The Complexity Myth

Contributed by Keith Farnish for Culture Change
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I'm looking forward to the rhubarb growing season; it happens when you least expect it, as tiny shoots start to emerge from the soil, embellished in the most delightful crinkles, and bursting with every shade of pink, red and green you could imagine. You can almost smell it stewing in the pan as its red shoots push upwards and outwards. My father, a great fan of this hardiest of plants, has replanted part of the driveway of his house with half a dozen roots, ready for the spring – Rhubard crumble rather than cars, any day.

How simple is this? You plonk a rhizome into a hole in the ground, cover it up, and a few weeks later you start getting something that you, while not quite being able to pop it in your mouth (it's rather sour), can heat up and then serve and eat. Actually, you could get something even simpler: plant an apple
sapling in the winter, wait two or three years, then eat the apples.

Alternatively, you could have an apple pie from a supermarket. Here are the ingredients of one that I bought because it was about to be thrown in the bin:

Bramley Apple (32%) (with antioxidants (Ascorbic acid, Citric acid) Firming Agent (Calcium chloride)), Wheat Flour, Water, Sugar, Glucose – Fructose Syrup (Wheat), Vegetable Oil (Rapeseed, Palm), Margarine (with Emulsifier (Mono- and diglycerides of fatty acids – Vegetable)), Butter, Cornflour, Dextrose (Wheat), Modified Potato Starch, Natural Flavouring, Raising Agents (Disodium diphosphate, Sodium hydrogen carbonate), Skimmed Milk Powder, Stabiliser (Guar gum), Whey Powder (Milk).

Got that? I could, if I wanted to, run an environmental breakdown of all the ingredients in the pie, and put you off buying one even more than you have probably been put off by just reading the ingredients. But I won't, because this isn't about the individual components of something, like an apple pie, it is about the whole, and the fundamental difference between something produced for the purposes of consumption by a member of Industrial Civilization, and something you would produce or do yourself as an individual human.

In short, it's about complexity.

Sing, Sing A Song

Like the apple pie as food, what we are encouraged to use for entertainment purposes, as de facto Consumers, are products of civilization – of the industrial machine. I can think of few things more entertaining, able to pass an evening with friends and family, than a good sing-along; standing or sitting around making beautiful sounds with just our bodies and nothing intervening or interfering with the music-making process. That's as simple as entertainment gets. The fact that so few of us partake of this staple of decades past, is not because we can't do it any more – we all know a few songs, albeit not word or pitch perfect – but because culturally it is deemed far more acceptable to do something that is inherently more complex.

In his seminal, Four Arguments For The Elimination Of Television, Jerry Mander contends that television is fundamentally a tool of a domination culture, that can be and is used to subvert the viewing public to whatever political or commercial ends the system requires. While all of Mander's arguments are valid, they point to what are essentially psychological controls. The issue of complexity is more fundamental than this: television is a product of the system, and thus has built-in complexity.

I will explain what I mean by "built-in complexity" later, but for now it is important to show how television is complex. Here's my description of a television set.

The Set itself is made up of a large number of components, the majority of which have dependency on other components. In a traditional CRT television there is a tube which consists of an anode and a cathode, an evacuated glass dome containing various photo-sensitive components and a series of "guns" that are electronically controlled. This control comes from the main board which controls the conversion of the electromagnetic signal into something that can be utilised by the picture guns and the sound system, which itself has many components including amplifiers and speakers. There are also many other components which control picture stability, electrical throughput, additional display mechanisms – like on-screen menus – and inputs from various sources. Surrounding all this is the case itself, upon which are mounted the different modules, plus control buttons and other embellishments.

The Set had to be manufactured, so we have to take into account the factory where the components were made, along with the (undoubtedly separate) factory in which the components were assembled. These factories are highly complex themselves, equipped with conveyors, testing systems, circuit printing machines...far too many things to list here. The original components were constructed from raw materials that were produced by a different set of complex systems, including mining, material processing and refining, smelting and a range of chemical processes required for producing the precise material required for manufacturing.

At almost every change in process there had to be some form of transportation; from the mine to the sorter to the refiner to the smelter to the shaper to the shipyard to the factory to the next factory to the next factory to the distribution depot to the warehouse to the store to the house – and that's a simplified version, because each component and module would have undergone its own discrete transportation path prior to assembly as a single television set, in the box and packaging that themselves were produced by factories from raw or recycled materials (and I won't even start on the complexity of the recycling process). Every mode of transportation needed to be manufactured and delivered; not forgetting the fuel to power this transportation.

And the Fuel to feed the power stations that produce the electricity which is transported across the land through power lines made of copper and aluminium, via step-up and step-down transformers made of metal, oil and a myriad other components to control the flow of power, eventually to the house where the television is used. But without a signal the television is nothing. The transmitters are, of course, powered using the same, or perhaps a different – if diesel powered – power infrastructure, but that's not the half of it. At the studio where the signals are originated are highly complex – far more complex than in the television – electrical and computerised systems that take the tape, or DVD or live recording from its source to the signal refining systems that convert the source into something that can be broadcast. Prior to preparing for broadcast, if the signal is not live, there would have been editing, production, script-writing, actor or presenter preparation... everything that is necessary for the source media to be acceptable for broadcast. And when that signal is fired into the air, to be picked up by a land station and probably a satellite, then nothing has started or ended; it

is just another stage in the unfeasibly complex system we call television.

You can do this analysis for any product of the industrial system, and I encourage you to do so. Everything is interlinked to a certain extent so, in theory, every artefact of Industrial Civilization is as complex as every other. But even taken down to those processes and components that are unique to a particular end-product, like a television set, a shop-bought apple pie, an aircraft or a modern kitchen, there is a level of complexity that would be completely beyond the understanding of anyone not brought up in the Culture of Empire. Actually, it's beyond the understanding of anyone who takes some time to analyse what makes up the things we use in this culture...

Make It Simple

So, why is complexity a bad thing? The phrase I want to explain here is, "Built-In Complexity". As you have seen, something we have become conditioned to take for granted, such as a television, is highly complex; but more than that it has complexity built into it simply, as I have said, because it is a product of Industrial Civilization. Civilizations operate on top-down principles, with policy flowing down from those who are the ultimate recipients of the wealth and power that flows up to them. In order to control something as vast as a civilization, especially the one that currently dominates the globe, complexity is inevitable.

Like television, systems of government have myriad linkages across the range of different sub-systems that operate in order to keep things working as they should. Like television, especially in a social sense, systems of government are about maintaining a hierarchy. Systems of government utilise television to maintain control: it propagates selected messages controlled by various commercial and political powers. Television is just one tool, albeit a very powerful one, that Industrial Civilization uses to inculcate civilians with the greater aims of the civilisation.

The systems of control, as Mander alludes to in his "Four Arguments", demand complexity as a result of both the scale of the systems and because of the increasing levels of technology that have been utilised to achieve the desired outcome. There is an inevitable relationship between the two, as it happens: you could not have something as inherently complex as a television without large-scale systems of manufacture – it just wouldn't be worth it. This is why the highest levels of systematic complexity are only seen within the largest systems; a localised tribe has no need for complexity when it's food is available to hand, or with a kitchen garden where the crops are grown or harvested solely for that tribe. If the tribe becomes "Westernised" then it will begin to attain Built-In Complexity, with its acquisition of imported goods, food and services, however small-scale: immediately the tribe utilises something from a more complex society, so it too becomes more complex.

On the other hand, if you start to divest yourself of television, shop-bought apple pies, and the trust you place in governmental systems of control, then you start to become less complex.

To Last The Whole Day Long

Simplification has so many benefits that it would not be possible to list them all here in detail, but I can outline four of them which I think capture the essence of simplicity, and show up the myth that complexity is a good, indeed an acceptable thing:

1) Simplicity requires less energy: This is self-evident, for the fewer stages there are in any process, the less energy will be consumed overall. You could argue that heating a house with a load of wood and a hole in the ceiling is more energy-intensive than a combination gas boiler, but – taking aside the difference between renewable versus non-renewable forms of energy – in order to manufacture the combination gas boiler in the first place requires a similar number of processes as to manufacture a television. If you want more efficient heating, hammering out a rocket stove from a few sheets of metal is relatively far simpler. In addition, the more stages involved in anything, the less accountability is possible, and thus the more opportunity for energy wastage.

2) Simplicity is connected: Following on from the previous point, accountability isn't really about economics, it is about knowledge. If I were to buy a cord of wood that had originated from a forest far away, then it would have had to pass through a number of stages to get from the source to the user: the felling of the tree(s); the sawing and preparation of the timber; the movement to the port and subsequent transportation by sea and/or land to the point at which it is available to me, or at least the person who gets it too me. Through these different stages I have progressively lost connection with the origin of the wood; I have no sight of the trees, I cannot feel the soil, I cannot smell the air where the tree once stood. I do not care. That is the way of the civilized. Compare this to a person who cuts her own wood from a tree she felled, and uses it to build a shelter.

3) Simplicity is stable: As Thomas Homer-Dixon described so vividly in The Upside Of Down, complex societies are inherently unstable, for they rely on a multitude of different stages and processes connected by an equally complex set of linkages, any one of which can be critical to the efficient operation of the system as a whole. Bring down a major power line to a processing plant, shut down a distribution computer, or blockade a port, and the whole dependent system may break down, particularly one that is already under stress, as so many systems are in the just-in-time economy. If you grow your own food, or ideally are a member of a small growing community, then you may be vulnerable to seasonal aberrations or pests, but so long as you do it right then your food supply is safe, and not subject to the hazards of complexity.

4) Simplicity is democratic: As we have seen, complexity is used to enforce the systems of control that the Culture of Empire uses against us, to keep us subjects of that culture. One man with a sword can control perhaps half a dozen people without swords; one man with an agenda, and a military establishment under his control can control entire nations. Within a cooperative society, a simple society working on egalitarian principles, no one can wield power without challenge. You have a say, as does everyone, for there can be no ivory towers or impregnable fortresses in the simple society – you need complexity to build them.

We have been sold The Complexity Myth, the idea that something is only good if it is a product of a complex set of processes, in order that we can be controlled. We are kept in check by this idea and do not question it because we have

forgotten how to live simply; we have been brainwashed to love the world of the complex, and as a result we are prepared to defend the thing that is causing the collapse of the natural world, and our own basic humanity.

Unless we are prepared to once again embrace the simple then we have no future as a species...except, perhaps those few remaining people who still live simply.

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