Frances Cairncross, Costing The Earth, The Challenge for Governments. The Opportunities for Business, Harvard Business School Press, Boston, MA, 1992, 342 pp.

1. Developments in industrial countries such as the US

While this book was published in 1992, it has remained among the popular selling books until now. This fact reflects its importance.

Recently, the industrialized countries met at a new Earth Summit to make common decisions about how to treat global warming and world environmental threats to health from environmental pollution. The United States was again reluctant to agree to binding rules, in spite of the fact that is burns a greater proportion of the world energy resources than any other country on earth. This decision was discouraging.

The Clinton Administration is supposed to be more environmentally sensitive than its predecessors. This is true on the domestic front. Mr. Gore, who is gunning to be the next President, has a stellar record on his votes issues in Congress concerning environmental, prior to becoming Vice-president.

His book *Earth in the Balance, Ecology and the Human Spirit* (Penguin, New York, 1992) is a classic best-seller and has been translated to many languages.

The book reviewed here reviews the trend of Environmentalism as a viable political and economic movement. It argues in favor of "raising environmental standards in all developed countries as a powerful incentive for innovation and product development". According to the author: "Perceptive firms realize that environmental regulation creates opportunities to compete and innovate".

American environmentalists have sometimes been perceived as a radical fringe who tie themselves to trees to avoid indiscriminate logging. However, who else has the courage to show that corporate greed is pushing to long our virgin forests to death?

In the US, in 1997, the Republicans in Congress have, all of a sudden, embraced environmental causes

after fighting them across the board. We will have to wait to see whether this conversion is real and long-term or just a smoke-screen to get elected.

2. Prospects for the Third World

"In poor countries, pollution still kills millions of people and makes even larger numbers ill." We hesitate to classify Mexico as a pertaining to the Third World. Mexicans might object to this classification. However, any visitor of a city like Mexico City where 20 million live, cannot but be struck by the deathly air that its inhabitants must breathe. Russia's efforts on the environmental front were never strong. They have declined further after the dissolution of the Soviet Union. We do not have to provide anecdotal evidence of countries like India whose record on the Environment is dismal.

In general, developing or under-developed countries argue that they cannot afford to pay regard to environmental issues when so many of its people are still barely eking out a living.

Costing the Earth argues that "developing countries are likely to realize that any request for official aid is more likely to be attractive to foreign donors if it appears to promote environmental protection".

"Clever third-world countries will see the environment [and 'Greening Aid'] as their strongest card."

Politicians tell voters that "taking better care of the environment is good for economic growth". They have concluded that "poverty is the worst pollutant, and wealth makes it easier to clean up". The implied conclusion is that: "The richer a country becomes, the better care it will take of its environment".

3. An environmental resurgence. The working of markets

The author of *Costing the Earth* is Environment Editor of the British magazine *The Economist*. In the book's Introduction he exclaims that "in the 1980's something extraordinary happened:

"People in many countries began to feel unhappy about the way the human race was treating its planet."

The public has become more aware of environmental issues and of environmental disasters which are frightening. They are asking the politicians to act more responsibly.

Until recently, countries worried about dirty air, dirty water and toxic waste. Legislation was enacted that dealt with pollution by extensive regulation. However, "measures were drawn up with little concern for the cost of implementing them".

It used to be that environmental lobbyists wanted to replace markets with government. The trend has reversed and the environmental movement is looking for ways to "improve markets".

It still wishes to have government(s) provide the lead and incentives, but it is willing to work with the corporate world to reach common environmental goals.

One way to improve the working of the market is to make sure consumers and producers pay the true costs of the environmental damage they cause. Markets work best when prices reflect as accurately as possible the costs of production. But, as the author states: "Making polluters pay is easier advocated than done".

Because environmental costs are hard to estimate, it is no reason to abandon the efforts to implement policies which reduce pollution.

4. Sustainable development

In the late 1980's the environmental movement embraced the influential concept of "sustainable development".

"Sustainable development" is a convenient phrase popularized in a report entitled *Our Common Future* by an international commission set up under Gro Harlem Brundtland, then Prime Minister of Norway. The report defined the idea as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". The commission "was anxious to extend the moral basis for development by arguing the need for intergenerational equity (fairness to posterity) as well as intergenerational equity (fairness to contemporaries)".

The necessary conditions for sustainable development are said to be the constancy of the natural stock. It argues "for non-negative changes in the stock of natural resources, such as soil and soil quality, ground and surface water and their quality, land biomass, water biomass, and the waste-assimilation capacity of the receiving environments".

According to Cairneross, sustainable development encourages countries to think about whether they are living beyond their means.

"A country that is too poor to live with the concept of sustainable development is certainly too poor to live without it." (Our emphasis.)

5. Costs and benefits

Reducing environmental pollution caused by industrial sources, and automobiles always costs dearly. Governments have so many demands placed on their budgets, that environmental causes usually lose out to more immediate and pressing needs. However, governments and the public have come to realize that environmental hazards (including smoking) affect everyone. It is not by coincidence that tobacco companies in the US are under siege. State governments are suing these companies successfully to recover health costs caused by smoking and "second-hand smoke", costs which heretofore were borne by states or consumers

Quantifying costs is usually easier than quantifying benefits. Costs show up directly in budgets and in pocket-books, although the effects of air pollution on health is insidious and hard to prove conclusively. Finding direct links and correlations are difficult to establish, but executives need ways to measure the costs and benefits of environmentally related decisions at the corporate level.

Efforts have been made to place a value on a human life

Traditionally, it was calculated in terms of the present value of future earnings that are foregone when a person must leave work due to illness caused by pollution. Other methods average the estimated number of lives saved, compared to the total cost of implementing a certain environmental measure. It may not be very accurate but it serves to establish priorities and to strike tradeoffs.

6. Energy efficiency

Probably, using energy causes more environmental damage, than any other peaceful human activity,

except, states the author, "reproduction". "Nuclear waste, acid rain, ground-level ozone are all ultimately costs incurred in the course of using energy." And, "no commercially available form of energy comes free of environmental problems".

The author contends that energy conservation makes economic as well as environmental sense. Fortunately, utilities in the US have received the message and have installed all kinds of conservation measures to motivate consumers to save energy. As an example, a utility in California where the author of this review lives, implemented a program by which it gave a rebate of \$50 to \$100 dollars for every old inefficient refrigerator that was turned in to the company when the consumer bought a new energy-efficient replacement. The program was so successful that the company ended up with large football fields full of old refrigerators for scrap. The company calculated that the result of this campaign reduced energy requirements by a quantity sufficient to avoid building a new generating plant, a cost which would have been much superior to the cost of the rebates.

Some state governments have also instituted similar plans which applied to old gasoline-guzzling automobiles. By paying to reduce the number of inefficient cars on the road, it reduced the eventual cost of environmental pollution on health. Other conservation measures which have proven successful is having utilities and other interested parties pay for improving the insulation of homes and residences.

When referring to energy efficiency, *Costing the Earth* describes energy inefficiencies in the US, the industrialized world as well as in third world such as countries in Eastern Europe, the old Soviet Union and China.

One reason that energy is used inefficiently is that it *is underpriced*. This is particularly prevalent in the US where gasoline is still \$1.50 per US gallon at the time of writing. This low price is harmful because it distorts the price mechanism to induce conservation by users and does not provide incentives for savings and conservation.

7. Conservation

Frances Cairncross, the author of this book, discusses the barriers to conservation and proposed solutions.

He states: "Conservation can pay". And we agree.

Cairncross states that our "biological wealth is now disappearing faster than ever. Some reckon that 5% to 15% of all species will go between 1990 and 2020. Indeed, the number will be larger if the destruction of tropical rain forests continues at the breakneck speed of the late 1980s". The author refers mainly to the Amazon forest and the Malaysian jungle. The causes of extinction have increased as human population has swollen. The loss of habitat is now our biggest threat.

"Conservationists turned economists argue that losses of biological diversity are economic losses."

Greed seems to be the biggest motivation fueling the economics of extinction. It is paradoxical to note that many of the problems suffered by countries where natural resources are being destroyed are created by governments. Government agencies which could take action to stop or slow down the depletion of natural resources are far removed from the regions where natural resources are being exploited. Only rural people, "the most economically disadvantaged", "the poorest of the poor", are near the zones of exploitation.

"The best hope for conservation is to try to make sure that more of the gains from conservation go to local people."

Cairncross provides data of the economic benefits reaped from the African Elephant and the rain forest. As long as the Brazilian government thinks that "the Amazon is its national heritage to plunder or preserve as it chooses", is is very little that the international community can do to stop it. The author argues for the implementation of some kind of "eco-colonialism" by which first world conservation organizations swap the debt of countries such as Brazil for money to be spent to save the tropical forests. Brazil has resisted such projects which it probably finds demeaning to its claims of sovereignty. However, only international pressure will have any sway and influence such countries to regard biological diversity a common heritage without geographical or national boundaries.

8. The challenge to corporations

Beyond a doubt, "the new greenery" (one way to describe the advent of the green consumer) will impose new costs on companies.

However, as the author remarks: "The new greenery also represents an extraordinary opportunity, perhaps the biggest opportunity for enterprise and invention the industrial world has ever seen." (Our emphasis.)

The author admits that green policies will place added burdens to costs. However, there will also be "an enormous and hard-to-quantify source of increased human well-being". Consumer tastes will shift.

Developing products will use energy more frugally. The world will be cleaner. Companies will contribute to make the world cleaner and greener. Technology which has contributed to the worsening of pollution will be constrained to improve it. When manufacturing processes become better controlled, waste is reduced. Measures to gauge improvements in environmental productivity will be devised. Environmental friendly products will replace energy wasteful ones and those which harm the air, water and land will disappear.

All these improvements are not utopian. Technology which has been so maligned for bringing about the environmental ills, will have to be marshaled to meet its new challenge: Green rules will turn to the companies' advantage and will present them with "their greatest opportunity".

The author visualizes "green investment" opportunities, "green consumers", "green mutual funds", "green shareholders", and of course, "green politicians".

Waste disposal and recycling, cleaner processes and cleaner products will all contribute to a better environment.

9. Environmental management. Industry and the global environment

For companies which take the environment seriously, the challenge will pay handsomely. Improvements in processes and products will also alter for the better, the general quality of management.

We have already witnessed the drive for Total Quality Management. An effective corporate policy will start in the boardroom. Instead of opposing government, executives will work in unison with it to promote environmental health. It is to their advantage. In the end, it is costly to always oppose new laws, new standards and to bring about suits against everything which looks or is perceived as green. Instead of positioning themselves against "green rules" it will pay to adopt and to promote them.

The public has already reacted positively toward companies which act responsibly with respect to the environment. Consumers favor the companies which genuinely clean up their processes to make the quality of life in their communities more livable and more palatable.

Recently, in the US, whole communities with a predominant minority population have reacted against companies which appear to run environmentally detrimental plants. They accused the companies to be racially motivated because they feel that they purposely run their dirtiest plants in the poorest and most disadvantaged communities.

The book ends with a "Checklist for Companies". This checklist presents suggestions for the sensible company chairman on "How to turn the ideas of this book into action". The list includes ten suggestions such as who should be in charge of environmental policy, how to draft environmental policies, how to institute environmental audits, how to reduce waste, how to find opportunities in waste disposal, recycling, and, in general, how to turn green laws to the company's advantage. We note, however, that these suggestions are listed but not developed in detail, a project which is left for the subject of another book.

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Dale E. Zand, The Leadership Triad: Knowledge, Trust and Power, New York, Oxford University Press, 1997, 221 pp.

How important is leadership? It seems a silly question to ask, but I have recently had occasion to compare American with European social science literature on this subject and came to the conclusion that in terms of the number of research reports and other publications, Europe is relatively indifferent to the subject. I then looked for a suitable way to start this review and turned to the *Oxford Book of Quotations*. I was astonished to find only four entries under 'leader', the same number as under 'lobster' while 'laughter' and 'laugh' get fifty-eight! So, I thought I might have better luck with the *Oxford Dictionary of Proverbs*, but there is not a single entry, while 'lion' has 23 and 'lie', 32.

One academic has looked into this and discovered that even social scientists only started writing extensively on leadership in the second half of the twentieth century. No doubt the growth of management education has some responsibility for this. Dale Zand is a

professor of management at the Stern School of Business at New York University and his practical, lucid writing has attracted praise from important colleagues like Warren Bennis and Chris Argyris.

Zand's thesis is deceptively simple: he starts with the assertion that effective leaders have to work with the three forces that figure in the title of his book: knowledge, trust and power. People who master this 'triadic' relation are not necessary popular, although if they also have the appropriate personality, they may well be liked, but they should not be considered saints without human foibles and defects. Few people would be surprised to hear that successful leaders have to be knowledgeable and have to generate trust among the people they lead, but power? Of course, power is a complex and controversial subject and there is a reluctance to admit wanting it or using it. At the same time, research shows that it is perhaps the single most important driving force among people in positions of authority. Psychologists, particularly those who convert problems into questionnaires, are reluctant to use the concept, preferring to talk about levels of aspiration, self determination, autonomy and centralisation. One reason for this is that respondents to questionnaires recognise the social desirability of keeping away from such a concept and therefore fail to tick the right box. Other social scientists, more inclined to observe than to measure, like Max Weber, have described the phenomenon at great length. However, most definitions of power, including Weber's, confine themselves to a simple description of one person exercising power over another, or one group exercising power over another.

Zand takes a broader more process-oriented approach which shows that at a certain stage of most decision-making processes, a choice has to be made or conflict has to be resolved and this frequently requires the use of what he calls 'legitimate formal power' which he defines as 'the lawful right to make a decision and to expect compliance'. By 'lawful' he simply means that there is a social or organisationally sanctioned convention by which people have agreed that a certain occupant of a position shall have the right to make certain decisions. In Chapter 9, he gives several examples of how this formula works in practice.

By freeing leaders from the embarrassment of apologising for using power, Zand makes it easier for them to recognise that, in most groups there is a considerable under-utilisation of experience and skill which it is the leader's responsibility to bring to the surface. In

general, the attraction of the book and its strength lies in the way the author combines theory with practice and shows how his 'triadic' formula links up with current discussions on empowerment and team working and the encouragement of vision.

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John Sheldrake, Management Theory: From Taylorism to Japanization, International Thomson Business Press, New York & London, 1996, paperback, 225 pp.

Encompassing the highpoints of management and theory this century, in twenty chapters only, is no small task. Starting with Frederick Winslow Taylor and ending with Charles Handy, Dr John Sheldrake (Reader in Management Studies at Guildhall University, London) has produced an undergraduate text of both clarity and usefulness; it is additionally well-edited and authoritative in its way.

Over half of the twenty authors he cameos were born in the US, although there are exceptions; Fayol was a Frenchman, Handy and Urwick were Britishborn and Schumacher as well as Weber, German. Mayo, it turns out, was Australian. There are two women: Lillian Gilbreth and Mary Parker Follett. It is not surprising how American the subject was, given the dominance of US business in the twentieth century. Even looking hard, it is no easy task to find many important writers on management elsewhere who are recognisably modern and who tried to enunciate general principles at the level of theory and emanating from practice. Contrast this with Economics, where the British mostly ruled the roost at least until the post-1945 epoch.

Sheldrake writes clearly and produces short accounts of the life and times of each of his 'gurus'. Less schematic than Pugh and Hickson's Writers on Organizations (Penguin, various editions, the latest of which was 1996), its order is chronological, starting in the 1890s and ending in the 1990s. Much that Sheldrake comments upon is grist to the undergraduates mill and his grasp of the business economic background is sound. His assertions are well-referenced and can be followed up in greater detail by the assiduous student keen to pursue further reading in detail.

The author proceeds along a well-trod route from Taylor, then the Gilbreths and Gantt, to Fayol, mov-

ing on to Weber. After dealing with Goodrich, he continues with Follett, Ford, Urwick, Mayo, Barnard and Sloan. Maslow, Herzberg and McGregor come next, followed by Schumacher, Braverman, Ouchi and Handy (the last set possibly less familiar). While Sheldrake zeros in on 'Japanization' through a description of Ouchi's work, he does not deal with Japanese writers on management other than in passing such as Ueno. Others like Ishikawa (father and son), or Ohmae receive no mention at all. Other Europeans, such as Crozier, are not included at all. Of the British contribution, neither Burns and Stalker nor Trist merit a chapter.

This book is useful because it conveys a great deal of background and biographical data and to some degree links them together. While Sheldrake has no overall 'theory' of how management knowledge evolves and 'why', he does have a good grasp of what constitutes the mainstream. Readers keen to advance further might try Huczynski's *Management Gurus* (Routledge, 1993), which tries to deal with management knowledge at a higher level of generality but remains readable and even witty in places. By contrast, Sheldrake's book is rather less adventurous and is rather clearly austere in style. None the less, *Management Theory* is workmanlike and down-to-earth.

Clearly, a more international text is needed, with a set of contributors that more comprehensively represents global contributors to management theory and practice. Such a work would include contributions less heavily US dominated and would spread its wings to the 'Little Dragon' economies and especially to Japan. Moreover, a clearly set of links needs to be articulated *between* the individual authors and *across* the currents of thought they represented. Sheldrake copes well with the limitations of the book's brief and structure. The layout was however too much like a US publishers' text: the pages being too wide (for this reviewer at least). A more compact paperback format would be more appropriate.

There were, however, several sensible add-ons. Each chapter is followed by a set of essay questions and a rather short reading list. There is a general bibliography and a full index, at the end of the book. At a reasonable paperback price, this short text is good value for money but is probably too basic for MBA candidates or other post-graduate students of the subject. A good higher-level text on management thinking should surely find a wide MBA readership.

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