Book Review

Safety I and Safety II, Hollnagel, Erik. Ashgate Publishing Co., Farnham, UK, 2014, 200 pp.

'Reformers tend to be difficult people,' Michael Kinsley of Vanity Fair wrote recently, 'but they come in different flavors' (Kinsley, 2014). There is Julian Assange of Wikileaks, for example, the narcissist: a self-canonized, entitled and unfinished man. There is Edward Snowden, the political romantic with the innocently conspirational world view of a precocious teenager. Then there is a Robespierre, a Trotsky – revolutionaries who declare the ancien régime corrupt and call for it to be toppled. Then there are the ascetics, who proclaim to know or understand less of the foil they have chosen to challenge with each day that goes by, yet still rack up results while rebuffing praise or adulation.

Erik Hollnagel is a reformer, if ever we had one in our field. And there are probably enough people who would cast him comfortably in any of Kinsley's roles. I would imagine Erik Hollnagel most confidently somewhere between revolutionary and ascetic. And not as particularly more difficult than the next reformer. Among the targets that have quite deservingly made it into Erik's sight over the past decades, have been information processing psychology, human reliability analysis and the very notion of 'human error' – to name but a few. He has even taken the practice of accident investigation to task for being the enemy of learning from failure. This time around, the ancien régime that needs to fold, and at whose incomprehensible follies he shakes his head, is Safety I. Safety I, Erik Hollnagel says, is a mode of risk management that has long become organized around making sure as few things as possible go wrong. It is generally reactive; that is, it responds when something does go wrong or is judged to be an unacceptable risk. Safety I sees accidents as the result of failures and malfunctions, and investigations therefore target causes and contributory factors. Humans are seen as a particularly weak link, a liability or a hazard. Variations and diversity in human performance are considered harmful, a challenge to compliance and should be prevented as much as possible.

This is Erik Hollnagel's current foil, and he sets out to systematically 'deconstruct' it. Not afraid to plumb Derrida for inspiration, Erik Hollnagel explains that 'deconstruction is originally the name of a philosophical movement which promotes a theory of literary criticism or semiotic analysis' (p. 91). Some might wonder what any of that has to do with safety management, but Erik Hollnagel is unfazed. If anything, he convinces the reader, words (like those of Safety I) refer only to other words, not to anything 'real.' Or, to put it in a way that Steve Jobs might have used, we have just made all of that stuff up. And given that we did, or that it was made up by people who are not necessarily any smarter than we are, we have every right and ability to make up different stuff. Like Safety II. That is not quite enough for Erik Hollnagel. He insists we move through some additional philosophy before granting ourselves that insight. So, there goes: the phenomenology, aetiology and ontology of safety – we need to go through all of those to lay bare the (false or obsolete) assumptions that hold up Safety I. By the time Erik Hollnagel lets us go at the end of that chapter (which is Chapter 5), you are either persuaded, mollified or pummeled into submission, and hardly need the next chapter for any more convincing (Chapter 6 is about the need to change). That said, it is still nice to be reminded of the many ways in which the world of 2014 is not the world that gave birth to Safety I; that the philosophical assumptions made by Safety I are as understandable given its own context at the time, as they are ridiculous to apply to our current context.

So what is the Safety II that we need to change to? In Safety II, we should aim to ensure that as many things as possible go right. Safety II is proactive, continuously trying to anticipate developments and events. It assumes that things, whether they go right or wrong, basically happen in the same way, regardless of the outcome. The purpose of a Safety II investigation, then, is to understand how things usually go right as a basis for explaining how they occasionally go wrong. In Safety II, humans are not seen as a problem to control, but as a resource necessary for system flexibility and resilience. Performance variability is both inevitable and useful, and can be monitored and managed.

There are those who, in my opinion a bit miserly, might complain that the book is more about dismantling Safety I than about building up Safety II. 'Only' a third of its pages, roughly, is devoted to the new ideas – so indeed. But getting this charge is a common fate for the

reformer. And I consider it miserly. Safety I, after all, has had since Heinrich, in the 1930s, to gradually encrust itself in layer upon layer of writings, methods, techniques, tools and teachings – globally. It has become established, mainstream, widely adopted, its tentacles and capillaries burrowed deeply into organizations as well as the safety field itself. How can a single reformer, any reformer, be expected to suddenly dream up a competing 80-year counterfactual history of, in this case, Safety II? As if it even existed? It is a silly, super-human expectation. And perhaps the charge says more about those making it than the reformer it targets. It suggests that they might not want to put in the hard yards to help the reform along, to support the development of the smaller steps that can operationalize the grander ideas, to be an early adopter and try and fail and try again. They might instead want Safety II presented to them as a ready-to-be-implemented, tested and approved risk management package in their organization. Perhaps they would rather get some Excel file directly off Erik Hollnagel so as to start ticking off their boxes for what is now Safety II. Never mind reading the book, never mind struggling with the philosophical challenges and underpinnings it throws at us. Never mind joining in the reform effort, being a thinker, doing the hard intellectual work together and having the courage to challenge the status quo without a fully formed, readily implementable paradigm to throw on the table during a next management meeting.

This is where Erik Hollnagel, I suspect, would be at his more ascetic – and pretty much ignore such critics. And this is the thing. Erik Hollnagel is perhaps the key pandit of the greatest recent generation of safety thinking, the generation post-Barry Turner, post-Charles Perrow. His beautifully ripened wit is not only quick, it can be acerbic. You have to be intellectually astute to capture the subtlety of the retort just slipped to you, incisive yet nuanced as it will be. This is not surprising for a man who counts Monty Python and the Coen brother's The Big Lebowski among his chief humorous inspirations – the type of humor that can entirely elude lesser mortals. In other words, you have to be deserving to even get it. To Erik Hollnagel, as the ascetic, I have seen many around him who are not.

Here are, I believe, two ingredients that are not just copyable for any aspiring Hollnagelian safety thinker. One is the sheer conscientious deliberation and subtlety of the arguments and definitions Erik Hollnagel uses. Take a sentence like 'Today's challenge is to develop and manage systems that are ever larger and more complicated . . .' (p. 113). He really means 'complicated' and not 'complex.' After all, we can neither develop nor manage 'complex' systems (and for Erik Hollnagel, that simply goes without saying): complexity emerges, grows on itself or is something that can grow out of complicated systems (Cilliers, 1998). Managing or developing something 'complex' is an oxymoron. To make sure the point comes across, and in as unambiguous a way as possible, Erik Hollnagel later introduces the distinction between tractable and intractable systems – a nice move, as it alludes not only to the cognitive limitations we bring to understanding such systems, but also to the impossibility of modelling them mathematically, the impossibility to derive the full equation set. The same subtlety is visible when he discusses the distinction between the sharp and blunt end of organizations, where he implicitly problematizes the centuries-old Cartesian notion of what is 'above' and what is 'below' in an organization by putting those words in quotation marks. That is precisely the deconstruction necessary to allow more complex, more paradigm-busting ways of understanding organizations and how they create and break safety every day.

But there is another ingredient. And that is Erik Hollnagel's limitless depth and breadth. He has seen, and read and heard, so much, from so many angles, that he can draw on a library of ideas and inspirations that reaches far beyond the steely emptiness of Newtonian engineering to which many in safety and human factors are beholden. Not long after opening the book, we learn of John Slesinger's 1976 film Marathon Man, for example. And deeper into it, we find Erik Hollnagel delivering delicious historical morsels like the distinction used in 1950s Francophone human factors between tâche and activité to denote the difference between work as imagined vs. work as done – something the Anglos thought they hadd cleverly and only recently come up with. It reminds us that, perhaps, there is little new under the sun. And yet there is. It is called Safety II. Safety I will, at most, be able to sustain the status quo, and at a significant cost. We will miss the sorts of signals that point to big blow-ups like Macondo. And we will be throwing a lot of rules and limits and constraints and bureaucracy at our organizations in the name of safety – with no additional marginal return. If you want to belong to the future of safety management, Erik Hollnagel argues, you pretty much know where to stand. It is called Safety II.

References

Cilliers, P. (1998), *Complexity and Postmodernism: Understanding Complex Systems*, Routledge, London.

Kinsley, M. (2014), 'No Place to Hide,' New York Times Book Review, 8 June, p. 14.

Sidney W. A. Dekker
Griffith University,
University of Queensland and
Royal Children's Hospital,
Brisbane, Australia