the Severn Trent water

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sewerage bill it goes into the River Sowe valley creating natural reed beds and a nature reserve which is a major resource for staff and local people. (47)



Thinking globally, acting locally: Coventry and Warwickshire University Hospitals Jubilee Nature Reserve – managing water run off from hospital car parks - promoting biodiversity, saving money



St Bartholomew's hospital's work on air pollution is another example of where hospitals are engaged in wider roles in relation to air pollution awareness, for patients with respiratory conditions, for community campaigns and for staff engagement. (48)

How do the dividends concern us today?

Very finally, some dilemmas and lessons for the present day perhaps?

Air pollution and electric vehicles?

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The excellent report of the Royal Colleges on air pollution, 'Every breathe we take' was a major landmark report, and certainly my Faculty was very pleased to be a part of the work that went into this. (49)



Air pollution is now killing 40000 people each year in the UK. (49) There is an enormous outpouring of concern and interest across the globe with a number of countries coming out to ban petrol powered cars, ban diesel vehicles and setting a

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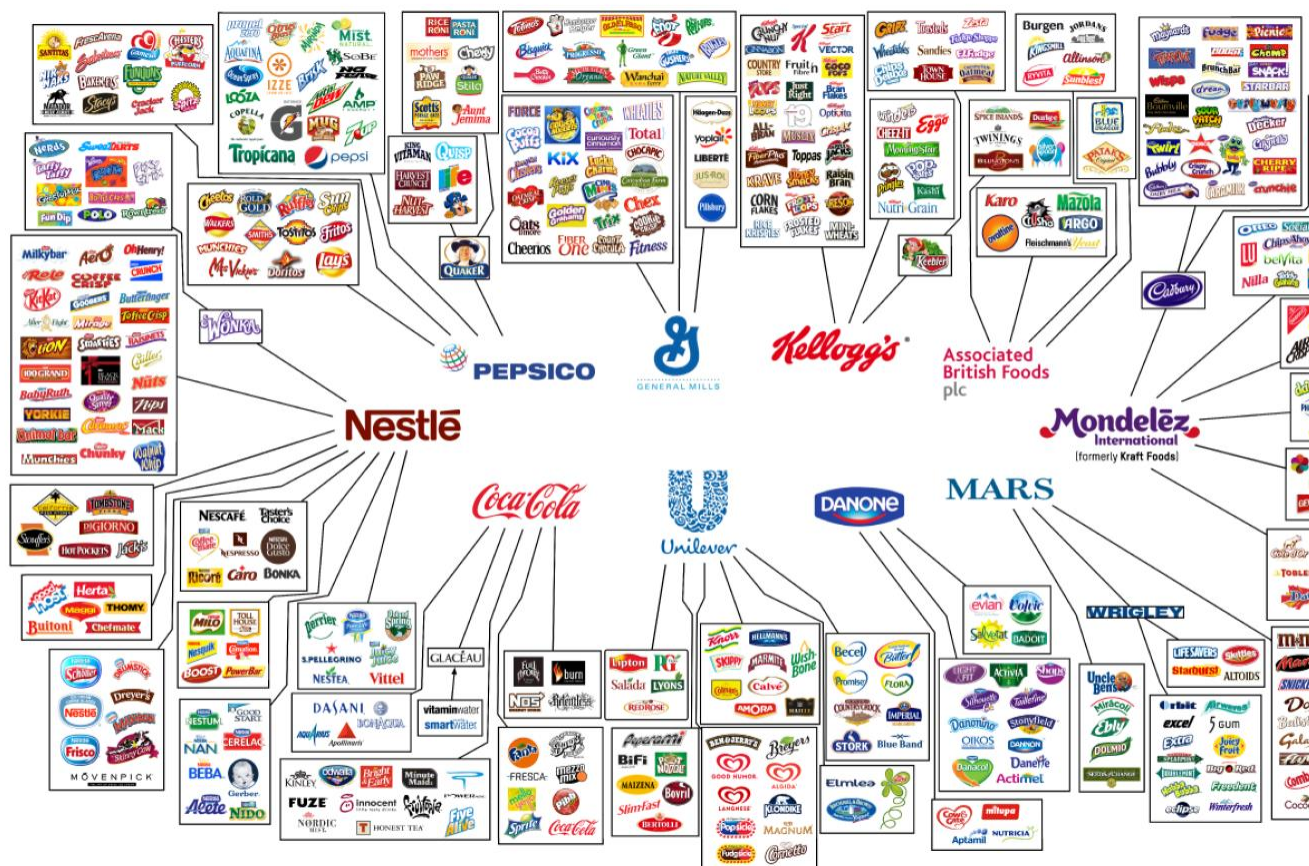
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timetable for that to happen which industry can respond to. The Royal College does see a place for the green dividend in energy-efficient cars, in the electric car boom. I personally have an electric car but it's not the whole solution: I'm still generating particulate pollution as the *rubber hits the road*. We do need a transport policy which is geared towards electric vehicles in fleets and electric public transport, but we need to see more people walking and cycling.

Compelling action from the food industry accountable?

On food, we do have to work with the food industry. 10 corporations control virtually everything we eat. (50)



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With pressure on the salt campaign, on food formulation and now through sugar, they are beginning to show some willingness and some involvement in reformulating high fat, high sugar foods. But we do have to keep the feet to the flames to make sure that all the changes happen, and we do get a healthier diet. And they *have* produced a low-fat pork scratching. That's not an advert for it by the way, I hate to support that, but it has been done!

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The screenshot shows a MailOnline article titled "Now pork SCRATCHINGS are a super food as top athletes endorse a new low-fat version of the old favourite bar snack". The article lists several bullet points: "New scratchings have 47 per cent less fat than the original pub snack", "Recipe is backed by model David Gandy and Paralympian star David Weir", "They are made from prime pork rind and have 70% pure protein in a bag", and "Pork scratchings thought to come from West Midlands in Victorian times". The article is by Jack Crone for MailOnline, published on 31 May 2015. To the right of the text is a photograph of a metal basket filled with golden-brown pork scratchings. Below the photo is a caption: "New recipe: A company has turned pub favourite pork scratchings into a nutritious low-fat super-snack". The MailOnline header includes navigation links like Home, News, U.S., Sport, TV&Showbiz, Australia, Femall, Health, Science, Money, Video, Travel, and a Day Forecast widget.

The social useful cigarette?

The medical profession has not always been on the right side of history - bleeding and leaching of course; Dr Milroy was very critical of his colleagues who failed to understand what the physicians of southern European countries understood about

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TB - that it was infectious. 100 years had gone by without his colleagues appearing to agree or countenance that TB was infectious. (1)

In 1949 the entire stock of American Doctors was enlisted to advertise that Camel were their favourite cigarettes. (51)

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I hope that we will not find that our current interest in e-cigarettes will be the thing that colleagues in 70 years' time criticise us for.

But, you know we have been misled, duped, seduced by the tobacco industry over many years, we welcomed low tar cigarettes, we welcomed filters, some of which had asbestos in them. We welcomed menthol cigarettes, these were all the 'safer cigarette'. (52) My faculty is part of a public health consensus that says there is a place for e-cigarettes in helping people to stop. But we do need to be very cautious about the lifeline that that may give to the tobacco industry. Very recently, we've seen the Wellcome Foundation pulling out of giving access to the Foundation for a Smoke Free World, the body funded by Philip Morris to get us to a smoke-free world. In America, tobacco companies are now being compelled to advertise that they have killed people – a long time coming you might think!

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Wellcome statement: corporate event hire cancellation

Press release / Published: 10 October 2017

Wellcome statement on the cancelled corporate event booking for the Foundation for a Smoke-Free World.

On 5 October 2017 Wellcome Trust took immediate steps to terminate a commercial hire contract for an event scheduled to take place in a Wellcome venue in late October.

At the time of booking, it was not made clear to Wellcome Trust Trading Ltd, or its parent Wellcome Trust Ltd, that the event was for a meeting of the Foundation for a Smoke-Free World, which is an organisation funded by a tobacco company.

Had we known who the booking was for, we would not have accepted it due to Wellcome's long-held stance against supporting, or investing in, activities relating to the tobacco industry.

A breach of contract occurred when Wellcome was named on the invitation without Wellcome's permission. The hire contract was cancelled and the event organisers were informed.

Wellcome has no association with the Foundation for a Smoke-Free World.

In last week's BMJ, Simon Chapman said 'Philip Morris supporting a cigarette free world? Pigs might fly!' (53)

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[http://www.bmj.com/
content/358/bmj.j444
3?sso=](http://www.bmj.com/content/358/bmj.j4443?sso=)

He went on to say that ‘just as car manufacturers now produce electric motor vehicles, but they’ve not abandoned producing fossil fuel producing cars, progressive governments like France, Germany, India and Norway have set dates for when fossil fuelled cars will be banned and we need to see the same with the tobacco industry. We need to challenge this statement about a tobacco free world; we need an agenda for pulling out of tobacco. We need the industry to show how they are going to help local tobacco retailers to divest, and we need to see how they

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are going to change the tobacco producers of America and Zimbabwe to other productive things’.

In conclusion: Health in all policies

In my BMJ leader just after the election, I said we needed to see health in all policies, a public health government. (54) And I described the things I’ve talked today about - inequality, how we need a new Food Act, because a healthier and more environmentally sound food policy would be good for farmers, the environment and ourselves and we certainly need a new approach to housing. The scandal of poor housing over many years must come to an end and it must come to an end because of the talismanic and apocalyptic disaster at Grenfell Tower.

Deaths from fire are the single biggest inequality in health that we see. You are 17 times more likely to die in a fire if you’re poor than if you’re rich and we’ve allowed this extreme inequality now to manifest in the disaster of Grenfell, currently subject to the public inquiry. We’ve seen it both as an index of inequality but also as a failure of housing design; and a failure of housing construction; and it is something which must be landmark for us and a point at which we change the way we do our housing policy.

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Figure 31 The ultimate technological fix?

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I finish with this idea: in the 1970s there was an drug company advert, in medical journals for a benzodiazepine ; it said: *'She can't change her environment but you can change her mood by prescribing Serenid-D' (Oxazepam)*. The subtext was the poor mental health of people living in high rise blocks could not be influenced by doctors, except by prescribing mood changing drugs.

Well, I say, we can change her environment; we can change that pattern of living. Big social changes are possible. There were 120 high-rise blocks in Sandwell when I went there in 1987; now there are 30.

I thank you for this opportunity to speak to you today. I believe that there is no more noble activity than being a doctor, we have our difficulties at the present but practising medicine is a great thing to do. In clinical practice, we can save lives one by one; in public health, with your help and with your advocacy, we can save lives in millions.

Thank you very much.

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