

Book Review

Safety Culture: Theory, Method and Improvement, Stian Antonsen. Ashgate, Aldershot, 2009, 172 pp.

Stian Antonsen's book offers an excellent and much needed integration of literature from scientific disciplines that, thus far, have dealt with safety and/or culture issues in relative isolation. Culture has been studied in fields such as sociology, anthropology and organization science. Technological, psychological and management approaches have each contributed to our knowledge of safety. Yet, this book is the first that does not just describe the valuable insights on safety and on culture, but genuinely provides a synergetic case for the culture approach to safety. The culture approach appreciates the role of technology and formal organization, but stresses that additional incorporation of shared perceptions, assumptions, informal and social processes are pivotal for understanding how safety systems actually work.

Although none of the arguments that build Antonsen's case for the cultural approach to safety are unique by themselves, they offer a valuable and highly relevant discussion of theoretical and methodological considerations for both researchers and practitioners that have the ambition of promoting reliability of operations as well as resilience for dealing with the unforeseen. This much needed balance between reliability and resilience illustrated in several action-research cases aimed at improving compliance to safety regulations. Antonsen convincingly demonstrates that the cultural approach has strong advantages over its predecessors punishment-based and bureaucratic approach to managing organizational safety.

Safety Culture comprises two parts, that together do justice to the book's subtitle: theory on the one hand, and methods and improvements on the other. Chapters one to four offer a comprehensible discussion of safety, culture and safety culture. This first part covers theory, and does so in a commendable way. Chapters five and six focus on methods, and make a case for combining quantitative with qualitative culture assessments. Improvements – the focus of chapter seven are to be expected from deploying action research. Action research can be seen a mixture of research and con-

sultancy, where the researcher's high involvement is used to gain the trust of various stakeholders of the organization under investigation. These stakeholders are encouraged to take on an active role in the investigation. Researchers and stakeholders commit jointly to the goal of problem definition and resolution. Antonsen illustrates the benefits of such an approach over more detached methods of culture assessment such as surveys. Action research is linked to organizational learning and social dynamics of subcultures and power issues.

Yet, even the action-research cases described do not enlighten as much of the true dynamics between shared assumptions that form the core of culture and related values, norms, active and passive leader reinforcement, power and actual safety behaviours as they probably could have. Psychological theory on social identity, bias in attribution of failure and cognitive dissonance resolution might have helped to lift insight in the dynamics of safety culture one level up.

The cases and methods of safety culture assessment described in the second part of the book offer hands on illustrations that strengthen the central argument of the book. Cases are, however, almost exclusively drawn from the oil and gas industry, while crucial lessons can be learned for other high-risk lines of industry. Aviation and medicine, for example, are interesting settings. Both in their own right, but also because there are relevant similarities in terms of interdisciplinary teamwork, and status differences within these teams. The role of non-technical skills and situation awareness, which are acknowledged in both industries would have offered a relevant addition. Further, because aviation is believed to have a 30-year head start over medicine in terms of safety maximization, these two industries offer a 'natural experiment' of development as well as endurance of safety culture interventions.

One last weakness to be mentioned is the book's emphasis on safety regulations as the front line of safety culture. Although the reasons for compliance versus violation are thoroughly examined, and such examination is crucial because, as Antonsen rightly states, the literature on violations thus far is thin, a rich and in my opinion important literature on error and error handling is ignored. Disasters invariably result from a

combination of active and latent failures. Both violations and errors are possible active failure contributors. Practitioners all too often confuse errors and violations and by doing so, they undermine opportunity for safety improvement.

Despite its weaknesses, Antonsens praiseworthy cultural approach is a worthwhile, if not an imperative

must-read for practitioners, students and junior researchers.

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