Chapter 4
Decision Integrity and Second Order Cybernetics

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ABSTRACT

The rational worldview of management science has come to dominate decision theory. This chapter proposes that, despite its evident successes, this view of decision making is decreasingly effective in a global world which turns out to be unruly and unpredictable in critical areas. The result is an escalation of unintended consequences in business, public affairs and human ecology. Despite its success in some fields of management, we need to question the rational view which disconnects the observer from the observed. Decision integrity is proposed as a reflexive theory of decision making that incorporates the decision maker as part of the decision field. It requires stepping out of the observer/object paradigm of classical science and into the alternative paradigm of second order cybernetics. The decision maker is not simply an observer but also a participant who cannot abdicate from personal ethical considerations and ultimate responsibility even in the face of uncertainty.

INTRODUCTION

Man is the prisoner of his own way of thinking and of his own stereotypes of himself. His machine for thinking the brain has been programmed to deal with a vanished world. This old world was characterized by the need to manage things – stone, wood, iron. The new world is characterized by the need to manage complexity. Complexity is the very stuff of today's world. (StaffordBeer, 1975, p. 15)

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With the rise and adoption of management science as the primary worldview or metatheory in both commerce and public affairs there has emerged a largely unexamined fixation with rational decision making. Rational economic man has become the unit in modern management and mathematical decision analysis has become the dominant espoused basis of management.

A recent case is the 2008 financial crisis. The growth of markets for derivatives and more complex financial instruments was made possible by

the development of mathematical methods for valuing these new constructs. These became the adopted norm across the banking sector. In this way the very idea of "hedging" was an attempt to eliminate the risks of uncertainty. There is a paradox here. As creatures of limited intelligence in an unstable world we form definable requirements that we hope to fulfil in what we believe to be a predictable world. Commerce has fixated our goal-seeking in the context of profit games. The application of science has identified some domains of relative predictability and they have been adopted as the official view bolstered by economic theory. Management science, over the last few decades, appears to have led us into an evolutionary trap. Kay (2008, p. 43) points out that "our abilities in pattern detection often lead us to observe systematic relationships where they do not exist, or confuse underlying causes with statistical noise." For example, people view economic behaviour in the context of equilibrium theory and anticipate the future accordingly. As we shall see, there are other models that predict different futures on the same data.

The implicit view of the operating environment is something like "this is what we want; this is what is going to happen in the world; so we know what we are going to do in that world in order to get what we want." Herein lays the trap. The world is continuously changing, it is complex and it throws out events and properties which are outside any range of prediction. Such events have been characterised as the phenomena of 'black swans'. (Taleb, 2007) The Black Swan theory refers to the implications of large-impact, hard-to-predict, and rare event beyond the realm of normal expectations.

We are part of this world, not separate from it and so of the same nature. When we rationalise ourselves and our world we are asserting something which at best is of limited consistency with how things really are. The perverse consequence of this is that the more we assert we understand the world, and so limit what we do, the more we find ourselves living with the unintended consequences of our decisions.

The above view can be applied to the individual, the group, the institution, the nation and the globe. From a management perspective we focus on the institution or organisation. Organisation management, dominated by the management sciences, has analysed and systematised situations to bring them under control to pursue goals such as "return to shareholders" or "public value."

However, the real world leaks out from the boundaries of rationality, springs surprises on us and confronts us with uncertainties. Indeed, on occasion, the world smashes through the very centre of institutional life and destroys jobs, companies, industries and even whole economies. Control should then be seen for what it is, a convenient half-truth.

We need probabilities to help us assess risks and narratives to guide us through uncertainties – and the general knowledge and judgement to know how to approach each particular situation. It is that general knowledge and judgement that has been so lacking in the financial follies of the last decade. (Kay, 2008, p. 43)

The kind of decision making that dominates in the "controlled world" does not match the behaviour of the "uncontrollable world." Effective decisions cannot be arrived at by rational analysis alone because the rationale is inherently a limited perspective. We need the half-truth this generates but we need an approach to deal with the missing unruly half. Kay points out; "We suffer, not just from ignorance of the future, but from a limited capacity to imagine what the future might be" (Kay, 2008, p 43).

Some thinkers and practitioners have made efforts to create alternative modes of perception, analysis and decision making more congruent with this unruly world beyond the veneer of socio-economic rationality. The International Futures Forum (2009), sums up its foundational