Safety Science 81 (2016) 68-80

Contents lists available at ScienceDirect

Safety Science

journal homepage: www.elsevier.com/locate/ssci

'Culture' as a tool and stumbling block for learning: The function of 'culture' in communications from regulatory authorities in the Norwegian petroleum sector

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ARTICLE INFO

Article history: Received 29 September 2014 Received in revised form 12 February 2015 Accepted 20 February 2015 Available online 12 March 2015

Keywords: Culture HSE regulations Accident investigation Communication Organisational learning

ABSTRACT

The 2001 HSE regulations for the Norwegian petroleum sector include a paragraph requiring the promotion of a sound health, safety and environment (HSE) culture. This paper presents an examination of the function of the 'culture' concept in communications from the regulatory authorities to the industry. We discuss implications for organisational and interorganisational learning for safety.

The regulatory authorities use 'HSE culture' in different ways depending on the document. No explicit definition of HSE culture is given in the regulations or the guidelines, whereas several diverging definitions are mentioned in an information pamphlet. In accident investigation reports, the HSE-culture concept has typically been used to characterise organisations with numerous violations of the HSE regulations or internal procedures. The concept has also been used to devise simplistic and possibly tautological explanations for frequent rule violations and to argue that numerous rule violations constituted a violation of the regulatory requirement to promote a sound HSE culture.

The plasticity of the 'HSE-culture' concept proved to be a two-edged sword. By introducing the HSEculture concept in the framework regulation, the regulatory authorities explored an unconventional approach to HSE regulation. The 'HSE-culture' concept legitimated a very broad range of HSE approaches in regulated companies, some of which were unexpected by the regulatory authorities. In accident investigations, the use of the 'HSE-culture' concept in an explanatory capacity might lead to the premature closure of a search for the causes of an undesired behaviour or decision. The use of the term 'poor HSE culture' to explain or characterise extensive non-compliance in the investigation reports may have stimulated the regulated companies to prioritise HSE strategies and measures to enforce compliance.

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1. Introduction

1.1. Background

The concept of 'Health Safety and Environment (HSE) culture' was introduced in Norwegian petroleum regulations in 2001. The guidelines to this provision stated that 'A favourable health, environment and safety culture is also needed to ensure continual development and improvement of health environment and safety' (PSA, 2009, p. 18). This indicates that the Norwegian Petroleum Directorate (NPD) saw the provision as a means to facilitate organisational learning.

A year later, the petroleum authorities released an advisory booklet aimed to clarify the relationship between culture and HSE (Petroleum Safety Authority Norway, n.d.). The booklet underlined that the petroleum regulations are functional and, consequently, that it is up to each company to define what should constitute a 'sound HSE culture'. The relationships between HSE culture and learning were given broad attention. The culture concept was also used in some accident investigation reports issued by the regulatory authorities, the NPD, and, later, the Petroleum Safety Authority, Norway (PSA). The requirement to promote a sound HSE culture was retained in the 2011 version of the framework regulations, but the corresponding section of the guidelines was reformulated.

The regulation of culture in general and the specific efforts to regulate HSE culture in the Norwegian petroleum industry have been controversial. Karlsen and Valen (2011) suggested that the regulation of culture was a legislative statement that the







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Norwegian petroleum industry was to become a world leader with regard to HSE. They argued that the introduction of the concept in the framework regulation was more an instance of political rhetoric and 'window dressing' than a basis for real regulatory practice. Grote and Weichbrodt (2013, p. 225) argued that '[...] the inclusion of safety culture into regulatory requirements may have detrimental effects on the factual safety of high-risk organisations because by trying to understand and use the concept attention is pulled away from addressing more manifest safety issues'. Commenting on the Norwegian experience, LeCoze and Wiig (2013), among others, concluded that one of the difficulties in regulating safety culture originates in the many different meanings of the concept. They noted that some would argue that the Norwegian experience was a failure, as it did not achieve consensus among the regulatory inspectors and led to challenges in relation to the industry. However, they argued that introducing an ambiguous concept could also push companies to explore issues that would not be dealt with otherwise.

Kringen (2013, p. 220) noted that the Norwegian regulatory authorities '[...] had to confront a number of difficult tasks, making sense of the complexities of HSE culture, making it operational within the framework of their regulatory strategy, and simultaneously facing industrial initiatives, programmes and "cultural interpretations".

This paper presents a study of the functions of the 'culture' concept in communications from the regulatory authorities to the Norwegian petroleum industry. The *function* refers to what the 'HSE-culture' concept does in the text—what it achieves, triggers and performs. We discuss implications for organisational and interorganisational learning for safety. Such implications may stem from, for example, how the culture concept has been used to analyse accidents and from whether and how it has been used to justify formal sanctions in the aftermath of accidents.

The research is based on an assumption that the way the regulatory authorities use the concept of 'culture' in their communication with the industry may influence companies' safety policies, strategies and measures. The study is a part of the research project *Translating HSE Culture in the petroleum industry* (TRACULT), which is designed to generate and disseminate knowledge on how regulatory authorities and companies might contribute to improving those aspects of HSE that are hard to explicate, measure and follow-up.

Our investigation is strictly bounded to a few documents and the usage of one concept in those documents. This form and focus has enabled us to unfold the meaning and function of both the concept and the specific contexts in which it functions. This limited body of documents can be used to illuminate issues concerning culture discourse, entification processes, safety production and questions of causality in investigations. These are issues, which, in their turn, may have an impact on organisational and interorganisational learning.

1.2. Culture controversies

The 'culture' concept has been discussed, defined and redefined so many times and in so many ways that it is difficult to present a coherent and precise synoptic of the different positions and their developments. Disciplines such as anthropology, psychology and engineering use the concept differently, but within those disciplines there have been debates related to what 'culture' refers to. Finally, the concept is often used as a matter of fact—without explicit definitions—by scientists and regulatory authorities, as well as in the media and everyday speech.

In organisational discourses, the concept of 'culture' is ambiguous and loosely defined. Though an anthropological concept of 'culture' is typically more comprehensive, safety culture research usually applies a more narrow conception.

Some fundamental differences and clear positions do exist. Of special interest to this case is the difference between culture articulated as object versus practice. In anthropology and philosophy, this difference is discussed as *variable versus metaphor* (e.g. Martin, 1992) correlating to neo-positivist versus interpretive perspectives. In an organisational context, the difference implies that culture is viewed as (1) something the organisation has and that can be managed (variable) versus (2) something the organisation is and that evolves by the practice of all members (metaphor). The typology provided by Allaire and Firsirotu (1984) differentiates between perspectives understanding culture as *ideational systems* and perspectives understanding culture as *sociocultural systems*. The core distinction in all typologies of culture is the difference between culture understood as an entity and culture understood as an indivisible whole.

1.3. From 'safety culture' to 'HSE culture'

The investigation into the Chernobyl accident is ubiquitously cited as the origin of the concept of 'safety culture'. However, the linking of the concepts of 'culture' and 'safety' can be traced at least back to Barry Turner's seminal *Man-Made Disasters* (1978). Though he did not explicitly use the term 'culture', Turner pioneered the field of safety culture by studying how accidents could be the results of a form of 'collective blindness' shared by the members of an organisation. The relationships between safety culture and an organisation's ability to identify safety problems, and then learn and improve from them, have been a prominent topic in discourse about safety culture (Westrum, 1993; Reason, 1997).

The interest in the relationship between culture and safety must be seen in association with a more general shift away from the assumption that individuals and organisations follow a strictly rational, intentional logic. Most organisational theorists now agree that shared beliefs and norms can provide quite specific rules for actions, thus forming 'irrational' foundations of organisational action (Brunsson, 1985). The interest in safety culture is also associated with the quest for more proactive approaches to safety management. While traditional measures of safety levels rest on retrospective data, such as LTI-rates and accident/incident records, knowledge about safety culture is thought, or at least hoped, to provide information that allows for safety improvements before accidents happen. Safety culture is often regarded as a subset of organisational culture that has consequences for HSE (see Hale, 2000; Guldenmund, 2000; Hopkins, 2006; Antonsen, 2009). As such, the concept is defined by its pragmatic effect.

In a widely cited definition from the Advisory Committee on the Safety of Nuclear Installation (ACSNI), safety culture is said to be '[...] the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine the commitment to, and the style and proficiency of, an organisation's health and safety management' (ACSNI, 1993, p. 23). Aspects of this definition have been retained in some PSA documents on HSE culture. Whereas safety culture is a recognised concept in international research literature, 'health culture' and 'environment culture' are not. This shows a skewed weighting on safety compared to health and environment. It also shows that certain cultural aspects are discussed and recognised differently in relation to the conceptual assembly of 'HSE culture'.

The HSE work in the petroleum industry is shaped by the dominating accountability logic across industries today (see e.g. Power, 1997; Almklov and Antonsen, 2010; Hood, 2007). Within this logic, activities must produce measurable entities so that HSE is auditable. A typical tool to this end is the Key Performance Indicator. The key question for the HSE department

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