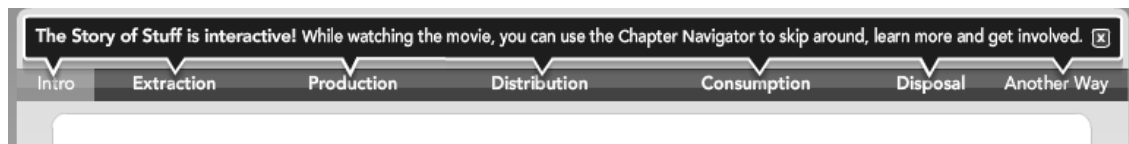


Stuffed!

Annie Leonard's on-line film, *The Story of Stuff* and its linked resources provide a very valuable addition to the 'green' armoury. (The film can be watched at <http://www.storyofstuff.com/international/>). For a start, the film itself is quite compelling. It features Leonard herself, talking to the camera, with animation changing behind her. Her presentation is direct, lively and succinct, while the graphics have been assembled with equal effectiveness. Not the least of the film's virtues is its humour and its comparatively crisp style, with more probable appeal to the 'YouTube' generation than the more plodding *Inconvenient Truth* and the rather wandering *Age of Stupid*.

The screenshot shows the website's navigation menu with tabs for 'Intro', 'Extraction', 'Production', 'Distribution', 'Consumption', 'Disposal', and 'Another Way'. The main content area features the title 'THE STORY OF STUFF' where the word 'STUFF' is rendered in large letters made of various household items. Below it, it says 'WITH ANNIE LEONARD' and 'PLAY'. A 'free range studios' logo is visible. A starburst badge on the right states 'Over 5.5 Million Views!'. The footer includes a navigation bar with 'HOME', 'MOVIE CREDITS', 'RESOURCES', 'MEDIA ROOM', and 'STORY OF STUFF BLOG'. On the left, there is a 'Get Your Answers (FAQ)' link with a pencil icon. On the right, there is a 'What is the Story of Stuff?' link. A small cartoon character is also present in the footer area.

Of course, there is the possibility that some audiences might find the format a bit too limited and the presentation patronising. Certainly the content is not exactly rocket science. But the style might just serve to reach those otherwise resistant to more earnest green propaganda. The film's bright-eyed optimistic edge might not be objectively justified but, perhaps, it will prove more appealing to non-converts than doom-and-gloom, not that the film pulls its punches about the destruction wrought by consumerist excess.



The film is divided into six major sections: extraction, production, distribution, consumption, disposal and, finally, what it calls 'another way'. The last one promotes 'sustainability' and 'equity' as its alternative. In each case, there is a button to click for further resources, with other links on the main site.

Home > Resources > Another Way

Another Way

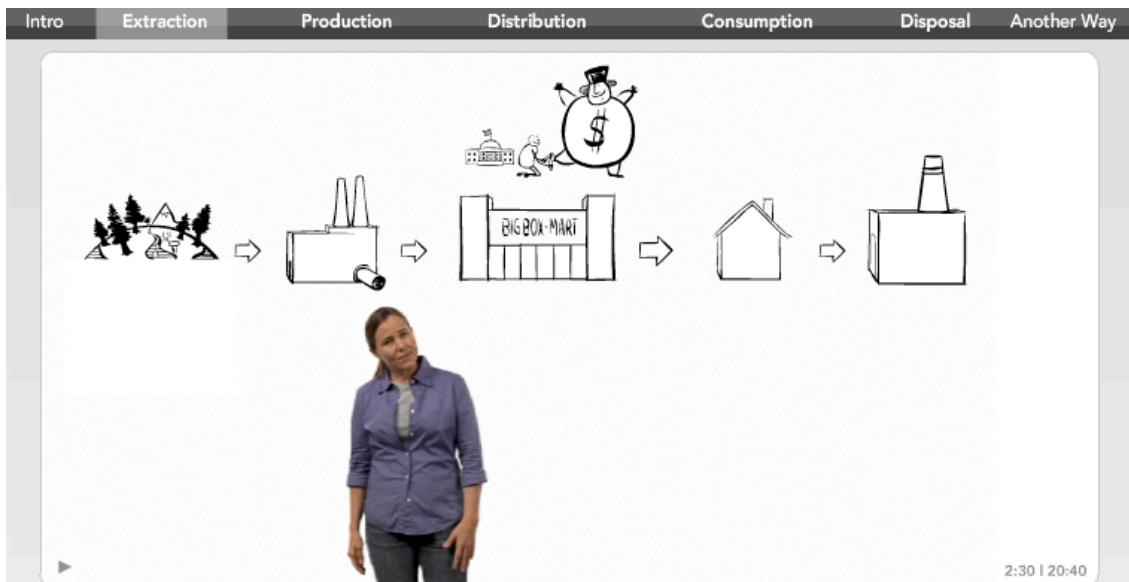
Many people who have seen **The Story of Stuff** have asked what they can do to address the problems identified in the film.

Each of us can promote sustainability and justice at multiple levels: as an individual, as a teacher or parent, a community member, a national citizen, and as a global citizen. As Annie says in the film, "the good thing about such an all pervasive problem is that there are so many points of intervention." That means that there are lots and lots of places to plug in, to get involved, and to make a difference. There is no single simple thing to do, because the set of problems we're addressing just isn't simple. But everyone can make a difference, but the bigger your action the bigger the difference you'll make. Here are some ideas:

10 Little and Big Things You Can Do

- 1. Power down!** A great deal of the resources we use and the waste we create is in the energy we consume. Look for opportunities in your life to significantly reduce energy use: drive less, fly less, turn off lights, buy local seasonal food (food takes energy to grow, package, store and transport), wear a sweater instead of turning up the heat, use a clothesline instead of a dryer, vacation closer to home, buy used or borrow things before buying new, recycle. All these things save energy and save you money. And, if you can switch to alternative energy by supporting a company that sells green energy to the grid or by installing solar panels on your home, bravo!

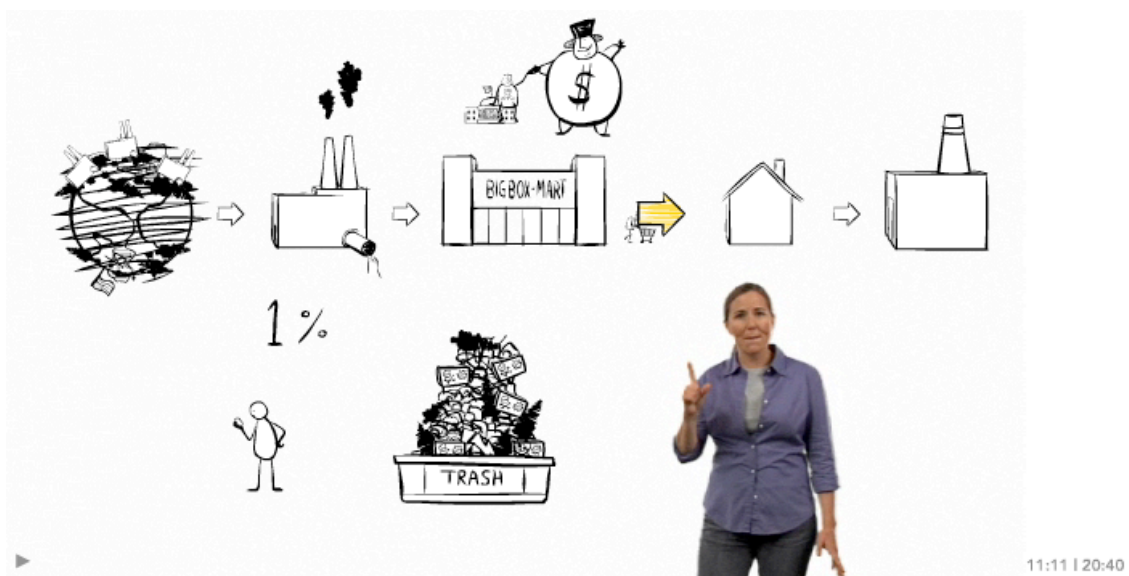
As its name suggests, *The Story of Stuff* is about the flow of resources through the economy, from initial extraction and harvesting to final disposal. It contrasts the picture painted in places like orthodox economic textbooks to what happens in the real world. It therefore spells out a host of environmental and social realities that abstract conceptualisations like the 'firm', the 'consumer', and the 'marketplace' ignore (including most TV reportage of economics). It makes it crystal clear that the system is highly inequitable and grossly unsustainable. It is a bubble destined to burst.



It feels somewhat churlish to make negative noises about this film. Yet for all its undoubted strengths it has some serious weaknesses that serve to frustrate a full understanding of the production-consumption cycle. Give the urgency of the ecological crisis, it is critical to get the arguments and evidence as strong as possible.

Dodgy data?

For a start, its use of statistics seems quite telling yet, on reflection, they do not seem quite so robust. In the case of synthetic chemicals, the figures given are the same quoted in assorted textbooks for a good many years. Viewers might wonder about their accuracy: surely there have been changes. Other figures are a bit too fuzzy (do exactly 200,000 migrants move a day?).



Then there are some rather odd calculations. It is claimed, for example, that in the USA (and most of the film's statistics relate to that land), only 1% (sic) of bought goods are still in use 6 months after purchase, with the other 99% trashed. This seems to be a matter of conflating somewhat incomparable items. A tube of toothpaste and a myriad of other such items might be thrown away

within that time but most purchasers of houses, cars, bigger electrical goods, most clothes and the like will still be using them.

In the case of some items, especially foodstuffs, one wouldn't want to be consuming them after a certain short period. In that case, a more compelling statistic is the amount of food thrown away uneaten. Overall, that alleged 1% of items still in use after 6 months probably have far greater environmental impacts in toto than the 99% said to be junked.

Energy Matters

The film's focus on matter - animal, vegetable or mineral – rather obscures the quantity and quality of energy inputs into the whole system. It is cheap energy that powers it, it is that input that is not only finite and polluting (fossil fuels and uranium-based nuclear electricity) but also limited in other ways (the diffuse and variable nature of so-called renewables). Phenomena like peak oil do not get much a splash in the film yet they will drastically undermine the socio-economic system it depicts. No film can cover 'everything' but some things are so significant that it is a mistake not to give them due emphasis.

Energy apart, the film also exaggerates the input of toxic chemicals at the production stage. Certainly it is a very serious problem (and also one also occurring back at the extraction/harvesting, starting with a cocktail of pesticides and other hazardous substances being employed). Yet many other non-toxic materials are also added and again sheer scale of usage often brings unsustainable problems.

Water is perhaps not an input one might readily associated with, say, motor vehicles yet car plants are actually very thirsty places, leading to more land being lost to reservoirs. Non-toxic elements in liquid, gaseous and solid wastes, perhaps something as basic as sugar in soft drinks manufacturing plant effluent, can cause ecological damage. Fertiliser run-off is nothing so poisonous as the toxics indicted in the film yet it is a massive pollutant of waterways. The biggest agent of environmental degradation is neither a toxic nor non-toxic chemical. It the covering over of land with concrete, brick and tarmac. The film does mention that the average American house has doubled in size over the past 30 years ("Mcmansions") but does not tease out the environmental consequences of such developments.



The Story of Stuff effectively charts the dramatic explosion in consumption levels over the past few decades. The big question, of course, is why so much 'stuff' is consumed and who is consuming it. In the latter case the film targets overconsumption in the USA in particular. The country is shown to be grabbing, sometimes accompanied by military force, a severely disproportionate portion of the world's resources. It is metaphorically and literally creating a bloated society (obesity levels etc) with knock-on effects on the Earth life-support systems (or, as the *Sun* tactfully put it in a recent headline, "fatties cause global warming").

This is true as far as it goes. It ignores, however, the fast growing and already gigantic pressure from the new middle classes of the so-called industrialising countries. China and India, with 40 % of the world's population, most of it still very poor, already consume more than half of the global supply of coal, iron ore, and steel. Delhi alone already registers some 1,000 new cars every day. Even modest increase in consumption by the poorer groups has a massive impact because of their numbers. Perhaps the film might briefly have made a more forceful point about the huge disparities within the USA, UK and their ilk.

Thou Shalt Consume

The film focuses on the huge expansion in consumption after World War 2. Before then, the working classes had got meagre crumbs off the tables of the plutocracy. The unemployed had even less. A few privileged skilled workers might aspire to a small body of material possessions but paucity was the rule for the majority. No wonder many people did not lock their door at night: they had nothing worth stealing! Nothing needs to be said about their diet or housing. Again it is not surprising that the British army formed 'bantam' regiments in World War 1 such was the stunted nature of many recruits.

But, after 1945, governments and businesses saw that citizens needed to be transformed into dutiful consumers to sustain economic expansion and accompanying profits. As pay packets expanded, advertising drove home the message of spend, spend, and spend again, making maximum use of what could be learned from psychology about human behaviour. Even the calendar could be harnessed to create special days for which another bout of shopping is in order.

Today shops like Marks and Spencer seem to be endlessly setting up displays devoted to sales relating to Easter, Valentine's Day, Mother's Day and the like. Christmas is of course the shrine of high consumption. Marriage is another opportunity for massive spending (wedding lists etc.). Leisure — recreation time — has become time for some more 'retail therapy'. The film tellingly cites the exhortation after 9/11 by then President Bush to "shop" as the best way to deal with the national trauma.



"OUR ENORMOUSLY PRODUCTIVE ECONOMY... DEMANDS THAT WE MAKE CONSUMPTION OUR WAY OF LIFE, THAT WE CONVERT THE BUYING AND USE OF GOODS INTO RITUALS, THAT WE SEEK OUR SPIRITUAL SATISFACTION, OUR EGO SATISFACTION, IN CONSUMPTION... WE NEED THINGS CONSUMED, BURNED UP, REPLACED AND DISCARDED AT AN EVER-ACCELERATING RATE."

It is not only the ecological costs of this fantastic explosion of production and consumption that are charted. Human health costs and the exploitation in 'sweatshop economies' are also indicted. The film also makes clear that consumption can become a treadmill on which satisfaction remains forever elusive. This is reflected in the way sociological surveys routinely do not find much correlation between material consumption and contentment.

That said, the film somewhat skates over the fact that many millions of really poor people would be safer, healthier and happier if they had access to the kind of things that even social security claimants and the like take for granted in countries like the UK. It is sometimes a bit too easy to sneer at consumerism when one is comfortable. Yet the film is essentially correct to indict the culture of 'moreness' and advocate, instead, 'enoughness'.

The diagram illustrates a process flow: a globe with a factory, a factory with a chimney, a store named 'BIG BOX-MART' with a shopping cart, a house, and a box. Below the diagram is a line graph titled 'NATIONAL HAPPINESS' showing a peak in the 1950s followed by a decline. A woman in a blue shirt is standing next to the graph, pointing at it.

Whatever patterns 'affluenza' takes, there is an obvious need to understand its root causes. Here *The Age of Stuff* flounders in soft populism. 'They' are to blame: the big bad corporations and their servants in government and the media. Together they conspire to promote an unsustainable and inequitable mix of planned obsolescence (goods artificially prone to premature breakdown,

deliberately designed to frustrate reuse and repair etc) and perceived obsolescence (promotion of fashion fads and corresponding fear of being not 'with-it'). There are times when the film claims too much, not least regarding computer (mal) design but everyday experience will confirm just how undurable are most 'durable goods'.

Media myths

Certainly businesses would not spend huge sums on advertising if it attracted no new customers. They clearly think that they really can generate more sales via alterations to product specifications, special pricing offers, clever in-store displays, product placement in movies, and other elements of the mix, not least the weaving of some desirable 'brand' image around an item. Firms like Coca-Cola will co-opt any sentiment — from racial harmony to world peace — to sell their ghastly drink. Revolt can be turned into a stylistic statement and sales pitch. Images of Cuban revolutionary Che Guevara, for example, have appeared in adverts for products ranging from station wagons to ice creams.

Yet life is more complicated than any such 'magic bullet' theory suggests. The media in general and advertising in particular simply do not possess the capacity to brainwash their viewers, listeners and readers. Media audiences are highly selective in what they consume, how they interpret it and in what ways they act upon the messages they receive. To even get attention, let alone win customers, adverts have to relate to existing hopes, fears and other feelings amongst their recipients.

So McDonald's may spent a fortune on advertising. They also carefully design the layout and colour schemes of their food outlets. Yet many people go there simply because they like the food and/or like the convenience of, if necessary, just pointing at what they want, instead of all that fuss in restaurants. Many people prefer to 'graze' on the move rather enjoy 'slow' meals.¹ The food might be junk but it offers a comparative bargain for poorer people. Many factors are at work, not just the manipulative effects of clever marketing.

Actually many marketing campaigns fail and indeed promote quite opposite effects. The famous 'never-alone-with-a-Strand' cigarette advertisement caused sales to plummet because audiences identified it as a product for losers. Many films bomb at the box office despite the most careful promotion campaigns. Apparently sales of the American Pils beer went down when a successful campaign attracted more drinkers who then discovered that they didn't like it. Quite commonly, consumers remember the advert but cannot name the product being advertised. Frequently the most adverts achieve is a change of brand, not the manufacture of new consumers or higher levels of consumption amongst existing buyers.

Consumer choice

The film might have been more effective if it made some concessions to other considerations. Changing consumption patterns, both in terms of number and kind, are influenced by factors like comfort, convenience, efficacy, portability, speed, safety ... Sometimes there are real gains. For example, this author, a music lover, was very pleased to get a new DAB radio since the sound quality is so much better than its predecessor. His digital camera probably generates much less chemical pollution than when he relied on 'wet photography'. The kettle he has just bought uses far less energy than the one he replaced. He remains a mobile phone 'refusenik' but cannot but recognise the advantages they give to his friends.

Meanwhile, some of the 'environmentally friendly' products he uses simply don't work as well as their conventional counterparts. At other times, they are much more expensive. The film rightly raises the point of real costs and their reflection in prices. As long as the goods in the shops are not priced in ways they more accurately reflect their full costs of production and transportation, there is a massive disincentive not to consume in more sustainable ways. Furthermore, when others do not change their ways, individual acts of 'goodness' not only cost more money but are sometimes quite ineffective since they represent such a small drop in the ocean. This is why politics and government action are so important, which, to be fair, the film does stress.

Annie Leonard and her co-thinkers could still claim that the overall impact of commercial and celebrity culture is to naturalise 'consumerism', the equation of possession of more, bigger and newer things with more satisfaction and success in life. Even then, and quite problematic for those of us who advocate a 'conserver', as opposed to a 'consumer', society, many ordinary citizens take active pleasure in consumerism.

Thus, big queues built up outside H & M stores in the UK in April 2009 when a new clothes range went on sale.ⁱⁱ In the early Soviet Union, where citizens were bombarded with propaganda extolling equality and frugality, many people hankered for the trappings of materialism, even down to the strong desire for little things like lipstick amongst Soviet women, even though such products were not being advertised.

Overall, consumerism cannot be reduced to some giant conspiracy, manipulating sad dupes into buying things they do not want or which will harm them. Populist rhetoric disguises the very real obstacles in moving beyond today's consumer society. The big corporations are only a part of the problem.

Missing numbers

In any case, unsustainable demand is driven by stronger forces than per capita consumption. The biggest single factor and one completely ignored by *The Story of Stuff* is the explosive growth in the sheer number of consumers. Incredibly the film makes no reference to the extra pressure on farmlands, forests, fisheries, mineral supplies and so forth created by the dramatic — and on-going — rise in human population: more people to feed, water, house, transport, employ, educate, heal, entertain and otherwise cater for.

It seems as if the significance of the P.A.T. equation is not fully grasped by Leonard and her colleagues. The increased impact of transport, for example, clearly stems in part from changes in 'T', not the least the switch from collective modes like bus and train to the private motor car, plus, more recently, the explosive growth in air flights. Yet all technologies have some impact and use beyond a certain level must become unsustainable on a finite planet. number of journeys per person. People do travel a lot more, both for work and pleasure, including more trips to distant edge-of-town shopping malls. But, as Professor John Holdren showed a number of years ago,ⁱⁱⁱ the biggest cause of the increasingly unsustainable impact of the transport sector in the USA was simply the increase in the 'P' factor, the growth in population, i.e. the absolute number of travellers.

At the same time, *The Story of Stuff* does not fully get to grips with more specific factors. Particularly significant is the changing relationship between the cost of labour and the cost of energy and raw material inputs. The wage bill is the biggest cost in many firms in the 'advanced' industrialised world. That is why

they try to automate, relocate to low wage economies and otherwise reduce the price of labour inputs.

By contrast, energy and raw materials is comparatively cheap. Because of this relationship it is more 'economic' for a firm not to repair some slightly faulty item like, say, a desktop scanner but to send complaining customers a new one and tell them to throw away the old one. New production, under the current economic system, is cheaper than the more labour-intensive activities associated with reuse, repair and recycling.

However, a hike in, say, the price of petrol is a less than popular option for politicians. Many social justice campaigners similarly oppose conservation measures like water metering and higher resource prices in general because, they claim, they will 'harm' poor people. Thus the incentive remains to squander, not conserve.

Alternatives?

Having well demonstrated that the existing production-consumption system is one of crisis, coming up against all sorts of limits, *The Story of Stuff* advocates a series of alternatives: 'green chemistry', 'zero waste', 'closed loop production', 'renewable energy', and localised economies. Most of all it asks viewers to 'get involved' and points to groups working on such goals. There is also a detailed bibliography on the website.

It is, however, not clear exactly what kind of alternative society the *Story of Stuff* team has in mind. One book it spotlights is Paul Hawken's *Natural Capitalism*. Yet there are good grounds for thinking that capitalism can never be greened so central is the growth imperative to its very nature. The concept of a steady-state economy is not foregrounded nor is any attempt made to grapple with the admittedly complex issue of carrying capacity.

It would also seem that the laws of physics have been repealed. The second law of thermodynamics suggests that there will always be some energy loss and unrecoverable material dissipation in extraction, manufacture, distribution and consumption. 'Zero waste' is a slice of pie-in-the-sky. Many recycling schemes, for example, probably make a net energy and materials loss, once all biophysical costs are taken into account. Meanwhile the various limits to renewable energy mean that it can only power a society with frugal demands.

Furthermore, studies like Richard Douthwaite's *Short Circuit* do demonstrate the environmental and (long-term) economic foolishness of long-distance transportation of most food and many other goods. Yet some things such as steel making can only be done on a comparatively big scale in fairly centralised locations. Sometimes such concentration makes pollution control easier too. Conversely, schemes like Mao's backyard factories were a disaster. In other words, there are limits too to localisation.

Yet *The Story of Stuff* does have its heart in the right place and, more importantly, it makes many telling points. So, overall, Annie Leonard and her colleagues do deserve a big vote of thanks for their efforts.

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April, 2009

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Images in this article are taken from the film website.

ⁱ Many of the author's students, 16-18 year olds in the NE of England, haven't had what he would consider a 'proper' family meal for ages. On college trips, for example, they actively seek out fast food joints even when cheaper and more interesting alternatives are on offer. At the same time, many prove quite resistant to other kinds of advertising, not least healthier lifestyles.

ⁱⁱ <http://www.guardian.co.uk/lifeandstyle/2009/apr/24/matthew-williamson-hennes-collection>

ⁱⁱⁱ Holdren, J. (1991). 'Population and the Energy Problem'. *Population and Environment*, 12(3), 1991: 231-255.