

Reclaiming ‘Sustainability’

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This essay draws heavily on the book ‘Die Entdeckung der Nachhaltigkeit’ by Ulrich Grober, published by Verlag Antje Kunstmann in 2010

Humpty Dumpty is alive and well.....

‘When I use a word,’ Humpty Dumpty said in rather a scornful tone, ‘it means just what I choose it to mean - neither more nor less.’

‘The question is,’ said Alice, ‘whether you can make words mean so many different things.’

‘The question is,’ said Humpty Dumpty, ‘which is to be master - that’s all.’

This famous passage from ‘Alice Through the Looking-Glass’ captures the unchanging essence of all semantic power struggles. It was perfectly exemplified in the recent saga of the Coalition government’s *New Policy Planning Framework*, published last month. The NPPF mandates a ‘presumption in favour of sustainable development’. But what did they mean by ‘sustainable development’? The consultation draft contained the following classic version of the Humpty Dumpty doctrine: ‘When taken as a whole, the policies in this Framework set out the Government’s view of what constitutes sustainable development’. But in the face of protests from various quarters, including not just environmental NGOs but the parliamentary Environmental Audit Committee and even some developers themselves, the government was forced to reconsider its ‘definition’ of sustainability. In the final version, the relevant section now reads ‘The UK Sustainable Development Strategy *Securing the Future* set out five ‘guiding principles’ of sustainable development: living within the planet’s environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly’.

Although it has yet to be tested in the courts, clearly the final version offers a much better prospect of resisting unsustainable planning proposals. So - a victory for Alice, representing common sense, as well as for sustainability. But it was only one battle in a war which has now been going on on many fronts for quite a few years already – the war over the meaning of ‘sustainable development’ and/or ‘sustainability’. [I should say at this point that I recognise that the argument over ‘sustainable development’ is not the same as that over ‘sustainability’ and that there is a case to be made against ‘SD’; but I think that this case has more to do with the ‘development’ part than the sustainability part, and it is the latter that I am concentrating on here, so for the purposes of this essay I am treating them together.]

When the term was enshrined in the UN-commissioned report ‘Our Common Future’ in 1987 (usually called the Brundtland Report), it seemed to capture succinctly a concept which had been coalescing over a number of years from a host of related ideas and simultaneously gaining ground in public discourse. It was truly an idea whose time had come. And it seemed to open the door to a new, global, social and environmental contract.

But now....’sustainability’ is everywhere and yet nowhere. The term has been diluted, devalued and hijacked, to the point where environmentalists of impeccable credentials argue that it has lost all meaning and value, that it cannot be used, that it should be abandoned.

We are all familiar with this kind of misuse. From ‘sustainable health’ through ‘sustainable freedom from dandruff’ to ‘sustainable returns on investment’, we are bombarded daily with multiplying instances of the use of the term, which certainly tend to dilute its meaning. This goes further and reaches a level which can only be described as abuse or even hijacking. What exactly can be meant by ‘sustainable golf’ or ‘sustainable Las Vegas’ (it’s true – try Googling them!)? And what precisely can be meant by ‘sustainable growth’ (which Herman Daly dismissed as an ‘impossibility theorem’ already in 1990, but which still appears regularly in the academic and policy literature) ? If golf or even Las Vegas can be described as ‘sustainable’ - even if only as an aspiration - then surely the concept has indeed lost all value and has to be abandoned?

Let’s first look more closely at exactly what is going on here. Nobody can seriously object to ‘sustainable health’. And even ‘a sustainable return on investments’ actually means nothing more than ‘sustained’ – i.e. long-lasting, durable. Clearly, the word has two levels of meaning, both of them in reasonably common usage: one which signifies nothing more than the idea of extension over a longer time period, and a deeper one which is a moral and political concept incorporating simultaneous ecological, economic and social dimensions. The problem arises when these two levels overlap. When the discourse in general is non-political, but it is suggested that the full, deeper meaning of the term is being employed. Sometimes, simple mental or linguistic sloppiness is to blame. But all too often the fog of confusion is deliberate. Then what you have is ‘greenwashing’.

You can make money, or political capital, out of confusion. Once the term has been hijacked and robbed of its substance, there’s not much you can do with it. Or rather, nothing you can’t do. The most mundane of activities, even the most ruthless pillaging of the planet, can be sold under the hollow label of ‘sustainability’ or ‘sustainable development’.

But we mustn’t give up the fight. The very fact that the term is being stolen and abused in this way indicates its value. Indeed, I would argue that ‘sustainability’ is essential to the green project, because no other term encapsulates the moral and political imperatives at its heart so succinctly and clearly. Let’s not cede our best weapons to the enemy, and have them turned against us. In this paper, I want to make a contribution to reclaiming the

word ‘sustainability’ – to defend the concept against abuse and dilution, to champion its strong version as opposed to the shallow and weak versions, and to encourage everyone to adopt this strong version into their own vocabulary and to use it correctly and to proper effect.

I’m not proposing to do this by offering a new definition. Like most valuable terms, ‘sustainability’ resists simple definition. Instead I want to capture and pin down its inner meaning, its essence, by outlining its history. The cultural history of sustainability has recently been mapped and analysed in a fascinating book by the German environmental author Ulrich Grober which I have just translated into English; the English translation will be published later this year.

Grober demonstrates that our modern concept has surprisingly deep roots and a long, little-known tradition. Old and rich words are often composed of several layers of meanings. In his book, he strips back these archaeological layers, one at a time, in order to get at the core of the word’s meaning.

For the purpose of this necessarily compressed summary, I will focus on three layers.

- The first is the full, deeper meaning of **the modern term**, as it established itself over the period from the early 1960s to the late 1980s.
- The second layer is **the blueprint** for the modern term, the technical German forestry term *Nachhaltigkeit* (or in the English translation ‘sustained yield forestry’). This was coined in Germany in the early 18th century (but with pan-European roots going back considerably further), and had spread around the world by around 1900.
- The third layer is the **early European Enlightenment**, and specifically the transition from the medieval Christian doctrine of Divine Providence to the Enlightenment imperative of *conservatio sui*, self-preservation, in the mid-17th century.

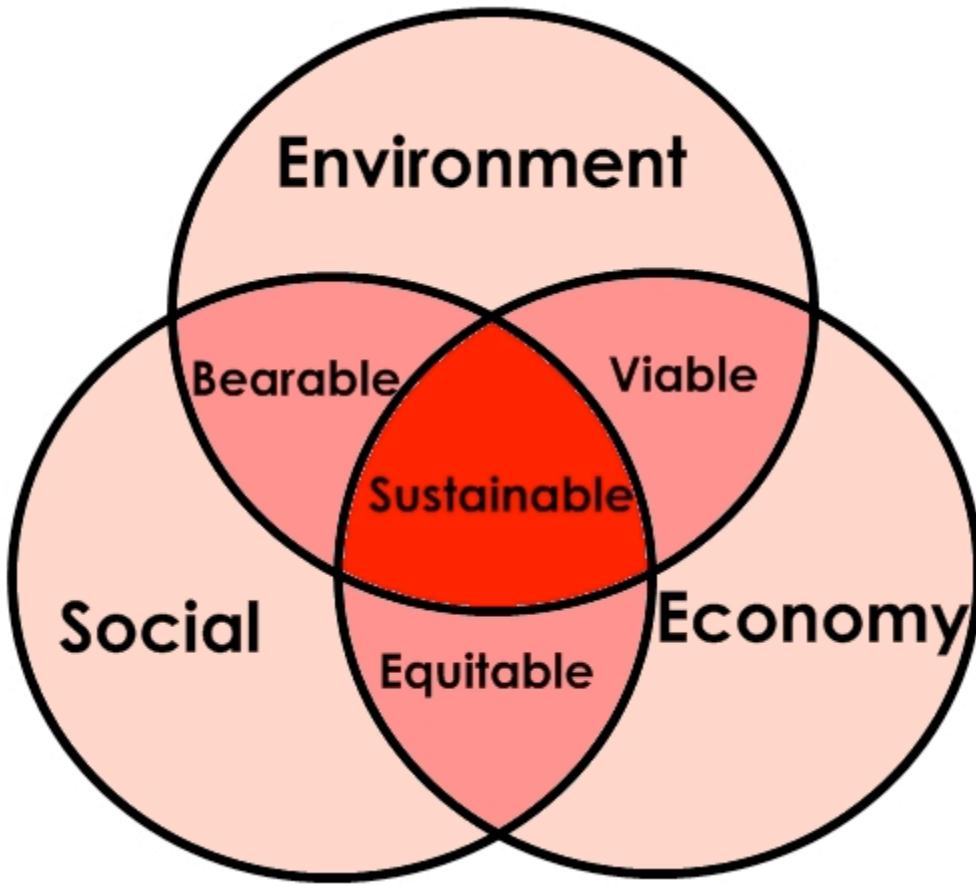
The modern term

What exactly do we mean when we use the word in its ‘deeper’ or more political sense today?

There is no comprehensive, universal definition of sustainability. The concept is too complex and too dynamic to allow one. Rather, several different formulations are in circulation, all to a greater or lesser degree circumscriptions and/or approximations. The best-known is a passage from the Brundtland Report published by the UN in 1987: sustainable development is '**development that meets the needs of the present without compromising the ability of future generations to meet their own needs**'. That is the original wording of the globally most frequently-used formulation of the basic idea, and it will serve as a historical marker for the current (undiluted) understanding.

Now it seems to me that this concept is immensely valuable. It encapsulates very succinctly both an extremely important moral principle – responsibility towards future generations – and an extremely important economic principle – the limitations on the physical capacity of the planet to meet our material needs – which together ought to shape all of our (economic) activity.

Here is another form of definition in widespread use – the concept of the ‘three pillars of sustainability’, in which ‘sustainability’ is the only area which encompasses simultaneously the economic, environmental and social dimensions of legitimate political activity.



If you try to imagine a term which could replace ‘sustainability’ at the centre of this figure, you soon recognise the value of having an agreed term to express this complex idea. So I for one don’t want to lose it. Rather, I want to try to anchor it and protect it - by means of history.

To begin with, it didn’t come from nowhere. It wasn’t invented by the Brundtland Commission – neither the idea nor the word. Grober recounts the history of the progress of the sustainability concept in the modern period, beginning (while acknowledging that in the history of thought all beginnings are more or less arbitrary) with Rachel Carson’s *Silent Spring* in 1962, via the Apollo lunar landing project and the first views of the Earth from space, to the countercultural movements of the 60s and 70s and the first UN

environment conference in Stockholm in 1972, the publication of the ‘Limits to Growth’ in the same year and up to the Brundtland Report in 1987. And he tracks the tortuous route of the terms used to express this idea, showing how important was the leap of imagination which linked the metaphor of ‘Spaceship Earth’ (hence the importance of the Apollo Project) to the closed-system ecological economics of forestry. For it was this link that opened the door to the term ‘sustainability’.

The blueprint – *Nachhaltigkeit*

Long before the Brundtland Report, foresters all over the world spoke of *sustained-yield forestry* when discussing their work from a long-term and broad perspective. It was their guiding principle, indeed their holy grail. The term was a translation from the German *nachhaltige Forstwirtschaft*, where *nachhaltig* (literally, holding back, or keeping in reserve) - or the abstract noun form *Nachhaltigkeit* - is the term expressing the idea of sustainability. This term was coined in Germany almost exactly 300 years ago. What happened around the early 1970s was that a few far-sighted and influential people saw the parallel between the closed-system ecological economics of forestry (‘sustained-yield forestry’) and the closed system economics necessary on ‘Spaceship Earth’. This was how the forestry term *Nachhaltigkeit* acquired its wider applicability and increased importance in the modern form of *sustainability*. Incidentally, a reverse modification process also took place, so that in German the word *Nachhaltigkeit* is now used principally to denote sustainability in its full modern sense, and not just within forestry.

Where did this idea come from, and why did it arise in Germany?

The answer is that it didn’t arise only in Germany, but that it was here that it first developed from a broad but vague European cultural concept into a systematic ideology and practice. The spur for this was – as ever - economic need. But economic needs are also always locally specific. What were the particular location and crisis which gave rise to this innovation?

The Ore Mountains which straddle the border between the German state of Saxony and the Czech Republic are so named for their rich deposits of numerous metals, including iron, silver, tin and uranium. These deposits have been mined since the 15th century. The silver mines were the principal source of the wealth and power of the Electorate of Saxony around 1700 (as exemplified in Dresden, one of the great capital cities of early modern Europe). The man who came up with the term *Nachhaltigkeit*, in a book on the management of forests which he published in 1713, was Hans Carl von Carlowitz, the Director of the Chief Mines Inspectorate of Saxony. It was his job to keep the silver industry functioning, and for this he needed above all wood, which – as charcoal – was the fuel for the smelting industry around the mines (as well as being essential for all of the local population, as firewood, and for the construction and maintenance of the mines, as timber). But the areas around the mines had been gradually denuded of trees over generations, and the wood shortage was now threatening the viability of the silver industry.

The basic principle of sustained-yield forestry is that you mustn't cut down more wood than the forest can re-grow in a year. If managed in this way, the forest is a renewable resource which will provide in perpetuity. If not, then when you burn wood you are consuming not just the end-product of the forestry industry but also its capital machinery and raw materials.

This may seem obvious to us, but one has to go back mentally to pre-industrial times to recognise that the assumption had been that the forests were inexhaustible. It was only growing populations and growing industrialization which challenged that assumption.

Carlowitz wasn't the first to recognize the problem, but he was the first to theorize it so completely and to encapsulate it in a single term. He thereby paved the way for a technical revolution in the management of German forests on the basis of sustainability which then spread via France and the rest of Europe around the world. The basic principles had been recognized before – each time under conditions of excess of demand over supply; for example, by Louis XIV of France, whose Prime Minister Colbert introduced a comprehensive reform of the state forests in his *Ordonnances* of 1669 because he feared that *la France perira faute des bois*; by John Evelyn in England, whose Royal Society report and book 'Sylva' of 1662 were a response to an enquiry from the Royal Navy, concerned about the lack of timber for ships; and by the Senate of Venice as early as the late 15th century, when the local forests could no longer supply the wooden foundation piles on which the city rests, hidden below the water line. It was a pan-European phenomenon of early modernity; the concept has counterparts in other non-European cultures, but it was in Europe, and initially in Germany, that it began the modern journey which has resulted in global recognition, if not (yet) implementation.

So why did it take so long for this seemingly obvious principle to establish itself?

The philosophical revolution – the Enlightenment

The answer is that the very idea of 'managing' the forests in the cause of sustainability, of managing nature, required a Copernican revolution in human thinking before it could be accepted. For the idea of sustainability is at its core much older even than the idea of 'sustained-yield forestry'. But it had been assumed that it was not the responsibility of mankind, but of God.

The insight that the world is so ordered that it renews itself, that it maintains the balances – climate, nutrition, water - necessary for the continuation of human life, of all life, is ancient. In Christian theology it was expressed in the concept of *Providentia Dei* - Divine Providence. God's Creation was not just a one-off act; God had foreseen the need to create a world which would renew itself perpetually, and had therefore built self-renewal into the system. This is what explains the cycle of the generations in animals and humans, the cycle of plant life, the water cycle, the cycle of the seasons, the orbits of the planets - and, it was believed, the orbit of the sun around the earth. This self-sustaining element of the Creation had a specific name: *conservatio* (of course, the root of the modern 'conservation'). The very idea that human assistance was necessary for the completion of

God's work was potentially heretical, and the idea that Divine Providence might actually be thwarted by human intervention was certainly so.

Following in the wake of the Copernican revolution, which displaced Man from the centre of the Cosmos, came the idea that human beings were perhaps at least co-responsible for their own survival, and for helping the plans of Divine Providence to be fulfilled. This required a transformation of the idea of *conservatio* into *conservatio sui*, responsibility for one's own preservation, which went hand in hand with the new philosophies now arising which allowed mankind the power and the responsibility of knowledge about the world. Once these ideas became universally accepted, then it was also accepted that human beings had a right, or even a duty, to manage nature (beyond the Biblical command 'to tend and to keep' the soil).

There remained the question as to who this management of nature was for. Was it for mankind, or for nature itself? Was mankind the point and purpose, or merely the steward, of the planet? This was where a fatal division occurred within the Enlightenment, where Spinoza deviated from the path set by Descartes. Descartes believed that human beings were set above nature, that Man was 'maître et possesseur de la nature'. Spinoza, who followed Descartes in very many respects, crucially parted company from him at this point, maintaining rather that mankind was a part of nature and that nature was synonymous with God. (This was why he was suspected of Atheism.) The division between Cartesian thinking and Spinozist thinking about Mankind's place in nature still underlies and explains much that divides environmentalists today from non-environmentalists – for example, the belief in the possibility of a technical 'fix' for climate change.

Back to the future

What happened between the global adoption of 'sustained-yield forestry', beginning in the early 18th century, and the re-discovery of sustainability as a universal principle in modern times, or around 1972?

In a nutshell, the fossil fuel age. Or to use a metaphor which was common at the beginning of the period - the discovery of the 'subterranean forests'. Sustainability survived as a niche concept in the world of forestry, but for the industrializing world forests were largely irrelevant once it was discovered that wood could be substituted by coal and oil. And until recently, the subterranean forests – just like the real ones before them – were assumed to be practically inexhaustible. Now that the coal and oil are running out, and economic demand for fuel (and now for other resources too) is once more exceeding supply, sustainability has to be discovered all over again - as the only way we will preserve the planet (not just the forests this time).

But it shouldn't be so difficult. Before the fossil fuel age, the fundamental universal forces of solar energy (directly, through sunlight, or indirectly through wood) and of gravity (in water and wind power) were the only energy sources we had. After the end of the fossil fuel age, they will be again. The unsustainable era will therefore prove to have

been only a blip. The key question is whether that blip ends peacefully, through our managing a return to sustainable practices, or in a violent cataclysmic collapse of the unsustainable lifestyles we have created on the back of our (wasted?) endowment of fossil fuels. As the doctrine of Divine Providence recognized, the planet itself is sustainable – it has cyclical sustainability processes built in. This has been expressed again in our own times and terms in the Gaia hypothesis, in some ways a contemporary, neo-pagan version of Divine Providence. If humanity interferes with the self-regulating sustainability of the planet, that interference will be removed.

Finally, then: how are we to achieve this indispensable return to sustainable practices? Grober proposes a simple litmus test comprised of only two parts. Of every proposal we should ask the following questions:

1. Does it reduce the ecological footprint?
2. Does it widen access to a good quality of life?

It will be countered of course that this is too simple. But – to come back to the National Policy Planning Framework – the same spirit which drove the reduction of over 1300 pages of detailed regulations down to 50 ought to welcome a practical definition of sustainability in two lines. Let's allow the courts, if necessary, to work out the fine detail, but while that is happening let's not lose sight of principles, of the spirit at the heart of the shared constitution, which need to be concise and accessible.

There is a lot to be said for simplicity. I argued above that the concept of sustainability, and the term, are essential to the green project, but I was perhaps being too modest on its behalf. You could argue that sustainability *is* the green project. What are all our efforts directed towards if not sustainability? As Grober says, “‘sustainability’ will remain the key term. It has the necessary gravity and the necessary flexibility. This word contains everything that matters”.

So let's not be afraid, once we've reclaimed it, to exercise our proprietary rights and to use the word frequently, as long as we are careful to use it properly. Its use may then serve to embed it deep in our culture and psyche - or perhaps to bring it back from there to the fully conscious level. Just as children have a powerful instinct for what is fair, perhaps we may find that we have, or can develop, or re-learn, an instinct for recognising what is in tune with nature, what is truly sustainable.

'Sustainability: a cultural history', by Ulrich Grober, translated by Ray Cunningham, will be published by Green Books on 3 September 2012