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## Practical Reason, Another Approach of Safe Action

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## Synopsis

Born from the realization that technology is neither the only source of risk, nor the exclusive solution, the concept of safety culture aimed at reintegrating human action, skills and symbolic productions (representations, beliefs, values, cognitive abilities, etc.) in the preservation of safety. As such it constituted a turning point for risk management and safety studies.

Yet, the concept seems to raise more and more questions, both as a concept and as a practical tool (Simard, 2000 ; Fuchs, 2012, Edwards et al., 2013 ; Lopez de Castro et al., 2013). Mostly, these questions revolve around the lack of consensus over one shared definition of safety culture; around the idea that a number of its traditionally accepted characteristics, such as its systemic nature, remain to be demonstrated; finally, and maybe most importantly, that its implementation through such management tools as questionnaires, indicators, dashboards, has deprived safety culture of its substance and diverted from its original purpose, i.e. putting humanity back at the heart of safety (Guldenmund, 2007 ; Karsh, Waterson, Holden, 2013 ; Reiman, Rollenhagen, 2013). Indeed such tools lead to classify and quantify reality in an attempt at reproducibility, leaving aside the many aspects of human action that do not fit the associated categories as well as its complexity.

Obviously safety culture has many virtues, in particular its popularity and ability to include all human aspects of action related to safety under one unique umbrella, thereby making it relatively easy to appropriate and ultimately helping balance the technical approach of safety. Yet, as the critics mentioned above suggest, it seems insufficient to translate the specificity of human action, and the reasons why leaving room for this specificity can help preserve safety.

Indeed, the limitations of strictly technical and engineered approaches of risk management, in particular their inability to cope with an environment more complex and unpredictable to the day, have been broadly documented (cf. for instance Hollnagel et al., 2006). As a consequence, in order to preserve safety organizations need to find a balance between the stability necessary to carry out their activity and expressed through rules and procedures, and the flexibility required to manage unpredicted situations, i.e. "slack" or ability of those who face such situations to decide on an ad hoc course of action (Grote, 2015).

If unpredicted, ad hoc action is required to preserve safety, it seems fair to try to develop a better understanding of human action, not only as a cognitive process but also as the result of an intention, i.e. the motivation of a specific individual, in a specific situation, to preserve safety. Indeed it seems that human action is usually considered from the angle of rationality, leaving intention aside. Yet even one of the most prominent authors on rationality, Herbert Simon, stated the role played by importance in decision-making (Simon, 1982).

In this conceptual paper, we call to a French contemporary philosopher, Paul Ricoeur, to analyse intentional action. In particular, we use his concept of "practical reason"(Ricoeur, 1986 (1991))which is the practical tool individuals use to decide on courses of actions that are simultaneously strategic (i.e. rational) and ethical. Ricoeur defines ethics as "a good life, with and for others, within just institutions"(Ricoeur, 1992). We show that being inherently oriented towards ethics, practical reason is directly favourable to the preservation of safety by individuals. Furthermore, as a specific environment, the "just institution", is necessary for practical reason to be expressed by individuals in their actions, Ricoeur opens an avenue to conceptualize organizations favourable to practical reason and therefore, preservation of safety by individuals.

Main references

Grote, G. (2015). "Promoting safety by increasing uncertainty –Implications for risk management", Safety Science 71, pp.71-79.

Guldenmund, F. (2000), "The nature of safety culture: a review of theory and research", Safety Science 34, p.215-257.

Hollnagel, E., Woods, D., Leveson, N. (2006), Resilience Engineering. Concepts and precepts, Ashgate, Aldershot, UK.

Ricoeur, P. (1991 (1986)). From Text to Action: Essays in Hermeneutics II, trans. Blamey, K., Thompson J. B., Evanston: Northwestern University Press.

Ricoeur, P. (1992 (1990)). Oneself as Another, trans. Kathleen Blamey, Chicago: University of Chicago Press. Simon, H.A. (1982). Models of bounded rationality: Behavioral economics and business organization (Vol. 1 et 2), The MIT Press.

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