

Renewing Strategic Planning and Management: a Paradoxical Approach¹

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Preliminary remarks

Thank you for the invitation to address the AMBA 50th anniversary conference, and for the opportunity to share some thoughts about my own half-century of work in management sciences.

I will refer to the rise of modern management science and of the idea of development in the post World War II period, share some thoughts on the nature of strategic planning and management that emerged in the following years, examine some of the challenges we face in the twenty-first century, and conclude with a suggestion on how to approach the renewal of strategic planning and management concepts to face these challenges.

Progress, development and management

The idea of individual and collective progress can be traced to a conception of continuous, linear and indefinite human advance that emerged in the Middle Ages and the Renaissance, was enshrined during the Scientific Revolution and the Illustration, and found practical expression in the Industrial Revolution.³ It was eclipsed during the "age of catastrophe" of the first decades of the 20th century, to rise once again in the post-World War II period, —but this time morphed into the concept of "development," which aimed at achieving everywhere the material standard of living of those well off in affluent countries, but in the span of just one generation and without the social costs they incurred or inflicted on others.⁴

¹ Slightly revised version of the address delivered at the Association of MBAs (AMBA) 50th Anniversary Conference, Cusco, Peru, September 5, 2017.

² See biographical note at the end of the paper.

³ J. B. Bury, *The Idea of Progress: an inquiry into its growth and origin*, New York, Dover Books, 1955; Robert Nisbet, *History of the Idea of Progress*, New York, Basic Books, 1980.

⁴ Eric Hobsbawm, *The Age of Extremes 1914-1991*, London Abacus, 1994.

Development was seen as the result of explicit and deliberate interventions by all sectors of society, usually under the guidance of the state, to improve efficiency and productivity, diversify the provision of goods and services, extend healthy life spans, and increase satisfaction and happiness. In short, development, the latest incarnation of the idea of progress, had to be planned and managed.

Although it has its origins in the nineteenth century, management science received a major boost in the post-World War II period. Successful wartime operations by the allied forces, together with the effective mobilization of science to support them and with the effectiveness of the Marshall Plan in reconstructing war-torn economies, inspired and informed the adaptation of wartime planning and management tools by the public and private sectors in peacetime.

The emerging concept of development was soon hijacked by the Cold War. Two alternative paths were charted: capitalist market economy and multiparty democracy in the West, and socialist central planning and singly party politics in the East. Each offered its own visions for the future, ways of engaging with the world, and institutional arrangements for advancing towards development; each provided a distinct framework within which to define what goods and services to produce, in what amounts, how to distribute them, and how to allocate financial, human, physical and technical resources.

As visions, context and institutions were clearly determined for the main protagonists of the Cold War and their close allies, their management of deliberate development interventions focused on decisions about activities and resources. To a large extent, this applied not only to countries, but also to their public, private, academic and civil society organizations.

In contrast, while navigating in the post-World War II context, developing countries faced pressures to choose between the alternative Western and Eastern visions of development; were buffeted by strong political interference winds in shifting and complex geopolitical settings; and most of them lacked the

stability of economic, social and political institutions that evolved over a long time in the industrialized nations.

As a result, for planning and management efforts in developing regions to have even modest success it was not enough to focus on decisions about goods and services, and on resource allocation, —deliberate interventions had to deal also with institutions, context and vision. Whether explicitly or implicitly, developing countries faced a broader range of intervention choices that comprised decisions about institution building, contextual engagement and vision formulation. In a sense, in comparison with those of more stable industrialized nations, government, private and civil society organizations in developing countries had a head start in dealing with these wider and thorny issues.

Anticipatory and actual decision-making

Shifting gears, let me now briefly examine the nature of planning and management. Human beings are the only species capable of consciously anticipating the consequences of their actions, and of modifying their behavior accordingly in order to achieve preferred outcomes. This implies identifying desired future situations; taking decisions in advance to approach them, in situations that have not yet occurred but are envisaged to occur; and then transforming those anticipatory decisions into actual ones as time passes, while at the same time continuously revising and updating the anticipatory decisions that lie ahead.

Therefore, following Russell Ackoff, *planning* can be defined as anticipatory decision-making; I would add that *management* could be defined as the process of continuously transforming anticipatory into actual decisions.⁵

As hinted above, anticipatory and actual decisions fall into five main categories: *resources, activities, institutions, context and vision*. Resource allocation is usually focused and short term; vision formulation is broad and long

⁵ Russell L. Ackoff, *A Concept of Corporate Planning*, New York, Wiley & Sons, 1970.

term; defining priorities and sequences of activities, determining institutional arrangements and deciding on contextual relations fall in between these two extremes. The interrelations between the five categories of anticipatory and actual decisions can be summarized indicating that *resources* are allocated to *activities* through *institutions* taking into account the *context* in order to approach the *vision*.⁶

In the first decades after World War II management science emphasized methods for optimizing resource allocation and priority setting. Mathematical programming, operations research, systems analysis, statistical techniques, simulation models, queuing theories, planning and programming budgeting systems, program evaluation and review techniques, and critical path methods were among the many tools developed for these purposes.

Gradually, and especially in the last two decades of the twentieth century, greater attention began to be paid to institutional issues, including organizational redesign, administrative processes, regulation systems, incentive structures; to organizational environments, including stakeholder analysis, competitive positioning, market research; and to the creation of visions, including scenario building, foresight exercises, idealized designs and desirable futures.

The expansion of the repertoire of approaches and methods to encompass institutional, context and vision anticipatory and actual decision-making was accompanied by debates about how to conduct strategic planning and management. Clashes emerged as muddling through, disjointed incrementalism and stepwise decision making were pitted against radical, visionary and comprehensive approaches; deliberate and purposeful strategies were opposed to emergent and opportunistic ones; global reach and ambition were contrasted

⁶ Francisco Sagasti, "A Conceptual 'Systems' Framework for the Study of Planning Theory," *Technological Forecasting and Social Change*, Vol. 5, 1973, pp. 379-393; and "Towards a new approach for scientific and technological planning, *Social Sciences Information*, Vol. 12, 1973, No. 2, pp. 67-95.

with local positioning and limited aims. Arguments about the ascent and decline of strategic planning appeared in scholarly management journals.⁷

A changed global context

The turbulent global context of the twenty-first century demands a reassessment of the ways in which human beings act, anticipate the consequences of actions, and how to confront the new situations that are created. This requires, once again, as happened in the post-World War II period, a reinterpretation of what is meant by progress and development, and a renewal of planning and management approaches and methods.

We live in a stormy period of history, a time of epochal transformation involving changes in a host of interrelated security, economic, financial, social, demographic, environmental, cultural, governance and human interaction domains. A global but fractured world order puts all of us in contact with one another, but simultaneously maintains and creates deep fissures between us. It transmits and magnifies disruptions of all types, even though the weaker and more vulnerable parts of the world are more severely affected by their reverberations.⁸

At the root of all of these changes there are extraordinary and accelerated scientific and technological advances, which are now profoundly altering the human condition and its future prospects. We are experiencing fundamental shifts in our ideas about physical, mental and virtual reality; the origin and fate of the universe, and the place we occupy in it; the nature of time as a background for the unfolding of cosmic and earthly events; the interactions between human actions and biophysical ecosystems; the newly acquired capacity to consciously alter the direction of human evolution; artificial intelligence and the uniqueness

⁷ Henry Mintzberg, "The fall and rise of strategic planning," *Harvard Business Review*, January-February 1994.

⁸ Francisco Sagasti, "The Fractured Global Order: Characteristics, structure and implications," presented at the workshop on "Disruptive change ahead" of the International Civil Society Center, Bellagio, February 2013; "Knowledge and development in a fractured global order," *Futures*, Vol. 27, 1995, pp. 591-610; and Francisco Sagasti and Gonzalo Alcalde, *Development Cooperation in a Fractured Global Order: An arduous transition*, Ottawa, International Development Research Centre, 1999.

of human reason; nanotechnologies and biotechnologies; and about information technologies and how to conceive human interactions in the age of information overload and big data.

These shifts and the fractured global order create complex, interdependent, time-lagged, conflict ridden, value laden, ambiguous, uncertain problems and conditions that are difficult to formulate, hard to comprehend, and that have no clear cut solution or straightforward way out (see box).

Renewing strategic planning and management

The extraordinary state of affairs that our species confronts in the twenty-first century could open enormous possibilities for humanity; yet, their unforeseen and undesirable consequences are also threatening our hard won civilizational achievements.

The “wicked problems” associated with the opportunities and challenges that are now emerging at all levels of society require responses of unprecedented creativity and scale, both in thought and action. These wicked problems defy logical and even dialectic habits of thought, demand unconventional thinking modes, require the capacity to view problems and conditions from different points of view simultaneously, and test our willingness to explore unusual and less trodden paths to confront them; furthermore, they are not solved once and for all, but “*only re-solved —over and over again.*”⁹

“*The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function,*” wrote Francis Scott Fitzgerald eighty years ago.¹⁰ We now need first-rate intelligence, more than ever, to face the planning and management challenges of the difficult decades ahead.

⁹ Horst W. J. Rittel and Melvin M. Webber, “Dilemmas in a General Theory of Planning,” in Russell L. Ackoff (editor), *Systems and Management Annual*, New York, Petrocelli, 1974, pp. 219-233; see also Jonathan Rosenhead (editor), *Rational Analysis for a Problematic World*, New York, John Wiley, 1989, pp. 10-11.

¹⁰ F. Scott Fitzgerald, “The Crack-Up”, *Esquire*, February 1936.

BOX: Twenty-first century challenges

"I think the odds are no better than fifty-fifty that our present civilization on Earth will survive to the end of the present century."

Sir Martin Rees

"Humankind finds itself on a non-sustainable course — a course that, unless it is changed, will lead to catastrophes of awesome consequences."

James Martin

"We're not ... going to get back the planet we used to have, ... Now we must try to figure out how to survive what's coming at us."

Bill McKibben

"This is the first moment in the history of our planet when any species, by its own voluntary actions, has become a danger to itself."

Bill Joy

"The juggernaut of technology-based capitalism will not be stopped. ... But the direction can be changed by mandate of a generally shared long-term environmental ethic. The choice is clear: the juggernaut will very soon either chew up what remains of the living world, or it will be redirected to save it."

Edward O. Wilson

"The unintended dynamics of technical civilization ... drifts willy-nilly and with exponential acceleration ... the credible extrapolations are frightening and the calculable time spans shrink at a frenzied pace ... averting the disaster ... will hurt an endless number of interests."

Hans Jonas

"In the early twenty-first century the train of progress is again pulling out of the station ... the last train ever to leave the station called Homo sapiens. Those who miss this train will never get a second chance. ... those who ride the train of progress will acquire divine abilities of creation and destruction, while those left behind will face extinction."

Yuval Noah Harari

"The current civilization has become dysfunctional ... Unless unforeseen changes take place, we will disappear, just as has happened with other species in the long history of life."

Amílcar Herrera

Sources: Martin, James. 2006. *The Meaning of the 21st Century: A Vital Blueprint for Ensuring Our Future*. London: Eden Project Books; McKibben, Bill. 2010. *Eaarth: Making a Life on a Tough New Planet*. New York: Times Books; Harari, Yuval N. 2017. *Homo Deus : A Brief History of Tomorrow*. New York: Harper; Herrera, Amílcar O. 1981. *La larga jornada: la crisis nuclear y el destino biológico del hombre*. México: Siglo XXI; Jonas, Hans. 1984. *The imperative of responsibility: in search of an ethics for the technological age*. Chicago: University of Chicago Press; Joy, Bill. 2000. "Why the future doesn't need us." *Wired Magazine*, April 2000; Wilson, Edward. 2002. *The Future of Life*. New York: Vintage Books; Rees, Martin J. 2003. *Our Final Hour*. New York, Basic Books.

Along these lines, I would like to suggest we need paradoxical thinking to transcend dichotomies: incremental versus radical, emergent versus deliberate and global versus local approaches to anticipatory and actual decision-making about resources, activities, institutions, contexts and visions. Paradoxical thinking goes beyond logical deduction and dialectic synthesis; it fully embraces ambiguity and contradiction while maintaining the capacity for purposeful intervention.

When deriving guidelines for anticipatory and actual decision-making, paradoxical thinking would use both aspects of these opposite stances, shifting rapidly from one to the other ever so fast that they would seem superimposed and simultaneous. We may even resort to the analogy of the once supposedly incompatible wave and particle theories of light: different experiments confirm one or the other, but both are empirically proven and practically fruitful.

Therefore, I would propose to engage in strategic planning and management adopting three paradoxical approaches:

Radical incrementalism. *Radical* because “although daring in thinking is no guarantee of daring in practice, mental timidity in constructing an ideal is certainly a criterion of mental timidity in practice.”¹¹ Bold leaps and bounds of imagination are required to anticipate future situations, opportunities and dangers, and to derive their consequences and implications for action now. *Incremental*, because when dealing with complex problems and conditions “limits on human intellectual capacities and on available information set definite limits to man’s capacity to be comprehensive.”¹²

Although information technology advances are helping considerably to collect and process huge amounts of data and artificial

¹¹ Piotr Kropotkin, “Must We Occupy Ourselves with an Examination of the Ideal of a Future System?” *Selected writings on anarchism and revolution*, Cambridge, Mass. MIT University Press, 1970, p. 46

¹² Charles E. Lindblom, “The science of ‘muddling through’”, *Public Administration Review*, Vol. 19, No. 2, Spring 1959. p. 84.

intelligence algorithms are leveraging human understanding, these limits now arise because of the complexity, trickiness and deviousness of wicked problems and conditions, which overrun human interpretative capabilities and require constantly updated mindsets. Embracing both the radical and the incremental at the same time implies being able to chart sequences of viable anticipatory decisions that would lead from the present situation to the envisioned radical future.

Strategic opportunism.¹³ *Strategic* because strategy is rational and systematic, deductive and deliberate, coherent and directed, and because it charts courses of action with well defined anticipatory decisions for advancing towards desired futures.¹⁴ *Opportunistic* because it is impossible to completely predict and anticipate the future, to comprehensively account for the unintended consequences of decisions and actions, and to map every possible contingency.¹⁵

Flexibility, resourcefulness, quick reactions, rapid adjustments and entrepreneurial spirit are required to avoid dangers and seize opportunities. This implies keeping a certain amount of unused financial, human, physical and other resources that could be rapidly mobilized, taking anticipatory rational decisions on the appropriate level of slack and adopting different viewpoints to elucidate, as much as possible, the unknown unknowns that create opportunities and dangers.

Focused contextualism. *Focused* because the transformation of anticipatory into actual decisions is made in the “here and now,” concentrating on specific issues, taking into account local circumstances, at particular moments in time and with immediate effects. *Contextual* because it is impossible to consider organizations in isolation, they are

¹³ Daniel Isenberg, “The Tactics of Strategic Opportunism,” *Harvard Business Review*, March 1987.

¹⁴ Michael Porter, “What is Strategy,” *Harvard Business Review*, Vol. 75, March-April 1997, letter to the editor

¹⁵ Don Sull, interviewed by Sarah Cliffe, “Is it Better to Be Strategic or Opportunistic.” *Harvard Business Review*, May 2014.

open systems continuously buffeted by environmental disturbances, respond to external stimuli and internalize their impact, and also react to internal pressures and externalize their effects.¹⁶

This implies gathering real time intelligence on the main agents in the task and contextual environments, monitoring their evolution to continuously assess their influence and impact, as well as constantly examining the internal situation to detect fault lines, pressure points and other stress markers that could be relieved by judicious interactions with the environment. Moreover, as local organizations operate in an increasingly global context, the anticipatory and actual decisions they take should both project *globalized localisms* outwards, and absorb *localized globalisms* inwards.¹⁷

There are many other contradictions that could be embraced in a paradoxical approach to strategic planning and management, such as *grounded idealism*, which involves aiming at unattainable but approachable ends, attributes, or qualities, while at the same time being pragmatic and moored by practical concerns;¹⁸ and *deferred immediatism*, which consciously manages the temporal dimension by rapidly shifting between long, medium and short-term perspectives, and by continuously reviewing the timing of anticipatory decisions and when are they transformed into actual decisions.

The general idea is that the wicked problems and conditions that we are facing at all levels of society require the nimble minds described by F. Scott Fitzgerald, and even following the advice Alice received from the White Queen to believe “six impossible things before breakfast.”¹⁹

¹⁶ Fred Emery and Eric Trist, “The causal texture of organizational environments,” *Human Relations*, Vol. 18, 1965, pp. 21-32; Francisco Sagasti, “A conceptual and taxonomic framework for the analysis of adaptive behavior,” *General Systems*, Vol. 15, 1970, pp. 151-160.

¹⁷ Boaventura de Sousa Santos, *Toward a New Common Sense*, New York, Routledge, 1995.

¹⁸ As Russ Ackoff and Fred Emery put it: “Ideal pursuit can provide cohesiveness and continuity to extended and unpredictable processes, to life and history. Thus the formulation and pursuit of ideals is a means by which man puts meaning and significance into his life and into the history of which he is a part.” *On Purposeful Systems*, Chicago and New York, Aldine-Atherton, 1972, p.237.

¹⁹ Lewis Carroll, *Through the Looking Glass*, New York, Dover Publications, 1999.

Concluding remarks

Let me conclude with some remarks on the potential contributions of the management sciences in developing countries, where managers and policy makers have had to deal for decades with the full range of resource, activity, institutional, context and vision anticipatory and actual decisions. Unfortunately, most of us did not realize this; like Molière's Monsieur Jordan, who had been talking in prose all his life without noticing it,²⁰ we went about coping with institutional instability, contextual turbulence and blurred visions, as well as making decisions activities and resources, without reflecting on what it meant, and without capitalizing on the experience and knowledge we acquired in the process.

We kept our noses to the grindstone and only occasionally raised our sights to appreciate what we were doing from a wider perspective.²¹ Worse still, when facing difficult and complex planning and management conditions and problems, developing country planners and managers often resorted to approaches and methods developed elsewhere, in quite different contexts, and shoehorned them to situations they were not designed for.

In my experience with public agencies, private firms and civil society organizations in developing countries, I have witnessed several institution building attempts, novel forms of exploring and relating to organizational contexts, and many cases of vision reframing. If reflected upon, generalized and transmitted properly, they may have offered valuable lessons for planners and managers everywhere.

²⁰ Molière, "The would-be gentleman", *Comedies of Moliere*, Wildside Press, 2007, p. 237.

²¹ For some of my early attempts at reflecting on management sciences in developing countries see: Francisco Sagasti and Ian Mitroff, "Operations Research from the Viewpoint of General Systems Theory," *Omega: The International Journal of Management Science*, Vol. 1, No. 6, December 1973, pp. 695-710; and Francisco Sagasti, "Management sciences in an underdeveloped country," *Management Sciences*, Vol. 19, No. 2, 1972, pp. 121-131, as well as "Operations Research in the Context of Development: Some Case Studies from Peru," *Operational Research Quarterly*, Vol. 25, 1974, pp. 219-230.

Therefore, I would suggest there is a need to jointly rethink the management sciences, strategic planning and management, anticipatory and actual decision-making. Whether living in rich or poor countries, we all face the consequences of global geopolitical shifts, security challenges, climate change disruptions, demographic transitions, cultural and religious unrest, employment and livelihood transformations, economic and social instabilities, scientific advances and technological innovations. We are all now in the same boat; together we must mobilize our collective planning and management knowledge and experience, which has been acquired and accumulated in both developed and developing countries for a long time.

Many developing regions, and Latin America in particular, have an extraordinary diversity of diversities, —ecological, biological, energy, water, forests, soils, fisheries, forestry, minerals, ethnic, cultural, linguistic— which confers resilience; and we have embarked in collective learning processes that, with some glaring exceptions, value peaceful conflict resolution and economic stability. We also have a long history dealing with inconsistencies, contradictions and paradoxes, but have managed to maintain a reasonably degree of coherence that allowed us to persist and prosper. If capitalized upon and further developed, the lessons of history may help us to successfully confront the daunting challenges of the twenty-first century, and also to take full advantage of the opportunities it offers.

In closing this address, I would venture that one of the main objectives of graduate business schools in the coming years should be *to prepare professionals to be at ease with inconsistencies, contradictions and paradoxes*; the capacity to do this will be crucial in coping with the disruptions of the coming decades. The ability to deal with paradoxes goes well beyond logical analysis and dialectic synthesis skills, which although necessary, are not sufficient to cope with the challenges of the twenty-first century. When anticipating responses to the changing information environment three decades ago, I thought we needed *synthesists*, in addition to analysts, to deal with the avalanche of information that

could be glimpsed in the horizon.²² This avalanche has now become a deluge, with an onslaught of data, images, sounds, news, views, opinions, facts, alternative facts, and so on, pounding on our senses and our minds. Beyond analysis and synthesis capabilities, in the overwhelming information environment of today, we need to embrace paradox and acquire the capacity to think and act in paradoxical ways.

Business employers have realized that new sets of abilities, skills and competences are necessary for success in the complex environments of the future. A 2017 Financial Time survey reported that some of the qualities they miss in their business school recruits are “big picture thinking,” the capacity “to solve complicated problems,” and “the ability to deal with ambiguity.”²³ In short, there is an urgent need to prepare the kind of managers that my late friend and mentor Eric Trist described so well:

“We need flexible, resourceful, resilient people who can tolerate a lot of surprise and ambiguity emotionally while continuing to work on complex issues intellectually.”

²² Francisco Sagasti, “Techno-economic intelligence for development”, *IFDA Dossier*, No. 35, May/June 1983, pp. 17-26; available at: http://franciscosagasti.com/portfolio_page/techno-economic-intelligence-for-development/

²³ Jonathan Moules and Patricia Nilsson, “What employers want from MBA graduates — and what they don’t,” *Financial Times*, August 31, 2017.

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