



**Pathways to the future:
enterprise, education
and science**

Reports and reflections by Dr Bronwen Rees, editor of *Interconnections*
From the: *Interconnections* Panel discussion, November 19th 2011
***Interconnections* and Hive workshop December 9th 2011**

Panellists at November 19th discussion at the Lord Ashcroft International Business School, Cambridge, UK:

Dr Bronwen Rees, *Editor, Interconnections*

Dr Ioanna Negru, *Senior Lecturer in Economics*

Ed Bentham, *Founder Trustee, Atlantic Whale Foundation*

Professor Jack Reardon, *Hamline University, US and Editor of International Journal of Pluralism in Education and Economics*

David Arkell, *Director of the Hive, enterprise and education park*

Present at the December 9th workshop held at the Hive, a new enterprise and education park in Cambridge, UK:

Dr Bronwen Rees: *Editor, Interconnections*

David Arkell: *Founder of the Hive*

Tim Jones: *Chief Executive, Allia*

Dr Michael Clark: *Chief Executive, Future Business*

Chris Carr: *Expert in finance for social enterprise*

Professor Tony Bryant: *Professor, Leeds Met University*

Andy Brady: *Leader Third Sector Futures, Anglia Ruskin University*

Joanna Warner: *Research in EES*

Howard Robinson: *PR and marketing*

Professor John Wright: *Representative for Atlantic Whale Foundation*

Professor Michael Lewis, *co-convenor, but absent due to family reasons*

Introduction and context

Just before the end of 2011, two meetings were held to bring together key people from many different contexts and disciplines and discuss new models of business with particular relationship to business education. One focus of these discussions was how to develop a foundation/network that could evolve pathways for the integration of business, education and science that would address the on-going economic and developing social and political crises. It was felt appropriate that this foundation could emerge from Cambridge, UK, one of the oldest university towns in the world, but also situated in 'silicon fen' – the UK equivalent of 'silicon valley'.

In this article, I draw upon the different expert viewpoints and points of argument, problems and debate that came together. We were all aware of the critical need for change, and this paper thus represents the different ways in which people are approaching this, the obstacles that we are experiencing, and our collective attempts to envision pathways for the future that can embrace this change. In particular, I have drawn out what the implications may be for business education in the future.

First, let us repeat what we understand by paradigm shift here, taking the quote from Kuhn, as quoted earlier in this issue by Richard House:

'The usual prelude to changes of this sort is... the awareness of anomaly, of an occurrence or set of occurrences that does not fit existing ways of ordering phenomena. The changes that result therefore require "putting on a different kind of thinking-cap", one that renders the anomalous law-like but that, in the process, also transforms the order exhibited by some other phenomena, previously unproblematic.' (Kuhn, 1977: xvii).

The anomalies that we are finding, amongst others, include a series of revolutions, a breakdown in the economic system, environmental and social problems and rapidly rising rates of mental health problems. None of the solutions that current thinking offer seems to be working, as the on-going recession and cuts suggest.

If the depth of this paradigm shift is on the lines suggested by Kuhn, then that implies a whole new view of the world, and a shift in our consciousness. For a shift of this size to take place, then, following Steiner, we would need to revise the collective concepts that make up a human view of the world, and this would take place both through thinking, and through action (Steiner, 1906). This means that we will be challenging our current understanding of reality through the differing actions that we take, and redefining it as we co-construct it. This is no mean feat – and will be easier for some than others. The problem is that as some take this leap, others are left behind or stay in the old view, and do not have the concepts which make up the new, leading to misunderstanding and miscommunication. This collective shift cannot take place without, and in fact demands, open dialogue, along the lines that Hugh Willmott talks about on p. 71. It is a multi-levelled process where no part of the picture remains untouched.

It will take openness, intelligence, inclusiveness, faith, and an understanding of difference for this to evolve relatively easily. None of these factors are characteristic of our current economic system that is currently predicated on the 'qualities' of competitiveness and survival of the fittest. However, findings from new science, including molecular biology and physics, are already formulating some aspects of this change – and part of this is a new evolutionary perspective which suggests that this change will come about through collaboration and connection rather than through competition and survival.

So part of the challenges that we are facing is how to bring together aspects of these different levels, and this was the focus of discussion in both of these meetings.

What follows is a report and summary of the five different challenges that emerged.

CHALLENGE 1

How can we begin to draw up an educational system that needs to encourage the spirit of inquiry when the professors themselves do not challenge the premises of their own thinking, particularly in economics?

Ionna Negru put her finger on this problem in her presentation as part of the panel, when she pointed out the 'dismal' response of economists to the crisis:

'Given the severity of the crisis, one would expect some introspection regarding the causes of the crisis, but also some introspection regarding the role that economics and economists have played, before and during this recession. Whilst there is plenty of reflection regarding how the economy, the government or capitalism itself has performed, there has been less introspection and self-criticism regarding the actual discipline of economics. Those who have reflected on economics, economists and their practices can be classified into several categories. Some have faulted the theory, especially macroeconomics, whilst others have related the failure of economics to the use of mathematical modelling to model and forecast the economy.'

Other economists and commentators have been looking at the lack of pluralism in economics, in terms of teaching, methodology and theory. In the context of the current crisis, this paper has been interested in how reflective economists have been with regards to their own discipline and practices.

The evolution of the discipline shows that the economics profession has, for some time, exhibited a profound disinterest in the scientific character of the approach, and in developments with neighbouring disciplines such as mathematics and physics, or within the philosophy of science at large. There are two possible explanations regarding such neglect and the lack of reaction of mainstream economics with regards to the current state of economics.

Firstly, there could be a genuine belief that crisis in the economy does not necessarily imply a crisis in economics, and no changes are required.

Secondly, it could be that mainstream economists are aware of the fallibility of their practices, but prevailing norms imply there is likely to be a profound career-cost in deviating from such practices.

Professor Jack Reardon has himself for many years been attempting to change the foundations of education in economics, resulting in the creation of the *International Journal of Pluralism in Education and Economics*. In the panel discussion he recounted the tale of how he began this journey, when after much thought and labour, by using the same mathematical formula of economists, he managed to challenge some of the basic precepts. He sent it to the top journal in economics and one of the reviewers wrote that 'This is unacceptable.'

This is no different from our church forefathers, wherein anything that challenged the status quo, such as Copernicus's heliocentric worldview, was deemed to be heretical. At least these days our lives are not on the line when we suggest something different – but our careers certainly are! Jack has been a persistent reformer in the field of economics ever since, striving to change the basic concepts that permeate the field, both through his writing and his travelling presenting his ideas worldwide. Many of these new concepts have been presented in former issues of *Interconnections*.

CHALLENGE 2

How do we change the concepts that permeate economics?

This, of course, begs the question of how we manage to change any concepts. My view (again following Steiner) is that it requires both action and perception for concepts to change – and this means that there will be some people who are expert in the thinking aspect – the scholars, and others who prefer taking action – the practitioners. What is important is that these reflect and reinforce the other, so that it is not the scholars who determine action, neither is it the blind action of those more predisposed to activity, but who do not reflect on their action.

As a balance to the scholars then, two practitioners offered up their solutions: Ed Bentham, the founder trustee of the Atlantic Whale Foundation, presented his work in setting up global project bases dedicated to preserving community and also opportunities for volunteers to create their own social enterprises within these contexts.

David Arkell showed how his own doctoral work on emotions had helped him create, from his role as Head of Innovation and Enterprise at the County Council, a new enterprise and education park at the Hive, situated next door to 'silicon fen'. Here both ideas and action are incorporated and move onwards into the future, creating new structures.

This was an inspiring evening with the panel both realistically and positively confronting the challenges of the current crisis, and generated some tentative steps forward. It opened up another area which I will call challenge 3.

CHALLENGE 3

How can we bring together scholars and practitioners in an emergent dialogue and in the creation of new concepts?

The problem of the divide between theory and practice has been recognised over the last 30 years or so, and has been acknowledged both in academic literature and in the many attempts at forging partnerships, both in the public and private sectors. Whilst there have been successes in these areas, they have been beset by problems. All of these problems are ultimately underpinned by the social systems that favour fragmentation. In academia, due to its inherent trajectory towards more and more specialisation, as necessitated by the scientific method, interdisciplinary work has been left on the sidelines. Career progress is difficult, due to lack of interdisciplinary journals in the area, and the difficulties in becoming published in specialist journals.

When working in the interstices of disciplines, it is all too easy for one's articles to be rejected by the specialist, as many frustrated researchers would recognise. So the quest for knowledge becomes lost as researchers stay safely within their own silos where there is more guarantee of career progression. Thus, new concepts that unite a picture of reality, rather than fragment it, have been difficult to communicate through the recognised channels. Happily, however, there are now breakthroughs in all the disciplines that point towards a more holistic approach, and will hopefully open up new channels for dissemination.

In the practitioners' field too, whilst there have been a plethora of partnerships, and so-called 'joined up' working, the underlying principles have not been that of genuine inquiry and collaboration, but have been dominated by market forces, creating a swathe of bureaucracy that has lost sight of the initial need for joining up.

The aim of the December 9th workshop was to bring together scholars and practitioners in an attempt to see if there was a ground for 'joining-up' under different conditions and through different values, and whether it would be possible to create different business models and hence educational practices that could support this inquiry.

This workshop was attended by researchers, practitioners, educationalists, financiers and public relations experts. We explored how we could set up an Interconnections Foundation at the Hive, that could help further these different but overlapping interests without being saddled by the problems described above.

This inaugural meeting took place at the Hive, and began with presentations from Chris Carr on 'readiness for investment' of social enterprises; Martin Clark on Future Business; Bronwen Rees on the role of *Interconnections*, Tony Bryant on his ventures into social enterprise, and by the Founder of the Hive, and creator of SmartLife, David Arkell. This was a meeting point of both ideas and of practice as we were the first to inhabit and vivify the new Hive location!

A major theme was the possibility of the creation of new business models that could accommodate the challenges 1 and 2 above, and also how this could create interest from investors.

CHALLENGE 4

How to divert invested money into new networks and pathways

Chris's talk on this was quite illuminating, as much of his work has been on getting social enterprises 'investment ready' for mainstream investors, and how this would look. We discussed whether investors would also need to be engaged in a change of paradigm? The feeling round the table was that the challenge was to create forms that would

engage investors, both financially and practically. This was borne out by the work that Tim Jones and Martin Clarke are carrying out with Allia and Future Business, located at the Hive, through their charitable bond. This creates pathways for investors to leave their money in a bond, which is subsequently used both for donations and for the generation of social enterprise. Underneath this initiative is a desire to help the release of the vast amount of capital that is currently sitting in banks for social and ethical use in business.

CHALLENGE 5

How can we communicate these ideas so that they become the backbone of a business education?

Like many other ideas in this issue of *Interconnections*, it became clear that a major part of effecting change needed the partnership between different sectors and disciplines. The creation of the Hive is a concrete, yet also symbolic initiation and gathering place to support people in their activities in developing sustainable livelihoods for themselves and others.

Dr Tony Bryant discussed his attempts, with Professor Michael Lewis, at getting social enterprise off the ground, but at its failure at the last hurdle. Hopefully, as more people realise that new thinking is the way of the future these efforts will result in greater success. Andy Brady, who set up Third Sector Futures in the Business School at LAIBS in 2008, has recruited over 90 staff from the third sector (not-for-profit, non-governmental, volunteer groups, charities, amongst others) to the university's new management qualifications for charity and social enterprise leaders. He expressed his suspicion of trying to build new business models within a capitalist system, since the tendency would be to appropriate the gains immediately. For example, he noted how some people involved in the co-operative movement would suggest that rather than addressing the failings of existing economies, theirs is an alternative economic system for those who are disillusioned by these failings. This provoked some interesting and passionate debate around the table.

Professor John Wright then presented the work of the Atlantic Whale Foundation, which is challenging the existing structures of education by focussing on work in the field. In this organisation, students are encouraged to build up social enterprises in the field, and by their learning can feed this back into the conceptual work. Thus concepts are being created by the learners themselves (see pp. 37–45, *Interconnections*, Issue 7).

From a PR and marketing perspective Howard Robinson described how in his work, he had had to change radically over the years, and the challenges of adapting marketing to the new technologies. Joanna Warner from Eastern Enterprise Hub discussed how her work could bring researchers into greater focus with the need for practical activity, and how they were developing new models and encouragement for new types of research, and new types of researchers.

Conclusions

All in all, these discussions are opening out new areas, and the *Interconnections* community is growing in depth, breadth and practice. Throughout the world, different communities who are working from changed values and scientific principles are springing up.

All these initiatives, and the *Interconnections* one itself, are beginning to illuminate and create working principles that are radically different from those found in the traditional business school curricula. We cannot afford to ignore the changes

that are happening, and will need to go back to the fundamental challenge of how we construct knowledge itself in order to frame new concepts that expand our consciousness, rather than move into different layers of abstraction.

Much of the change that is happening is where people are reconnecting, and re-visioning a relationship with nature herself. If we are entering a paradigmatic shift as Kuhn described, as many expert commentators suggest and the current problems dictate, then this level of shift in our perceptions needs to take place.

So, in this sense it is up to each of us, in whichever corner of the globe or institution we reside, to reflect on the nature of our response to the crisis. Keeping our heads in the sand will no longer work.

Just as new science is breaking through its own boundaries, it seems obvious that economics too needs to move out of its own rut, which is set in a scientific paradigm of Newtonian mechanics that was just about appropriate for the 19th century.

This will require more and more dialogue and action in the construction of institutions, and educational practices that will co-create a sustainable future. This means the development of networks whose work is underpinned by change and transformation, and the creation of ethical livelihoods.

Interconnections is a vehicle for making this collectively conscious, by providing a practical vehicle for dialogue, inspiration and emergence.



The Hive context – ‘always thoughts of tomorrow in mind’

The Hive is a multi-million pound education and enterprise park for the incubation, promotion and education of clean tech and low carbon businesses, students and the public.

The Hive is located on Kings Hedges Road, Cambridge. The Hive's first building, the SmartLIFE™ Low Carbon centre, was opened in October 2011. This centre specialises in training, skills and qualifications for low carbon energy solutions and joins with the adjacent SmartLIFE Construction centre promoting modern methods of construction. SmartLIFE is a business of Cambridgeshire County Council, working with Cambridge Regional College and others.

Allia will be building the Future Business Centre at the Hive. This will bring together around 50 businesses from clean tech to social enterprises. The Centre will grow clean tech and low carbon sectors will cross fertilise with SmartLIFE education and training provision – focussed on the advanced technician skills and understanding of the need for interdisciplinary solutions and opportunities.

The third component will be the SmartLIFE Expo of homes and buildings to showcase products and services supply chains to customers. This in particular will connect joint activities with business, industry, education and public alike.

The Hive site is strategically located on the Guided Busway and wider transport network to allow for excellent local and international access. Additionally two major hotel chains are within walking distance of the site, and an upmarket hotel will be completed at the adjacent Science Park shortly.

www.smartlife.org.uk

www.talktothehive.org

www.allia.org.uk

www.futurebusiness.co.uk/about-us

