



## **“Heritage and the Philosophy of Sustainability”**

**by Neil May**

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I am going to speak today about “Heritage and the Philosophy of Sustainability”, but the title of my talk, since we’re at an energy efficiency conference might just as well be “The Problem with Energy Efficiency?”.

What I’m going to talk about is the next stage in the STBA’s programme of work. We had a policy discussion about six months ago, about what we should focus on next and what were the key elements for the STBA going forward. After about a two hour discussion, we decided that we really need to get to the heart of the matter, and I’ll explain why that is, as I go on. The heart of the matter being: why are we bothering, why do we care? I think is what it comes down to.

I’m going to start with a story about something that happened to me about 3 years ago. I was invited to Garden Organic (the leading membership organisation for the promotion of domestic organic gardening) for a conference, although I’m not an expert on gardening. I was asked there as a representative of the construction industry for a cross sector discussion about sustainability. The key note speaker there was a guy called Dr Alan Knight, who is somebody you might have come across. He was quite famous in the built environment sector a few years ago, because he was the sustainability director of B&Q and he drove through a policy which was about getting suppliers to verify the environmental impact of their products. They in turn had to go to their suppliers, because obviously there is quite a long chain, so it was about the chain of environment impact and the responsibility of each part in this chain.

He then moved on to becoming the sustainability director for Virgin, a big group. So I was looking forward to hearing him speak, but I think all of us were shocked when we heard what he was saying. He said at one point, and this is the phrase I want you to hold in mind while I talk about the philosophy of sustainability, he said, ‘Sustainability is not about ethics, it’s about logistics. It’s about how we get nine billion people to a plasma screen lifestyle by 2050,’ and on his slides he had a picture of a plasma screen TV. So just bear that in mind a bit, because that is, to some extent, what this discussion is about - is that the aim of our sustainability policy?

Now the background, I’ve said, to where we are now and the background to the STBA itself is that the STBA arose out of a concern to some extent that sustainability policy was going to create problems for traditional buildings. Mainly it was heritage driven and the first meetings we had predominantly involved Heritage and Conservation people. It had arisen because of the Government initiatives on retrofit and the need to upgrade all our building stock for energy efficiency. There were some fairly negative things being said in the press about traditional buildings. The Energy Saving Trust produced a press release which was entitled, ‘Old Buildings are Carbon Villains,’ and this was based on modelling which used SAP or the default figures from RdSAP, and it said, basically, “old buildings bad - new buildings good”.



Then there was the SPAB letter to The Times, a little bit later, trying to raise the issue of the risks of the government retrofit agenda, not only in terms of energy but in terms of moisture and damage to fabric and heritage. That led to the Older Properties Working Group being founded by DECC who in regard to this issue have been very responsive – in fact for me DECC for me have been fantastic in this whole debate and discussion. Out of that came the Responsible Retrofit Report, funded by DECC and undertaken by the STBA, to consider the knowledge gaps, primary issues and also possible solutions to these supposed problems of old buildings and the current retrofit policy and practice. The Report was focused on energy issues in Retrofit. However it also allowed us to bring in other values and issues which weren't just to do with energy, they were to do with technical issues and heritage issues, as we have on the Guidance Wheel now. So we've been successful, I think, in linking and distinguishing these issues in a rigorous way, supported by Government. And this message has broadly been accepted. For example, a few days ago, I was at a meeting convened by the National Trust with the Friends of the Earth. FoE are pushing a very strong energy and fuel poverty agenda, and are not focused on heritage or health. However they now really accept that there are issues around heritage and around technical performance, and that there are also issues of accuracy of the current policy tools such as SAP being used to assess buildings, as well as a need for a more holistic approach. So, you know, to a large extent the debate has changed, and that's a great success for us. However we have to ask the question: Is that sufficient? Is heritage actually integrated into these discussions, or is it a tick box, which you have to tick off in order to get on with the other stuff of retrofit, like boilers, insulation and PVs?

At the moment I think there's not a ground for discussion between the issue of energy and the issue of beauty. There's not a ground for discussion between carbon and craft. It feels like there's still a "two cultures" division between science and art, or between fact and value, or between function and meaning. It might be that for some people this situation is, to some extent, acceptable – they might say "well, at least we've got policy makers mentioning heritage and traditional skills". But is that really acceptable and what are the risks of staying where we are? That's what I think the STBA needs to address.

So is it acceptable? From one point of view the division of energy and beauty, or carbon and craft, into separated uncommunicating categories might be acceptable from a philosophical position based on the supposition that there are incommensurable values which cannot ever be resolved and indeed should not be. So we couldn't and shouldn't make a programme or a model which tries to bring all values under one method of analysis or calculation. Things need to stay separate in order to maintain their truth and their reality. This doesn't mean we can't put beauty, heritage, local crafts, energy, carbon and moisture into one place in one process of assessment, but we just have to accept that there are different values in many of them and they cannot be compared directly. So that's one position in regard to not having *a ground for discussion* between energy/carbon and beauty/craft. And there's another position, which is a tactical one, which is just that it's good enough for now. At least we have the issues being mentioned.

For me neither position is a good basis for going forward. I'm involved in the STBA, not because I'm particularly a heritage person, but because I want to have a radical sustainability agenda in this country. However, personally, I don't want an agenda which is just based on energy, which in my opinion is a narrow and misguided way of understanding what sustainability is about. I am worried that if there is no ground for discussion, then this is what will happen, because they are not central to the debate about sustainability, but an add-on, a nice-to-have.



I think real sustainability has to be based on other values as well as functional ones like energy. More than that, and I'll come back to this point later, I think we are missing a massive opportunity of driving real positive change in culture and policy if we do not incorporate these non-functional values into this discussion. So it's very important to have a debate, but we have to find some ground, some language to talk about all these issues and values together in an equal and reciprocal way, so that we can start having a debate. If we don't do it, there's also a massive risk.

The risk is that logistics always trumps ethics – so we are back to the statement of Alan Knight which I spoke about at the beginning of this talk. Numbers are currently much more powerful than qualities in terms of discussion and policy. So we need to try to establish a new ground for discussion where numbers do not dominate.

If we don't do this, and in some ways encourage the numbers game, then there is a huge risk of losing everything. If you accept that you have to calculate the energy efficiency of old buildings in order to protect them and you even manage to show that they're much better than the SAP values (or even that they are really good by some other method of assessment such as dynamic thermal modelling), then at some point you will be caught by that argument. People will say, 'Yes okay the U-value or overall energy use is pretty good, but actually we need Passivhaus U-values and heat energy demand, or zero energy buildings!' and since we are now playing the numbers game, we cannot use any other defence, and that will in the end justify the destruction of buildings or even whole towns, in order to go further with the numbers, because the numbers are what we've accepted as the basis for decision making. So, there's a danger in playing that game.

Of course this sounds extreme and probably the destruction of whole towns may not happen, although it has been proposed and carried out in the past and there are still voices calling for this kind of action nowadays, all based on numerical arguments about energy, carbon and money. However the cladding of whole streets and towns of traditional construction with external wall insulation and grey render is taking place as we speak, because of the strength of numbers in this argument about "sustainability".

There's also a danger in another kind of number, which is the way economic value is measured. Ultimately a lot of numbers don't come down to carbon or energy; they come down to money, because that's the key factor really. For example English Heritage commissioned LSE to produce a document recently, which was an assessment of the effects of Conservation on value. But the value being described wasn't beauty, it was money. It was an assessment which showed how if you have a heritage building or street or town and you preserve it properly, it actually increases the value of the property.

That's okay, but in many ways that is a very dangerous game to play as well. There are other people trying to quantify beauty and heritage in this way. For example the World Bank has recently produced a long book called 'The Economics of Uniqueness' subtitled 'Investing in Historic City Cores and Cultural Heritage Assets for Sustainable Development'. Basically, it's all about trying to put financial value on to uniqueness. The ultimate financial way of calculating this is usually through something called Willingness To Pay (or WTP). So if you've got an historic site, the way of assessing its value for preservation comes down to the question: Are people willing to pay for it? Or more practically, How much entrance fee can be charged to the site to maximise takings?



We can then assess whether the WTP value justifies it being preserved with all the costs of access as well as maintenance and everything else. So Willingness To Pay is very clear and easy to calculate, and to many people it might seem very reasonable, but personally I think that it's also very dangerous. Willingness To Pay is very different in different cultures and in different times and can be influenced by many factors. We might imagine a situation where you say to the whole country, 'Shall we pay for a new airport or shall we pay for a massive theme park, or shall we preserve a few old buildings?' I'm not sure that that sort of democratic process is going to benefit traditional buildings, or actual sustainability itself. We have to accept and understand the context we are living within, before we choose a method of assessment.

For example certain critiques of modern consumerist society would lead us to the opposite conclusion about the use of Willingness to Pay as a method for judging value. Ivan Illich, for example, in *Tools for Conviviality* wrote: "In a consumer society there are two kinds of slavery; the prisoners of envy and the prisoners of addiction". So would we trust addicts and those obsessed with celebrities and personal status to make good long term decisions? A more modern critic of present consumerism, Tim Jackson, in his book *Prosperity Without Growth* writes "We're being persuaded to spend money we don't have, on things we don't need, to create impressions that won't last, on people we don't care about." I think that's quite a good way of understanding some of the things that are going on in our culture, which would be reflected in Willingness To Pay. So Willingness To Pay also has its own dangers. It requires a mature and balanced culture, as does democracy itself, for it to work for the good.

In the conservation of large historic sites, we might, under some conditions, be able to imagine that WTP could be a worthwhile method for determining cultural value, but in environmental conservation it is much more problematic. If you're a nature conservationist for example, you might well be concerned with preserving things which actually you can't see, or which are pretty unattractive, such as bugs and moulds. I mean, is anyone really going to be willing to pay to conserve those things, which are unnoticeable and unattractive to most people even though they might actually be fundamental to our ecology and to our natural life? So, the willingness to pay argument is useful in certain situations, but it's also something we've got to be careful of. What if certain traditional built environment factors are like the bugs and moulds of our natural environment, almost invisible, not valued, but essential to our cultural survival and well-being?

Another risk of not having a proper ground for discussion of all the issues in sustainability is that assumptions tend to dominate. These are not only assumptions in policies and methods of assessment (i.e. the assumption that quantifiable things are more important than qualitative issues), but assumptions about those who have different opinions. So, for example, a lot of people will probably assume that people who are interested in the heritage of buildings or the conservation of buildings are middle class twits who are not connected to the real world. As there isn't a proper ground for discussion, we end up with a lot of assumptions being made, and positions become more and more entrenched, often obscured further by different vocabulary and or different use of the same words ("value" being a case in point, but also, sadly the word "sustainability").

Furthermore, because the assumptions are not discussed and debates continue often on a superficial level with a high degree of antagonism, we lose that opportunity for a radically different approach, one not based on numerical values, which might be a better way of moving towards a sustainable society.



People are so intent on defending their existing positions that the idea of a fundamentally new or different approach cannot be countenanced. We need to find a way to enable such a discussion in a way which is non-threatening and engaging at the same time.

So I'm arguing that for the STBA there is a strong need for a proper philosophical debate about these issues, which exposes assumptions and puts core values on the table. We've made a proposal which I would like to get feedback on and support for. The proposal has three elements to it. Firstly we propose to examine the assumptions and core values in existing mainstream sustainability policy. We need to unpick that a little bit, and I'll come back to that in a minute. Then we will look at what the assumptions are in conservation policies and principles. There are a lot of things which say, 'Conservation philosophy,' but they don't have much philosophy in them, to be honest. They're mainly conservation principles, which is fine but it's not getting to the core issues that are around them. Then having looked at those things, we will consider whether there a different way of doing sustainability policy, a different kind of framework for discussing these things, which actually can open up a much broader debate and actually be less prone to unintended consequences and negative long term impacts.

One of the things that many current sustainability policies assume is that people are rational, self-interested individuals, who are going to make rational decisions about things, and if you tell them they can save so much money on doing something with their property, they will do it and save that money and energy, thereby helping to reduce energy use overall in the UK. This was the basis of the Green Deal. Well, as we know, this policy has not taken off as policy makers hoped. It has become apparent that for most home owners, their homes are not just money items like shares on the stock exchange but places they love (in some cases!) and which have an emotional as well as a social meaning. And actually where people do make energy saving (or generating) measures in their properties, quite often you get the opposite happening, whereby they take the financial benefits, if there are any, and spend this money saved on something which is even more energy consuming (such as a bigger car, or foreign travel). This is known as a rebound effect and it shows that the policy has made assumptions about reality which are wrong or incomplete.

So, we have to think about different frameworks for sustainability based upon different, better assumptions. That's what I want to propose. So, what do we mean by assumptions? In order to have a discussion, how can we get to a point where we're actually starting to talk about values and explicit assumptions? For this we have to go back to very basic questions. One of the basic questions is: What are buildings? I think that's a good place to start, you know, because if you look at the zero carbon definition or the Code for Sustainable Homes - and I was quite involved in the zero carbon hub and also chaired the Technical Advisory group for the Code for Sustainable Homes for a while - the assumption there was that buildings are, yes they're for shelter and various other functions, but actually they're all about, at this moment in terms of policy, they're about carbon and energy and how these relate to the challenges of global climate change and energy supply.

These definitions and policies don't talk about homes or about a sense of belonging, about the enjoyment that people have in buildings, and it's one of the reasons why I think the Green Deal is struggling in some ways, because most people don't think of their buildings just as energy.



“What are buildings?” may seem an obvious kind of question, but it is actually quite complex and can be taken at several levels. Are houses buildings? Anyone who has read House Form and Culture by Amos Rapoport, will know that there are many forms of houses, not all of them would be classified as buildings. Some of them seem to us just like windbreaks, or temporary shelters. Do buildings always have roofs or walls? Is a monument a building?

At a deeper level we can ask “What are buildings?” by looking at how they relate to other aspects of reality. An important question nowadays seems to be how homes relate to nature: are they part of the natural environment or are they separate from it? Are they a blot on it, which is what the Zero Carbon Homes seems to imply, or do they enhance it? How does our use of resources in constructing, using and maintaining buildings affect nature? But this asks a further question of us, which is: what is nature? What is the environment? What is it for? Are we as interested in dust mites and in preserving dust mites, as we are interested in preserving tigers or robins? They’re all part of the natural environment, so why don’t we value them in the same way? So there are some big questions about nature and I’ll just quote you something Caroline Spelman, who was the Secretary of State for Environment at the time, said in order to give what might be a policy view. She was speaking at the United Nations Biodiversity Conference in 2010, and she said at the end of the conference, ‘Nature provides countless services for free, but we need to take steps now to protect and improve it before we lose these benefits for good. If we get it wrong, growth will be curtailed. That is why we must reach a new target to reduce the loss of species.’ So it’s about economic growth and the countless “services” that Nature provides to us Humans for free. That’s why we need to preserve nature.

Now I’m not saying that is a whole view, but that is how it comes out and how policy discussions quite often get formed. The issues of our relationship to nature or culture are reduced to things which can be quantifiable and measured in terms of physical or financial metrics. However these assumptions are not only assumptions about nature or culture but about human beings themselves. In fact the question which is behind all of this debate about buildings and nature is really: What is human kind? What are people for? Is it just to survive and watch plasma screen TVs? Well a lot of us are watching plasma screen TVs at the moment, because of The World Cup, and that’s good fun, but is that the purpose of human beings? If it is, then what about tribal cultures? What about traditional ways of doing things? What about craft and beauty, let alone truth and wisdom and compassion? All those things are quite challenging to a debate about building conservation. But they cannot be avoided.

In philosophical terms, and I’m going to use some long words here, this is about **Ontology**, which is what are we? what are things? Are we just a bundle of atoms, cells and neurons or are we body, mind, feeling, even spirit? Do other things have a being which is more than random physical bits? **Cosmology**, how do things fit together, what is the world, what is the relationship of people to things and actions in space and through time? **Epistemology**, how do we know these things and on what basis can we make decisions to determine our lives? And **Teleology**, which is the question of what is the purpose of things? What is the meaning of life? What are people, buildings and nature for? I think all these questions and primary category of question need to be on the table. It may be uncomfortable to start talking about human purpose or being in a discussion about the sustainability of buildings, but at some stage this is what it comes down to.





So if we look at the Zero Carbon Homes Policy we should consider: what is the concept of human being and building and nature embodied in this policy? How do they relate? What is the definition of knowledge and purpose? I gave a talk at the launch of the Prince's Natural House at BRE a few years ago, and in fact I had to speak after Grant Shapps, the then Housing Minister. So I was the last speaker and I thanked him and I said (and he didn't disagree with this actually) "The problem with zero carbon is that it means that the best we can do is nothing." You know that one of the reasons why the Zero Carbon Homes Policy was launched was because it meant we could in theory build new homes with no carbon impact. If we can do this, then we can build as many as we want and still meet our legal requirements for carbon reduction. Great! We can have economic growth, we can have all this supply of new housing, which is necessary, but there's no carbon impact. It is the Green Growth dream come true. And it starts putting our culture and particularly our policy makers into a certain way of thinking about buildings. It reinforces a notion that human activity is un-natural and that man is a consumer of nature, rather than a participant in nature. Houses are resource using, carbon emitting objects and in order to preserve nature we have to reduce this impact as far as possible, ideally to nothing. Whereas for me, I mean, I was a builder for fourteen years, you know, being a builder is not just about minimising negative impacts. I don't want to wake up in the morning thinking, 'What am I going to do today, the best I can do is nothing?' I want to think, 'I'm a creator and a revealer of the truth of the natural environment, and actually doing something useful, beneficial and beautiful if possible.' As I said also at the conference 'Birds build nests and badgers dig sets, so why should people not build houses to live in, raise children and enjoy life?' So, there are lots of ways of looking at these things, but we end up with policies, if we're not careful, which push us down a certain way of thinking, and the Green Deal, to some extent, is also like that, it's assumed that people are rational individuals who are interested in energy, who are going to make utilitarian decisions about these things, but ultimately it is about function and impact reduction, not about quality of life or connection with nature.

These are all part, to some extent, of a paradigm of utilitarianism. There's a great book, which I recommend, called, 'The Romantic Economist,' which examines the debate between Bentham, Coleridge and Wordsworth, at the beginning of the 19th Century. It was a debate about whether you can have an economics which has values and imagination in it, takes account of context and constraints, and uses non-numerical ways of assessing policies and outcomes. That debate went on really until the 1980s and then the romantics lost, just as the New Romantics came in, along with neo-liberal economics and monetarism.

So now it's quite difficult to have a discussion about economics, which doesn't resort to that way of thinking. It reduces the concept of the whole to lots of bits which have to be added up. One of the problems with any analysis which is reductionist is you tend to lose the sense of the whole. It is hard to get back to a sense of the whole or to anything which cannot be expressed as a number. I don't say that this dominant paradigm is what everyone believes, I actually think that most people don't live like that and I don't think the economists or policy makers live like that. It's a bit like that cartoon where you have a man and a woman and the one of them says to the other, 'Shall we base our relationship on greed and self-interest?' and the other says, 'No let's just base our economy on it.' So we quite often have a kind of split between public values and private values, personal values, which actually is not healthy because our work is a lot of our life. It affects everyone in a particular way, and we need to bring other human values back in to it.



So when you look at conservation philosophy and also the embedded values in a traditional built environment, what do they say about these core themes of being, relationships, knowledge and purpose? To me they should be saying things not only about beauty, but about history, learning, craft, local materials, local connection, the relationship between buildings, people and nature, the purpose of buildings and of people.

As I said earlier, much so called “Conservation Philosophy” is not philosophy at all, but practical principles for dealing with older building repair. Amongst these are the key principles of sympathetic repair and maintenance. But what lies behind these? Do they hide a different concept of what buildings are for and how we interact with them? Are they saying more than just that you’ll save energy if you maintain your filters on your ventilation system, or have your boiler system maintained? Looking at the work of Ruskin and Morris, it is obvious that these principles embody a philosophy of buildings and people which is much more than utilitarian, that behind them are a different concept of what sustainability means and a different way of approaching sustainability. I think we need to really think about that and bring it out. So the question really is, can this conservation philosophy and the embedded values in traditional building and practice lead to a different way of thinking and acting in regard to sustainability and sustainability policy?

Before we answer this perhaps we need to ask, for a start, whether we need a different way. I mean, is there anything wrong with what we’re doing at the moment? Is it actually in this situation the best we can do, even if there are lots of problems with it? This is the kind of resigned slightly despairing response I get from many in politics or large organisations. However I think we do need a different way of thinking and acting about sustainability, and increasingly I think many people are coming to this realisation.

One of the main areas in which current sustainability thinking and policy is being challenged is in regard to unintended consequences. There are two main types of unintended consequence, known as primary and ancillary, or more colloquially as rebound effects and side effects. In terms of rebound, there’s a great article by a guy called Tilman Santarius entitled, ‘Green Growth Unravelling,’ which looks at thirteen types of rebound effect, mainly in a German context. He considers them all separately and comes to an estimate that, on average, we get a minimum 50% rebound on virtually any energy saving technology that is introduced – ie the actual energy reduction of any new measure are only half that predicted. In some areas rebound is 100% or even more. For example he shows a chart of German housing heating energy use per person and it’s the same now as it was in 1970. The U-values are all better, boiler efficiency is better, in fact everything’s better, but the buildings are bigger, so the per person energy use for space heating is the same as 40 years ago. When you add in the massive increase in the use of appliances, actually Germans on average are using far more energy per person in housing than they were in 1970. So in spite of great technical advances and skilled German builders, housing energy use hasn’t gone down at all and all predictions for future reductions, under this current system must be considered with caution.





Santarius also looks at possible policy solutions to this situation, such as increasing energy prices (through green taxes) and caps on energy use. However his opinion is that (to quote him exactly) “Only when the realisation dawns that there can and should come a point at which enough – or perhaps already too much – economic growth has been achieved in a given society will it be possible to consider the economic limits to growth. And only when these limits are one day adhered to will efficiency and consistency strategies be able to make an entirely constructive contribution to sustainability. In the meantime, the years that are likely to pass before this mammoth task is completed will provide new evidence for the thesis of this study: that rebound effects will continue to thwart sufficient reduction of absolute natural resource use as long as the economy keeps growing.”

The same applies in all areas of life, not just in buildings, according to this article. It casts considerable doubt on the possibility of a sustainable future for humanity under this current economic and technological paradigm. Indeed in books such as “Techno-fix: why technology won’t save us or the environment” by Michael and Joyce Huesemann, the idea of technical innovation for sustainability, which is the last hope of Green Growth economics and Green Capitalism is seriously challenged; the notion that innovation and technology can provide a solution to our environmental and other problems is exposed as a front for business as usual, and not only as unnecessary, but also harmful. Because the problem with innovation is that it keeps on destroying things. It has to. There are whole economic theories based upon the notion of “creative destruction” and “built in obsolescence”, which is why so much innovation is negative overall, or has massive rebound and side effects.

We have to start looking at what is lost, as well as what is gained, both materially and particularly in regard to qualitative things. Unintended consequences often are not noticeable for many years, and this applies particularly to consequences for well-being and for culture. Living as I do near a motorway, I often wonder whether anyone has ever thought of considering the loss of the sound of birdsong or the snuffling of hedgehogs, things which I used to hear so clearly before the motorway was extended in the early 90s – sounds which not only enriched my life, but enabled me to relate to nature more fully and physically than I can now. We could say the same for the destruction or erosion of so much of our built environment. These impacts will have real effects not only on individual being but on our common local and national culture. I am not saying that we shouldn’t have technical innovation, but we must to put it in a context, look at what is lost and not rely on it for our salvation.

Another reason why I do not believe we should be satisfied with the current paradigm and the way that it has distorted and captured concepts of sustainability is the kind of vision of the future given by Dr Alan Knight: it’s 2050 and everyone in the whole world is stuck in front of a plasma screen TV for most of the day. Is that where we are going, or do we have an alternative vision of the future?



Interestingly the UCL is just setting up an Institute for Global Prosperity and, somewhat surprisingly, it's going to be under the Bartlett, under built environment studies, which for me, is great news both because I am working there, but also because the institute has been given a proper context and grounding. The woman who's running it, Professor Henrietta Moore, who was formerly professor in Anthropology from Cambridge, says in the announcement about the Institute "The focus of the new institute is to search for an alternative to the current failed model of economic growth. The search to find prosperity is more than economic growth, and will consider wellbeing, happiness and quality of life in equal measure."

I think that that is good that people are starting to talk about these issues and I feel the STBA needs to be part of that discussion, because actually conservation thinking and philosophy and the embedded history of buildings, what traditional buildings tell us about core relationships, core meanings, has a huge amount to offer to that discussion.

There may be a way of doing sustainability policy which doesn't have so many rebound effects, which doesn't cause so many unintended consequences and actually starts to drive a much stronger passion for radical change, because we need radical change. Not only is the International Panel for Climate Change calling for such change, but there was a NASA report on the future of the planet, which came out a few weeks ago which also was a clarion call for radical action. It said that within fifteen years we are facing an economic, social and environmental perfect storm. They've looked at it through many different metrics and methods, including economic, environmental and social science as well as from the use of satellite images over the past few decades. They say that the two key things that need to be addressed are inequality and growth. We cannot go on as we are now. It is unsustainable.

So actually this is a good time to start talking about these things, when there is beginning to be openness in this debate, and we can help to drive things forward by developing a philosophy of sustainability from the traditional built environment. We need to do this both to establish a proper ground for discussion about sustainability in traditional buildings, but also because, in doing so and in order to do so, we have to address issues that are at the heart of any debate about sustainability, issues of being, relationship, knowledge and meaning. These need grounding and the traditional built environment is the ideal place to ground such a debate. From here we can and must engage with sustainability more generally, contributing to the debate and driving new thinking (which of course may be old thinking) and change.

So that's the basis on which I'm proposing an STBA philosophy paper and discussion, the idea is that we produce a primer and then once we've done that, we have a big debate involving lots of different players, the institutions, industry and Government. From this debate we can then develop some alternative frameworks for sustainability policy going forward.

It's not pre-determined, it's open to existing as well as new thinking, it will be pluralist in approach and it's for the common benefit, so I welcome your engagement and your ideas as we take this important initiative forward.

Thank you very much.