

Globalization vs. sustainability? A NZ-German perspective on the role of the university

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Abstract: The economic bias of our globalized world has marginalized sustainability as humanity's true and greatest challenge. Rather than facing up to this challenge, universities have, by and large, followed the economic bias by investing into 'marketable' degrees and programmes. Reliance on market needs and corporate funding has sidelined future-oriented interdisciplinary sustainability education and research. We may ask: is the university's economically driven agenda compatible with sustainability reflecting complexity and interdisciplinarity? The paper examines the current and potential role of the university as a leader for sustainability education and research citing good and bad examples from universities in New Zealand and Germany. The thesis is that the university is in need of urgent reforms to reclaim its constitutional role as a conscience and critic of society.

Introduction: Saving some trees and losing the forest

I'm a “68er” (or close to it) as we call the rebellious generation in Germany. My political socialization was a mix of anti-authoritarianism and anti-capitalism, both flourishing in the 1970's, but then complemented by the emerging Green movement. When I helped founding the German Greens in 1980, it was clear to us that the Green project cannot rely on reforms, but needs to transform both, Western capitalism and Eastern socialism, as both socio-economic models have proven to be totally ignorant to humanity's dependence on the natural world.

I have never changed this view. But what do I mean by transformation and how would it affect the role of the university?

Let me explain first of all, what forty years of environmental reforms have achieved. To put it this way, many *trees* have been saved, but we are losing the *forest*. Trees have been saved, literally and metaphorically. Europe, North America and Australasia have steadily increased their protected areas and natural reserves, forestry is better managed, rivers and lakes are less polluted, the air in urban environments is cleaner, energy efficiency has greatly improved, renewable energy is on the rise and eco-friendly products are in high demand today. By all accounts, a notable list of achievements, and some people even think that the sustainability message has finally been understood.

I do not think so. The gap between the promise of environmental governance and actual ecological decline has consistently widened with no signs of a reverse trend. The planet's key ecological systems are collapsing before our

eyes: the global climate is heading for tipping-point, icecaps are melting, rainforests are vanishing, the stabilizing functions of oceans and vegetative covers are weakening, fish stocks are disappearing, biological diversity has rapidly gone down. The ecological integrity of the entire planet is now at risk¹, while human population continues to mushroom (now double the size of forty years ago at the beginning of environmental law and governance). Today, humanity's ecological-footprint is so large that we would need 1,4 planets to sustain us. So, the *forests* are being lost, we are rapidly running out of time.

The problem is this. We are fooling ourselves if we think that reforms will do the trick. They simply haven't got deep enough. Merely scratching the surface, they have left the underlying driving forces of environmental degradation unchanged.

Until today, environmental governance has remained what it always was, i.e. a subordinate concern in society, an add-on, or minimalist, shallow program. It is the poor cousin of economic governance (for ongoing growth in productivity, profit, and associated inequitable access to power). Unfortunately, the dominance of economic governance, accelerated in the age of globalization, has crushed "die zarte grüne Saat" (the tender green seeds) of the 1980's. The green decade of the 1980's was just an episode. Globalisation of the 1990's saw a growing of international environmental institutions and treaties, but only in numbers, not in substance. The substance of governance today is the same as it has always been. State-centred governance, internationally and nationally, is still shaped around economics and as such defensive, reactive, selfish, utilitarian, problem-solving and short-termed.

Sustainability proclaims the opposite, i.e. governance that is global, proactive, ecological, strategic and long-termed. Sustainability does not fit the traditional idea of economics first and environment second. It turns them around: the ecological system is the basis and frame of all living systems including social and economic systems. This turnaround is a paradigmatic change, but the only chance for human survival. So, what are the chances to institutionalize sustainability? I am not trying to answer this question here², but want to point out the role of the university.

Globalization and university

Of all our social institutions, surely one would expect the university to be a vanguard of sustainability.³ The university is the one space in society not dictated by economics, not threatened by economic globalization, fairly immune to the demands of governments and markets and loyal only to the pursuit of

¹ Still the best source for assessing the state of the planet's ecological systems is the UN Global Ecosystem Assessment <http://www.millenniumassessment.org/en/Index.aspx>.

² See K.Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (Ashgate/UK, 2008).

³ K. Bosselmann, "Sustainability and University: Compatible Agendas?", (2001) 33 *Educational Philosophy and Theory* 2, pp. 167-86.

truth and knowledge. Or so one would think. The reality is different – as every academic and student knows -, but the challenge for the university remains nevertheless - namely to nourish independent, critical thinking that no civilized society can do without.

In my view, the biggest threat to the university has not come from market forces, government pressures or lack of funding. NZ's intellectual hero, Ernest Rutherford, famously said: "We've got no money, so we've got to think." Unfortunately, we haven't done enough thinking. Universities and polytechs have only been too willing to meet market demands, no matter how short-lived or unsustainable those demands may have been. An attitude of wanting-to-please. Need more accountants, more managers, more lawyers, more doctors, more engineers, more scientists, more bio-engineers and all of them more and more specialized? No problem, we can help. Universities have competed with each other where only cooperation would have mustered enough resistance against market demands.

In NZ, the number of degrees has doubled over the last 15 years. The same is probably true for Germany. Even more alarming is the desire for specializations. There has been an explosion of highly specialized institutes and research centres throughout OECD countries.

Here at Auckland we have an impressive range of specialized research clusters such as the *Research Centre for Germanic Connections with New Zealand and the Pacific*, the *University of Auckland Centre for Earthquake Engineering Research*, the *Yacht Research Unit* or the *New Zealand National Eye Centre*. Plus another 50 or so highly specialized research centres. Not to mention some big institutes on economic innovation including the currently built *Institute for Innovation of Biotechnology*. They may all be important, but at they are accessible only to select groups making it harder to detect the *universal* in the University, now perhaps better named *Speciversity*.

Some time ago, educationalist Chet Bowers, University of Oregon, wrote a revealing book entitled "*The Culture of Denial*".⁴

The book shows how our educational systems actually reinforce the cultural beliefs that contribute to environmental destruction. Universities, in particular, provide students with a narrow view of life, compartmentalized into various disciplines, that creates a sort of mythic ambiguity around modernist culture. Bowers' thesis is that the fragmentation of the environmental movement (with all its specialists for everything) has repeated itself in the fragmentation of modern academic disciplines. This way the sustainability message falls between the gaps and gets easily lost. We desperately need an ethos of multidisciplinary research that looks at the whole, not the specific.

⁴ Chet Bowers, *The Culture of Denial: Why the Environmental Movement Needs a Strategy for Reforming Universities and Public Schools* (State University of New York Press, 1997).

At Auckland, we do not have such an ethos, nor I suspect at other NZ or German universities. It is fair to say that interdisciplinary research initiatives and programmes are becoming more popular; at Auckland University, for example, some 50 sustainability-related courses have been introduced during the last five years alone. On the whole, however, universities are reacting to market demands rather than proactively defining new directions.

Undoubtedly, sustainability holds the key here. Nothing could be more important than shifting the current mode of short-term economic rationality to long-term ecological rationality. If there is sufficient agreement on this, then how do we do it? Like any paradigm shift, embracing a wider ecological rationality involves the whole person and not just thinking.

Fundamentally, sustainability-thinking is ethically motivated and different from mere environmental awareness. Sustainability ethics focus on human-nature relationships, not purely human relationships. This is crucial. If we don't accept this and continue to think in purely social, anthropocentric relationships, we will not be able to overcome economic rationality concerned with balancing and trade-offs between economics, society and the environment (so-called 'weak sustainability'). I am not saying that economic rationality must be abolished, but there is far too much of it and it is not the real thing. Sustainability-thinking takes a different perspective: nature defines the foundations and limits of all human pursuits. Ecological integrity must not be compromised. This is an ethical stance, as mentioned, and can be contested of course. But it is the essence of sustainability and my plea is to not confuse it with other ideas. The first law of academic dialogue is clarity of what we are talking about.

I have said elsewhere that sustainability – German *Nachhaltigkeit* – is deeply embedded in European history. It is not new at all and by no means exclusive to Non-Western cultures, but closely connected with some of the big names of European cultural history: St. Francis, Spinoza, Leibniz, Goethe, Schiller, Herder, Humboldt etc. as well as the Hanns Carl von Carlowitz (1645-1714) who wrote the definite text on sustainability economics '*Sylvicultura oeconomica*', the earliest comprehensive handbook of forestry.

Earlier this month, German writer Ulrich Grober published his history of sustainability in Europe.⁵ The powerful message of this book is that sustainability thinking has dominated economic theory until the beginning of the 19th century when new economic theory increasingly replaced nature with money as the central point of reference. Ever since, economic systems have assumed independence from ecological systems. Today, of course, we see the bottom falling off from the barrel. And – as we can see here - economic calculations seem to missing something.

⁵ Ulrich Grober, *Die Entdeckung der Nachhaltigkeit: Kulturgeschichte eines Begriffs* (Verlag Antje Kunstmann/Germany, 2010).

I see a huge opportunity for university research here. If ecological experts (in science and humanities) engage with economic experts, we may be able to get the bottom back on the barrel again. Our Meeting here is on the subject of "bridging the distance". I believe that not only New Zealand and Germany should be in dialogue, but also ecologists and economists, scientists and social scientists, and so on.

Making sustainability count

For the remainder of my talk, let me summarize what we at the University of Auckland have done to meet the challenge of sustainability and then make some suggestions.

A first step in the journey was a dialogue among all members of the university starting 15 years ago, when a taskforce drafted an Environmental Policy. Following various rounds of consultation with all Faculties, the final draft was adopted by Senate in 1998. It contains a "Commitment to Sustainability" emphasizing new values, concepts and methodologies for teaching and research.

As an environmental lawyer, I know that implementation is always the hard bit. It took us a further five years before some institutional changes were implemented. An environmental coordinator was employed who reports directly to the Vice-Chancellor. Dr Lesley Stone first conducted a university-wide survey, then initiated many changes to the operations of the university (energy-efficiency, savings of material use, waste minimization etc.). Thanks to a major grant of the Vice-Chancellor's Development Fund, we are now conducting the *U 21 Sustainability Project* which aims for institutional changes such as multidisciplinary sustainability courses, degrees and research programmes (including a "Centre of Excellence"). There are, after all, some 250 academics teaching and researching sustainability-related subjects. We are making good progress with a new university-wide Sustainability 101 course to be introduced next year and with an international Sustainability symposium to be held later this year. And, of course, a number of faculties have introduced new courses and programmes attracting many New Zealand and international, particularly German, students.

We have a number of research cooperations with German universities in the sustainability area. To mention just a few that some involvement with:

- Following a project called "Nachhaltige Universität Dortmund", there have been frequent mutual visits of researchers of the Dortmund's Urban Planning Department and of Auckland's School of Architecture and Planning with a focus on developing sustainability indicators for regional planning;

- The University of Lüneburg⁶ (40 km from my home town) is known, together with the University of Oldenburg⁷, as Germany's leading university for sustainability teaching and research. Typically, degree studies there are focused on projects rather than disciplines leading to an entirely different quality of the sustainability discourse. Two years ago, we had Prof Michael Braungart (Lüneburg), co-author of "*Cradle to Cradle*"⁸, coming for a visit. Braungart advocates not being less wasteful, but avoid producing waste in the first place. He talked here in this room and inspired us with insights like this one: "*To be less bad is to accept things as they are, to believe that poorly designed, dishonourable, destructive systems are the best humans can do. The ultimate failure of the "be less bad" approach is a failure of imagination.*"
- Some imagination is hopefully behind Auckland's annual study trips to Berlin that I organize for my Auckland students. As part of my course "Sustainability Law and Governance" at the Freie Universität Berlin⁹ we visit the Federal Ministry for the Environment, the National Sustainability Council, the Wuppertal Institute for Environment, Climate, and Energy or public meetings such as this one.

Of course, DAAD has an important role in bridging the distance between nations and between disciplines. The journey towards sustainability can only be undertaken together, across nations and across disciplines.

To conclude my talk, here are some ideas for joint ventures.

1. Energy: no country has done more to promote electricity from renewable energy than Germany, yet only 15% are generated that way. No other country has a higher percentage of electricity from renewable energy than NZ, yet we have gone backwards from 90% in the 1970's to 66% today. So, what measures and policies are needed to shift to solar and wind? Both countries can learn a lot from each other.
2. Law: NZ has the world's most ambitious environmental legislation, yet the Resource Management Act is badly administered and its underpinning sustainability paradigm almost completely ignored. In Germany, on the other hand, environmental laws are scattered and hardly informed by sustainability, yet the overall environmental performance is better than in NZ. What then, we could ask, are the characteristics of effective sustainability law?
3. Governance: Do we need more democracy or more effectiveness in decision-making? Both are not necessarily complementary. China, for

⁶ <http://www.leuphana.de>

⁷ <http://www.uni-oldenburg.de>

⁸ William McDonough and Michael Braungart, *Cradle to Cradle: Remaking the Way We Make Things* (North Point Press/US, 2002).

⁹ <http://www.fubis.org>

example, is very effective making changes and developing low-impact technologies, for example, but is not democratic. In advanced capitalist states, on the other hand, democracy is tightly coupled with the promise of growth and consumerism. How then can democracy be decoupled from growth and consumerism?

These are just three areas of sustainability research that I have an interest in drawing from excellent social science networks in NZ and Germany. I feel, however, that in the past NZ-German co-operations have mostly been supported in growth-oriented areas (agriculture, biotechnology etc.) and a lot less sustainability areas and social sciences (humanities). Again, sustainability is fundamentally about ethics and social behaviour, hence a core subject of social sciences. We should invest a lot more in this area.

Let me close by evoking Alexander von Humboldt, pioneer of the unity of all sciences and founder of the modern idea of the university. Humboldt was, of course, also a champion of ecological economics. As a qualified forest economist he fully understood that consumption can only occur within the limits of natural resources. And as romantic, Humboldt saw no conflict between emotions and rationality when thinking about nature: "Nature herself is sublimely eloquent. The stars as they sparkle in firmament fill us with delight and ecstasy, and yet they all move in orbit marked out with mathematical precision."¹⁰ For Humboldt, the unity of nature was the essence of the human experience and basis of all education.

I welcome this Meeting today as an opportunity to celebrate the famous "Humboldt ideal". In today's globalized and highly specialized world, the Humboldt ideal is probably more needed than ever before.

¹⁰ Alexander von Humboldt, *Personal Narrative of Travels of the Equinocial Regions of the New Continent during Years 1799-1804* (London, 1814), Vol. 1, pp.34-35