What Is the Place of Human and Organisational Factors in Safety?



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An Introduction

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Abstract It has been largely accepted, in academia as well as in business, that the main vulnerabilities in industrial safety come from human and organisational factors. Despite this consensus, it is still difficult for human and organisational factors (HOF or OHF) to become a priority within companies. There are many reasons for this: HOF are only included on the agenda in exceptional circumstances; the often-marginal position of bodies in charge of HOF, which in addition, is still a fairly heterogenous field of knowledge. Thus, the main question that seems to be raised is that of the place that should be held by HOF, with two main options: either overtly affirming their specific nature or being unobtrusively present in various ways in daily activities. In turn, this leads us to ask ourselves about the relationship between the ordinary and the exceptional within companies.

Keywords HOF · Safety · Ordinary daily life · Exceptional circumstances

The place of human and organisational factors (HOF) or organisational and human factors (OHF) in safety, notably industrial safety, is rather paradoxical. On the one hand, this question has been widely explored in the various fields of intellectual output (by academics, experts, consultants, etc.) and recognised as being important by stakeholders in safety (companies, supervisory bodies and agencies, insurance companies, etc.). On the other hand, the question would appear to be the subject of continued discussion and, although taken into account, would still not appear to be a priority.

The result of this is a hiatus between the proclamations around HOF and their veritable integration within companies and organisations responsible for managing industrial risks. This book looks beyond the injunctions that are so commonly made by academics and experts and seeks to better understand the reasons for and the implications of such a situation and then, by doing so, offer suggestions for improving it.

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1 What Place Is Given to HOF in Industrial Safety?

The way HOF are taken into account is the result of the obstacles encountered when analysing events (incidents, near-misses, accidents), which were mainly, and sometimes only, examined from a technical angle. In contemporary safety analyses, it now seems to be taken for granted that the main vulnerabilities are related to HOF, rather as if, in the various areas, we had reached the limit of the progress that could be made from a technical point of view. Thus, any significant steps forward would now have to be made at the human and at the organisational (or managerial) level. On this point, there would appear to be a fairly broad consensus which allows the engineering world to consider any residual imperfections in safety to be outside of their scope of application. This allows the world of human and social sciences (HSS) to acquire greater legitimacy for their work in this area.

However, the scope of HOF has not been clearly set out. The hesitation between HOF and OHF, which is still commonplace, is related to ongoing debates about the respective importance of "humans" and "organisations" in factors that put safety at risk. Going beyond the set-piece and spontaneous approaches around "human failings" and the progress made from the notion of "human error", the challenge is in fact to know just how far it is possible to scale the ladder of causes in order to identify or allocate responsibilities. In other words, how can we avoid limiting analysis to the behaviour of operators, or first-line management (as is still often the case)?

A number of disciplines have been drawn together to analyse HOF (ergonomics, psychology, sociology of work, management sciences, sociology of organisations, sociology of professions, etc.). Thus, knowledge capital and know-how exist, although it would still be worthwhile questioning their constitution (such as, for example, the role of human and organisational factors in the technical and scientific choices within companies?). Or, to put it another way, is the way in which HOF are limited closely related to the disciplines that have analysed them?

Nevertheless, HOF have acquired a status in the analysis of industrial safety, and companies in charge of high-risk activities have been incited to examine this issue, design specific safety actions and put in place the corresponding training. But this rather indisputable general movement is facing a number of obstacles, partly due to the fact that HOF are an "intermittent" priority within companies, according to circumstances and contexts. As a result, it is mainly when serious incidents, accidents or catastrophes occur that the debate around these factors is rekindled. Similarly, it is mainly in these circumstances that researchers, experts and actors expressing their concerns within companies are able to underline the importance of HOF.

2 HOF in Industrial Safety: Still Trying to Find their Place?

A first difficulty in the recognition of HOF comes from the fact that decision makers only take them truly into account in exceptional circumstances. Which, of course, makes regular and lasting inclusion of these questions a problem.

A second difficulty, which is related to the previous one, is that under normal circumstances, the actors in charge of HOF often hold low-profile or even marginal positions within companies. Of course, situations vary from one company to another, but these actors usually operate within specific departments, hubs or agencies, away from the major management teams. The consequence of this is that these structures, in their various positions, can appear atypical compared to the organisation as a whole, and refer to functions that need to be regularly justified and defended.

A third and final major difficulty encountered by HOF is that it is a very diverse subject. HOFs cannot be described as being a uniform topic. Although some approaches and schools are more developed than others, there is still broad heterogeneity in academic output as well as in its circulation via expert input and consultancy work. Even if, within companies, specialist HOF structures can be identified (see above), it is undeniable that questions about these factors are present in many regular activities (concerning productive performance, motivation systems, produce usage, health and safety, etc.). Thus, we find a fragmented set of references to HOF in various company departments (production, human resources, safety, etc.). Sometimes, even the actors directly confronted with safety problems "do HOF without knowing it" or, rather, without feeling the need to refer to any formal knowledge to embark on actions in this area.

For all these reasons, the place that HOF and those who promote it can have within companies is not automatic: it remains largely a work in progress. In many ways, this may seem surprising given the now-recognised importance of HOF in safety issues. We could even think that, in fact, it would not take much for HOF to be on the agenda outside of exceptional circumstances, for the issue to be addressed within companies, so that as a result of knowledge being tested on a large scale, doctrines are established and then widely shared. And yet, this is not the case, the "means of existence" of HOF remains a problem.

3 How to Make HOF "Exist"?

This question has progressively become more central in the discussions between researchers and researcher-practitioners participating in this book. The question is to decide what is the best strategy for ensuring that HOF become a lasting subject of interest within companies.

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A first option is to try to make HOF a priority for safety. This is a difficult but not impossible goal to reach given the increasing attention paid to the risk of accidents, notably major ones, and the sensitivity of certain key decision makers about this subject. But this implies that those in charge of HOF would undertake very deliberate actions with great consistency over time, while associating themselves closely with the knowledge generators in this area. They would notably be raising the profile of the structures they are leading high enough for them to be heard by deciders. This option, which in many ways would appear justified, requires a lot of energy and its success is heavily dependent on the circumstances.

Another more modest and more pragmatic option is based around the idea that HOF are unlikely to be recognised as a priority by all decision makers anyway (other than the group of those who were immediately convinced by them). In this approach, the strategy would focus less on preaching their virtues and rather seek ways to allow them to become part of the ordinary daily lives of companies. In other words, to keep these concerns "alive" through a number of activities, without them being necessarily linked to any risks. The downside of this being, of course, that the question of HOF becomes less visible and less specific.

There is a debate around these two main options. The first and most obvious one is risky, in the sense that it assumes that taking into account HOF means that there is a real programme, of both knowledge and action, with true continuity over time. This has the merit of coherency and makes it possible to envisage the drafting of a doctrine based on specific knowledge and actors able to put them to the test in their activities. The second option is risky in the sense that it can lead to a certain dispersal or dilution in HOF knowledge. However, it has the merit of, discreetly and quietly, being able to penetrate all levels of the company, at various moments.

This book discusses this difficulty in finding the right position. The position is an essential question in order to determine how, today, industrial safety can be truly enriched by the learnings from work on HOF. In some ways, this then leads us to reflect on the relationship between the ordinary and the exceptional within companies managing high risk activities.

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