

Chapter 1

Making Pictures Out of Empty Space

“The pages are still blank, but there is a miraculous feeling of the words being there, written in invisible ink and clamouring to become visible.”

Vladimir Nabokov

This is not an insubstantial book. At just under 100,000 words, it is a long way from being a pamphlet or PowerPoint. And, while trying to make it accessible to a broad readership, the subject matter is not exactly for the faint of heart. All of which adds up to making this a dense accumulation of thoughts and ideas. So I warn you in advance that there are places where it may be challenging to read quickly and easily. In this situation, you may get to the middle of page 91 or 216 and wonder whether you should bother going on. Let’s talk about why right now.

Neither the back cover marketing copy, promotional material, nor the chapter road map of the Preface (for those who wanted their money’s worth and actually read it), actually tell you why. They each, in turn, tantalize and allude to the practical benefit of your investment in time and thought. None quenches the likely thirst to know the value before embarking on the voyage. And, it’s a fair request. The cover copy and other promotional materials connected to a need and created both the perceived value and incentive to part with some money. Now, however, we’re not talking about money: we’re talking about the more important investment of time and mental energy.

So where are we going? What’s the payoff for hanging in through the next ten chapters?

Enlightenment, entertainment, method, and wit. Not necessarily in that order or concentration.

By the end of the book, the argument and method should not only be an obvious conclusion but be supported by principles and examples of technique to build upon. There are many conclusions, take-aways, and perspective-shifters interwoven into the text which I will elaborate upon below. As you traverse the chapters, hopefully connecting the disparate arts and sciences exposed and considered, you should gather three things.

- Perspective
- Knowledge
- Unusual connections

Because it can't be said too much, the key to making unusual connections is atypical perspectives. It's important to be careful with the word atypical before perspective though. It does not imply eccentricity or sociopathy. Rather, it's to suggest that any view of the world not matching the preferred choice. It doesn't matter why you, I, or anyone else prefers one particular view or another: family choice and childhood training, schooling, whatever. The important matter is that we have preferred perspectives and, we tend to avoid and ignore all others. That's fine. But, being aware of other perspectives and trying them on even briefly reveals the world in an entirely new way.

In the book we consider unusual but valid perspectives in a number of areas. This starts with an evaluation of what everyone—including you—might be doing and thinking while their in your ambit, and how. That is, most of us tend to be a little egocentric to the extent of believing that the rest of the world thinks the way we do. As we find out in the very first chapter, it's not only conceivable but likely that while we're all playing a "game" of some sort, we're all playing different games with different goals and rules. That realization gives us the opportunity to harmonize with or at least recognize the intents and actions of everyone else—to do with what we will.

There are other facets to this value of perspective. Most of us were schooled with a view of liberal arts and sciences (including social science and the highly derivative managerial science) that is today at best misleading and at worst false. So much of what makes our world go round—and which works for the most part, on a day-to-day basis—is based in an understanding of science that is continually being proven workable but wrong. That applies to everything from the mundane (i.e., economics) to the profound (e.g., physics). In fact, it might be more accurate to say that this is not so much a matter of perspective as of adjustment to new realities. But rather than wade into that debate, let's just say that as it relates to this discussion, in the "new" sciences of Chaos and Complexity, and social science of Behavioural economics, are realities that we very much need to be aware of—even if we choose to just call them perspectives—because they don't align with the accepted methods.

Above all else, as it relates to perspective, by the end you will have well-considered and supported reasons to take a second (and third), sideways look at so many of those things that we tend to hold as “certain.” For those who end up more inclined toward multiple perspectives (whether you are starting there now or not), the well-considered support is ammunition and protection if you opt to advance such an approach within your organization or “ecosystem.” In every chapter, in every evaluation you will find reasonable alternative views. Even for the most conservative of readers, I hope that the current of information and argument encourages you to at least—within this closed environment—consider the options. It’s not possible to point to a specific place in the text where this is developed: it is woven into the exposition.

Knowledge can be gained anywhere from anything, and through the book I make the case and offer suggestions for how to take that openness to new knowledge everywhere you go. But specifically in the pages that follow, what’s assembled is a collection of knowledge about subjects not commonplace in daily life. If you saw the movie, *Jurassic Park*, you encountered a few thoughts about Chaos theory, and in the period following 9/11 most of the television viewing world became familiar with the notion of asymmetry. But in these and so many other cases, these exotic notions became superficial buzzwords for a moment and then were gone. There was no practical substance to the words, and so we all returned to what we learned early and know well.

Yet the ideas and concepts underlying these fields of expertise and theory that percolate to popular attention are powerful. They have great power in their own rights as anybody with passing knowledge of the theories of Chaos and Complexity can attest. They have the capacity to turn your worldview on its side if not completely upside down. That alone is worth something *if the goal is to be different, better, successful*. But before any practical improvement can come of it, one first has to be aware of the theory behind the words and perhaps even understand it to *some* depth. In this respect, the densely packed early and middle chapters of the book afford, in one place, an essential overview of four hard-to-access areas of knowledge. This may be sufficient for your purpose or may be only the foundation for further research. One way or the other, my hope is that it becomes a basis for an alternate view of everything and anything you may be working on.

It’s very likely that at least one of these areas of expert theory will be brand new to any given reader. The most probable reason that such theory and practice may not be known is because it is well outside the locus of immediate interest or apparent relevance. It’s fair to assume that a business person—a marketer or operations manager—may not turn immediately to the theories of tactical warfare to bolster his or her performance capacity. That’s both reasonable and unfortunate. It’s reasonable because in a world of information, we all have to sift through to find what appears to be most valuable and

ignore the vast majority. It's unfortunate because the underlying concepts and process of an idea such as John Boyd's OODA loop are applicable to almost every aspect of daily life not just to dogfighting in fighter jets. I have been pleasantly astounded at how frequently and broadly the method applies in everything from competitive sports to negotiating. I'm sure you will too.

It is also likely that some of the ideas and theories will be known to many readers. Concepts from geometry and an overview of decision trees or normal curve statistics may seem like treading over a well-worn path. It's not—at least not in this book—for two reasons. First, the concepts are usually presented as foundational to other, less well known ideas. So a brief reminder is warranted. Second, and perhaps more interesting is that my take on these common notions is uncommon. (I think.) How they are presented and what the implications of that alternative perspective represent to analysis and decision-making is—I hope—unique and insightful. In terms of affecting what you do and how, this is what I have to offer. And it is offered up throughout the book as the various theories and ideas are being presented.

The larger, unique value of what is presented throughout is not, however, the simple exposition of uncommon views of existing ideas. That is merely old wine in new bottles. The larger value is, in fact, the connections between these disparate elements to reveal fuller import to everybody every day. These connections also reveal and substantiate the natural power of the individual concepts, like path dependence, by exposing the resonant consistency in variations across different disciplines. These connections suggest that the ideas are not only worth knowing but worth understanding and applying widely.

By overlaying fundamental principles and concepts of, say, Complexity and Adaptivity to the theories of Behavioural economics, and then giving them a practical context in possible common use, I hope that their applicability becomes evident. To achieve that goal, I have assumed that varied and multiple examples that come from various features of anybody's life: parent, professional, etc. will be helpful. The downside of this is, of course, it makes the text a little less easy to traverse quickly and may give it less gravitas and authority. ("How can this be relevant to business? The example is about being catty about the neighbour's kids...") On the other hand, perhaps this makes it more lively and entertaining.

The connections are my particular contribution. Anybody could compile a limited encyclopedia of features for these fields of study and thought. That would obviously satisfy the knowledge transfer. But, in a book about alternate perspectives and inverting your thinking, it seems that to not provide alternate perspectives and inverted thinking would be somehow incomplete. This is why in a later chapter, I spend some time

interrogating, deconstructing, and opining on the problems with hallowed analytic techniques such as SWOT. It all hangs together in an internally-referential and logically supported argument. As such, some of the opinions and approaches are bound to be a little discomfiting and, for the most conservative reader, even off-putting. I ask you, where necessary, to suspend judgment temporarily.

One more thing, about the style: it is expository, not reportage or narrative. That means, unlike reading Malcolm Gladwell's work or the *Freakonomics* books, what I have to convey is not carried along on the thread of a captivating tale. The combination of (this) author and the nature of the content does not lend itself to that kind of treatment. So, the book may drift toward textbook more than popularization. I have, however, tried to use vignette and anecdotal types of episodes in fictional examples to make my points. Small consolation, I suppose. Also, I have tried to make my counter-intuitive and possibly counter-cultural ideas modestly humorous and otherwise palatable. If, at any moment, you are wondering: "Is this genuine or he trying to be a smart-ass to make a point?" chances are that it's the latter and I hope you're snickering with me.

This is what I believe to be some of the specific payoffs for sticking with me through the book, including the "reduced speed" zones.

1. A key realization is that innovation or otherwise doing things not commonly accepted is hard, and that we tend to make it even harder on ourselves. The first statement is (hopefully) self-evident; the second is my provocative proposition. By the final chapter, it should be equally self-evident why the proposition is true. We are programmed through our lives to do so and actually fight what nature and our better angels advise to make it easier. It's also true because in attempting to achieve this goal of doing novel things we must necessarily find and act on information and data that currently does not exist and is therefore "invisible" to everyone else operating within the *status quo*. Not only is this revealed throughout the book, the elements of a solution to that challenge are presented.
2. Even within the commonly accepted methods and approaches to analysis and understanding are subconsciously accepted, insidious biases, preferences, and expectations. Later in the book, the new knowledge and connections made among expert fields is brought to bear on reviewing many of those common methods in a new light. The result is not so much to recommend they be thrown out as to identify and highlight how these trusted techniques need to be handled for optimal benefit and why.

3. Using the logic of a complex system, there is an argument made for why and how *any* action at all may be the most appropriate thing to do in a given circumstance. Within reason, the science and the tactical manoeuvre doctrine/technique show that any action at all can expose both otherwise invisible information and hidden connections.
4. Much has been said about the wisdom of crowds in the past several years. It is a well-proven and even logical proposition, and its whiff of democracy helps too. The notion derives at least in part from features of Behavioural economics. The funny thing is that if you interpret and apply the concepts of Behavioural economics to the idea of crowdsourcing in just an ever-so-slightly oblique way, what becomes evident is that in more circumstances than not it is not wisdom but tyranny at play. By the end of the exposition and interpretation, I hope that you too will be able to identify some of the conditions when the wise crowd has fallen prey to an information cascade and is not really much wiser than a herd of buffalo. There are tell-tale signs.
5. Immediately following this one is a chapter that almost seems out of place. It is philosophical (but relatively brief). Its value is that it explores very simple but very relevant questions:
 - What if everybody is not playing the same “game?” It’s fully possible that apparent competitors are actually seeking to achieve entirely different ends. This makes for a significant tactical mismatch.
 - What kind of game *are* they playing? For that matter, what kind of game *am I* playing? And, can I achieve my stated goals playing this game?

Of many possible approaches to understanding and evaluating what’s going on in a particular (competitive) game space, I have chosen three. Allowing yourself to consider circumstances by any or all of these, it is very likely that you will end up with several valid but different views of the situation. And, those perspectives make the remainder of the argument in the book, the knowledge, and the connections more vivid.

6. Recently, a thread of popular thought recommends as a clarifying exercise to “Ask why five times.” This is true at least as far as it goes if you are probing deeper into a specific issue and doing it as prescribed. It makes sense: each Why peels back a layer of the onion to get at the core issue. But, unless controlled (which many a single-minded executive is more than capable of doing) the Why questions end up being a recursive series. That means they are repetitions with the output of the previous query being the input to the current one. This can push the system (the inquiry) into random and unpredictable chaos

after the third question, which is about as far away from the intent as you can get. By exploring the features and implications of Complexity, we identify the characteristics of a situation that lend themselves to randomness and chaos rather than greater clarity.

7. Even those of us who took intensive post-secondary statistics courses (at least me) probably abuse one fundamental precept of basic statistics: the normal curve. Though, hopefully, not as much as others who know even less. That's because too many people take a basic understanding and application of the distribution and apply it well beyond its intent or capability. So, we begin to assume or read into the concept of the normal distribution a sense of what average, let alone fair and equitable, should be. It's not right. It's not how nature works and it's not how life unfolds. In the book there is a specific section about it, and the notion of alternative understandings colour all the other expositions and interpretations.

The promotional material on the back of the book is headlined, "Finding invisible advantage in everything," and I mean it. So much of what we need in order to be first is invisible to the average eye until somebody finds it. The sustained proposition is that to be first, you need to look not where others are looking and not for things that exist. You need to look into the spaces for those things that you need but don't obviously exist. The rationale and support, the principles, and some techniques to tease out those invisible bits is what permeates the text from here to the last page. It may not always be easy, but I think it is enlightening, hope it is entertaining, and pledge it will be fruitful.