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What If? . . . What Next? . . . What For?

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Good decision analysis is certainly more than good number crunching. Indeed, good analysis is equal parts number crunching and *number questioning*. Questions of the *what if...?* type have been routinized in their mechanics by spreadsheet programs, but it is still the responsibility of the analyst to pose those questions properly in the first place. “What next?” and “what for?” are questions that are clearly less amenable to straight-out programming, as they get to the core of decision goals and purposes.

There are two aspects to “what next?” There is what *will* happen next, as in forecasting, and then there is what *should* happen next, as in tactical and strategic planning. The former requires more than a dash of prescience; the latter requires a dollop of presumptuousness.

Asking “what for?” of course really cuts to the heart of matter, that is, to aims and intentions, to ambitions and purposes, and to values and goals. Below we examine four books that pose and attempt to answer these three broad *what---* questions; questions that number crunchers should always ask for themselves and for the decision makers whom they serve.



What If?
Robert Cowley, ed.

Putnam, 1999,
395 pages

www.penguinputnam.com

A COLLECTION OF 20 ESSAYS
by prominent historians,
mainly military in
focus, they examine

key battles and episodes asking in each case the provocative “what if?” They identify crucial points in the situations wherein something else could have happened and then trace the consequences of that something else—reconciling the new path with other conditions and factors so as to determine whether that path could actually have been realized. Thus, the plausibility of the various might-have-beens comes under heavy scrutiny. Among the essayists are top military writers like John Keegan and Stephen Ambrose. Editor Cowley himself is the founding editor of *Military History Quarterly*. While the topics of the essays have been previously addressed in *MHQ* and elsewhere, the essays in this volume are original. There are, however, some 14 short sidebars that are drawn from the pages of *MHQ*.

The typical hinge point for several of the what-if speculations is weather. How much different the world, much less the

war, would have been if fog had not shrouded the escape of George Washington from the battle on Long Island, or if the storms had resumed during the landings at Normandy beach. Narrow escapes from death by key figures are also branching points. Had Cortez been killed instead of saved in the battle on the viaduct into the Aztec capital, the U.S. might likely be a far smaller country, perhaps ending at the Mississippi River. From a decision scientist’s perspective, those chapters that deal with faulty decision making, rather than quirks of fate, are the more interesting. In particular, John Keegan’s speculation about Hitler’s decision not to continue on, after winning Greece, into the Middle East and delaying the assault on Russia is intriguing. So, too, is the discussion of Philip II’s attempt to micromanage the Spanish armada against the English.

Historians call these re-writes “counterfactual experiments” and they have some rules that they try to follow. One is the ‘minimal rewrite rule’—make only small and plausible changes to the actual sequence of events. Another concerns second-order counterfactuals—within these episodes, changes that seem to put a new order in place may actually unfold in such a way that the original order is ultimately restored. The weight of history’s long-term tendencies can be difficult to overcome.



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The important take-away for decision analysts reading this stimulating book is to include more subtle, less obvious, options in doing a sensitivity analysis. Just tweaking the sales growth rate within an optimistic/pessimistic range won't do it. It requires recognizing that a combination of little changes can cause a lot of rewritten history. And it requires continuing the *what-if* past the initial perturbation and playing the scenario fully out so one can see what's next.



Next: Trends for the Near Future
by Matathia and Salzman

Overlook, 1999,
414 pages

www.nowandnext.com
www.overlookpress.com

THE AUTHORS, WHO ARE WITH THE INTERNATIONAL advertising agency, Young & Rubicam, oversee a scanning service for alerting clients about emerging trends. They are thus able to draw upon the services of some 2,000-plus researchers in Y&R offices worldwide. The compilation of their work here is a very broad and breezy catalog of possible developments that might play out over the near and intermediate term. Reportedly, the book did not appeal to the mainline publishers because it saw the U.S.'s global dominance eroding. Too bad that a mainline publisher did not pick it up because it would have benefited from more editing. In parts, it reads too much like a collection of clipping-service snippets. What is valuable is the scope of coverage, both from the geographic side as well as the cultural and societal side. The 21 chapters range from discussions of sports, work, and family to global culture and money. There is no index, unfortunately—again, something that a mainline publisher might have provided.

Well, what are some of the interesting trends foreseen by Matathia and Salzman? How about triple-play day care centers that can handle your aging parents, your pampered pets, and your precious offspring? How about more signage in icon-ese? More retrospective approaches to entertainment. The decline of face-to-face focus groups as Internet market polling grows.

Blue as the big color and more than money coming out of an ATM. Golly, what next? (Be forewarned that you may not always like the prospects.)



Beyond Malthus
by Brown, Gardner, & Halweil

Norton, 1999, 168 pages

www.wwnorton.com
www.worldwatch.org

SUBTITLED "NINETEEN Dimensions of the Population Challenge," this is another publication by the Worldwatch Institute in its Environmental Alert Series. Each year this organization updates its assessments about how population growth is affecting the availability of various resources (such as water, energy, and fisheries), and impacting aspects of society (such as urbanization and conflict). The volume covers 19 categories with per-capita plots and details on data sources, thus making it a good supplement for forecasting courses.

Of particular interest this year is the institute's observation that 'demographic fatigue' has set in. The 'fatigue' label applies to those governments that are growing fiscally weary of trying to educate, employ, and maintain a clean environment for a population heavily weighted with small children but lightly weighted with healthy breadwinners. The principal cause of the slow-down, in too many countries, is the spread of AIDS. This tragic disease is affecting both mortality and fertility rates with sufficient impact that demographers have knocked a half-billion people off of 50-year projections. The mortality impact is comparable to the arrival of smallpox in the New World and the diffusion of the bubonic plague throughout the Old World. It is now over 200 years since Thomas Malthus wrote his essay delineating the gap between exponential population growth and linear food supply growth. And while many argue about the validity of his ideas, the reality seems to be that the specters checking population growth have not really changed—they just take turns riding at the head of the pack.



High Tech Heretic
by Clifford Stoll

Doubleday, 1999,
221 pages

www.doubleday.com

THIS IS LIKE AN extended "letter-to-the-editor" from a far-out thinker on the fringe.

Like somebody from Berkeley. And that's exactly where author Stoll is from. But no small-time computer user he; as an astronomer, he confesses to big-time number crunching with computers. What has him upset is the *computers will cure-all* attitude of some parents, politicians, and 'techno-promoters' who are demanding PC deployment throughout the K thru 12 grades. Stoll feels that what really are needed in schools are more good books and more good teachers, not more computers. He offers up the horror stories we've all heard. Schools are given obsolete machines that can't be repaired; web sites vanish overnight; instructors don't know their modems from their motherboards. Stoll says he met a second-grade teacher who threw out the magnets she had for class use because they might damage floppy disks. Now her students learn about magnetism from a multimedia program. Tired of hearing the catch phrase that 'information is power,' contrarian Stoll therefore wonders why librarians are not the most powerful people around. But of course, there are no more librarians, only *information specialists*.

Just what level of computer literacy do our students need and how should they get it? Should the way of instruction be any different than how schools handle drivers' ed.? After all, says Stoll, the car is very important in our society, but we don't have a car in every classroom. Of course, he is being extreme, but that's the tenor of the book. Even the book's index is labeled as "Index with an attitude." Readers soon weary of this diatribe and long for some new arguments or fresh ways of framing old ones. One novel suggestion offered by the author is to convert old Apple Mac computers (the CPU of choice for K thru 12) to fish tanks. Stoll says that if businesses really want to help instructors then they should give each instructor a photocopier. I'll take one. ■