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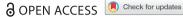
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Democracy in practice? The Norwegian public inquiry of the Alexander L. Kielland North-Sea oil platform disaster

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ABSTRACT

In March 1980, the oil-platform Alexander L. Kielland capsized in the North Sea resulting in the death of 123 workers. The Norwegian inquiry into the disaster was closed to the public and the survivors' accounts of the disaster differed considerably from the official account. The inquiry was experienced as undemocratic by those who had been in the disaster. Many of them felt humiliated, claiming that their opinions were not given due weight. We argue that if the inquiry had been more transparent and inclusive, important information would have been made available that might have prevented subsequent disasters. Such transparency would be supported if disaster commissions used a critical realist version of knowledge acquisition based on a layered ontology and grounded in an epistemology that uses retroduction and judgemental rationality. In this article, critical realism is also used to justify the interdisciplinary nature of the research, which starts with historical methods.

KEYWORDS

Offshore; oil; disaster; inquiry; public; democracy

Introduction

This article is an analysis of the Norwegian Public Inquiry to investigate the capsizing of the Alexander L. Kielland oil-platform in 1980, in which 123 oil-workers lost their lives. Significantly, the workers and sailors who had been in the disaster claimed that their opinions and experiences were not given due weight by the Inquiry, and their opinions about what happened differed considerably from the official opinion. It was not only workers' interpretation of the disaster that differed from the official discourse: evidence from two published academic books and several public discussions suggested that there were other alternative interpretations (Dahle 1980; Eggen 1980; Enghaug and Lønning 1980; Johansen 2005; Kielland-nettverket 2017; Kielland-nettverket 2020; Nilsen 1984; Norwegian National Broadcasting Service 2013, 1983, 1981; Østlund 1992).

Since the publishing of the Norwegian Public Inquiry Commission report, a support group, Kielland-nettverket (2017, 2020), has continuously argued for a new inquiry and questioned the conclusions and process of the commission. Furthermore, as the result of considerable media coverage - which included a number of public lectures and the publication of the authors' previous research¹ – there has been renewed political attention given to the problem of the transparency of Norwegian Public inquiries. This has culminated in a meeting with the Norwegian Parliament Constitutional and Control Committee as well as an internal inquiry by the Norwegian State Auditor to discuss the issue (Smith-Solbakken and Weihe 2020; Sønderland 2018). The Norwegian State Auditor published their report in March 2021 (Riksrevisjonen 2021). The auditors criticized the follow-up of the surviving workers and the families of those that died. They argued that, although the authorities knew about post-traumatic reactions and the importance of providing crises intervention to survivors and families, nevertheless, no such help was given. However, the auditors found no reason to start a new inquiry or to criticize the conclusions of the commission. To the contrary, we believe that there is good reason to do so, and this article is our attempt to provide such an inquiry.

In our inquiry, we consider the complexity of the different interpretations or understandings of what led to the disaster. When Paolo Freire communicated the situation of the oppressed, he communicated their voices (Freire [1970] 1999). It is through listening to these voices that we have access to different interpretations of events in disaster inquiries. Freire knew that each single individual alone would not have political influence but that the voices together could represent a significant force. This is also our perspective: we wish to use interviews or oral histories to give a voice to those who have been silenced. In this way, we hope to allow them to achieve political significance (Røykenes 2008; Burke 1991; Egholm and Wul 2000, 2001; Feldt 2009; Ginzburg 1993; Joyner 1999; Magnússon 2003, 2019). We call our historical method 'polyphonic', in that we communicate a multitude of single identifiable voices to describe the memories, reflections and analysis of those affected (Smith-Solbakken 2016; Smith-Solbakken and Weihe 2020). From a historians' perspective, we are using microhistory, 'the intensive investigation of a relatively welldefined smaller object, most often a single event' (Magnússon and Szijárto 2013, 4; Smith-Solbakken and Weihe 2020 2021a, 2021b) to investigate processes of general interest, specifically in this case the general processes of public inquiries that relate to democracy.

Whilst current conceptions of democracy provide a platform for the opinions of the community, these opinions are easily dismissed because the community views are seen as mere 'opinion' and not 'empirical'. Therefore, towards the end of this article, we describe how a critical realist conception of democracy potentially rectifies this problem because it sees all theories, that is, opinions, about causation - whether community or expert – as pointing to real generative mechanisms and it, therefore, underlabours for community knowledge by placing it at the same level as expert knowledge, with the same criteria for judging validity (judgemental rationality).

We hope that our investigation will be used to influence future inquiries to be transparent (involve the public in the investigations and keep them fully informed) and inclusive (give due weight to the experiences and opinions of those affected). In our opinion, this is important for reasons of both safety and democracy, although these two things are related. They are related because the fuller analysis of what really happened enabled by democracy is what provides the information necessary to make comprehensive and effective changes to safety procedures.

The method, study materials and interviews

Critical realism was our chosen framework for understanding the processes described in the Kielland oil-platform disaster and their interpretations. Critical realism allows for an interdisciplinary approach to a critical analysis of the public inquiry. This research was, therefore, a combination of both classical historical methods, based on oral and archival sources (Gottschalk 1950); and social science methods (Danermark et al. 2002; Bhaskar et al. 2015; Collier 1994; Cruickshank 2003; Edwards, O'Mahoney, and Vincent 2014; Jessop 2001). However, we also align ourselves with the French sociologist and anthropologist Pierre Bourdieu (Aakvag 2008; Bourdieu 1995, 1997; Bourdieu and Callewart 1994; Freire [1970] 1999). We therefore consider the place of culture in social theory to be important (Archer [1988] 1996).

An advantage of critical realism is that it allows us to report 'what remains', and 'what – chameleon-like - has been changed', whilst nevertheless allowing us to explain, in an interdisciplinary way, how and why the transmutation occurred in the first place (Bhaskar, 2011a, 2011b, 1993, 1986, 1978; Brante 2005; Buch-Hansen and Nielsen 2005). Phrasing ourselves in this way allows for an understanding of the power structures that both made the opinions of those affected appear to be unimportant and created a context in which society accepted the interpretations of the experts as the most beneficial for society. In the process of the public inquiry into the disaster, the structures and the traditions of the past were made invisible behind a screen of new, obfuscating terminology and rhetoric that a critical realist approach allows to be penetrated.

We carried out interviews with close to three hundred oil-workers, family members, rescue workers and others involved or affected by the Norwegian disaster.² We started our interviews nearly 35 years after the disaster. By this time, many of those interviewed were retired, and many of those who had been part of the disaster, and in responsible positions at the time, were dead. The North-Sea workers came from several countries. The majority were from Norwegian coastal communities, although some came from small communities in Scotland and the rest of the United Kingdom. Among those staying at the Kielland platform, many were employed to carry out short-time installation work on other platforms. The latter did not regard themselves as oil-workers, but as professionals within their field (Ryggvik and Smith-Solbakken 1997; Smith-Solbakken 1997). Some of the workers were unskilled labour, but most had some kind of professional training, such as electricians, welders, sailors and so on. The platform workers had a culture characterized by learning by practice rather than learning by theory (Syvertsen and Weihe 2009; Falk and Weihe 2009; Weihe 2007).

In addition to the interviews, we reviewed various publications, including some from the archives of the Public Inquiry Commission.³ The Norwegian archives of the Public Inquiry Commission were closed to the public. However, we gained access – as researchers – by special permission from the National Archives of Norway. A French Inquiry expert commission made an independent report, which is also part of the background material for this discussion. The French report received little attention in Norway but was important in attaining a settlement of damage compensation between an insurance group of the platform and the French builders.

We report our findings from both the literature review and the interviews under the following headings (A) to (G).

(A) What happened on the day of the Alexander L. Kielland oil-platform disaster

The French-built Kielland platform was made to withstand extreme weather conditions. Crew members were heard to say that the platform was one of the best in the North-Sea. Like the Titanic, which was 'the ship that could not sink' (Barrat 2009, Butler [1998] 2002; Howells 1999), Alexander L. Kielland was 'the platform that could not capsize'.

Nevertheless, on 27 March 1980, the Alexander L. Kielland platform capsized, killing 123 male oil-workers died, whilst 89 men survived. The platform was in an oilfield in the South-West part of the Norwegian North Sea sector close to the boundary of the British sector. A large-scale rescue operation was conducted which involved all North-Sea countries. Alexander L. Kielland was originally built as a drilling platform; however, due to a lack of drilling contracts, the platform had been temporarily re-purposed to provide living quarters for workers from several platforms in the vicinity. Helicopters were used to transport oil-workers to and from land and to other platforms. The platform was, therefore, like a busy airport terminal with helicopters departing and arriving to and from various destinations.

Containers for living, canteen and so on had been added to the drilling deck, resulting in structures several stories high. These container additions were easy to remove should a drilling contract be obtained, and the platform be required to revert to its original purpose. The oil-workers called the hostel 'Bangladesh'. Despite this, the work on the platform was attractive because pay was much higher than work on land (Smith-Solbakken 2019a). At the time of the disaster, the platform was in the process of being converted back into a drilling rig. Thus, luggage and equipment were packed and ready for transportation. When the platform capsized, this luggage slid in front of doors and prevented them from opening. Drilling equipment stored on board, ready for installation, slid on the slanted deck and killed a number of oil-workers trying to evacuate. Others lost their lives because of the near-freezing conditions, with sea temperatures of just a few degrees.

(B) The 'democratic' processes of the inquiry into the Alexander L. Kielland oilplatform disaster

Several of those interviewed stated that initially they did not tell the Commission everything that they knew. They emphasized that the reasons for this were no longer present and that they could finally give their own, un-censured, opinions. Several emphasized that they felt it was now their responsibility to give their version and interpretation of the disaster, for the sake of the future safety of the industry and its employees. A number of them said that it was because they were now retired that they felt they could finally tell the whole truth; and that if they were still working in the industry, they might be fired if they talked (Smith-Solbakken 2019a). These statements correspond well with other Norwegian research done on workers experiencing authoritarian leadership (Kaldal 2010, 2012, 2016). Such memories or statements give valuable insight into work cultures, in addition to archival sources (Kaldal 2008).

Therefore, not only did the workers feel obliged to keep quiet about the events leading up to, and subsequent to, the Kielland disaster, but the Norwegian public inquiry into the disaster itself was closed to the public, which further removed the public's access to

information. The police investigation was only available to those being investigated, their lawyers, the commission and the public prosecutor, with access allowed only by permission to researchers (Smith-Solbakken 2016). Although one might question how democratic such a process can be, if it is carried out in camera and access to its reports is denied to the public, nevertheless, the Public Inquiry Commission acknowledged the need for democracy by appointing participants representing varied stakeholder interests. These participants included: a local judge from Stavanger, the town where the Kielland platform was registered (the head of the commission); a member of the major national Norwegian trade union, the 'Lands Organisasjonen' (LO), which had strong connections to the governing Norwegian Labour party and thus to the government; a civil engineering professor from the Norwegian Technical University in Trondheim; and a sea captain with special competency in navigation and practical handling of vessels. Thus, the workers were represented in the commission through their labour organization, the LO; and there was also a specialist in construction, a person qualified to be captain aboard a moveable platform and a legal specialist. Special interests and competency were thus represented in the commission.

The purpose of the commission was to investigate all aspects of security and possible criminal neglect (NOU 1981:11 and Smith-Solbakken and Weihe 2019). As is customary, a judge was placed in charge. In the British and Canadian tradition, the judge is far more independent than in the Norwegian tradition (Brierly 1954; Ibbetson 2017; Morton 2002). A Norwegian judge may be independent in her/his rulings, but she/he must follow the mandate of the government (Cullen 1990; Darbyshire 2017; Royal Commission on the Ocean Ranger Maritime Disaster 1985a, 1985b, 1984; Weihe and Smith-Solbakken 2019). Thus, the political control over the inquiry commission is greater in Norway than in Britain. Because of his relative independence, Lord Cullen, the judge in the British Piper Alpha Inquiry, was able to consider matters such as the working culture of the platforms; he was not restricted to the physical causes of the disaster, as was the case in the Norwegian disaster.

To explain further, in the case of the Alexander L. Kielland oil-platform disaster, the mandate given to the judge was to look into both what caused the disaster and the grave consequences of the disaster. The mandate was, however, limited to two components: the causes of the disaster, the efficacy of the rescue operation as well as the life-saving materials; and the relevant routines of the platform during the disaster. Significantly, there was no mandate for the examination of the working conditions or the working culture on the platform; yet in other similar inquiries, such as the British inguiry into the Piper Alpha oil rig disaster and the Canadian in inguiry into the Ocean Ranger oil-rig disaster, these aspects are included in the mandate (Cadigan 2009; Macinnes 2019).

Social structures 'both enable and constrain social activity' (Judd 2003, 122). In the case of the Norwegian Public Inquiry, the closing of the documents and the closed process of the inquiry functioned to give the public limited insight into the facts and conclusions of the inquiry. The inquiry was essentially carried out by the experts and the judge, who ensured that the process of the commission was carried out according to law (Smith-Solbakken 2016; Smith-Solbakken and Weihe 2019). It has been argued by Karlsen (1982) and Ryggvik and Smith-Solbakken (1997) that the ideals of co-operation and democracy are, in such cases, interpreted by the political establishment, the law and the labour government



in terms of their particular ideals or objectives, which exhibit differences both in the history of law and in practice (Darbyshire 2017; Milsom 2003; Morton 2002; Slapper 2016).

(C) The findings of the Norwegian Public Inquiry

The Norwegian public inquiry into the Alexander L. Kielland disaster published their report in 1981, after an extensive investigation researching different aspects of the accident, the rescue operation, security as well as using police reports from witnesses to the disaster and others involved in management and inspections. Despite the variety of sources reviewed, the commission's report focussed on the opinion of a single technical expert from the University of Trondheim. The other expert reports were given much less attention. Only selected parts and summaries were used in the report of the commission, although they became part of the closed archives of the commission (for example, Dahle 1980). Some reports were not quoted at all, such as that by the civil engineer Gundersen who had worked on platforms similar in construction to the Kielland Platform and who wrote an independent report (Gundersen 1981; Stavanger Aftenblad 2016). One civil engineer expert, who focussed on a possible explosion on the Kielland Platform, was dismissed as a conspiracy theorist (Østlund 1992).

The engineering expert from University of Trondheim centred his argument on the faulty welding and weaknesses in the French, where the platform was constructed and concluded that it was this that had resulted in the disaster. Other possible causes of the disaster, which were discussed by the Commission but not allocated ultimate responsibility, were: loss of stability, the stress of movement of the platform by anchor wires, collisions at sea by supply vessels, possible explosions on board, the lack of fastening of recently on-loaded drilling equipment, stress caused by the wind and movement of the sea and the additional weight of the platform due to the use as a floating hostel for oil-workers.

The commission arrived at a number of recommendations. As a result of these recommendations, the oil industry changed its construction and security procedures, its approach to ensuring the safety of its equipment, and its training procedures (Smith-Solbakken 2016; Smith-Solbakken and Weihe 2019).

(D) The findings of the French expert commission

A French expert commission acknowledged the faulty welding in a beam in the construction, but, unlike the technical expert from Trondheim University, they did not conclude that this was the cause of the disaster. Instead, they suggested that the cause of the disaster was related to problems with the platform's operational procedures, loss of stability, anchoring of the platform and the stress of movement by anchor wires (Jourdain et al. 1985; Tribunal of Commerce 1985).

A later insurance settlement between the Norwegian insurance group and the French Wharf was achieved after several years of juridical processes. The settlement (which was closed to the public) is nevertheless stored in the Norwegian archives and it suggests that there was an overall and significant loss for the insurer. The French claim – that the disaster was caused by operational faults as opposed to constructional faults – was found to be impossible to dispute in court (Smith-Solbakken and Weihe 2019; Smith-Solbakken 2016: Stavanger Aftenblad 2016).

The French report was translated to English but not to Norwegian. In the Norwegian public and political life, the conclusions of the French report received little attention. As the out-of-court settlement was not public, there was no public knowledge of the loss incurred by the Norwegian insurer (Smith-Solbakken and Weihe 2019; Smith-Solbakken 2016).

(E) The findings (some say opinions) of the workers

The oil workers and seamen suggested that the Kielland Disaster was caused by a number of co-existing factors and events. Their suggestions were: loss of stability due to additional weight and open doors; the platform not properly secured for storm conditions, which allowed loose containers and heavy drilling equipment to slide dramatically across the deck when the platform slanted; the stress of un-coordinated pulling of the platform by anchor wires due to faulty instruments; collisions with supply vessels; and too few anchors. They also suggested that the platform was not anchored according to the instructions of the French wharf because of the presence of oil-pipelines on the bottom, and that there were a number of collisions with supply vessels. They also claimed that they had seen cracks and that proper maintenance work had not been carried out. The crew members claimed that they had made statements regarding these problems to the operator company before the disaster. They stated that they suspected a cover-up in which only selected information was released to the public; and they described how being too out-spoken in criticism of management could have consequences such as being fired or blacklisted (Smith-Solbakken 2019a). They also realized, and largely accepted, that there was an argument for maintaining national unity in the public realm by not challenging the official rhetoric. Finally, the interviews also revealed that the workers had a strong sense of working-class solidarity and that this sense of solidarity motivated them to use their skills and knowledge to help their co-workers to survive during the accident and the subsequent rescue operations.

(F) The reception of the workers' opinions

The stories from the workers found in the Norwegian discourse, which suggested reasons for the disaster, were either ignored or not taken seriously. Some of the workers were called 'conspiracy theorists'. However, because these understandings were ignored by the commission, there were few if any moderating forces, resulting in possibly outrageous rumours, stories of conspiracy and cover-up, which could not be corrected. Furthermore, a consequence of the Commission's disregard for the interpretations of the workers – which reflects the disregard for such voices within the social structure – was that the workers developed a considerable distrust of academia and political processes.

(G) Learned hopelessness? Or back-stage discourse?

One could assume that a potential outcome of this process, in which the opinions of the workers were ignored, would be 'learned hopelessness'. However, the outcome was

rather that the workers learned that they could take back (some?) of their power by having their own memory and discourse. Whilst the workers came to view so-called 'democracy' and 'judicial rights' as the domain of the powerful and felt that their viewpoints must remain back-stage, nevertheless, they continued to discuss, sometimes heatedly, the issues themselves. They also used music to convey the memories of the disaster. One well-known song by the artist Morten Abel asks 'Why', reflecting the feeling that many questions were left unanswered by the inquiry. Fiction and disaster songs do not necessarily relate to identifiable persons, but they enable individuals to relate to the disasters and to their impact on local communities, families and individuals in ways that scholarly texts rarely do.

Paolo Freire (1921–1971) describes how the oppressed frequently identify with the values and understandings of their oppressors (Freire [1970] 1999). However, in this case, the workers did not identify with the values of their 'oppressors'. Instead, they chose to avoid challenging the values of their 'oppressors' to achieve objectives of the greater good (national unity) and their own personal job security.

The French sociologist and anthropologist, Pierre Bourdieu (1930–2002), describes collective understandings as well as silences. In his opinion, all cultures have collective understandings and silences; and it is in the interaction between various (spatially or socially distinct) cultures that it is possible to present what would otherwise be undisclosed (Bourdieu 1995; Lane 2000). In this case, it is perhaps more correct to say that rather than silence, there were parallel discourses, one in the public realm and the other in the collective realm of the workers and sailors. Disclosure into the public realm is perhaps possible now because we are in a contemporary culture that is distinct from the historical culture that existed more than 40 years ago.

Discussion: structures and mechanisms of the failure of democracy

In this discussion, we will offer an explanation for why the workers' opinions were not taken seriously, from the perspective of the social structures present, related to capitalist business practices. That is, we will suggest motives for authorities to dismiss the workers accounts. We will then discuss how the assumptions of an empiricist philosophy of science, which currently dominate mainstream versions of what counts as knowledge, were the mechanism by which these opinions could be dismissed, and how a critical realist version of the philosophy of science would remove recourse to such a mechanism.

Structural explanation for the silencing of the workers' opinions

Even though the political rhetoric supposedly encouraged worker involvement there were social structures that stopped their involvement (Smith-Solbakken and Weihe 2019). Thus, many safety issues before the disaster were not addressed, despite the workers having reported them; and, similarly, the workers' opinions about what caused the accident were also silenced. We argue that the social structures in question, which prevented the opinions of the workers from being heard, were shaped by the capitalist demand that businesses make profit and keep up production. That is, safety is calculated in terms of its cost, which tends towards the sacrifice of safety. The same was found to be true in the later Canadian disaster with the Ocean Ranger platform in 1982 and in the British Piper Alpha disaster in 1988 (Cullen 1990; Heffernan 2009; O'Byrne 2011).

It is also relevant that the Public Inquiry Commission might have pointed to criminal negligence or even individual responsibility. That is, reports from the police investigation, which are normally part of the material of the investigation, are used by the state prosecutor to decide whether they should start criminal proceedings or legal action. Such inquiries can, therefore, potentially lead to criminal investigations. This is one of the reasons why so much is at stake for the involved parties.

Empiricist science as the mechanism of silencing the workers' opinions, and the critical realist alternative

We argue from a critical realist perspective that the ease with which the workers' stories could be dismissed was because, in mainstream philosophy, reasons have no 'ontology'. That is, mainstream philosophy assumes that there is nothing real to which reasons relate as 'reasons are not causes'. In opposition to such a view, we argue that reasons can be causes because reasons refer to real things. It is, therefore, possible to choose between competing theories about causality (reasons) by choosing the theory that accounts for most of the evidence (judgemental rationality) (Bhaskar 1978, 1993). These theories are arrived at by retroduction, which is simply a kind of reasoning that considers 'what must have been' for a certain event to have happened (Bhaskar 1978). In the Kielland disaster inquiry, all of the involved stakeholders were involved in retroductive theorizing about what happened, but only the theories of the experts were taken seriously.

In the critical realist tradition, judgemental rationality – the comparison of competing theories about what happened – is not optional, making for an entirely different and transparent process. An approach to such inquiries, based on critical realism, therefore potentially helps to prevent ideologically influenced decisions because such decisions require the obfuscation of truth – but it is just such obfuscation that judgemental rationality guards against. In inquiries with great academic, political, and economic consequences, it is especially important to investigate possible blind spots which may be the result of the particular interests of stakeholders. Because the experts and the politicians have the most to lose and gain from certain interpretations, the most qualified people to arrive at the final conclusion are the public. However, the public need full access to relevant information if they are to contribute; and therefore, it is necessary to have a transparent process. As such, public debate is of crucial importance to a functioning democracy. Nevertheless, it is not enough for the members of the public to be included; their opinions must also be valued. If this does not happen, they are reduced to spectators. This is especially so when only the opinions of a certain kind of (technical) expertise are acknowledged as valid, which leaves the rest of the truth about what happened, related to social structures and culture, out of deliberations (Patel and Pilgrim 2018). Critical realism provides a philosophical justification for the use of non-technical knowledge because its layered reality includes non-empirical levels, which are known about through retroductive theorizing. Retroductive theorizing is a common-sense way of achieving knowledge that is available to all involved parties, not just the technical experts (Patel and Pilgrim 2018). It allows us to know about parts of reality that are not empirical but are emergent from empirical levels, such as social structures and mechanisms (Bhaskar 1978, 1993).

For example, whilst it is acknowledged that faulty welding in large constructions often happens - due to human error, faults in welding equipment, or weaknesses in the materials – nevertheless, routine inspections should find these faults. In the interviews with the workers, it was claimed that routine repairs and inspections were not carried out due to the cost of docking and maintenance. As a result, minor flaws in the platform's construction – generally thought of as normal and simply to be expected and routinely repaired - interfered with its operation and security (Smith-Solbakken 2019a, 2019b, 2019d). Many of the oil-workers, sailors, rescue workers and others involved in the salvage operation, therefore, thought (using retroduction) that the disaster was caused by multiple factors, often connected to the routine operations of the platform such as the anchor handling and the lack of routines for closing openings and doors and fastening equipment that could slide if the platform started to slant. Reports in the closed archives as well as reports of independent experts supported their views on several points (Johansen 2005; Kielland nettverket 2017; Kongsnes 2016a, 2016b, 2016c; NRK 1981, 1983, 2013; Smith-Solbakken 2016; Smith-Solbakken and Weihe 2019). One example is the stability report by a professor in stability, Emil Aal Dahle, that concluded that the loss of stability that resulted in the capsizing was due to the handling of the platform (Dahle 1980). Another report, from the civil engineer Pål Mitsem, concluded that lack of maintenance and handling caused the disaster (Mitsem 1987). Retroduction in the critical realist tradition is useful here as it assumes that it is necessary to arrive at theories about culture, personality and social structure. That is, if these aspects of reality are to be taken into consideration, we need to be able to theorize about their existence as we cannot measure them directly (Price 2020). Such an analysis makes it possible to explain different levels of reality and to deal with the complexity of the situation. In this case, part of the complexity includes the limitations and possible faults in the manmade construction and all the changes made to the platform to repurpose it for a use other than that for which it was originally intended (as already mentioned, it was originally constructed as a drilling platform). Other factors include the interpersonal relationships, the culture or rather cultures on the platform, and the social structures. The complexity is therefore great. All of this complexity can be accounted for using the critical realist layered ontology that includes empirical, actual and real dimensions of reality (Bhaskar 1978, 1993).

However, the public inquiry into the disaster was based on positivism and therefore it could not account for the complexity. This is because positivism has an atomistic view of causation; it also tends to devalue non-expert opinions, especially if they are based on subjectively experienced events (positivism values 'objectivity' alone). The inquiry therefore reduced the discussion to the 'actual' level of reality - the actual moment when the oil rig structure disintegrated, and the technical failings associated with this moment. It ignored other aspects of reality that could have explained what lead up to this moment. Therefore, other reasons for the disaster, which involved social, cultural and psychological considerations, were ignored. Politically, keeping the discussion to the technicalities of a disaster is convenient, and therefore there is little incentive for such inquiries to weigh up all the available theories and compare them in a judgementally rational way (choose the theory that best explains all the evidence). In fact, the critical realist approach makes it, sometimes, difficult to place the blame at the door of any one person or group. Perhaps what we have here is the need for our current social structures and mechanisms, as a whole, to be placed under-investigation, and not just the

actions of unscrupulous actors who take advantage of the affordances of faulty social structures.

Conclusion

Public inquiry commissions reflect the structure of society; and they are particularly important in ensuring public involvement and indeed democracy (Danermark et al. 2002). While the Norwegian inquiry focused on technical aspects, or the material interactions of atomistically interpreted parts of nature, the British Piper Alpha and Canadian Ocean Ranger inquiries considered both material aspects and cultural aspects. However, none of the inquiries significantly addressed the social structures and the stratification of the embodied personality (for a description of the embodied personality, see Hartwig 2014). The perspective obtained by considering the embodied personality helps to explain why different persons have different understandings and have different potentials in terms of voicing their opinions and remaining active in the discourse that tries to understand the disaster. We would like to see public inquiries in the future that consider all the relevant aspects of the layers of reality: from global (international) aspects, to social, cultural aspects and to aspects of the embodied personality, as described by Bhaskar's seven laminations of scale (Bhaskar 2010, 9–10).

Public inquiry commissions are not only important in the nation under which the disasters happen, but also internationally. The Norwegian inquiry researched an accident that had similarities to the Canadian Ocean Ranger accident two years later. In both cases, loss of stability resulted in substantial loss of life. Safety in the oil sector and at sea is an international concern, which means that open processes are not only a national concern but also an international concern. Knowledge learnt from one accident can result in actions that prevent subsequent disasters. We are more likely to gain such knowledge through transparent, open processes of inquiry. Closed processes also potentially nourish questionable rumours and speculations since these are not able to be quelled through interactive debate. In comparison, there seemed to be less speculation about the causes of the British Piper Alpha and Canadian Ocean Ranger disasters; however, this is not to say that the latter were perfect, bitterness, grief and a sense of distrust in the safety measures put in place still remained.

Accidents in the oil-sector involve large international companies, the insurance industry, sub-contractors as well as national interests. In such events, each individual easily becomes a victim of processes beyond their control. Given that disasters happen regularly, it is all the more important to ensure that politicians, trade unions and those working with safety have access to all available data. No aspect of a disaster should be ignored. Whilst it is important to place value on, and give research funding to, specialist disciplines such as metallurgy and engineering; it is equally important to value the experiences and theories of those non-experts who were involved in the events.

Analysing the process of the Norwegian inquiry requires a critical analytic perspective that considers what is in the open and what remains enfolded and thus unseen, such as hidden structures and traditions as well as interests. It is a process relating to important economic interests in the international and national capitalist economy as well as the interest of the public and activist groups (Jessop 2001). For historians, such as us, it is a challenge to be part of a contemporary political discourse whilst the same time



analysing the past (Karlegärd and Karlsson 2009). Nevertheless, it is because of its relevance to the future that we need history. In other words, in one way, history is about what is in the past, but in another way, it is also about what is ahead of us (Kvande and Naastad 2013).

The way that a society handles the aftermath of large-scale disasters is an important test of its social structures and mechanisms; it is a gauge of these entities' fitness for purpose, where their purpose is to protect the wellbeing of its citizens. Not only is this wellbeing measured in terms of future safety related to the disaster context itself, but also in terms of involved local communities, churches, families, and individuals - all of whom face practical challenges, such as the loss of income for bereaved families, as well as challenges of grief. Therefore, the practical handling of the trauma has both short-term and long-term consequences, with evidence that such trauma can be transferred to the next-generation and be part of the shared trauma of a community. Therefore, the way that a disaster is handled is a test of, in the case of the Kielland Disaster, the judicial and public institutions as well as the oil industry, trade- unions and all the professional bodies involved.

New disasters will occur; and we will have need of new inquiries. Such disasters require thorough inquiries that provide truthful accounts of the events and what caused them. Democracy – when it is enabled by full public disclosure and the normative assumption that non-expert knowledge and experience is valuable because it refers to real causal mechanisms – is a pre-condition for thorough inquiries that consider not only the technical levels of the causes of a disaster (at the level of the empirical) but also the deeper causes (at the real levels of the embodied personality, culture and social structure).

Notes

- 1. Paulsen and Smith-Solbakken 2017; Smith-Solbakken 2016; Smith-Solbakken 2019a, 2019b, 2019c, 2019d, 2019e; Smith-Solbakken and Weihe 2018, 2019, 2020; Weihe 2018 and forthcoming articles in the Norwegian National Encyclopaedia, newspapers and labour union journals.
- 2. The interviews have been published by the University Library of Stavanger (Smith-Solbakken 2019a, 2019b, 2019c, 2019d, 2019e). Permission has been obtained from those interviewed to document their names and stories, although they remain the owners of their histories and can add further documentation if they so wish.
- 3. These publications included: Brunswig 1984; Dahle 1980; Det Norske Veritas and Sjøfartsdirektoratet Undated; Eggen 1980; Ersland 1994; Haagensen 1985; Hovden 1981; Hovden and Vinje 1983; Hovedredningssentralen Sør-Norge 1980; Mitsem 1987; National Archives of Norway Archives of the Public Inquiry Commission 2015-2018; NOU1981:11; NOU 1983:53; Paulsen and Smith-Solbakken 2017; Smith-Solbakken 2016; Tagesen 1983; Jourdain et al. 1985; Tribunal of Commerce 1985; Tønnesen and Knutsen 1983, and the two reports from the commission; as well as media coverage of the accident, such as, for example Eggen 1980; Fædrelandsvennen 2010; Nilsen 1984; Tagesen 1983; Johansen 2005; Jørgensen 1980; Enghaug and Lønning 1980; Hovden 1981; Hovden and Vinje 1983; Aftenblad 2016; 1980.

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