

Book Reviews

Structures of Scientific Collaboration

Wesley Shrum, Joel Genuth and Ivan Chompalov

London, MIT Press, 2007, xi+273 pp., UK£22.95, ISBN 978-0-262-19559-1 hbk

Recently reading *Books Ireland (October 2008)*, a monthly presumably remote and unfamiliar to most readers of *Prometheus*, I was struck by the coincidental relevance of a comment in an introduction to a review of several books on the Irish Theatre (p. 223). The author, Eamonn Kelly, 'mentions'

as background for the general reader to this particular Great Game (of ever expanding studies on the new generation of playwrights) and also to identify my own particular approach and perspective: namely, is it readable? Or even decipherable? Often such books which are neither readable nor decipherable arrive on my desk for review, and, hardly knowing where to fling them, my first natural inclination is to ridicule them.

I could not fling away this book partly at least because it is my own selection from a short list sent to me by the Books Editor of *Prometheus*. Given my past, which included being a researcher and writer on the role of interaction between people as the source of most innovations, this book seemed to be at least adjacent to my own special interests. How easy it is to be misled; but I am committed to reviewing it for the guidance of readers of *Prometheus*. It occurs to me that in fact it might be worth scanning as an example of how not to write a report and certainly not one to be published as a book.

It seems imperative therefore to follow Eamonn Kelly's example, albeit that this is a very serious book in the writing of which the authors have been very serious. Only with very serious perceptions of their task could they have arrived at a work so unenjoyably difficult to read. The style of writing betrays my long held bias against the writings of sociologists. My belief is that the many schools and disciplines of study embraced by the term sociology were seduced by the post-Second World War triumphs of the hard sciences into considering that they also deserved to be considered as science. Equally therefore their work must conclude with new theory, a new theory of society, equally mathematically proven. Thus they state that 'to date no

comprehensive theory of scientific collaboration exists' (p. 7). The way to a new theory is clear. Unfortunately, the mathematical certainty of the natural sciences cannot be matched by the many options and nuances which exist in societies and sociology. But sociologists such as these authors keep trying.

Hence this book is written in what I can refer to only as a pseudo-scientific mode. There is a tortuous complexity in its inevitable setting out of every possible option in nouns and verbs, ors, ands and serial commas. A short example is when the authors define inter-organisational collaboration as involving three or more organisations and therefore 'we sought to interview at least one individual from each participating organisation, including physicists, graduate students, engineers, post-docs, computer specialists and technicians' (p. 14). All in the one? Another example is a paragraph, commencing with the words 'Several important modes of collaboration do not meet our criterion for multi-organisational collaboration' (p. 5) followed by sentences beginning 'We are not concerned with ...'. What is the concern: 'an interorganisational or multi-organisational collaboration is a research project involving three or more independent organisations' (p. 4).

Wonderment does not cease here. The sheer expansion in the number of words exhibited, which enabled a report to become a book, does make one wonder a number of things but let me not be tempted into enumerating them as these authors would. Let me wonder nevertheless, how did the editors in MIT allow this work to pass into print? Perhaps the skills of the censors wielding a blue pencil are as badly needed in the commercial/academic publishing world of today as they once were in the intelligence world of World War Two. Perhaps, in these times of wordiness rather than of creativeness, words are replacing ideas.

One must, however, remain scientific. 'The work' is said to be an 'empirical study of an increasingly important structure for the production of knowledge in the modern world; the multi-organisational collaboration' (p. 3). My understanding of empirical is borne out by the definition of the word in Chambers English Dictionary: 'resting on trial or experiment'. In fact, 53 collaborations were identified from analysis of 'the transcripts of oral histories [that is interviews] conducted for a series of documentation research projects' (p. 3) conducted by the American Institute of Physics' Centre for History of Physics in 1995. There were about 500 of these interviews of collaborations first in the building and use of particle accelerators, later expanded in a second phase to include five further specialities. This analysis was further developed by interviews with selected and willing participants in the collaborations selected. There was little sense of trial or experiment here. I use the word sense simply because of its occurrence in the authors' arriving at an approximation of what is meant by collaboration—'In the next section we distinguish our sense of "collaboration" from a variety of closely related senses' (p. 4). Following this is the paragraph of not concerneds to which reference has been made.

Organisations apparently cannot cooperate, only collaborate, whereas people can do both. Yet collaboration is demonstrated to be based on the very human emotion of self-interest. In scientific activity such as particle physics and the building of particle accelerators, scientists collaborate with others whether it is at an institutional level or not because they want access to instrumentation which they or their organisation does not have. They need collaboration in order to carry out their own work. To create, access and process data would be otherwise impossible without the instrumentation available elsewhere. In spite of this apparent selfishness underlying collaboration and cooperation, 'Only human beings can take each other's interests into account' (p. viii) and yet 'individual interests must sometimes

be sacrificed for the sake of the common objective' (p. viii). A paradoxical situation but also a very human one in which the organisation has the same characteristics as its leading members.

The day of the individual scientist reaching outstanding results and status is gone. The authors see that he/she is being replaced by teams, that is collaborative groups within organisations which can afford to supply the instrumentation of themselves or by collaborating from within their own organisation with those teams working in another organisation which has the instrumentation. Yet it is the drive of individual persons who are the leaders pursuing their own selfish interests who cause the team or organisation to do more than is possible with their own resources. People collaborate and cooperate and it is people who give an organisation the appearance of collaborating and cooperating. The organisation is merely an enabling mechanism for the formal and informal collaboration.

The authors say that 'Finally we are not concerned with collaboration in the sense of the informal, unmanaged communication that has linked scientists in networks across organisational lines since the seventeenth century if not longer' (p. 5). Woe the leader or manager who does not enable the informal and unmanaged to enrich the organisation or team.

Gerry Sweeney
SICA Innovation Consultants
Dublin, Republic of Ireland
sica@iol.ie
© 2008 Gerry Sweeney

Against Intellectual Monopoly

Michele Boldrin and David K. Levine

Cambridge, Cambridge University Press, 2008, 312 pp., A\$49.95, ISBN-13 978-0-521-87928-6 hbk; eBook version US\$24.00

Sex, Science and Profits

Terence Healey

London, William Heinemann, 2008, 455 pp., A\$69.95, ISBN 978-0-434-00824-7 hbk

These two books are not the first useful challenges to the view that patent and copyright monopolies are economically beneficial. But in contrast to earlier contributions, they do not investigate specific faults of these systems of legislated monopoly. Rather they turn their attention to competition and the role of competitive markets and the profit motive in ensuring a high level of innovation and investment in science and technology. There are many parallels in their arguments, but they are reached by far different routes.

Boldrin and Levine, who have published previously on this topic in the *International Economic Review*, here embark on a more comprehensive assessment, written for general accessibility. They cover an enormous range of material—dealing in some depth with each of patents and copyright, and drawing their

evidence from many centuries and nations. They turn the traditional approach to ‘intellectual property’ on its head, questioning why a seller should be able to impose limits on the way the buyer can use the copy s/he has purchased. They consider this ‘intellectual monopoly’ over uses of a bought copy of an idea as an unjustifiable intervention in the property rights of the purchaser. Effectively it turns a purchase into a conditional rental. They marshal a wide range of evidence to demonstrate that innovation frequently occurs in the absence of legislated monopolies, and provide further detail on some of the well-known stories of patents being used to hold up technological progress.

Healey is even more ambitious, commencing his story in the Bronze Age. His focus is on the role of science in technological progress and whether science in fact operates as a public good. Healey is a biologist, so is writing here well outside his field of expertise. He is also targeting a general audience. While one might wish a sounder and more consistent referencing of the story being told, it is nonetheless an interesting and provocative read. He certainly presents sufficient alternative perspectives on science funding to warrant others developing a more systematic assessment of the thesis that governments should largely withdraw from funding science. His argument is told around a story that is well known to students of innovation—that the innovation process is messy and involves significant feedback loops, including that new technology often leads to advances in science. What he does with this story is, however, different and challenging.

Both books contain a wealth of material on all manner of aspects of the usual stories of science and technology development. Boldrin and Levine’s material is more solidly footnoted and referenced. Fascinating side stories include consideration of the role of labour mobility in the transfer of knowledge and the contrasting economic performance of Route 128 and Silicon Valley. Massachusetts has traditional anti-competition restraints on labour, preventing entry into the same line of business for a period after ceasing employment. California has strenuously resisted such anti-competitive legislation. Route 128 has experienced much slower economic growth than Silicon Valley. Another wonderful snippet is that ‘... the entire Hollywood movie industry has managed by creative accounting to avoid earning a profit during its entire history ...’ (p. 28)—this from the players who brought us a lengthy extension in the copyright term, and the much-criticised Digital Millennium Copyright Act. Boldrin and Levine also provide a lengthy section on simultaneous invention, reviewing the contributions of some well-known inventors. They focus in particular on famous cases that involved technological hold-up, and show that the famous patent-holder’s contribution to the new technology was often minor.

Healey also tells some fascinating stories—that Adam Smith believed in the importance of market discipline partly because of his experience of very poor quality education at Oxford compared to Glasgow University. Healey’s review of the technological developments made during the so-called Dark Ages is also most interesting; though given the extraordinarily broad range of his material, the details are generally not well documented.

Both authors identify a major fallacy in the ‘conventional’ economic approach. Despite the focus of the economics discipline on issues at the margin, this does not extend to a key policy consideration—how much reward is needed to induce a desired effect. Well-crafted public policy achieves maximum change in behaviour for minimum intervention and cost. But in regard to the alleged large differential between social and private returns to innovation, economists immediately

conclude that there will be an under-incentive to invest as the innovator will not be able to appropriate the *full* social gain. This ignores the size of the profit that the innovator will make. It also ignores the risk consumers of a new product must also take.

Healey demonstrates the fallacy of this oft-repeated view using the example of private seed research and development companies in India. These capture only 6% of the total social gain from their research, yet this provides an excellent private return (17%) on the investment. Moreover the remainder of the social return is shared between very many players, each of whom have to take risks with the new seeds and need such a return if they are to be willing purchasers. This provides a very vivid example of the fallacy of the presumption that an inability to appropriate the *full* social return means that an innovation will not proceed.

Boldrin and Levine also discuss this point at some length, noting mathematical work demonstrating that private returns often increase as social returns increase. As long as market conditions permit innovators to recoup their costs and earn a return on their investment, innovation will proceed, despite the part of the benefit that cannot be appropriated. They point out that where capacity is limited—as it inevitably is with a genuinely new innovation—the producer will be able to charge above marginal cost and earn large rents. They also note a range of other market advantages deriving from first-mover status, and from ownership of the original innovation.

The one exception identified by Boldrin and Levine is where the initial size of the investment is large relative to the market. Here markets may not be well-suited to prompt innovation. Indeed this was the prime example discussed in Arrow's seminal article. Arrow, of course concluded that governments should directly fund such research. While Arrow noted such areas as aircraft development, currently pharmaceutical research is seen as falling into this category because of the very high cost of Phase III clinical trials.

Boldrin and Levine devote a whole chapter to the issue of pharmaceutical research and patents. While the combination of very high development costs and alleged greater ease of copying make this the prime example used to support the need for patent monopolies, the evidence of this need is less than compelling. In Europe most countries did not allow the patenting of pharmaceutical products until the introduction of the European Patent Convention in the 1970s. This did not prevent countries such as Switzerland from being leading developers of useful new drugs. It is well-known that one consequence of the introduction of chemical product patents was Italy's loss of global leadership in generic pharmaceuticals—a lead not replaced by any new expertise in new chemical entities. Boldrin and Levine take some different angles to the question of whether patents are essential to encourage major new drug development. They review major drug discoveries and check which were dependent on patent-motivated research. Of 15 major new drugs, two (chlorpromazine and the contraceptive pill) were found to be patent-dependent. Of 46 current major globally-selling drugs, 26 involved patents, including some that were simultaneously discovered and where there were therefore protracted and expensive legal battles. Clearly significant new drugs are regularly developed without the patent incentive.

Another common theme in these two books is the issue of research collaboration and information sharing, though again these are investigated from quite different perspectives. Healey sees the long scientific apprenticeship process as a means of building trust and competence. He argues that access to 'the college' is

paid for by publications, indeed that access to shared information is paid for in advance both by the long apprenticeship and demonstrating competence through publication. He suggests that science should be analysed as a 'college good' rather than a public good.

Boldrin and Levine look at the large advances emerging out of multiple small innovative steps. Where capacity is limited, as in any nascent industry, there is little down-side to information sharing, and much to be gained. They also note that only those that have invested sufficiently in R&D are able to participate in this 'free' information-sharing.

Both books emphasise the importance of the market in driving innovation and science funding. Healey argues that in nineteenth century Britain entrepreneurs invested in applied science and new management techniques. There was also substantial private funding of science, including the creation of new universities (Manchester, Leeds, University College London, etc.) and the endowment of chairs at existing universities. He sees wars as providing an impetus for government entry into science funding, and provides an interesting historical perspective on concerns about dependence on such funding for scientific independence. This latter concern is based on a view that because science is a collective activity, scientists tend to be over-orthodox in their thinking, a tendency that will be compounded by government funding. He notes the rarity of university criticism of governments (except for the perennial criticisms of inadequate science funding).

Perhaps one of the most interesting discussions in Healey's book is the view that the important thing is scientists, not science. He argues this based on the importance of tacit knowledge at the frontiers of science. He links this perspective to a view that it is a small number of scientists in each field who contribute the largest share of new knowledge. He then goes on to suggest that from an industrial perspective, the key commercial interest is in these few scientists, not science in general. There is thus no problem of excludability, as the few leading scientists '... exercise a near-monopoly control over new knowledge' (p. 328).

Healey draws on research by the Science Policy Research Unit to show that a small proportion of industry R&D funds are spent on pure research (7%), and older research by Mansfield and Griliches that companies which fund pure science out-perform those that do not. This willingness of some firms to invest in pure research again challenges the oft-repeated view that there is an insufficient private incentive to fund research where the returns cannot be fully appropriated.

Healey also turns the economic research about the relationship between R&D investment and economic growth on its head, arguing that it is only the rich that can afford R&D, so that as a country's wealth grows, so does the share of resources it devotes to R&D. This suggestion that the causality in this statistical relationship is the reverse of that usually posited reminds one of Griliches' comment in 1990 that causality in the correlation between patent volume and productivity most probably ran from productivity to patents.¹ Boldrin and Levine devote a chapter to the somewhat narrower question of whether there is any link between legislated patent or copyright monopolies and innovation. The economic evidence presented to address this question ranges from eighteenth century composers to a review of 23 economic studies of the impact of patents, including studies of natural experiments such as Japan, Taiwan and Italy. They note that some of the results (for example the increase in foreign direct investment in Taiwan after the introduction of stronger patent laws) depend on the co-existence of strong and weak patent

regimes, a situation fast disappearing. They find just one study demonstrating a positive relationship between patent strength and the share of GDP devoted to R&D. However, when a control for market (GDP) size is introduced the relationship holds only at low levels of patent protection. For countries with larger markets—which are also the richer countries—there is no association between more patent protection and a higher share of GDP spent on R&D.

Consistent with their view that monopolies are unnecessary as an incentive to either creativity or invention, Boldrin and Levine have provided copies of this book free on the Web. Given the vast range of quality research drawn together in this work, I found that after reading the free (but bulky) Web version, I was delighted to be able to purchase the published book. It is an excellent summary and critique of the arguments surrounding patent and copyright policy, and is well-supported by evidence. The normal conflation of quite different instruments of market intervention into the single misleading term ‘intellectual property’ is avoided, so this book throws much-needed light on both patent and copyright issues.

While Healey’s contribution covers a far wider range of material it does so in less depth and in this sense is a less satisfying read. Nonetheless it strongly challenges the conventional science view, and provides some persuasive evidence. What is needed now is far more solid work testing whether Healey’s proposal for reduced government funding of science would lead to a new flourishing of leading-edge research or not.

Notes and References

1. Zvi Griliches, ‘Patent statistics as economic indicators: a survey’, *Journal of Economic Literature*, 28, 4, 1990, pp. 1661–707, at p. 1700.

Hazel V. J. Moir
 Visitor, Regulatory Institutions Network
 Australian National University
hazel.moir@anu.edu.au
 © 2008 Hazel V. J. Moir

Identity and Violence: The Illusion of Destiny

Amartya Sen

New York, W.W. Norton & Company, 2006, xx+215 pp., US\$24.95, ISBN 978 0 393 06007 2 hbk

Rethinking Islamism: The Ideology of the New Terror

Meghnad Desai

London, I.B. Tauris, 2007, viii+196 pp. UK£12.99, ISBN 978 1 84511 267 7 pbk

In these current times hardly a week goes by when there isn’t yet another book being published on terrorism, Islam, instability in the Middle East etc. A non-random selection on offer in any decent bookstore or library is as follows:

Globalisation, Democracy and Terrorism (2008), *Responding to Terrorism: Political, Philosophical and Legal Perspectives* (2008), *Human Rights, Terrorism and Counter Terrorism* (2008), *The History of Terrorism: from Antiquity to Al Qaeda* (2007), *Terrorism Financing and State Responses: A Comparative Perspective* (2007) and *The Economic Costs and Consequences of Terrorism* (2007).

When there is widespread interest in a topic, the market may throw up some pedestrian books. But occasionally there is something completely different, an example being *Leaderless Jihad: Terror Networks in the Twenty-First Century*.¹ The author, Mark Sageman, is not only a former employee of America's CIA, but is also a forensic and clinical psychiatrist, who happens to be interested in Islamic terrorism. His research disposition is to undertake 'evidence-based terrorism research', rather than describe case studies or (journalistically) report anecdotes. He now has a sample of 500 terrorists and he seeks an answer to the following question: 'What makes a terrorist?' His answer is that terrorists are not mentally ill, poor, uneducated, sociopathic or victims of trauma: in large part, terrorists acquire radical views as a result of discussions with other like-minded people. Sageman argues that there are four steps in this process, and only a few Muslims take the final step of joining a terrorist cell. Such cells take on the role of a surrogate family and nurture a jihadist world-view. In this account, although Al Qaeda was previously a central office or 'terrorism central' (his term), since 2001 it has become a diffuse social movement with 'informal networks that mobilise people to resort to terrorism'. Thus, Al Qaeda is now freelance or 'leaderless jihad'. It follows, *inter alia*, that a sole concern with eliminating Osama Bin Laden is mis-conceived as a means of eradicating current terrorism.

The purpose here is to review two recent books: *Identity and Violence ...* and *Rethinking Islamism ...*. The *Prometheus* reader may well wonder why these two books have been brought together in this joint review. Well, maybe as with Sageman (a psychiatrist), there will be some unexpected insight. Both authors are (somewhat non-standard) economists (one with the Nobel Prize in Economics), from the Indian sub-continent, with distinguished academic careers in important universities in the UK, the US and elsewhere.

Consider the following self-description by Sen:

I can be, at the same time, an Asian, an Indian citizen, a Bengali with Bangladeshi ancestry, an America or British resident, an economist, a dabbler in philosophy, an author, a Sanskritist, a strong believer in secularism and democracy, a man, a feminist, a heterosexual, a defender of gay and lesbian rights, with a nonreligious lifestyle, from a Hindu background, a non-Brahmin, and a non-believer in an afterlife [and a before-life] (Sen, p. 19).

The significance of this self-description will become clearer below.

Desai (b. 1940), formerly a Professor of Economics at the London School of Economics, is now a Labour peer in the House of Lords. He is the author, *inter alia*, of *Marxian Economics* (1979) and more recently *Marx's Revenge: the Resurgence of Capitalism and the Death of Statist Socialism* (2002). A self-proclaimed left-wing writer, his academic work can be described as political economy, economic development, and more recently, globalisation. He is also a self-described atheist (Desai, p. 136).

Sen (b. 1933) has quite diverse academic interests: he is the author of, *inter alia*, *Collective Choice and Social Welfare* (1979), *On Economic Inequality* (1973), *Hunger and Public Action* (1989), *Commodities and Capabilities* (1999) and *Development*

as *Freedom* (1999). His academic work has been at the forefront of many areas of economics.

For the purpose of providing some context to this review, it is useful to recall that in 1989 Francis Fukuyama published an essay entitled 'The End of History?',² and subsequently the argument was given a more detailed book-length treatment.³ The term 'The End of History' is easily misconstrued: for Fukuyama 'History' is a single evolutionary process, in the sense used by Hegel and Marx, by which mankind would achieve a societal form whereby fundamental issues (or the Big Questions) had been settled. For Marx the End of History was the communist state. Fukuyama's argument was that there was a growing consensus (in the late 1980s) that liberal democracy, as a system of government, had triumphed over alternative systems of government (or ideologies) such as hereditary monarchy, fascism and communism. He argued that liberal democracy may be conceived of as the 'end point of mankind's ideological evolution' and the 'final form of human government': in this sense it was the 'End of History' in the Hegelian (and Marxian) frameworks. He was writing in the era in which the ideological competition of the twentieth century was coming to an end with the re-unification of Germany, the end of the Cold War, and the implosion of the USSR. Some people were speaking of the triumph of the Western idea of liberal democracy.

Within a few years (in 1993) a quite different argument was made by Huntington that had no connotations of consensus and harmony: in an essay entitled 'The Clash of Civilizations' he argued that 'Westerners erroneously assume that other civilizations can and will embrace individualism and democracy, but Confucian, Islamic, Japanese, Hindu and other groups do not view the Western outlook as desirable'.⁴ The argument was also subsequently elaborated in a book.⁵ It should be emphasised that Huntington was not advocating 'clashes': he was describing some current trends and predicting the effects that would arise. It is relevant to give a concise statement of Huntington's thesis, as it is one of the arguments that induced Sen to write *Identity and Violence*

For Huntington, world politics was entering a new phase. *Glasnost* under Mikhail Gorbachev was a precursor to the fall of the Berlin wall and the implosion of communism (and the re-emergence of Russia), not simply of the 'old' USSR, but also of the numerous puppet communist regimes established throughout Eastern Europe after World War II. Although these events marked the end of the Cold War, they did not imply the end of international conflicts. For Huntington, conflict 'will be a direct result of the cultural, historic, ethnic and religious differences that make civilizations unique'. The faultlines of these civilisations (Confucian, Islamic, Japanese, Hindu, Western etc.) will be the battlelines of the future. He draws several conclusions from this analysis: first, the US must forge alliances with countries sharing its cultural values, and spread those values wherever possible. Second, the West must be accommodating towards other civilisations, if possible, but confrontation may be necessary. In addition, all people should learn to tolerate each other.

Huntington's position is that the issues that Fukuyama was interpreting involved some final dimensions of an era of ideological conflict: conflicts will occur still, but they will take place on cultural and religious lines. His prediction was that those future conflicts would most likely be an Islamic–Western clash or a Confucian–Western clash. With this background in mind, we turn now to the books under review.

The immediate impetus for Desai's book was the detonation of three bombs on the London Underground, and the subsequent bombing of a bus in July 2005.

However, this was but one event in a series: other events were the 1993 attack on the World Trade Centre in New York, the 1998 bombing of the US Embassies in Kenya and Tanzania, the 2000 attack on the USS *Cole*, the 2002 Bali Bombings, the 2004 attacks on the Madrid rail system, and bombs in New Delhi, Sharm-el-Sheikh, Amman and so on. However, the most striking was the coordinated suicide attacks by 19 terrorists in September 2001, connected to Al Qaeda, using hijacked commercial aircraft and crashing them into the Twin Towers of the World Trade Centre and the Pentagon Building in Washington. These events involved over 3,000 deaths, predominantly civilians. Sen's motivation is the same as Desai's: a concern with the 'violent events and atrocities of the last few years' (p. xii).

Sen's book is about 'the miniaturization of people' (p. xvi), or the assumption that human beings are uni-dimensional and hence can be categorised solely on the basis of religion or culture. For Sen, it is this assumption which underlies contemporary world conflict: this concept of a single identity is a necessary condition for hatred. This emotion can overwhelm other human states such as sympathy, charity and kindness, and behavioural norms such as The Golden Rule ('As ye would that men should do to you, do ye also to them in like manner').

More specifically, Sen's argument is that concentrating on a sole dimension of identity is the source of violence: 'Violence is fermented by the imposition of singular and belligerent identities on gullible people, championed by proficient artisans of terror ... Al Qaeda relies heavily on cultivating and exploiting a militant Islamic identity specifically aimed against Western people' (pp. 2–3). This latter point is well-illustrated by Abu Bakar Bashir, the (so-called) spiritual leader of Jemaah Islamiyah in Indonesia, who has said

We would rather die than follow that which you worship. We reject all of your beliefs; we reject all of your ideologies ..., your teachings on social issues, economics or beliefs (*sic*). Between you and us there will forever be a ravine of hate and we will be enemies until you follow God's Law.⁶

Sen argues that this partitioning of people (and countries) involves a 'solitarist approach to human identity' (p. xii), in which there are blocks of people, or a federation of religions or civilisations.

Where is Sen coming from? What values underlie his arguments? This is made clear in the 'Prologue' of this short book where he outlines the central dimensions of 'leading a human life': choice and reason. He argues that we can *choose* from among our multiple identities. Recall Sen's self-description quoted previously: this is a list of Sen's 'multiple identities'. What follows is that we must make decisions on the relative significance we attach to the various roles we have in life: we have 'substantial freedom regarding what *priority* to give to the various identities we may simultaneously have' (p. 38).

However, if the world is seen in Huntington's framework of civilisations, then emphasis is being placed on a single human characteristic. Is it not surprising that Sen devotes a whole chapter to a single-minded critique of the 'clash of civilizations thesis'. His argument is that this conception ignores the many identities that people have and assumes a unique relevance for a sole attribute. Such conceptions deny choice: furthermore this deterministic emphasis implies that we are trapped by destiny. However, it should be observed that Huntington was not advocating 'clashes': his analysis was descriptive of 'the way things are in the world'.

Sen does not apply the same forceful arguments to other solitarist conceptions such as Marxian class analysis, and the currently-fashionable arguments about communitarian philosophy: he has Huntington in his sights.

He continues his critique of Huntington in Chapter 4 ('Religious Affiliations and Muslim History') in which he points to heterogeneity of religions (e.g. Sunni and Shia) in various countries and, even more so, in civilisations. The critique continues in his chapter 'West and Anti-West', which is concerned (in part) with post-colonial issues.

There are then two chapters on culture with an emphasis on the issues surrounding 'multiculturalism'. As with colonialism, multiculturalism often involves the use of stereotypes, or the invocation of singular identities, a concept and process which Sen argues is the source of the problem of violence. However, Sen clearly does not want to critique these cultural positions (of which he approves). Elsewhere he speaks of 'a broad approach to social progress in general'. So obtuse complicated arguments are being given. For example consider the following:

There are, I would argue, two socially distinct approaches to multiculturalism, one of which concentrated on the promotion of diversity as a value in itself; the other approach focuses on the freedom of reasoning and decision-making, and celebrated cultural diversity to the extent that it is as freely chosen as possible by the person involved (p. 150).

Some readers may consider these distinctions to be clarifying and useful, however I do not consider them to be so. This multiculturalism argument is simple, may I say, in comparison to his nuanced five-point discussion of culture, *per se*, in his 'Culture and Captivity' chapter.

Desai's book is quite different. There is no making of obscure arguments here, although there are many distinctions or dichotomies. Some of the most important are as follows: religion *vs* ideology; terrorism *vs* terrorists; ideology *vs* pragmatism; theocracy *vs* democracy; the Caliphate *vs* the nation state; tolerance *vs* intolerance; philosophy *vs* ideology; anarchists *vs* cadres; idealism *vs* *realpolitik*; and the most important of all is Islam *vs* Islamism.

Desai's central argument is that the source of the new terrorism is not to be found in a religion, Islam, but in a political ideology, Islamism, which uses religious terminology. The implication is that all those commentators who argue that the West needs 'to understand Islam' are subject to misconception: they need to look behind the religious language. Another implication is that 'the war on terror' is also misconceived: 'only ideas can defeat ideas, not guns' (p. 12). The objective of the new terrorists is that associated with any political ideology, *viz.* to win and use power.

One must be clear on the meaning of the words: 'Islam' is a religion, and 'Islamism' is a political ideology. It is argued at some length that every religion (Judaism, Christianity, Islam, Hinduism, etc.), despite their contents, have been invoked to incite warlike instincts. But it is not the religion *per se* that provokes violence 'but how it is used politically ... We need to rethink religion politically, and not just treat it as religion' (pp. 11–2). Thus the current upsurge in terrorism is not to be found in religion 'but in an ideology ... of global Islamism. [Global Islamism] is the ideology of global terrorism. If we are to fight it, we must understand it. And fight it we must because it is an ideology which is not amendable to debate or dialogue' (p. 12), because its adherents are not interested in debate or dialogue. Nor do they attend multi-faith discussions or ecumenical conferences.

Desai then uses, not a dichotomy, but a three-fold distinction of types of Islamism. Moral Islamism involves the normative view that Muslims should adopt a pious and orthodox style of living. This is 'mild'. National (or political) Islamism involves a stronger normative position: if Muslims are in a majority in a particular country, the government should have the Qu'ran as its guide, and implement Sharia Law. Global Islamism is the most extreme variant of the three and involves a complex story.

The story concerns a glorious past, a miserable present, an enemy who is responsible for [the Muslims'] current lowly status ... and the programme of action which is to be undertaken if the miserable present is to be turned into a bright future which will restore the glorious past (p. 26).

Desai argues that anarchism, communism and (various) nationalisms also have 'stories' with these four components. His two-fold strategy for defeating this new ideology is as follows: first, we have to understand the ideology of Global Islamism. And second, 'we need to know how the other ideologies were successfully contained and made incapable of inflicting gross misery while surviving as philosophies or belief systems' (p. 27).

It is important to understand Bin Laden's conception of Islam's place in history. For him, the disappearance of the Ottoman Empire in the aftermath of World War I bulks large in his outrage at the West (despite the fact that it was Atatürk who abolished the Caliphate). But earlier times also provide an impetus to his hatred of the West. What is sometimes called 'The Dark Ages' in Europe was in fact the high-point of Muslim territorial expansion: this period is referred to by some as the Islamic Golden Age. From its beginnings in the Arabian Peninsula in 622 under the Prophet Muhammad, and under subsequent Caliphs, the Muslim Empire (within approximately 100 years) took in all the lands of northern India to the Pyrenees; this included central Asia, the Middle East, North Africa, Southern Italy and the Iberian Peninsula.

The Islamic expansion in Western Europe was brought to an end by Charles Martel's victory at the Battle of Tours (or Poitiers) on the Loire River in 732. And it was in 1085 that the Muslim city of Toledo was captured by Alonso VI of Castile-Leon: this was the first act in what came to be called the *Reconquista*, the 400-year conflict over the Iberian Peninsula which came to an end in 1493. The Muslim invasions of eastern Europe ended with the Siege of Vienna in 1529 when the Ottoman Empire (under Suliman the Magnificent) first attempted to capture the city of Vienna. After this defeat, Islamic forces continued to make incursions into central Europe until the defeat of Kara Mustafa Pasha at the Battle of Vienna in 1683. This battle brought to an end the 300-year conflict between central European kingdoms and the Ottoman Empire. In the years from 1683 to 1700 the Hapsburgs gradually occupied Southern Hungary and Transylvania (part of modern Romania) (for details see Davies).⁷ Such historical events led Bin Laden to the view that the West has trampled on Muslims.

The central theme of Global Islamism can be described as 'the Muslim predicament'. Desai writes as follows: 'What was once a great and universal empire has disappeared, and a people once proud and world-conquering is now adrift. They have no single spiritual or temporal authority for the first time in thirteen centuries' (p. 121).

Who is to blame for this? The short answer is 'the West': for Osama Bin Laden, there is a clash between 'the Crusader West' and the Muslim community, the

umma. Abu Bakar Bashir also holds this view: 'The root of all confrontation in the world at this time, which is frequently described as terrorism, is actually the clash between the believers in Islam and the non-believers'.⁸ It is clear that Bin Laden and Bashir are people who fit Sen's description of a person who works from a singular identity. Furthermore, they both hold to the 'clash of civilizations' view described by Huntington. But it is clear that their epistemological position is different from his: for them having a singular identity and advocating the 'clash of civilizations' involve holding highly desirable normative positions.

Desai's final two chapters are entitled 'Combating Global Islamism' and 'Winning the War against Terror'. His discussion involves an insightful account of how anarchists (from the late nineteenth and early twentieth century) and the communist empire were defeated. These chapters deserve close attention. He concludes his book by re-phrasing Karl Marx's eleventh thesis on Feuerbach: 'We have tried to interpret Global Islamism; the task however is to defeat it' (p. 179).

My (self-appointed) task in reading these two books was to look for something 'different' or 'striking', in the way that Sageman's book was different and striking. I did not find anything in Sen that met this criterion: in fact, I found the book somewhat repetitive as the central argument that 'we all have different roles in life' was stated again and again. On the other hand, Desai's content was varied and thought-provoking. I will conclude by referring to how some of the various matters thrown up by Global Islamism are discussed in the West. Towards the end of the book (p. 152), Desai makes the point that it has become fashionable to be anti-American in many Western countries. Although he is no apologist for the US, Desai is gently warning us that it is not logical to imply that my enemy's (the US's) enemy (Al Qaeda) is my friend. As such he is pointing to some difficulties that exist in the West when it comes to considering some of the issues that have arisen from Global Terrorism.

Two matters that are much-discussed relate to responses that have occurred in Western democracies, *viz.* restraints on civil liberties (police detention without arrest etc.) and the use of torture to obtain information about terrorist acts or possible terrorists. These issues, apart from being debated in the press, now have book-length treatments.⁹

Although Desai makes some critical points about civil liberties and torture, he does not devote much space to them. However he devotes some pages to some 'blind-spots' (my term) exhibited by Western liberals, intellectuals, journalists etc. Desai has two sections in Chapter One entitled 'The Religion Detour' and 'The Growth of Western Tolerance' which deserve the (Western) readers close attention. He points out that 'The Western world is liberal, tolerant and, by and large, not intensely religious. In the Protestant regions of Europe, people are agnostic, if not atheist. The Catholics are tolerant and can never be fundamentalist ...' (pp. 19–20).

Let us leave aside quibbles that we can have with these generalisations, and follow Desai's argument. He points out that traits such as tolerance etc., have not always been dominant, and now they are commonly held by many people. These traits, combined with the dominant political correctness, have certain effects. For example, Desai argues that many Western liberals feel quite comfortable contemptuously dismissing Christian fundamentalism, yet they are 'helpless against Muslim fundamentalism'. Furthermore, the dominant political correctness has led, not only to the acknowledgement of (say) Ramadan and Diwali, but to 'even the most agnostic of Western liberals [becoming] sympathisers of [other] religious beliefs'

(p. 22). It is often these same people who argue for not celebrating Christmas, as it may offend, not their agnostic beliefs, but the sentiments of the new (non-Christian) citizens. In addition (and this is the most telling point) the possibility that they may be accused of racism ‘cripples their critical faculties’ (p. 20). They are forced into silence.

Now that is both different and striking!

Notes and References

1. Mark Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century*, University of Pennsylvania Press, Philadelphia, 2008.
2. Francis Fukuyama, ‘The end of history?’, *The National Interest*, 16, Summer 1989, pp. 3–18.
3. Francis Fukuyama, *The End of History and the Last Man*, Penguin, Harmondsworth, 1992.
4. Samuel P. Huntington, ‘The clash of civilizations?’, *Foreign Affairs*, 72, Summer 1993, p. 22.
5. Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order*, Simon & Schuster, New York, 1996.
6. Quoted in S. Neighbour, *In the Shadow of Swords: On the Trail of Terrorism from Afghanistan to Australia*, Harper Collins, Sydney, 2005, p. 2.
7. Norman Davies, *Europe: A History*, Pimlico, London, 1997.
8. Quoted in Neighbour, *op cit.*, p. 5.
9. See, for example, A. C. Grayling, *Towards the Light: The Story of the Struggles for Liberty and Rights that Made the Modern West*, Bloomsbury, London, 2007; and Phillip Zimbardo, *The Lucifer Effect: Understanding How Good People Turn Evil*, Random House, New York, 2007.

D. P. Doessel
 Queensland Centre for Mental Health Research, and School of Population Health
 The University of Queensland, Australia
 darrel_doessel@qcmhr.uq.edu.au
 © 2008 D. P. Doessel

Here Comes Everybody: the Power of Organizing without Organizations

Clay Shirky

London, Allen Lane, 2008, 327 pp., UK£20.00, ISBN 978-0-713-99989-1 hbk

By Clay Shirky’s appraisal, ‘we are living in the middle of the largest increase in expressive capability in the history of the human race’ where ‘more people can communicate more things to more people than has ever been possible in the past’ and where ‘the size and speed of this increase (...) makes the change unprecedented’ (p. 106). Doubtless he is right. Throughout its 300 odd pages, Shirky charts the rise of group culture via the Internet, typically, e-mail, blogging and various forms of social networking. His constant theme is that ‘the information we give off about ourselves, in photos and e-mails and MySpace pages has dramatically increased our social visibility and made it easier for us to find each other but also to be scrutinized in public’ (p. 12). Shirky maintains that the shift in visibility and inter-activity is most obvious in activities which previously were ‘too difficult to be pursued with traditional management but [which] have become possible with new forms of coordination’ (p. 31).

Shirky uses Ronald Coase's famous paper, 'The Nature of the Firm' (published in 1937),¹ to frame his analysis. Coase attempted to explain the apparent anomaly whereby, if markets can regulate production via price movements, why do firms exist? Coase identified transaction costs as a significant barrier to a completely open market for labour. As Shirky paraphrases, 'the more people involved in a given task, the more potential agreements need to be negotiated to do anything' (p. 30). Running organisations is difficult because 'every transaction (...) requires (...) some limited resource: time, attention or money' and because of these transaction costs, 'some sources of value are too costly to take advantage of' (p. 29). Thus, 'a firm is successful when the costs of directing employee effort are lower than the potential gain from directing' (p. 30). Activities where costs are 'higher than the potential value for both firms and markets simply don't happen' (p. 31). Shirky's argument is that 'new social tools are altering this equation by lowering the costs of co-ordinating group action' (p. 31). Everywhere, 'newly capable groups are assembling and (...) working without the managerial imperative and outside the previous strictures that bounded their effectiveness' (p. 24). Shirky returns to this theme again and again, using a number of social networking sites as examples. Flickr, the photo-sharing site, adds 'a social dimension to the simple act of viewing' (p. 33). Flickr operates by allowing its subscribers to post photographs they have taken and which they label (tag). When two or more users choose the same tag, their photos are automatically linked. Thus it is possible to search the Flickr pages using terms such as 'Toronto propane explosion' to find all of the photographs bearing on that tag. In many cases, these are more up to date than those carried by the commercial news media. Users indexing their own photographs is 'the only way that Flickr can bear the costs involved' (p. 33) because previously 'the gap between effort and payoff [was] too large for any institution to span' (p. 34). The new tools allow organisations to circumvent transaction costs because they are able to bend, distort or completely abandon traditional models of managerial oversight (p. 39). Flickr works because it 'has provided a platform for users to aggregate the photos themselves' (p. 34). The onus of organising and the associated transaction costs have been shifted onto the consumer. The financial cost of uploading photographs to Flickr may be low, but the true costs are in the time saved to the organisation—users may spend much time digitally editing and tagging their photographs prior to posting, and organising them into sets, collections and groups post-posting on the Internet.

Indeed, it is no longer even necessary to be a professional in order to publish in a professional capacity. In the case of the London Transport bombings in 2005, 'having cameras in the hands of amateurs on the scene was better than (...) having professionals who had to travel' (p. 35). Similarly, with the Indian Ocean *tsunami* in December 2004. 'Mass amateurization is a result of the spread of expressive capabilities' (p. 66). So easy is it for anyone to post to the Internet—images, blogs, messages—that the question is now not "Why publish this?" but "why not?" (p. 60). The cost of finding 'like-minded people has been lowered and, more importantly, deprofessionalized' (p. 63). Previously, 'when it was easy to recognize who the publisher was, it was easy to figure out who the journalists were' (p. 73). While the 'amateurization of the photographer's profession began with the spread of digital cameras, (...) it really took off with the creation of online photo hosting sites' (p.74). Nowadays, professionalism is defined only on the basis of revenue: in the United States, 'the IRS defines a professional photographer as someone who makes more than \$5,000 a year selling his or her photos' (p. 75). The distinction

between amateurism and professionalism which ‘once was a chasm has now become a mere slope’ (p.77).

Similarly, with the written word. Shirky baldly states, for a generation ‘growing up without the scarcity that made publishing such a serious-minded pursuit, the written word has no special value in and of itself’ (p. 79). He notes that today’s tendency is to ‘publish then filter’ and that, surveying this vast collection of ‘personal postings, in-joke photographs and poorly shot video, it is easy to conclude that (...) the old world of scarcity (...) spared us the worst of amateur production’ (p. 83). He reminds us that while ‘the cost of posting things in a global medium has collapsed, much of what gets posted (...) is in public, but not for the public’ (p. 90). In other words, ‘they’re not talking to you’ (p. 85). So who are they talking to? He suggests that email and ‘the ability to create group conversations effortlessly without needing the permission of the recipients, is providing a way for an increasing number of us to experience the downside of fame’ (p. 95). This downside is because we are not always able to reciprocate, ‘in the way our friends and colleagues would like us to’ (p. 95). Hence, if our power to organise ourselves has vastly increased, yet at the same time we are incapable of responding to every invitation to organise, are we really as co-ordinated as Shirky would have us believe? He cites as examples, the ice cream protest in Belarus, where a blog was used to ‘propose a flash mob’ (p. 166) inviting political protestors to turn up in the central square of Minsk and eat ice cream; and, more mundanely, flash mobs assembling for a ‘Zombie walk’ in San Francisco; and a silent dance party at London’s Victoria Station (p. 165). Nonetheless, neither political protest, nor performance art are phenomena unique to the post-Internet age.

Where is Shirky going with all of this? Not all that far, given that his final conclusion is, rather weakly, that even though ‘our social tools are dramatically improving our ability to share, cooperate, and act together’ we are, at the same time, ‘coming to take [them] for granted as well’ (p. 304). This is particularly true for a younger generation, whereas those who are ‘old enough to remember a time before social tools became widely available are constantly playing catch-up’ (p. 304). Throughout his book, Shirky explores many of the uses and applications of the new social tools: Flickr, Wikipedia, the development of Linux, Digg and several more, all from the perspective that these social tools ‘have been increasingly giving groups the power to coalesce and act in political arenas’ (p. 292). Yet the question of the power that social tools might simultaneously provide to governments and to organisations to know more about individuals, by enabling them to access and trade information free of traditional transaction costs, although mooted, is not explored.

Are we really connecting with each other to the extent that Shirky believes? Or, in creating an even greater information thicket, because it is so easy and relatively cost-free to do so, are we simply, as per Coase’s analysis, functioning as extended entities of the firm? Google makes billions by ‘matching ads to content it does not own’ relying on ‘the Internet remaining an open, under-commercialised environment’.² Our social networking may simply be yet another facet of commercialised, corporate culture. Shirky says that ‘the most profound effects of social tools lag their invention by years and it isn’t until [their] adopters take these tools for granted that their real effects begin to appear’ (p. 270). His book is in the main observational, yet the reader can forgive his reluctance to draw out conclusions. He has tackled a huge subject, admirably so. He states that it is only ‘when a technology becomes normal, then ubiquitous, and finally so pervasive as to be invisible, that the really profound changes happen’ (p. 105). Quite how far away we are from the

point of invisibility is hard to say, but one can only imagine that Shirky will have a great deal more to say before, and after, it is reached.

Notes and References

1. R. H. Coase, 'The nature of the firm', *Economica*, 4, 16, November 1937, pp. 386–405.
2. 'That interminable 0.9 seconds', *The Guardian*, 1 November 2008.

Suzanne Mieczkowska
 Newton Abbot, Devon, UK
 smieczk@yahoo.co.uk
 © 2008 Suzanne Mieczkowska

The Mythical Organisation

Graham Galer

Axminster, Triarchy Press, 2008, xiii+105 pp., UK£25.00, ISBN 978-0-9557681-1-8 pbk

There is a certain irony to reviewing a book entitled, *The Mythical Organisation*, in a journal entitled *Prometheus*. Reading this book, I couldn't help wondering whether Graham Galer, its author, had indeed stolen 'the fire of the gods' and brought it to us humans or whether perhaps Icarus-like he flew too near to the sun!

Galer opens his preface with a clear statement of his position and intention: 'I believe that better decisions would often be made if we—businessmen (*sic*), politicians, citizens—recognised the extent to which we are influenced, perhaps unconsciously, by the myths that pervade modern society' (p. vii). He defines a myth as 'a narrative that is widely accepted as an account of the world or part of it'. According to him, a myth is not necessarily 'true' nor is it universally accepted and later in the book he explicitly challenges the modern use of myth—'it's a myth'—to mean untrue. He states that 'their existence fulfils the need, which most of us feel, to understand and find meaning in our life experiences'. He advocates a better understanding of modern myths in order to better understand and question the organisations in which we work as well as the broader society and to recognise the importance of myth as a tool of power, whether government or organisational. He states that 'reactions triggered by myth can empower the decision-making elite and perpetuate a state of public acquiescence'. A powerful beginning, particularly when you know that Galer spent 36 years working for Shell, ending his career as Head of Planning Support at a time when Shell was developing its approach to scenario planning. He then had a successful career as a strategy consultant before moving into academia to study International Conflict Analysis. The book, according to the back cover, is written for managers in large organisations, as well as those lecturing or studying in the fields of business management—especially organisational studies and politics.

However, the preface also reveals one of the issues with the first chapters. This book started out as Galer's PhD thesis on 'the myths of war' and while this is clearly what sparked his interest in the power of myths in organisations, the first three chapters are structured like a PhD thesis and do not seem to be written with

managers in large organisations or those lecturing or studying in the fields of business management in mind.

Chapter 1, 'Myth in the Modern World', starts with a series of definitions. Myths are described as 'stories about events, past or present ... which may or may not be true ... but which represent an underlying psychological truth'. He provides a dictionary definition as 'a belief or a subject of belief whose truth is accepted uncritically'. Then he moves to provide three very British examples: 'We always win the war', a myth he cites originating from the Second War; a myth that the National Health Service 'is unique' and is 'the envy of the world'; and the myth of the independence of the BBC from government driven by a mission to 'inform, educate and entertain'. His narrative develops a focus on different myths of war—one liberal and one conservative—drawing on a range of other authors before returning to the idea that there are pervasive myths of nationhood which are very powerful and slow to change and specific myths, including those about the NHS and the BBC. He then moves on to consider what these myths have in common and where they come from. He heads up this section as 'Mythic consciousness' citing in particular Ernst Cassirer and his work, *The Myth of the State*. He regards this mythic consciousness as containing the 'myths of the Christian bible ... the Koran and the Torah' and new myths such as the myth of democracy and 'the developing mythology of climate change' (p. 15). He returns to his earlier definition of myths as fulfilling some psychological need and points to the emotional power of war memorials, statues and the last post commemorating different aspects of the war finding their echo in other events such as national anthems at football matches or when Olympic medals are presented.

The chapter then differentiates myths from fables, fairy stories, folk-tales, sagas and epics, legends and parables. Fables for example are defined as fictitious stories such as Aesop's tales, folk tales as similar to those written by the Grimm Brothers, an epic as a long narrative poem such as Beowulf and legends as the lives of the saints or perhaps Robin Hood, and parables predominantly New Testament stories. He distinguishes myths on two grounds: 'they explain a phenomenon ... by giving meaning to a series of events or experiences'; and 'they express a feeling or emotion that has consequences for social cohesion' (p. 20). He then draws on the work of Joseph Campbell and Karen Armstrong to suggest that mythology evolves over time through the four stages of hunter gatherer; agrarian cultures; city states; then religion and philosophy of the post Axial Age. He considers that his own examples of the Second World War, the NHS and the BBC fit into this chronology of myth making.

Chapter 2, 'Where Do Myths Come From?', begins with his 'own, perhaps simplistic, belief ... that most myths have been built up through the gradual development of narrative structures—stories—told and retold by different people over the course of time' (p. 29). He supports this by drawing on myths from the First World War, the Long March and the Soviet 'hero' myth. He considers the role of the historian in challenging the validity of myths and the way in which they have evolved and concludes that myth 'may develop through the straightforward promulgation of narratives, either informally or through the medium of literature'.

Chapter 3, 'Two Theories of Myth', seeks to be more specific about the kind of mental processes that turn human experience into myth—drawing on the work of Rene Girard and Victor Turner who respectively describe myth arising from a sacrificial crisis and myths that arise from what Turner describes as 'liminal' groups, and Galer uses the term marginal groups. Galer goes into the work of both authors in

some detail. He gives two examples of the sacrificial crisis leading to the process of myth making—the first the defeat of Churchill after the war; the second the sacrificing of Chief Executives citing the resignation of the Chairman and Director-General of the BBC in relation to the suicide of David Kelly and the charging of Ken Lay and Jeffrey Skilling in relation to the bankruptcy of Enron. In the latter case, Galer makes clear that the fact that these men were criminals does not make them any less sacrificial victims. He then turns to Turner's work on *communitas* giving examples of religious communities, innovative companies and soldiers such as Francis of Assisi, the Australians in the First World War and the activities of Pierre Wack and Ted Newland which led to scenario planning within Shell that created a myth that the future could be addressed.

In Chapter 4, 'Myth and Organisations', he draws on his experience of working inside Shell still further. The chapter describes the 'internal myth' within the company of 'harnessing, through science, technology and commerce, by a global partnership of committed and responsible workers, of a major natural resource, for beneficial social ends'. He describes how this myth was a common narrative within the company and evident in, for example, the *Shell Sustainability Report* and in particular the introduction by the Chief Executive. He contrasts this with the 'external myth' developed by Friends of the Earth and other environmental groups, spelt out in the report *Lessons Not Learned—the Other Shell Report 2004*. He describes how Friends of the Earth used the last words of Ken Saro-Wiwa, the Nigerian Campaigner executed for his campaigns against the environmental damage of companies including Shell, within the report and on other occasions to build coherence and meaning to their opposition to Shell's activities. He describes how these myths, particularly the external one, are reinforced by wider societal myths and given respectability by other authors such as Joel Bakan in his book *the Corporation: the Pathological Pursuit of Profit and Power*. The chapter then turns to an analysis of where these myths come from and how they develop. Galer heads this section with an acknowledgement that it would take a lot of research to determine the source of them. His view, drawing on Kieser's work, is that myths can come from the 'extraordinary performance of extraordinary people', and that for internal myths the main source is the management team and the ritualistic nature of internal meetings, 'awaydays' etc. He returns to Turner's marginalised communities and asserts that many of these meetings are marginal experiences. He also considers that external myths arise from the marginalised experience of *communitas*, in the case of Shell, the environmental groups whose activities 'are clearly in many cases marginal (one thinks of groups of motorway protesters climbing trees)'. The majority of the population do not wish to join these activities but nevertheless develop an underlying sympathy with their concern for nature and the natural environment. Galer also points to the fact that Friends of the Earth clearly saw the execution of Ken Saro-Wiwa and the other nine activists as a sacrificial crisis that Shell helped to give force to by being 'unable or possibly unwilling to intervene to try to halt the executions, and continued subsequently to operate in Nigeria'.

The chapter moves on to consider whether organisational myths like societal ones help maintain social stability. To consider this he moves briefly back to his example of the NHS and how the myth of 'envy of the world' is maintained through various changes. He notes the convergence of the internal and external myths in the case of the NHS and wonders what happens when the two diverge as in the case of Shell. His view is that they may converge over time or the divergence causes creative tension which enables the organisation to develop and change. The

chapter ends with a brief review of what happens in the absence of myth and how this vacuum can lead to inertia and lack of ability to change.

Chapter 5, 'Myths and the Future', suggests that scenarios are powerful tools for addressing the future and that they have something in common with myths—they both enable people to make sense out of complex situations. He believes that organisational myths can develop without the need for sacrificial crisis or marginalised groups and that 'for organisations, one vehicle for building such a narrative could be provided by the construction, promulgation, discussion and continual refinement of scenarios'. He then describes his view of the 'High Road' and 'Low Road' scenarios developed by the Anglo American Corporation of South Africa in the 1980s. These scenarios and the preference for the High Road route were then discussed widely in South Africa and became widely known and accepted according to Galer. He charts the development of these scenarios through to the 1990s and their absorption into the 'Rainbow Nation' address of Nelson Mandela as President. He emphasises in particular that the groups responsible for developing the scenarios were often marginalised groups working on the fringes of mainstream thought. He supports his contention that scenario planning can help organisations develop their own myths by referring to work done within the NHS on scenario planning and how these fed into government reports such as the Wanless report into the NHS.

In Chapter 6, Galer concludes that myths are alive and well and flourishing in modern society. He contends that myths come in many forms and new myths are being developed all the time, particularly in relation to myths of organisation, of nationhood and of war. He argues that scenarios are a way to modify existing myths and develop new ones.

So is 'Galer Prometheus' bringing the fire of the gods to humans and will he be chained to the rocks for his troubles? On one level, this is an issue of huge significance to organisations. The point at which the book springs to life is in Galer's treatment of 'Myth and the Organization' (Chapter 4), when he describes the internal and external myths about Shell and Ken Saro-Wiwa (pp. 61–8). It is quite clear that two completely different sets of beliefs, values and narratives were at play and it is fascinating stuff—but does it give our life meaning in the way he defines myths? Probably for those directly involved it did. Similarly, his take on scenario planning is interesting and thought-provoking. I have certainly worked with groups where a preferred scenario became a self-fulfilling prophecy but do they fulfil some psychological need? I would have liked to know more and I would have liked to know how the clashing of the internal and external myths affected scenario planning and the development of the internal myth. On another level, the early chapters are clearly taken from a PhD thesis on the myths of war with some additional paragraphs added. Unfortunately, the seams show which detract from the potential impact of the book.

Carol Sherriff
Wilson Sherriff—The Facilitation Experts
Welwyn Garden City, UK
carol.sherriff@wilsonsherriff.com
© 2008 *Carol Sherriff*

Coolhunting: Chasing Down the Next Big Thing

Peter Gloor and Scott Cooper

New York, American Management Association, 2007, xvii+236 pp., UK£14.99, ISBN 0814473865 hbk

Reviewing a book like *Coolhunting* would be a great deal easier if I were sure what sort of a creature I was dealing with. The cover locates it firmly in the 'Heathrow School of Management', with the sub-title *Chasing Down the Next Big Thing* and bullet-ised phrases such as *Spot hot new ideas* and *Identify the trendsetters*, but that does it a disservice. Inside, the form and style are more considered, more provisional, eschewing simple nostrums in favour of a wider discussion of an emergent phenomenon that may just be changing the business world as we know it. And then, just over half way in, the style abruptly changes, almost to that of an academic paper, with a couple of chapters describing the experience of trying to quantify the phenomenon using automated social network analysis software. Finally, it returns to its major thesis: anticipating the coming world of swarm creativity and harnessing collective wisdom. So just what sort of a book is it?

The initial premise is quite simple; what does it take to spot winners? Building on Henry Chesbrough's concept of Open Innovation,¹ Gloor and Cooper argue that not only do all the smart people not work for your organisation, they increasingly do operate in loose, diverse, Internet-enabled networks of creative folk which *collectively* offer vastly more potential for initiating, recognising, adopting and popularising new ideas. The important word here is *collectively*. There is a thesis that if you ask enough people, then the average of their responses will converge upon the answer. The authors offer the example from the work of Francis Galton, noted Victorian polymath, who happened upon an agricultural fair at which there was a 'Guess the weight of the ox' competition. Galton relates that the average (median, since you ask) of around 800 estimates was almost precisely correct—a much better performance than the 'experts' on hand could manage. This book emerges from the potential of the Internet, and Web 2.0 in particular, to tap into this phenomenon of Collective Innovation Networks (COINs).

The authors make great use of the metaphor of the bee swarm as an exemplar of collective intelligence. There are other metaphors; the kinetic theory of gases enables predictions to be made of the gas, albeit not of its individual molecules, whose energies will typically be normally distributed around the mean. Perhaps more contentiously in the current economic climate, there is the judgment of the market. Several examples are given in *Coolhunting* of the working of Prediction Markets, from the long-established Iowa Political Markets, to in-house schemes from the likes of Siemens and Hewlett Packard. According to researchers at the University of Iowa, prediction markets require two characteristics; enough players—such that the aggregate judgment is sufficiently accurate—and a market mechanism that enables such aggregation. The case studies offered have achieved notable successes (see e.g. the Hollywood Stock Exchange² for an open access 'game' illustrating the predictive ability of such mechanisms) but today's scepticism regarding the manipulability of markets—not least by their own internal mechanisms—should sound a cautionary note; markets are far from infallible. Nevertheless the power of sufficiently large samples remains seriously attractive.

Throughout this book runs a thread of business counterculture. Cool is defined early on as some combination of *fun* and *excellence*. Why Apple is apparently cool, and Microsoft not is far too complex a question to be addressed here, but the authors suggest that cool additionally demands an element of altruism, some almost idealistic striving for the common good which goes beyond the immediate and obvious pursuit of short term profit. Being the 'little guy' therefore seems to help, as does a business plan which involves some element of giving stuff away, as in the browser wars of the 1980s, or Google's path to dominance as a search engine, not to mention the entire Open-Source Initiative. The counter-culture thread runs deeper with an apparent disdain for naked ambition; Gloor and Cooper counsel that cool is more likely to emerge from *Galaxies* than from *Stars*. Whereas a Star will seek fame and fortune, and relishes being the centre of attention, Galaxies (Benjamin Franklin and Henry Oldenburg are offered as illustration that this is hardly a new phenomenon) gain power by giving it away, multiply knowledge by sharing it, and trust the collective wisdom, well aware that the presence of a star usually inhibits collective creativity. In terms of leadership style there are strong echoes here of Jim Collins' 'Level 5 Leadership',³ advocating humility, a certain generosity of spirit and a willingness to trust in those being led; the very antithesis of the often ego-driven heroic leader.⁴

This thread is reinforced by extremely eclectic exemplars, often favouring popular culture or the history of ideas over more traditional business sources. Science Fiction fans will recognise the references to Gibson, Asimov and Brunner whilst music fans of a certain age will readily acknowledge the role of John Mayall as a quintessential *Coolfarmer* (a coolfarmer is someone who cultivates that which coolhunters go in search of; the ever-changing personnel of John Mayall's Bluesbreakers constitute a veritable honour-roll of musicians who went on to distinguish themselves in the field). Further examples discuss *inter alia* the South Sea bubble, the Columbia shuttle disaster and the Enron debacle, as well as more successful enterprises such as InnoCentive⁵ and Procter & Gamble's 'Connect and Develop' innovation model. The heroes in this sort of environment are very different from the traditional business norm; they are driven by intrinsic motivation, they enjoy discussing ideas with other folk 'just for its own sake'.

Overall then, an enjoyable—if occasionally elliptical—read. Notwithstanding an almost inevitable final chapter entitled 'Five steps to becoming a coolfarmer', the book offers few direct prescriptions, more a series of entreaties to 'do the right thing'. Connectedness, it argues, is the vital trait; not just smart people, but *connected* people. And Web 2.0 is the barometer of cool (as soon as we can work out how to interpret what it's telling us). Tomorrow's crucial innovation, it seems, is just as likely to emerge via the neighbourhood coffee shop as from the corporate R&D lab. Coolhunting just might be how we come to recognise it.

Notes and References

1. H. Chesbrough, 'The era of open innovation', *Sloan Management Review*, 44, 3, Spring 2003.
2. See www.hsx.com.
3. J. C. Collins, 'Level 5 leadership', *Harvard Business Review*, 79, 1, January 2001.
4. R. B. Reich, 'Entrepreneurship reconsidered: the team as hero', *Harvard Business Review*, May–June 1987.

5. 'InnoCentive is an open innovation community of smart, creative people who provide solutions to tough problems in business, science, product development' (see www.innocentive.com).

David Mayle
Open University Business School
Milton Keynes, UK
d.t.mayle@open.ac.uk
© 2008 David Mayle

Managing Information and Knowledge in Organizations: A Literacy Approach

Alistair Mutch

Abingdon, Routledge, 2008, xvi+267 pp., UK£26.99, ISBN 978-0415417266 pbk

For those who have reservations about picking up a textbook with both 'information systems' and 'knowledge' on the cover, Mutch offers reassurance: 'the focus of this book is on the use of data, information and knowledge rather than on the application of ICT' (p. 181). Refreshingly, the book examines both the potential and pitfalls of the use of information technologies, widely conceived. It is a kaleidoscope of current theories and disciplinary development at the intersection of organisation studies, information systems, and library and information science. Replete with case examples drawn from sectors such as education, manufacturing and retail, this is a textbook tour that highlights theoretical ideas and their practical application. But what happens if you twist the kaleidoscope? As Professor Mutch cautions early on, 'just because ideas exist and are helpful, there is no guarantee that they are applied' (p. 2). Accordingly, he advances 'information literacy' as a means of re-orientating discussion about the nature of managerial 'information' work in the Knowledge Economy.

Situating himself within Peter Drucker's 'knowledge work' treatise,¹ Mutch draws on studies in Library and Information Science and develops a skills-based definition of information literacy. This literacy approach, he suggests, offers managers a way to correct for narrow conceptions of information and information technology. By listing information literacy criteria from the field of education,² Mutch tells us what an 'information literate' manager might be like (p. 17). A knowledge of major current resources, the ability to frame researchable questions, the ability to locate, evaluate, manage and use information in a range of contexts, the ability to retrieve information using a variety of media, the ability to decode and critically evaluate a variety of informational forms are all required. These individual capabilities are developed and discussed in the light of Christine Bruce's work on the seven faces of information literacy in the library and information sciences sphere.³ Mutch argues, however, that unlike students or librarians, management practitioners have been left to structure their own information needs without necessarily developing commensurate professional information skills.

Professor Mutch's work speaks to a number of contemporary debates. Three of these in particular caught my attention and they give some indication of the range and theoretical scope this book attempts to encompass: shifts to practical reasoning, the role of HR in information management, and the interrelationship between spaces for individual action and institutional change. A nuanced discussion of the

distinctions between data, information and knowledge introduces the first of these in Chapter Three. This discussion is set in the context of the changing roles that universities play in knowledge production. The position of universities as exclusive sources of authorised knowledge—according to Enlightenment principles of intellectual scepticism, detailed empirical investigation and the power of Reason that, in the Oxbridge tradition, downplayed the role of vocational and practical knowledge (p. 43)—is contrasted with their contemporary connections with practical activities, including formal ties with business. Mutch goes on to suggest that the importation of US cultural preferences for statistically-based analysis, exemplified by Davenport and Harris's *Competing on Analytics*⁴ thesis, fits with a formal rationality that dates back to Simon and an enthusiasm, now widely considered overly-optimistic, for patterns of 'unprogrammed' decision-making (characterised by infrequency and their highly judgemental nature) that might somehow be reproduced by artificial intelligence (p. 27).

Mutch advocates instead a multi-modal and situated approach to the textualisation of work. He emphasises the need for communicative competence, an idea 'which sees information as embedded in a web of relationships' (p. 100). Here, he suggests, the quality of relationships is more important than the technological tools used. In Part II, which forms the single longest section of the book, Mutch turns his attention to how an information literacy perspective may expand discussion of these relationships: between technologies, structures and individuals. Whilst the first two of the five chapters in this section deal, loosely, with the differences between structured and unstructured data, I was struck particularly by Mutch's contention that Human Resource Management pays insufficient attention to questions of information policy, management and strategy. This argument is advanced through consideration and critique of Media (or Information) Richness Theory⁵ and Yates and Orlikowski's work on organisational communication genres.⁶ Data analysis, attention to publishing (rather than messaging), editing and material classification skills offer valuable insights into how ideas relevant to library and information science skills might improve organisational-wide information literacy.

The 'skills profiles' of managers, Mutch speculates, often lack 'Practical reasoning' (p. 173) associated with a capacity for intensive data analysis and communicative competence. While evidence is limited, it does suggest that HR professionals rely on formal, educational credentials as a proxy for individuals' ability to use information creatively. In addition to application-specific user-training (the primary focus of current endeavours), Mutch argues for exploration of how the available information might be used (information management) and how benefits may be derived from doing things differently (information strategy). Mutch contends that it has been easier for organisations to justify capital investment in tangible hardware than commit revenue expenses to the training and development of people. In Chapter 6, drawing again from Library and Information Science, the use of information policies to raise the profile of information use in strategy formulation is advocated. Elegant examples of what 'information literate' approaches to supply-oriented and customer-orientated data policies can achieve are developed with regard to Walmart and Tesco. But the potential to exploit information literate approaches is often overlooked or squandered amid a failure to appreciate the type of literacy that might 'make a difference'.

In the third part of the book, the information literacy focus is re-adjusted, and a wide-angled lens employed to explore the relationships between information, power, culture and institutional formation. Whilst Mutch continues to deploy his

discerning critical eye in Chapter 9, juxtapositioning Foucault's treatment of power with that of Steven Luke, there is something of the Reduced Shakespeare Company about aspects of this endeavour. On this occasion, the conceptual simplification which reduces complex conceptions of power to a few sentences distils the essential essence to such an extent that it is questionable whether or not what remains retains enough of its original substance. This criticism cannot, however, be levelled at the second of these two chapters, which pans out, gradually, to reveal the broader canvas for this text: Margaret Archer's Morphogenetic theory of social change.⁷ This is no surprise, since Mutch is an influential figure in the current epistemological debates around situated organisational action.⁸ In Chapter 10, Mutch considers the relationship between information and institutions. Here, particularly, he expounds the relationship between information system use and Archer's critical realist social theory.⁹ Developing Archer's concept of institutionally-shaped organisational logics, Mutch reviews Richard Whitley's work on comparative business systems.¹⁰ Viewed in this light, the recent shifts in financial infrastructures raise interesting questions about how and what information managers may now need and use to reconfigure their own business models.

Despite these evident strengths, as a 'cover to cover' reader, at times I found the book difficult to navigate. Browsing readers would perhaps benefit from sharper, more definitive connections between the theoretical and illustrative links that span chapters and the four sections into which the book is divided. Running the risk of raising questions about my own information literacy, I felt links between case illustrations and textual discussions could be strengthened. I puzzled over unexplained differences in the embellishment of in-text case examples (globes and scroll icons) and their positioning sometimes jarred. Chapter content is signposted clearly, however, both by key questions at the start of each part and chapter introductions, which contain navigation boxes that detail intended learning outcomes. Key-point summaries are provided at the end of each chapter and students are provided with review questions to encourage deep learning. Additional seminar questions and discussion cases are included for group discussion. Despite these teaching aids, it is not until the concluding chapter that Mutch finally lays out his argument and identifies three dimensions: communicative competence, definitional work and awareness of context against which he frames the limits and potential of his information literacy approach. These aspects, I felt, could usefully be signposted from the start.

As intended, this book offers valuable insights into the differences between data, information and knowledge. It fulfils its aim to pay greater attention to organisational data and information than other textbooks in the field. Mutch identifies his audience as 'those who wish to get a better understanding of the many factors which can impinge on the creation, sharing and use of knowledge in the world of information' (p. 1). Aimed at advanced undergraduate and postgraduate level, the range of different theoretical perspectives covered is impressive; though, perhaps inevitably, this breadth is achieved with some loss of depth and conceptual precision. This is a minor criticism, given the extensive referencing and direction of interested readers to further reading sources at the end of each chapter. Mutch summarises the central contention of his book, saying 'it is likely that any [information literacy] approach will fail if not contextualised properly' (p. 3). Armed with this compendium, it seems to me more likely that managers will be capable of the sophisticated contextual analysis required.

Notes and References

1. Peter Drucker, *Management: Tasks, Responsibilities, Practices*, Harper & Row, New York, 1973.
2. P. Candy, G. Crebert and J. O'Leary, *Developing Lifelong Learners Through Undergraduate Education*, Australian Government Publishing Service, Canberra, 1994.
3. Christine Bruce, *Seven Faces of Information Literacy*, AUSLIB Press, Adelaide, 1997.
4. Thomas Davenport and Jean Harris, *Competing on Analytics: The New Science of Winning*, Harvard Business School Press, Boston, 2007.
5. R. Daft and R. Lengel, 'A proposed integration among organizational information requirements, media richness, and structural design', *Management Science*, 32, 5, 1986, pp. 191–233.
6. J. Yates and W. Orlikowski, 'Genres of organizational communication: a structural approach to studying communication and media', *Academy of Management Review*, 17, 2, 1992, pp. 299–326.
7. Margaret Archer, *Realist Social Theory: The Morphogenetic Approach*, Cambridge University Press, Cambridge, 1995; Margaret Archer, *Culture and Agency: The Place of Culture in Social Theory*, Cambridge University Press, Cambridge, 1996; Margaret Archer, *Structure, Agency and the Internal Conversation*, Cambridge University Press, Cambridge, 2003.
8. A. Mutch, R. Delbridge and M. Ventresca, 'Situating organizational action: the relational sociology of organizations', *Organization*, 13, 5, 2006, pp. 607–25.
9. Archer, *op. cit.* 1995; 1996.
10. Richard Whitley, *Divergent Capitalisms: The Social Structuring and Change of Business Systems*, Oxford University Press, Oxford, 2000.

Caroline Emberson
The Open University Business School
Milton Keynes, UK
c.a.emberson@open.ac.uk
© 2008 *Caroline Emberson*