



KNOWLEDGE TRANSFER AND SHARING AT UNESCO-IHE: THE NEXT 25 YEARS

by
M. B. Abbott

Discussion Draft Paper
for the session on
Knowledge Transfer

Thursday, 14 June 2007
Delft, The Netherlands

The nature of the knowledge that is being transferred and is being shared

The still current paradigm of knowledge transfer, as currently still largely practised at UNESCO-IHE, is predicated upon a balance of knowledge in the Northern Hemisphere that places the so-called 'West' in a superior position to that of the equally so-called 'East', with the Southern Hemisphere for the most part in an even less privileged position again in this respect. Thus knowledge is supposed to flow for much the greater part from the 'West' – seen as composed primarily of Europe and North America, often still called 'The First World' – and towards 'the rest of the world', which is still widely regarded as 'The Third World'. Of course this view is necessarily treated to much denial and obfuscation, such as is exemplified by such terms as "knowledge networking" and "knowledge sharing", whereby the 'Western' supposition of possessing some superiority in its knowledge is covered over, so that this supposition remains only implicit and is for the most part is hidden from view. In particular, it is often hidden under the implicit assumption, which is really a presumption, that 'modern science', as this evolved in Europe after the *Condemnations* of 1277, is 'the only true science', while technology continues to be seen merely as 'applied modern science' in this same sense. Let us look for a moment at the way this, essentially Eurocentric view is employed.

The present world-economic situation has long corresponded to one in which the consumption of natural resources by the 'First World', as a more prosperous part of human society, has increased at a rate that is clearly unsustainable, even as in another and larger part of human society, constituting the 'Third World', the number of persons living in abject poverty and unable to avail themselves of these resources has long continued to increase. Of course many 'aid projects' have been undertaken and are still in progress to redress this situation, but their success is clearly mostly marginal and in many cases unsustainable. There has correspondingly been a great and long-ongoing campaign to increase expenditures on aiding this so-called 'Third World', and especially in the areas of infrastructure, and many promises have been made over the years to provide the means to ameliorate the still-ongoing situation, but many of the erstwhile aid-providers have reneged upon their specious promises. This is especially evident in the water sector, where the efforts that have been made are frequently seen to have had little longer-term and overall effect and indeed are regarded by many with a long and direct experience of working in this 'Third World' as fundamentally misguided and in many and possibly most cases futile.

At the same time, there is a certain consensus among several such persons with a long and close experience of working on infrastructural projects in the 'Third World' that this situation arises because of the absence of any real, or genuine, stakeholder participation in most parts of this World. This is in a large part because most of the true or genuine stakeholders – the great majority who have the most direct stake in the outcome of the project concerned – are not represented at all, having been disenfranchised by a richer and more influential minority. There have of course been many attempts to change this situation by direct interventions on the part of international organisations and non-governmental organisations, primarily financed by 'First World' societies but directed towards the *enablement* of specific communities in the 'Third World'. Whatever the good intentions of *community enablement*, however, the autonomy of the stakeholders concerned is much too often compromised within this construction. This is in the first place because, beyond these

interventions, there lurks a further hindrance, in that the introduction of a genuine stakeholder participation, in which the poor and oppressed could take a major and indeed leading part in a project, necessitates the taking of a sociotechnical position that is way beyond the capacities of most of those who are established in this area. This is often because the relations between those promoting such projects and those who are realising and operating them are afflicted by technocratic attitudes that Martin Heidegger (1927//1962, pp.122, 123//pp.158, 159) characterised in terms of *deficient modes of solicitude*, whereby even an apparently positive mode of solicitude may in fact be deficient. This is often experienced where an aid recipient is only 'receiving instructions', basically only being 'trained', rather than being challenged-out to develop his or her inherent capabilities and to exercise these independently. There are singularly few persons who are prepared to grasp the nettle of genuine stakeholder participation and, inseparably from this, stakeholder empowerment, in the Third World.

From a sociotechnical point of view, the poor and oppressed have been for the most part disenfranchised within projects, and even when they have been to some extent enabled, because they lack *power*, even as the success of the projects depends fundamentally upon the *knowledge* of just these persons. This disenfranchisement occurs in turn because the knowledge that this great majority possess is for the most part not accepted as such by those who are nominally responsible for the projects concerned, who see themselves and the more privileged minorities with which they cooperate as the repositories of 'the only true knowledge', which they like to associate with... 'modern-scientific knowledge'. Michel Foucault (1976, with his italics) exposed "the inhibiting effect of global, *totalitarian theories*" of this kind that, although they provide useful tools for local research, could only be provided these "on the condition that the theoretical unity of these discourses was in some sense put into abeyance, or at least curtailed, divided, overthrown, caricatured, theatricalised, or what you will. In each case, the attempt to think in terms of a totality has in fact proved a hindrance to research" within this totalitarian technocratic perspective.

We have however increasingly become witnesses to a counter movement. Foucault recognised this many years ago now when he observed that "over and above, and arising out of this thematic, there is something else to which we are witness, and which we might describe as an *insurrection of subjugated knowledges*". It is through our current observations of this insurrection that we now also "come to entertain the claims to attention of local, discontinuous, disqualified, illegitimate knowledges against the claims of a unitary body of theory which would filter, hierarchise and order them in the name of some true knowledge and some arbitrary idea of what constitutes a science and its objects".

Foucault emphasised that the inclusion of these more local, popular, disqualified, indigenous knowledges did not constitute any positivistic return to a more 'careful' or 'exact' form of science, for he saw these precisely as *anti-sciences* in the sense of their opposition to *the current ideology of modern-scientific totalitarianism*. As he explained: "We are concerned ... with the insurrection of knowledges that are opposed primarily not to the contents, methods or concepts of science, but to the effects of the centralising powers which are linked to the institution and functioning of an organised scientific discourse in a society such as ours." It is these centralising

powers, and not modern science itself, that are so inimical to the local, popular, indigenous knowledges.

The presently ongoing, even if only partial and ephemeral, insurrections of subjugated knowledges that we do observe in many places today have the capacity, if properly led, to provide the only realistic means to overcome the present impasse in 'Third-World' development. This is correspondingly today the most relevant aspect of stakeholder participation, even if many, and probably most, of these stakeholders are currently dispossessed, terrorised, driven from their lands, deprived of their water, and abused in every other way, and all of this on a massive scale (e.g. Roy, 1999). Corresponding to this and to the very extent that they succeed, movements of this kind can come to constitute a rejection of the mandate claimed by the respective governments to exercise violence and the threat of violence within this sphere – and this, in turn, often leads into other forms of insurrection again. This process can only be mitigated when democratic means exist or can be imposed, either to prescribe limits to the mandate, as in some parts of India, or to promote genuine stakeholder participation against entrenched privileged minorities, as in several parts of Latin America. A sociotechnical perspective that accepted this and worked out from it, understanding that the greatest crime of all is to deprive people of the possibilities to exercise their own deep-rooted knowledge and understanding, could quite easily overcome this present untenable situation, and then at a small fraction of the costs currently being incurred in the largely euphemistic name of 'development aid'.

The current rapidly changing balance of knowledge/power in the world

This situation is now changing, and indeed changing with historically unprecedented rapidity, through changes occurring in large parts of what was until recently 'The Third World', but which are now transforming that world into something very different again to the existing 'First World'. This new 'World' that is now developing is in fact not becoming just another part of 'The First World' at all, but is developing/mutating into another kind of world again, and indeed one that has not previously existed. We shall here speak about 'The Zeroth World' because what is developing is now clearly something that is as far removed from the existing 'First World' as this 'First World' is removed from the existing 'Third World'. Of course it is not for us to say that this 'Zeroth World' will be something 'preferable' to our current 'First World': we cannot possibly make value judgements on such issues, but only constatae the most likely consequences of currently- ongoing developments.

This sea-change in 'Worlds' has in fact quite a long historical background and if we are to understand anything at all about what is currently occurring it is essential to refer back into the history of such 'Worlds' We must thereby pose the question of when and how these present-day 'Worlds' arose in the first place?

The first big even though necessarily limited historical picture is that which identifies the distribution of industrial activity and its dynamics on a global scale. Its best known precursor was the set of estimates of world manufacturing output made by Bairoch in 1982 and as extended and commented upon in a popular book by Paul Kennedy in 1989. Bairoch showed how, even as Europe's share of world manufacturing output increased from 23 percent to 62 percent between 1750 and 1900, what we now call 'The Third World' decreased from 73 percent to 11 percent, with

China falling from 32.8 percent to 6.2 percent and India/Pakistan from 24.5 percent to 1.7 percent. Although these falls were clearly equated with a synergic combination of European industrialisation and colonisation, leading into the era of imperialism on the side of Europe with the associated subversion and destruction of the industries of 'The Third World' by the European imperialist powers, it was indicative that Japan's share also fell from 3.8 percent to 2.4 percent even though it was not so directly occupied or otherwise dominated by military and naval force. Similarly, taking per-capita levels of industrialisation with the UK's level providing a reference value of 100 in 1900, whereas the UK itself passed from 10 in 1750 to this reference 100 in 1900 and Europe as a whole from 8 to 35 and the USA from 4 to 69, China fell from 8 to 3, India from 7 to 1 and the Third World as a whole from 7 to 2. Thus, with Kennedy (1989, pp. 147,148):

Hence Bairoch's remarkable – and horrifying – suggestion that whereas the per-capita levels of industrialisation in Europe and the Third World may have been not too far apart from each other in 1750, the latter's was only one-eighteenth of the former's (2 percent to 35 percent) by 1900, and only one fiftieth of the United Kingdom's (2 percent to 100 percent).

We shall here use the metaphor of a pendulum to describe this swing in fortunes and we shall at first employ it to characterise the massive change that occurred in these fortunes over 150 years, after some millennia in which a relative stability had been maintained, and thence the even more dramatic and much more rapid change that is occurring in the opposite direction today.

Inseparable from this change, however, were the two world wars that convulsed much of Asia and Europe and which led to a situation whereby, by 1945, the USA alone had some 75 percent of all the world's manufacturing capacity with no material damage at all and minimal losses in manpower, while most of Europe and a large part of Asia were reduced to ruins with severe losses of manpower in many cases. Although Europe including Russia, and then Japan, had largely recovered within some 30 years, the status of the Third World changed very little up until 1975, and indeed the pendulum seemed to be moving ever more exorably again against that World. It is only now, in retrospect, that we can trace the moment when the pendulum started to move back, starting in places like Brazil and Korea, and there is a very important reason why this swing was not observed much earlier and is still almost completely misunderstood today in the West, so that it has long remained and still largely remains *an invisible pendulum*. The reasons for this dyslexia, myopia and profound misunderstanding are, in the first place, a state of denial in the world of Western politics such as is strongly supported by the Western media, so that if we are to understand anything at all of the dynamics of this pendulum, as it now swings back to and ultimately proceeds beyond its 1750 state of Asian industrial dominance, we should also consider this occulting influence of the Western political and media forces. Since however we must here abjure any concern with political and media activities, we are obliged to avoid such issues of motivation here: these occulting forces will simply be taken as given by the life-worlds of those who promote them and are admitted here merely as facts, to be taken into account on their own terms without value judgements from our side. Our purpose here is only to estimate the dynamics of this pendulum as it is now moving down upon Europe and the USA in particular, and for this purpose we only need to understand why this pendulum must remain for the most part invisible to the greater part of 'Western' populations for political reasons,

even as we who feel and indeed have a personal responsibility for the future are obliged to see it as clearly as possible.

Of course, almost everyone is aware of something called ‘Asian competition’, but our local politicians and their supporting media do everything possible to misrepresent and obfuscate the nature of this competition, explaining it away by references to ‘cheap labour’, an ‘undervalued currency’ and other such chimeræ, explanation that are risible for anyone who is at all acquainted with the nature of competitive advantage in a post-modern condition of society – and are acquainted with more recent and concurrently ongoing Asian industrial practices and attitudes. It is instead necessary to understand the new kind of competitive advantage enjoyed by these Asian societies, explaining its sociotechnical foundations and so basing itself upon a proper understanding of the new relations that are arising between people and equipment within post-modern conditions of societies. This understanding thus traces the transformation/mutation of present-day societies that are based upon the promoting ever larger numbers of ‘knowers’ (to provide so-called ‘knowledge societies’) into those that are promoting ever larger numbers of ‘consumers of knowledge’, as experts in the acquisition, employment and disposal of wide ranges of knowledges (as ‘understanding societies’). This development is of course inseparable from new ways of organising working arrangements, enabling the development of self-structuring and so self-managing groups that are far more flexible and adaptable than are existing tightly-coupled and over-managed structures.

What we do need to emphasise is the urgency of attaining to a proper evaluation of the dynamics of The Hidden Pendulum, and in particular that we cannot then be so much concerned with the speed with which this is proceeding, but with *its acceleration*. In fact we can identify and characterise a specific combination and interaction of processes that are creating this acceleration, but these indeed need also to be understood *both in themselves and in their interactions*. It is nothing like enough simply to compound growth rates, but it is necessary to understand the various, essentially qualitative, factors that have come into synergy as they drive this transformation in the so-called ‘balance of economic power’. It is essential to identify the deep-cultural identities and their transformations/mutations within the presently-ongoing socio-economic transformations. As one apparently exceptional, but in fact essential example, the incredible and historically unprecedented rise in the popularity of European classical music, first to a relatively limited extent in Japan but now to an overwhelming extent in China – “The Chinese musical explosion: performers in their millions and listeners in their billions” in the words of *Gramophone* – needs to be related to these deep-going mutations in the Asian, and especially Chinese ‘collective unconscious’ that are in point of fact inseparable from those that are driving its economic development.

However, even as we need to understand that this transformation is essentially a qualitative one, current practice insists that we provide it with some kinds of quantitative representations. These quantitative representations, as sets of measures, may then serve to provide us with some knowledge even as they cannot provide us with much in the way of understanding. Thus we may observe that China is already consuming almost half of all the world’s plate glass and almost half of all the world’s cement, more than a third of the world’s steel and almost thirty percent of its aluminium – and so we can go on with any number of other such measures. Or we can

observe that instead of installing between 75 and 80 gigawatts of new electricity generating capacity in 2006, as projected by the central government, it actually installed 102 gigawatts – twice the existing installed capacity of California and far more than is currently installed in the whole of the UK. And, of course, these proportions continue to increase exponentially. In purchasing power parity (PPP) terms, China should become the world's largest economy in 2009-2010, while in heavy-industrial terms it is already substantially larger than the EU and the USA put together. And this is still only the beginning. While visiting China again a few weeks ago, a good friend observed to me that that “China is one great building site”, directed to raising the standards of its housing, in particular, to unprecedented levels. Visiting new homes one is struck by the sheer excellence of the current construction and household equipment, already now at, and even in some cases higher than, the best European standards. But of course with this must come much higher levels of working efficiency and flexibility. When I recently observed to the Chairman of the Europe-China Hotel Management Expert Council that what was essential happening in China was that now, right now, *quantity is transforming into quality*, he agreed most forcefully.

Now not only this China, but the new ‘Zeroth World’ more generally, is currently mostly associated with the so-called BRIC economies: Brazil, Russia, India and China. The major events in 2006 that may be said to have announced this new arrival were the purchasing of most of the Belgian, British, Dutch, French and Luxemburg steel industries by Indian companies, the further major extensions of Russian specialist steel interests in the USA and Germany in particular, the Chinese construction of massive new container ports in Zeebrugge and Piraeus and the contracting by Chinese companies of advanced research studies in Europe, as well as Brazilian interventions in bio-fuel industries and several related areas again. These advances were then necessarily provided in 2006 with ‘air cover’ in the EU by the introduction of new and major upgradings of existing television channels by Chinese, Russian and other countries, transmitting in the English, French, German and Spanish languages, demonstrating an understanding on the part of these nations of the significance of ‘the technologies of persuasion’ in supporting their ongoing industrial-acquisition activities.

The influence of ‘The Zeroth World’ on ‘The Third World’ and its consequences

There are two competing ‘stories’ here, the first one being associated with the geographical reorientation of world trade, from predominantly North-South to predominantly East-West. This is exemplified on the one hand by the massive extensions of the existing Panama Canal and the construction of at least one further such canal to the north of Panama, and on the other hand by the introduction of container ships of unprecedented size and associated economic speed, serving the new container ports such as those already observed in Europe. The construction of another monster port facility of this kind on the Canadian Pacific coast, intended to service the US market, further symbolises the globalisation of this trend.

The second ‘story’ is the transformation of Africa, primarily through Chinese mineral extraction, energy resources exploitation and related interventions that, although still at a relatively early stage, must come in time to change the economic fortunes of that continent, just as earlier developments from the side of ‘The West’

have already transformed the fortunes of Australia and some Latin American states. The negative sides of this transformation have of course taken the headlines in 'The West' and no-one will deny the downsides of many of the presently-ongoing developments, but in the longer term the upsides will surely be the more significant in transforming the fortunes of that deeply troubled continent.

These developments promise to achieve, albeit in ways that are not exactly congenial to 'The West', what 'The West' has signally failed to achieve through its own efforts: a major amelioration of conditions in 'The Third World', transforming this in turn also into another world again. Maybe it may come to occupy the space left by a departed 'Second World', albeit again in a very different way. In any event, these changes must have the most serious consequences for a 'First World' which has so far been at the centre of international organisations such as UNESCO, and thus also of UNESCO-IHE. The omnipresent and constantly denied Eurocentricity of such bodies is now being brought into question in ways that were not previously seriously considered. Already, of course, the talk is all about cooperation with organisations in what is now rapidly becoming 'The Zeroth World', but the consequences, and indeed the realities of this 'cooperation' do not seem to have been thought through. The basic reality, that the existing 'First World' is already quite overshadowed in heavy-industrial terms by societies that are moving with ever greater speed into a 'Zeroth World', and that the 'First World' will be outclassed in almost all respects by this new 'Zeroth World' within some 10-15 years, has to be taken into account in all forward planning. Several branches of industry are already engaged in this: organisations such as UNESCO-IHE will need to do likewise.

Of course, whenever one says anything of this kind within any organisation, the response from within the organisation itself is entirely predictable: "But we are already doing this! We have set up this committee and that study group etc. etc. to prepare for just such eventualities...assuming of course that they ever really materialise". But there are several encouraging signs, at least from the side of industry, that account really is being taken of the new era of Asian industrial predominance in which Europe, and North America can only play a quite secondary, even though hopefully a supporting, role.

Reference

Kennedy, P., 1987/89, *The Rise and Fall of the Great Powers*, Random House, New York