Understanding the Relationships Between Ship and Shore Personnel -
A New Study

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Abstract

The working environment of a ship is unusual as a vessel is, in addition, the temporary place of residence for the seafarers who work on-board. The environment is also unusual because of the length of time that vessels spend ‘deep-sea’ far from land and in relative isolation. This solitude combined with the dangers which can be faced at sea tends to produce a feeling of separation amongst seafarers. They feel they are regarded differently by many ‘landlubbers’ who have little idea of what life at sea is like and who they, in turn, may find it hard to relate to. In this context the relationships between shipboard and shore-side personnel may exemplify unusual dynamics. Certainly such relationships are substantially spatially and temporally constrained and this may impact in negative ways upon essential operational matters. This paper relates to a new study of the interaction of ship-based and shore-based personnel. Drawing on shipboard observations and interviews, the study will explore the relationships between active seafarers and shore-side staff such as pilots, surveyors, inspectors, service engineers and vessel agents. In this paper we outline some of the factors identified in the wider literature that may potentially influence such interaction on-board.

Introduction

In a study of maritime accident reports (2002-12) produced by the Maritime Accident Investigation Board (UK), the Australian Transport Safety Board (Australia), the Maritime New Zealand (New Zealand) and the National Transportation Safety Board (USA), Tang et al (2013) highlight the crucial role of communication and interaction on-board in the occurrence of accidents at sea. Their findings indicate that ‘failure in communication’ constituted the fourth highest immediate cause of accidents as identified by accident investigators in the four maritime administrations in the period 2002-12. Failures in communication also constituted the second highest contributory cause identified in relation to these accidents.

1 Please refer to Appendix 1 for interpretation of shore-based personnel.
These findings though not solely focussed on interaction between shipboard and shore-based personnel highlight the impact of interaction on operational matters which in turn bears upon safety issues on-board. This paper focuses on issues identified in the existing literature that impact upon interaction between shipboard and shore-side personnel. However, it should be noted from the outset that, although concerns have previously been raised by maritime industry leaders (see, for example, Maritime Directorate 1991 as cited in Sampson and Zhao, 2003) about the crucial role of interaction on-board, to date there has been little specific research undertaken in this area.

A review of the field reveals that studies of interaction between shipboard and shore-side personnel are largely notable by their absence. The material that is available generally takes the form of personal accounts in maritime publications and magazines by either shipboard or shore-side personnel who relate their experiences of interacting with each other.

The small number of relevant studies reported in scholarly journals concern on-board interaction which is limited to interaction between passengers on cruise ships, interaction between seafarers and shore-side management staff in the same companies and interaction between seafarers themselves. For example, a study by Bailey et al (2006) focuses upon the interaction of seafarers engaged in navigation on the bridge of a merchant ship; a study by Papathanassisis (2012) in centred on the guest-to-guest interaction on-board cruise ships; and research presented by Sampson (2003) considers the role of power relations and interaction between masters and subordinate seafarers in accidents and incidents at sea. Finally Xue (2012) discusses communication between Chinese seafarers and ship managers and the role of such communication in influencing shipboard occupational health and safety management (see also Sampson et al, 2013). It is worth briefly outlining the main findings from these studies before moving on to a broader consideration of the literature which frames this area of interest.

Papathanasis (2012) considers social interaction amongst paying guests on-board cruise vessels. According to this research interaction between guests from different social backgrounds, who occupy differently priced rooms/suites on-board, produces the potential for misunderstandings and, as a result, conflicts frequently erupt amongst cruise ship passengers. Here, contrary to the expectation of cruise ship managers, the manipulation of space and the importance given to social interaction as a prime
consideration in the creation of a unique experience on-board, creates more anxieties than enjoyable experiences for guests.

Moving on to seafarers themselves, the focus of a study by Bailey et al (2006) is a talk sequence that occurs on a ship’s bridge and how this sheds light on the practicalities of communicating in noisy spacious environments. This is argued to have implications for the simulator training in bridge resource management that seafarers undergo in the course of their life at sea.

Sampson (2003) presents the argument that power relations on-board can have serious repercussions for safe navigation at sea. By looking at the power differentials that exist between masters/officers and lower-ranked seafarers, she underlines the serious potential for accidents in environments where seafarers are too afraid to contest the opinion of masters and/or officers, no matter what the circumstances. In particular, she highlights the problems which may be associated with an ‘authoritarian’ style of leadership amongst masters.

Finally, two studies have emphasised the importance of communication between ship and shore personnel in relation to safety management. Bailey et al (2012) demonstrate how communication is currently more effective in relation to the communication of ‘top down’ messages from management to seafarers than it is in relation to the ‘bottom up’ communication that is so key to the effective management of safety on-board (see also Sampson et al 2013). While in a similar vein Xue’s (2012) study shows that the flow of communication between Chinese seafarers and ship management staff is asymmetrical and that ship owners/management tend to dominate and influence communication leaving little room for seafarers to voice concern over issues concerning health and safety.

The studies cited above are helpful in highlighting some of the issues that are likely to emerge in relation to consideration of ship-shore personnel relationships such as: misunderstandings and conflict; the influence of power relations; and the impact of the environment on communication. However, the remit of these studies was limited to the interaction that takes place between and amongst seafarers (Bailey et al, 2006 and Sampson, 2003), or between seafarers and shore-side management staff in the same companies (Bailey et al, 2012, Sampson, 2013, Xue, 2012), or in the case of Papathanassiss, interaction amongst guests on-board.
Evidently, there is a gap to be addressed concerning the dynamics of interaction between shipboard and shore-side personnel and how it impacts on operational matters on-board. This paper, therefore aims to outline the background to a new three-year study of interaction between shipboard and shore-side personnel which is jointly funded by the Lloyd’s Register Foundation (LRF), The TK Foundation and Cardiff University. The purpose of the paper is to identify emergent issues arising from a diverse range of literature which will inform the future ethnographic work to be conducted as part of the research.

**Methods**

In undertaking this review we adopted three approaches. In the first instance we undertook reviews of academic literature and what might be termed ‘grey’ industry-associated literature such as journals, magazines and newspapers. We then followed this with internet searches to access information published on-line. In using the internet as source of information, we undertook a general search using the keywords “social interaction”, “social interaction AND seafarers”, “bridge team management”, and “on-board communication”. The same keywords were used in searching for relevant literature published in scholarly/specialised academic journals (via Scopus2). Finally, we made use of the available, general social science, literature about ‘life and work at sea’, scouring this to identify relevant issues hidden amongst the findings which would not have been picked up using keyword searches as such.

**Emergent Issues**

*Paperwork and its potential to impact on social interaction on-board*

While ‘paperwork’ (which may increasingly be computerised administrative work) is part and parcel of many work environments, at sea paperwork and administration may impinge on interaction if, and when, it comes to dominate workload excessively.

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2 Scopus is a large abstract and citation database of peer-reviewed research literature relating to a variety of disciplines including the social sciences. The database includes details from over 20,500 titles from more than 5,000 international publishers.
In this context it is relevant that several studies have made specific reference to the increased quantity of paperwork on-board. In a paper published in 2003 Sampson and Wu describe the ways in which seafarers regard their jobs as becoming increasingly paper-based and how, in many cases, they resent the ways in which such changes are impacting upon the exercise of ‘seamanship’ on-board. As one seafarer observed:

> How I see it with the paperwork, it’s a jungle […] Too many systems, I can’t oversee it […] Generally I like to sail […] Seamanship? This is not Seamanship [rustles papers] this is horseshit! (Sampson and Wu, 2003: 142)

In a later publication based on different fieldwork undertaken on-board a variety of ocean going vessels Sampson further observes that:

> Captains and chief engineers have found their jobs to be increasingly dominated by ‘paperwork’ or more accurately bureaucratic tasks. This generally requires them to be seated in their offices (dayrooms) at computer terminals […] (Sampson, 2013, p. 94).

Knudsen (2009) also documents this rising tide of paperwork and administration on-board vessels and the resistance to these developments found amongst seafarers. She notes that “when it comes to ‘paperwork’ such as filling checklists or reading risk assessments, various objections [by seafarers] are raised” (Knudsen, 2009, p. 297) and goes on to suggest that not only is some paperwork perceived as unnecessarily bureaucratic and time-consuming, sometimes it is even seen as counteracting safety (op cit). An article in the industry journal *Seaways* further confirms the general view that paperwork can be excessive:

> “[…] there are a number of stumbling blocks in the process of preparing for port calls, not least the different documentation required by ports – often, even when they need the same information, it will have to be entered into entirely different forms, with formats for pre-arrival information varying from a phone call to providing non-zipped Microsoft file 24 hrs before arrival” (Timmins, 2011, p. 26).

Excessive paperwork adds to the demands already placed on seafarers by the fast turnaround of ships and reduced manning levels. As such, paperwork can contribute to fatigue which may have implications for interaction with shore-side personnel.

In this context, it is not unusual to find examples of seafarers expressing the following view that when ships dock there is a need:
“[...] to fill out a myriad of forms for customs, immigration and quarantine which adds further to seafarers’ workload” (Timmins 2011, p. 28).

It is interesting that in this example the opinion is expressed with specific reference to arrival in port as a considerable amount of ship-shore personnel interaction takes place precisely at this point in a voyage cycle. Thus, this would seem to indicate that it is worthwhile investigating the relationship between paperwork and interaction in further detail.

In taking note of seafarers’ distress over this ‘culture of paperwork’ in the maritime industry, we have to consider the context of their discontent. As one master describes this: “All masters will know these situations: cancelling dates to catch up with the working hours in the next port to adhere to; tides; locks… (Zanen, 1997, p. 27).” It is likely that confronted by such paperwork and a myriad of other concerns, the master’s interaction, and indeed the interaction of other seafarers, with any visiting shore-side personnel may be affected, most especially, as in this example, when the master comes face to face with an:

“ambitious port-state control inspector who goes with his magnifier over a well-found vessel which is under time pressure to leave or the surveyor who is still fiddling with his figures when pilot, tugs and linesmen are waiting, etc. (Zanen, 1997, p. 27).”

In other sectors, research has highlighted the extent to which the demands of paperwork may conflict with other demands placed on workers who require time for necessary and effective interaction in the course of their jobs. In the health services, for example, there is evidence that nurses and doctors complain that they don’t have sufficient time to properly look after their patients because they are required to complete too much paperwork (see, for example, Carr and Kazanowski, 1994; Moore and Katz, 1996; Payne et al, 2000).

Taken as a whole, this evidence suggests that paperwork is one aspect of the work-role that should be taken into consideration when we consider seafarers’ interaction with shore-side personnel as there do appear to be clear indications within the existing literature that paperwork may have unanticipated consequences for ship-shore interaction as well as for a number of other areas of work.
The remoteness of the vessel

Despite reductions in the overall length of voyages between ports, brought about by increases in achievable vessel speed in the twenty-first century ships are paradoxically more remote from the shore. This is largely because vessels have become more difficult to access. The International Ship and Port Facility Security Code (ISPS code) has meant that ship visitors are more carefully controlled once a vessel is in port and this can be seen to have reinforced the geographic barriers between ship and shore personnel which are produced by: the international character of the industry; the increased automation of many terminals which has resulted in restricted access to quaysides; and the increasingly remote location of many new port terminals and facilities (Sampson and Wu, 2003).

A study of a container terminal, where the shipping line which was served by the terminal and the terminal operators themselves were owned by the same parent company, is illustrative. Here the spatial separation of the vessel from the terminal caused by the organisation of the ‘yard’ and the restricted access to the yard by all personnel was described as creating a gulf between shipboard and shore-side personnel. Whilst simultaneously regretting the marked lack of interaction between the shore-side staff and sea-staff a manager at the terminal observed at interview that:

The thing is that we are sitting here, and to go down to the ship you have to go around [gestures a long route circumventing the yard]. So it is a distance of [several] kilometres. People don’t do it. (Sampson and Wu, 2003:135)

This lack of regular social interaction between sea and shore staff, even when working for related companies, may well serve to increase the extent to which seafarers feel they are different to, as a consequence of being remote from, land-based workers who were historically and symbolically characterised as ‘landlubbers’ in the UK fleet. This feeling of ‘difference’ and isolation carries the potential to undermine effective interaction and may well contribute to the tensions that can be experienced between shore and sea-staff in the course of face to face meetings. However, the remoteness of the vessel is also likely to diminish the possibilities of such face to face meetings occurring at all and to reduce interaction to that which is facilitated by email access or telecommunications, both of which may negatively impact on the quality of such interaction. As Lightfoot notes, for example, ‘The messages sent by e-mail tend to be more ambiguous and subject to misinterpretation than is commonly realised’ (Lightfoot, 2006: 218). This is, therefore, a
second area that needs to be taken into consideration when exploring the interaction between ship and shore-side personnel. Specifically it will be important to consider whether the limited interaction between seafarers and shore-side personnel, in itself, produces a lack of understanding and poor quality interaction. Furthermore the role of non-face-to-face communication via email and telephone will need to be considered and attention will need to be paid to the limitations and benefits of such interaction.

**Issues of legitimacy: the credentials of shore-side personnel**

As already indicated, work on the ship is qualitatively different from work ashore (see, for example, Baum, 2012 and Sampson, 2013) and there is a prevailing belief amongst many seafarers that some of the shore-side personnel that they deal with, such as pilots for example, should have on-board experience in order to properly understand the shipboard environment.

In this context, evidence to suggest that seafarers might be required to interact with shore-side personnel who are younger than them and who have little (or perhaps no) sea-based work experience, may be of relevance. For instance, a port inspector reports that the current crop of surveyors and inspectors are:

“[… ] retiring with no replacements coming through the ranks. This means that many organizations – e.g. classification societies, flag states, port state control – are using fresh graduates from universities as surveyors and ISM auditors who have little or no shipboard experience” (Wall, 2007, p. 5).

It is possible that age differences and a lack of sea-based experience amongst some shore-side personnel may negatively impact on interaction between shipboard personnel and their shore-based colleagues. Research elsewhere has noted the impact of generation on workforce relations. For example, Oshagbemi quoting Mitchell’s (2000) study of American workers asserts that “age tends to give greater or lesser degree of expression of individualism among the workers with the younger generations feeling more comfortable exhibiting individualistic behaviours”. Mitchell (2000) further suggests that generations matter because of the resulting differences in attitudes and behaviour between two generations (2008, p. 1897, see also Mellahi and Guermat, 2004). Furthermore, the interactional consequences of working with others of a different generation are explicitly referenced in research considering relatively young managers and older subordinates, Uen et al explain:
Young managers with less time in their current position also show more difficulties getting along with senior subordinates because these senior people may feel uncomfortable accepting instruction from junior management (2009, p. 325).

The impact of age difference may be particularly significant in the hierarchical and culturally differentiated shipboard environment (Sampson, 2013 and Harrison, 1975). As a scenario, for example: a master in his 60s, with some 40 years of sea experience, may be required to interact with a port inspector in his early 20s, who is a fresh graduate and with no sailing experience at all. Here, the age and professional-biographical differences between them might influence their routine interaction as the master remains conscious of his seniority and years of experience, while the inspector exercises his authority on the basis of his position. This is just a hypothetical scenario but anecdotes from seafarers who have dealt with “overbearing” young inspectors in combination with research undertaken in other workplaces indicates that it is worth considering the influence of both age and sea-experience in relation to ship-shore interaction.

In relation to pilotage, in particular, there appears to be a prevalent sentiment amongst seafarers that it would be beneficial to bridge resource management if pilots had experience of command prior to joining the pilotage service. Australia and the UK, currently require pilots to be qualified masters. In the case of Australia they are required to have sailed as masters for three years prior to becoming licensed pilots (AMSA, 2013). These requirements are not universal, however, and it is worth considering how pilot qualifications and experience may impact on pilot-master interaction. It may be, for example, that having experience as a master may give a pilot a better understanding of the demands made upon the master and that this could improve interaction between them. As one pilot suggests:

They [pilots] would definitely look in a different way at certain situations in which the master may find himself; and then easily remember their own days as a master (Zanen, 1997, p. 27).

This individual continues that where pilots lack sea-experience “it is important to include items in the pilot’s training that will give him a better insight in today’s shipmaster’s position; so the pilot, who has never been in command will ‘understand’ the master’s position, not only in matters of navigation and shiphandling but also commercial matters” (Zanen, 1997, p. 27).
Language barriers

In the context of a highly internationalised industry, the role of language in ship-shore interaction cannot be overlooked.

Initial meetings, by their very nature, are fraught with uncertainties and people are generally regarded as exerting considerable effort to overcome these uncertainties (Knobloch and Solomon, 2002; Clark et al, 2004; Dockery and Steiner, 1990; Lee and Gudykunst, 2001). As Boucher and Jacobson acknowledge:

Interpreting behaviour during interactions with strangers, or initial interactions, is further complicated by the fact that we possess little information about our partners, increasing our uncertainty (2012, p. 652).

What happens in initial meetings between shipboard and shore-side personnel may be crucial in setting the tone for workable interaction. Communication theorists observe that:

Strangers, upon meeting, go through certain steps in order to reduce uncertainty about each other and decide whether one likes or dislikes the other. […] strangers enter an interaction with high levels of uncertainty about one another (Feeney, et al, 2009, p 491).

However taking steps to reduce uncertainty may not be possible in the context of ship-shore interaction which may: take place under considerable time pressure; occur in noisy environments that curtail the possibilities for effective communication; and take place between people of different cultures.

There are specific challenges associated with inter-cultural encounters where participants are said to interact not only as individuals but also as perceived representatives of their respective cultures. Each participant brings to the interaction a different native language and a different cultural upbringing that is generally unfamiliar to his or her interactional ‘partner’. These in combination with other dissimilarities, including appearance, target language proficiency, and manner of communication, may create a sense of foreignness that can undermine effective interaction (Chen, 2003, p. 184).

Further to this, as Lewis has observed in the area of management studies, “cooperation in the workplace may be affected by cultural predisposition” (2011, p. 964). Compounding these influences is the impact of the transmission of culturally rooted ‘signals’. These lead to the potential for individuals faced with a counterpart from another culture to easily
misread a signal or transmit an unintended message (Morris, et al, 1998, p. 729). For example, in their study of conflict management style between American and Asian managers, Morris et al explain:

A different type of misunderstanding occurs when Asian managers make the error of reading a US colleague’s direct adversarial arguments as indicating unreasonableness and lack of respect (1998, p. 730).

The extent to which such cultural styles underpin interactional difficulties between ship and shore personnel is under-evidenced at present. However, it is apparent that the use of words is significant to ship personnel in their interaction with shore-side staff, including officials, and this highlights the potential for cultural differences (be these occupational, or national) to undermine co-operative interaction. This is, for example, the point made by a British master whose ship was inspected in a European port when he was told by inspectors that the ship ‘was under attack’ for its deficiencies. This did not sit well with the master. He found the expression disturbing.

“I also told him, politely, that I thought the use of the words ‘under attack’ was unfortunate. He denied using them and said that was not his approach […]. He did use those words and everything about the inspection was conducted with that mentality. We were constantly having to defend ourselves against implied accusations of incompetence, indifference and/or deceit, (while trying to remain polite and helpful ourselves) (Nautilus UK Telegraph 2007, p. 16).

An ill-chosen word or phrase in an encounter can be much resented on-board vessels where staff already feel under immense pressure and it would seem that such unhappy encounters between ship and shore personnel may be on the increase:

“[…] the aggressive approach is the attitude we encounter more and more from representatives of most of the authorities who board us around the world […] Nautilus UK Telegraph 2007, p. 16).

In such instances, when words produce hostility, the offended party may reciprocate with what he/she understands to be the same attitude leading to an escalation of poor relations. For example, interpersonal theory suggests that during social interaction, the behaviour of one person invites complementary behaviour from the other person such that individuals alter the interpersonal styles of their interactional partners (Feeney et al 2009, p. 490).

In addition, it could be said that failure to master the English language (as the international language of the sea) might serve as a barrier to sustained interaction with
shore-side personnel. In general terms, poor communication has been identified in a variety of reports, and accounts, as a feature of the bridge team when a vessel is carrying a pilot. The lack of interaction between masters and pilots has, for example, been mentioned in accident investigation reports. Thus, in the case of Sea Empress, “the pilot and the master had not discussed and agreed a pilotage plan and as a consequence neither the master nor the chief officer (whose watch it was) knew what the pilot intentions were (Colson, 1998, p. 24).

In many cases it may not be that language barriers are the primary cause of poor pilot-bridge team interaction. However there are indications that cultural and/or language barriers may be implicated in some instances. In the case of Cosco Busan, the voice data recorders captured very limited interaction between the US pilot and the Chinese master despite the fact that the pilot made it clear that he did not understand the vessel ECDIS. The detailed accident investigation report paints a picture of a hostile relationship between the US pilot and the Chinese master which may have been a result of ethnic/cultural differences combined with language barriers and the individual characteristics of the personnel involved. A quote from an interview with the Captain which is reproduced in the accident investigation report is revealing:

   And then [this] pilot came on-board with a very cold face. Some of them just don’t want to pay attention on us and some of them would not like to talk with us … It seemed the pilot coming on-board was with cold face, doesn’t want to talk. I don’t know if he had a hard day before or because he was unhappy because I was a Chinese.

   NTSB Marine Accident Report, 7 Nov 2007, pp 67-68

This quote is also helpful in reminding us of the potential for racism and stereotyping to impact on inter-cultural interaction in self-evidently negative ways.

**Conclusions**

Human interaction is a complex process which cannot be reduced to a mere exchange of words. Furthermore, in the context of a workplace, interaction may be subject to rather particular constraints and challenges. Lewis for example (2011) indicates that:
“…a group of workers brought together to form a work team may or may not coalesce in an optimally desirable way. Aspects of group variability, such as gender, race, seniority, or perceived competence, may hinder smooth functioning. By their very nature, workplaces constitute controlled environments that impose limits on how individuals within them might behave in groups” (2011, p. 966).

In relation to shipboard interaction between sea-staff and shore-staff the literature points to a number of areas where attention could usefully be focussed in the course of future empirical investigation. Thus consideration needs to be given to the context of interaction including the remoteness of ships as workplaces and the implications of this for relationships between ship and shore personnel. Workloads, and the workplace demands placed upon seafarers, and also upon shore-side personnel, will also need to be taken into account in thinking about the context of interaction and the impact of this on the quality of ship-shore relationships. The perceived legitimacy of the interacting parties (which may be affected by factors such as age and experience) may also be relevant and again this may relate equally to the legitimacy attached to sea-staff and to that associated with shore-staff. Further to this it will be worth considering the duration of interactions between personnel. In this attention will be given to the opportunities for personnel to build relationships over a period of time. Finally we will need to pay attention to the cross-national nature of much interaction between shipboard and shore-side staff and the implications of this for clarity and for confusion in communications.

References


Appendix 1

When referring to shore-side personnel, we have in mind the following but a caveat must be made here. In reviewing literature related to the topic, not all these shore-side personnel are covered. In fact, only inspectors, surveyors and pilots will be mentioned due to the non-availability of materials pertaining to other personnel. But it is hoped that the issues faced by these shore-side personnel mirror to a certain extent the concerns of other shore-side personnel in their interaction with shipboard personnel, or vice versa. The shore-side personnel are the following:

1. Pilots
2. Riding Crews (including 3rd party contractors)
3. Service/ Maintenance Engineers (for example, software engineers)
4. Shore Side Maintenance Crews
5. Stevedores
6. Surveyors/ Inspectors
   i. Vetting
   ii. Flag/port state
   iii. Classification
   iv. Insurance
   v. ITF
   vi. Customs
   vii. Police
   viii. MLC
   ix. Accident investigators
   x. Company Superintendants
   xi. Customs