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Developing Sustainably ~ *Drivers, Techniques and Case Studies*

THE PEITHO PROPOSITION ~ Sustainability in a democratic, industrialised economy ~ are we ready?

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ABSTRACT

PEITHO was the goddess or spirit of persuasion, seduction and charming speech and also represents rape; she was usually depicted as a woman with her hand lifted in persuasion or fleeing from the scene of a rape; often with a white dove and ball of binding twine somewhere in the picture.

The analogy is that the “persuasion, seduction and charming speech” is what we have to do; the “rape” is the pillage of the earth’s resources; the “white dove” is a typical symbol of hope and the “ball of binding twine” represents that we are all inextricably linked together (the people and the available resources).

1. This proposition was originally entitled: *Sustainability in a democratic, industrialised economy ~ is it possible?* Since the answer is “no” that does not really help. By substituting “*is it possible*” with “*are we ready*” it allows us to explore the possibility of why it is not possible now, **and then** what it would take to make it so; so that we **are** ready.
2. The first thing to do is to rehearse why it is not possible, just in case some poor souls are under any illusion that it is possible. Broadly, there are two existing world conditions that allow a sustainable basis for a country; firstly, within the context of a totalitarian state and, secondly, within the context of a (democratic) agrarian state. In the case of the former, the totalitarian state, the economy can be established and directed to achieve whatever goals it wishes within the bounds of practicality. It simply orders its citizens to behave in a certain way and to abide by a given set of rules (governing living patterns, concepts of work, even at the level of population control). Whilst it is seductive to think about what it is possible to achieve, one should be in no doubt that it is at a cost which is unacceptable by any democratic norms. In the case of the latter, the agrarian state, the life choices that generate living beyond the country’s inherent means are not available. So, it would be possible to manage the country’s economic development in a way to avoid mass-dependency (on energy, food, goods, water systems *etc*).
3. In democratic, industrialised economies (such as the US, the UK and the rest of Europe) the process of industrialisation has locked us into mass-delivery systems of energy, food, water supply, waste disposal and so on. These systems are inherently unstable since they rely on providing services or goods on a per capita basis that is affordable to average working citizens, on an ever-increasing scale. Yet the sources of these services and goods are finite ~ the current favourite is of course the notion of “peak oil”. Of course, technology and inventiveness delay the appreciation of that finiteness to all but a relatively few who truly recognise the basis on which these services and goods are supplied. Some of those *few* are speaking out but the rest of those *few* (the majority) are themselves locked in to the mirage of endless supply through one or more of: job security, indifference, denial and so on. They have actually become part of the problem instead of being part of the solution.
4. As an example, at the CIWEM conference, a representative of the UK Department of the Communities and Local Government put up two maps; one of water stressed areas and the other future housing building. The coincidence of “fit” was laughable if it was not so sad. An Emperor’s New Clothes moment if ever there was one.
5. There are many sound voices who have articulated the concern. They do so from various perspectives; economics, environmental science, ecology, population dynamics, and one or two just from commonsense. Articulating the concern is useful but limited. Something more is necessary to give hope, a future worth looking forward to and a reason above all to believe that the voices that stand up are not mavericks, crazies or anarchists but are actually **right**.
6. Let us return to the original question ~ *Sustainability in a democratic, industrialised economy ~ is it possible?* The answer is a resounding “no”. Let us also be blunt: those that think sustainability in a democratic, industrialised economy is possible are at best ignorant and worst dangerous, because they lead us down a path of progressive, unimaginable misery. BUT...

7. Whilst it is not possible to have a sustainable, democratic, industrialised economy with our present approach of aspiring to, and assuming, continuing economic growth in the UK, **it is possible under some changed conditions**.
8. Various thinkers have written comprehensively about this and thought up handy little ditties such as one-planet living. However, it would be helpful if these people stopped talking about the problem and actually figured out a **practical** way forward. Let us help them consider the big picture: there are three ways for the UK to become sustainable, and then develop sustainably. The least likely, though sometimes it does not seem like that, is a nuclear conflict in which the UK infrastructure and systems are wholly destroyed. Partial destruction does not help because we (assuming there are some appropriate “we” left) are likely to try emulating what we had. With wholesale destruction we **could** try to do something differently. The likelihood for that, though, is not great. Whilst history does not tend to repeat itself exactly it does tend to rhyme, so the omens for a change are not ultimately good. More likely, would be the second “option”: a pandemic that wipes out at least 30% of the population. Whether or not we would take the opportunity that such release from resource pressure would give us is another matter. More likely we would simply continue as before (given the infrastructure and systems would still be nominally in place) and enjoy the breathing space. Being realistic, planning for a pandemic is probably a bit of a stretch as a basis for putting the UK on a sustainable basis.
9. In the absence of a nuclear conflict or a pandemic, to offer hope that sustainability in a democratic, industrialised economy could be a reality, the third option would be for our elected representatives to take action that will change our lives and lifestyles fundamentally. Currently, they are unable to do ... because they do not have permission. Permission to make the changes. Let’s be very clear: individual change by individuals, on the scale required, is quite inconceivable in the timescale required.
10. Let me explain that because it does tend to go against current “green” dogma about how important everyone’s contribution is. Individual action is a corner stone of thousands of small activist groups throughout the country. Of course, there is a huge amount of good stuff going on at all scales. But before we look at why that is laudable, yet totally inadequate, let’s examine what we actually need to do.
11. At this stage we have to, at least, mention what sustainability is all about ~ not the trite definitions which do not mean anything but what it means in hard measureable terms. There are some basic principles:
 - Any materials mined from the earth should not exceed the environment’s capacity to disperse, absorb, recycle or otherwise neutralise their harmful effects to humans and the environment
 - Synthetic substances in their manufacture and use should not exceed the environment’s capacity to disperse, absorb, recycle or otherwise neutralise their harmful effects to humans or the environment
 - The biological diversity and productivity of ecosystems should not be endangered
 - A healthy economy should be maintained, which accurately represents the value of natural, human, social and manufactured capital
 - Individual human skills, knowledge and health should be developed and deployed to optimum effect
 - Social progress and justice should recognise the needs of everyone
 - There must be equity for future generations
 - Structures and institutions should promote stewardship of natural resources and the development of people
12. I said earlier that there is a huge amount of good stuff going on at all scales; individual, community, organisation and government. Now let’s think about those different scales within the context of the basic principles above.
13. We, as **individuals**, are exhorted to:
 - **Recycle**
Yet there is still resistance to this and only when kerbside collection kicks in does it really begin to stick
 - **Change light bulbs, switch off PCs etc**
It is still very common to see open plan offices awash with artificial light and blinds closed, dozens of PCs, printers etc left on standby overnight, or even just left on
 - **Insulate**
17 M homes still have less than 150 mm of loft insulation (current standard is 270 mm)
 - **Use the car less**
This is relatively easy in conurbations or large towns (if you choose to use public transport). Try that if you need to move between small towns or out of villages...

- **Buy local food**
We are addicted to inexpensive, non-seasonal fruits and vegetables
- **Consider renewable energy**
This is still pretty expensive and regarded as a black art by many
- **Take UK holidays**
- *We are addicted to inexpensive, no frills flights*
- ... and so on

The laudable basic principles of sustainability pale into complete irrelevance to the here and now of practical living, working and playing in today's UK.

14. All is not gloom though. There is a lot of good advice about. Unfortunately, much of it is just tedious, endless repetition. Every activist group seems to need to have its own web site. Each government department has its own advice pages, special agencies have their own pages; we are inundated with a huge amount of very similar information: all sharing best¹ practice, all exhorting individual action. Yet none of these sites gives us the big picture. None seem to figure out how it gets us from where we are, to where we need to be. My guess is they do not know or are unable to say. There is almost a faith-like quality to the assumption that as long as we all do the right thing, all will be well.

Just take a look around and think a bit, just a bit, do we really believe that if we do the right thing all will be well?

15. Let's be blunt again: how many of the 42 million adults and 15 million children in the UK do we really believe would even subscribe to the list of basic sustainable principles, let alone actually act to conform to them? If you are **still** clinging to fantasy, let's run the numbers:

Being optimistic, let's see what the *green* lobby has to offer. One would hope that the "green" lobby is already at least partially "on message". In round terms, those that subscribe to the green groups probably number less than three million (see Table 1).

Group	Nominal Membership/Supporter (in millions)
RSPB	1
Wildlife Trusts	0.75
Greenpeace	0.2
Woodland Trust	0.2
Friends of the Earth	0.1
Campaign for the Protection of Rural England	0.064
Marine Conservation Society	0.000005
Others	0.5
Total	2.814

16. Let's assume the majority of the green lobby are adults, say, 2.5 M and are inclined to be more receptive to the "message". That is about 5% of the population. It is not enough. Why?

There is a big difference in hearing a "message" and acting upon it. The message is not actually about recycling, changing light bulbs, switching off PCs etc, insulating the home, using the car less, buying local food, considering renewable energy or taking UK holidays. It is about serious lifestyle change; re-thinking how we live, work and play. Serious numbers of the "green" are fairly passive "subscribers" they have particular interests, perhaps birds or pandas, perhaps green-field housing, perhaps footpaths but that does not make them serious lifestyle changers.

With effort, perhaps a few more could be persuaded to do more ~ 80%? Even this sounds too optimistic yet that would still only give us 2 M adults. With a UK adult population of 45 M we are talking 43 M that more or less are living, oblivious to the slow-burning fuse of resource depletion.

17. The **real challenge** is that all this sustainability does not even resonate fully within 2 M. The real issue ~ changing mindset of 43 M or let's say just 46% which gives a nice round number of 20 M seems a hard if not

¹ Let's not dwell on this, but the sharing of "practice" does not necessarily make it, by default, "best" practice

impossible sell. If some optimists are still happy to grasp at straws (or the words “acorns”, “little” and “oak trees” come to mind) let’s think “litter”.

18. We have had a litter problem in the UK at least since 1958 ~ 50 years. This is despite endless national campaigns and strenuous efforts by local authorities. In 2008, the *Campaign for the Protection of Rural England* trotted out their new president, the American celebrity writer, Bill Bryson to spearhead a new anti-litter campaign, *Stop the Drop*. After 50 years of campaigns, legislation (albeit barely enforced or enforceable) endless education from infant schools upwards, bins pretty much wherever one walks, we still have not solved the simplest environmental challenge. The technical solution is relatively low cost, the message is very clear, the action required is achievable and the problem is easily seen, felt and sometimes smelt, yet we cannot solve it.

Recall this; BBC News (London) 18 July 2008 ~ **Mob attacks officers over litter**

“... Two police officers were attacked by a mob in south London when they asked a 15-year-old girl to pick up some litter she dropped. Metropolitan Police said one of the officers suffered injuries including a bite wound in the attack. Up to 30 people attacked the officers when the girl refused to pick up the litter and became aggressive. Police Inspector Simon Ellingham said the girl initially picked up the litter when asked, but immediately dropped it again sparking a confrontation leading to the attack...”

If we can’t deal with litter which we can see, touch and smell, and which is technologically simple and cheap to deal with ... do we really think we can deal with sustainability?

19. Of course there are some nominally, inspiring examples: Ashton Hayes in Cheshire, the Centre for Alternative Technology in North Wales, perhaps even The Transition Movement, though it is probably too early to tell yet with the latter. The one thing these examples all have in common is the level at which they operate (recycling, energy efficiency, transport, local food etc). The argument is that one starts with easy to do stuff, bring on board decent numbers and then escalate. Except there is no escalation and no serious practical way to escalate because we then meet the lock-in problem of mass delivery of our basic services and needs. It is of course possible to go “off-grid” not just for energy but food, waste disposal water supply and so on but then we are operating at a very minimalist level, which will not resonate with our 20 M. The above examples are simply not scaleable... in a democratic context.
20. There is a film doing the rounds called *Power of the Community*. The notion is that it shows what can be done when push comes to shove as it did in Cuba after the collapse of the Soviet Union and with it, its support for Cuba. Communities then had to grasp a real problem and re-adjust completely. The outcome was heroic and inspiring. The folly of subscribing to this seductive little tale is that the “driver” for this kind of heroic action is absent in the UK. It is not really absent of course. The writing is on the wall for many of life’s assumptions not just “peak oil”, though that is the more topical one. But to all intents and purposes for the 20 M there is no driver.

Let’s get real. It is going to have to get **seriously bad** before the 20 M are going to modify their current lifestyles **even if they have the ability**.

21. The one advantage that the Cuban communities had over, say, the UK, apart from a seriously bad life-or-death situation and a totalitarian state, is that it is essentially an agrarian society and was not overpopulated.
22. It had room to be heroic. Even rural communities in the UK are largely locked into structures that promote: travel to work, reliance on global food systems, reliance on fossil fuel power, ready availability of unlimited clean water and so on. There is simply not the space for communities to re-engineer, without a directing mind.
23. So what of **organisations**, what do they offer?
24. Some have argued that instead of using “litter” as a proxy as to how hard behaviour is to change one should use “health and safety”. Certainly things have improved since, say, the 1970s, but we still have an unacceptable level of injury and death in, say, the construction industry. The improvements we do see are simply a reflection that once you have educated the work force, provided the right kit if necessary and have continued reinforcement it is possible to make change stick because ... you can **tell/order** them to change. Organisations have rules and they can force behavioural change.

In the public domain there is ... choice, and therein lies the problem. We can choose not to do the sensible or the right thing if we so wish. Some even do this just to be contrary ~ I am sure we know many of these.

25. So that leaves us with ... **government**.
26. In the UK we have: central government, regional, county/unitary, district, borough/unitary, town and parish councils with variational equivalents in different parts of the UK. Let's just deal with England, as the "challenge" to develop sustainably is the most acute.
27. **Regional Government** is more or less about the Regional Spatial Strategy for each region. One can dress it up in a couple of different ways but the end result is that the Strategy is about houses ... how many and where. The house numbers are simple derivatives based on required economic growth targets. Growth requires x additional labour requiring y houses. At the Examination in Public where the Strategy is debated who do we have round the tables in droves? House builders lobbying for "sustainable" housing which just happens to coincide with where they have land banks. The water providers are there too, as is the Department for Environment Food and Rural Affairs, the Environment Agency, Highways *etc.* What these all have in common is to deliver the house numbers allocated by central government. They don't seriously challenge the basic proposition in the first place. Their remit is simply to receive the allocation and then figure out how to deliver that "sustainably". It is like building a boat for 200 providing 10 life jackets and then saying: save everyone. The numbers do not stack up. Even the most pedestrian, first year undergraduate in sustainability studies spots that in Week 2 (Week 1 is Freshers' Week and sustainability is defined by rather different measures). Yet, nominally well-educated professionals fail to see the non-alignment between house numbers and sustainable development or do they... perhaps they lack courage, positional power, job security and those other things that keep our collective head down.
28. "... *Carbon virtue and collective environmentalism are futile as long as our economic system is built on the assumption of growth.*" **New Scientist, Opinion, 18 Oct 2008**
29. So what of the other tiers of government? ~ county/unitary, district, and borough/unitary councils ~ the **planning** authorities. The county council service delivery and *raison d'être* is pretty much predicated by the Local Area Agreements. These "agreements" are made with central government and are based around delivering services for presumed levels of housing. The scale required demands mass-delivery structures and systems.
30. The **town and parish council** play a minor role. Interestingly though, rather than being the end of the road in terms of governance they could (should?) be the beginning. But more of that later...
31. To summarise, **individuals are not able to change sufficiently** on their own. Even if 20 M wanted to they could not because, with the exception of handfuls of exceptional people, they have neither the technical or financial resources to do so. **Communities are not able to change sufficiently** either because they are locked into dependency on existing structures and systems. **Organisations are not able to operate**, significantly, outside of the existing market mechanisms. That leaves government ... and all tiers of government are defined by central government.
- 32. So, we need to re-shape the way we do things and the way things are done for us.**
33. This is why central government has to lead. To do that it will need permission ...from us. Left to its own devices, central government will simply have a series of "eco town moments". Actions that miss the point.
34. In October 2008, *New Scientist* published a series of articles from some key thinkers: Herman Daly (father of ecological economics) Tim Jackson (UK Sustainable Development Commission) Gus Speth (Environmental Advisor to Jimmy Carter) Susan George (Leading thinker of the political left) Andrew Simms (Policy Director, NEF) and David Suzuki (Broadcaster and activist). In its overall summary, the *New Scientist* drew some brief conclusions:
- Economy is blind to true environmental cost
 - Green values have no chance against today's capitalism
 - Only global, government-led effort can shift our destructive course
 - Unbridled growth cannot pull poor out of poverty
 - Politicians have to change their thinking
35. Let's take a look at some thoughts of these thinkers:
- Herman Daly** ("father of ecological economics") a former senior economist with the World Bank (1988 – 1994) and currently Professor of Ecological Economics, University of Maryland, US

He concluded:

"...a macro economy that is structurally required to grow in scale beyond the biophysical limits of the Earth is an absurdity..."

Tim Jackson (UK Sustainable Development Commission) currently Professor of Sustainable Development, University of Surrey (UK) and the Economic Commissioner on the UK Sustainable Development Commission

He concluded:

"...it is time to stop pretending that mindlessly chasing economic growth is compatible with sustainability..."

Gus Speth (Environmental Advisor to Jimmy Carter) former Head of the UN Development Programme and currently Dean of School of Forestry & Env Studies, Yale, US

He concluded:

"...we are trying to do environmental policy and activism within a system that is simply too powerful..."

Susan George (Leading thinker of the political left) serves as Chair on the Board of the Transnational Institute which is an Amsterdam-based network of activist-scholars who produce critical analysis of global problems

She concluded:

"...individuals ... should not harbour any illusions that personal behaviour ...can do the trick. The worst offenders will not desist and voluntary measures are ineffective. Scale is the problem..."

Andrew Simms (Policy Director, NEF) co-author of *Do Good Lives Have to Cost the Earth?* notes that during the Eighties for every \$100 added to value of the global economy \$ 2.20 trickled down to the poor; in the Nineties this had diminished to 60 c. Ever increasing growth is argued to be the way to lift millions out of poverty ~ a myth

He concluded:

"...took just days for governments ... to abandon decades of economic doctrine to rescue the feckless financial system..." (Referring to the "Financial Credit Crunch of 2008")

David Suzuki (Broadcaster and activist) a Canadian campaigner and founder of the Suzuki Foundation which works with business leaders ~ the industrialised world (20%) consumes 80% of resources

He concluded:

"...Earth could support 200 million if you want to live like North Americans..."

36. We are not alone! OK, let's say 80% of us are convinced ... so what? Tim Jackson (UK Sustainable Development Commission) remarked after making a key presentation to the UK Treasury: "A UK Treasury official accused me of wanting to go back to cave living". Another said: "Well, that's all very interesting perhaps we can get back to the real job of growing the economy".

If someone appointed by government to the heart of sustainable development in the UK can be so easily dismissed what can individual, ordinary, thinking people do? **Absolutely nothing**

May be, may be not...

37. One of the observable facts that has become increasingly obvious from the recent financial challenges is that central government is able to respond quickly and fundamentally. But only when three conditions are met:
- When it is safe to do so;
 - When the prevailing situation is blindingly, obviously bad; and
 - When there is absolutely nowhere else to go.

In modern times, until this year, the above usually happens at time of war. As our banks and everyone else's keeled over, the fundamental premise on which our society was based seemed (and probably still is) on the brink ~ a wartime equivalent. The government acted ~ time will tell if that was successful. The key parallel here is that we are in a resource credit crunch ~ far more serious than the financial equivalent because we will not be able to borrow from the future ~ we have been using the future resources for some time.

Time for a Plan

38. The Plan is in two, concurrent tracks:

Central government should host a multi-media National Convention of the best thinkers and experts on economics, science, arts, philosophy to develop a Blueprint and timescale for the shift of the UK to a sustainable basis	Central government must direct all tiers to begin the biggest debate and exchange of views in UK history, concerning the future, in every single parish or equivalent. This National Debate must be accessible and understandable by 42 M. Its objective is to develop a permission to implement the Blueprint
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39. Neither of these things will happen without a catalyst. This is where CIWEM comes in. The government needs to be persuaded that the Plan above should be initiated (within a non party-based, non-electoral context).
40. CIWEM should engage with fellow institutions (that constitute the technical and scientific leadership of the UK) to create a professional voice; this constituency should then engage with the “green groups” (to add a little critical mass) and with media and key celebrities to achieve a groundswell of thoughtful opinion sufficient to give permission to the government to begin the two Plan tracks: host the National Convention and begin the National Debate.
41. The shift of the UK to a sustainable basis ~ will require fundamental realignments in the way we live, move about, work, obtain our food and water, obtain and use energy, deliver education, health care and so on. To do this will require government action on a scale unprecedented even by times of war or financial chaos. To contemplate this, government needs to be sensitised to the need and be permitted to take the first step to speak to the people and draw up a Blueprint, and then act on its behalf. To date, inspiring individuals have been unable to achieve this. A different tactic is needed.
42. The role of CIWEM is to begin the process of assembling a professional voice (technical and scientific leaders, media and thoughtful celebrities) to “permit” the government to begin.
43. So, sustainability in a democracy that is industrialised? NOT YET - we need a plan and Government requires permission. If 80% here today, at this conference say to CIWEM leadership “Yes we can” then CIWEM can begin its task. It requires a first step ... from you ... please. If even 80% of what has been rehearsed here today resonates with you, please place your yellow sticker on the voting wall.

Sustainability in a democratic, industrialised economy ~ are we ready? I hope that you are today²
Thank You

² By the end of the conference, 80.4% of delegates had placed their stickers on the wall