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# Seafarers and Growing Environmental Concerns: To Comply or Not to Comply – Choices and Practices

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#### Abstract

This paper reports on my tracking of the mobility and multiplicity of seafarers' perceptions in their journey from the normality of 'dumping at sea' practices to more responsible environmental behaviours. It focuses, in part, on how seafarers perceive the marine pollution and their aspirations to protect their own countries' marine and coastal environments. The arguments presented in this paper are based on a wider qualitative study that involved talking to seafarers worldwide in different work settings (i.e. shipping companies) and working onboard fleets trading in various parts of the world. Whilst marine pollution is depicted by seafarers as a 'beast' that needs mitigation, they are still divided on the optimum way forward. They assign some blame for pollution to new entrants to the profession, to uneducated, untrained, or ignorant seafarers, to some shipping companies, and even to some countries for not adopting appropriate or adequate environmental programmes to protect their marine and coastal environments. Such themes emerged from the data gathered by conducting qualitative semi-structured interviews with seafarers from different countries, companies, and areas of trade. Moreover, interviewees in this study are frequently resorting to 'demographic based' backgrounds prioritising how preventing marine pollution from ships could save their countries' coasts, beaches and shorelines and how this would reflect on their national economy and children's health. This paper aims to trace the source of what could be termed 'environmental integrity' perceptions and to contribute in uncovering the motivations, interests and difficulties faced by seafarers in relation to compliance practices with MARPOL as an exemplary marine environmental convention.

# **1.0 Introduction**

This paper highlights the perceptions and compliance practices of seafarers when interacting with one of the pioneer and major marine environmental conventions which has been in force for more than quarter of a century (i.e. prevention of pollution from ships known as MARPOL). Such perceptions can significantly open a communication window to policy makers to verify the impacts of compliance and enforcement difficulties on the perceptions and actions of regulatees in such an exemplary globalised industry. Throughout this paper I argue that seafarers are continuously evaluating (often critically) and using their job's extremely mobile nature to monitor the status of the marine and coastal environments in various parts of the world. Further, this continuous monitoring of the compliance levels of countries, companies and peers, creates and establishes a set of perceptions which might

govern and direct their own short and long term environmental behaviour and compliance practices.

#### 2.0 Methodology and Methods

The arguments presented in this paper are based on a wider qualitative study that involved talking to seafarers worldwide in different work settings (i.e. shipping companies) and trading in various parts of the world. The semi-structured interviews conducted with seafarers aimed - among other issues - to verify the difficulties regarding MARPOL compliance requirements (focusing on Annex I – oil) among active seafarers. The main aims of this wider study could be summarised in the following:

- To identify how involved parties view the pollution problem differently in order to fully appreciate the compliance dynamics and to, eventually, seek ways to address them;
- To verify the impacts of different implementation and enforcement levels in various geographic and organisational arenas on the perceptions and environmental practices of seafarers (i.e. compliance to MARPOL).

To achieve these aims, a set of carefully designed interviews (total of 40) were conducted with seafarers from various parts of the world whilst their tanker ships were in port or at a Maritime Education and Training Institution. The shipping companies varied between national flags and 2<sup>nd</sup> registers to open registers - also known as flag of convenience countries - and voyage patterns ranged between coasters to deep sea going vessels. Respondents presented three main types of perceptions in relation to the marine pollution and compliance namely 'economic-based' perceptions, 'value-based' perceptions, problems and 'socio/political-based' perceptions. Such perceptions, in many cases, acted as barriers to being able to comply with MARPOL even when the vast majority of respondents were clearly willing to. The following sections present and discuss the data coded under the main types of characterisations, perceptions, and practices, focusing on the implications of the formation of such established perceptions on the environmental practices not only for seafarers, but also to shipping companies and countries as well. For the sake of clarity, compliance with MARPOL was chosen to depict clearly the problems faced by seafarers in

their daily attempts to fulfil the statutory requirements of this major environmental convention in force for almost three decades. This is presented in the form of different themes/barriers to sound compliance practice resulting from seafarers' experiences with issues regarding marine pollution in different shipping companies operating in different geographic areas, while facing different environmental priorities adopted by state parties worldwide.

#### 3.0 The Economic/Cost Barrier

This was one of the most prominent barriers to sound environmental compliance detected amongst seafarers in this study. In order to interpret and understand the implementation and enforcement difficulties encountered by different countries, seafarers adopted a dominant preconception that differentiates between affluent European countries and developing countries. They often linked the political will of nations to protect their waters from pollution with the availability of economic resources. Doing this, they reported how many affluent nations they visited are performing better than less developed counties on the MARPOL enforcement front. However, when some respondents observed high levels of pollution in the territorial waters of some affluent Gulf nations, and lack of compliance to MARPOL requirements for providing port reception facilities in many EU ports, this triggered frustration and ambivalence about the actual reasons behind what they perceived as institutional 'passivity' or lack of political will to protect the marine environment. An experienced Middle Eastern Chief Engineer working onboard a ship trading between the Gulf and European ports contends:

...in our areas...I mean the developing countries regions...our seas have no respect...have no value...even the Europeans when they come to our waters...they do whatever they like.

This respondent is referring to the scarcity of oil dumping, monitoring, and surveillance capabilities, in developing countries due to the lack of political will of such nations - as he perceives - to protect their waters. The argument is that seafarers experiencing such national and/or institutional practices tend to become complacent - as evidenced from this study - in their own MARPOL compliance activities asking questions such as: "no one cares here! why should I care ?". However, the problem takes a slightly different form in the EU region as

interpreted by a European Chief Officer (trading in EU waters only) when explaining his views about non-compliance practices:

...a lot of us have to deal with the fact that maybe some of these companies have a prohibitive cost ...they don't want to pay the cost...and the seafarers are finding it....very difficult to get rid of certain waste products...the only place you can get rid of it in the continent (Europe) is in the barges....but for a charge and not cheap either.....

This senior ranked officer, while reporting the non-existence of such facilities in many of the ports his ship visits, interpreted also that one of the reasons may be the very high cost that certain shipping companies incur to use the port reception facilities (for discharging oily waste). Such an established 'prohibitive' economic barrier was utilised by some respondents trading in this area as a justification for their own oil dumping activities at sea in breach of MARPOL.

#### 3.1 The Regulatory Enforcement Barrier

This dominant perception tends to develop among seafarers having sailed for a number of years and interacting with different countries adopting different environmental priorities. In other words seafarers cannot ignore the different levels of rigor countries adopt in enforcing MARPOL. In the context of regulatory compliance and enforcement, scholars contend that any regulated entity weighs the marginal costs of compliance with its marginal benefits. Such benefits often relate to the accepted value of fines avoided, which in turn is a function of the probability of inspections conducted, the likelihood of a violator being found, and the magnitude of penalty imposed (Brehm and Hamilton 1996). The scarce literature focusing on regulating marine pollution on the international level suggests that maritime policy makers (mainly at the International Maritime Organisation - IMO) had to choose between 'effectiveness oriented' and 'compliance oriented' information. The former is mainly used to assess whether regime members (i.e. state parties) are achieving regime goals, while the latter is to assess whether particular actors are fulfilling regime commitments (Mitchell 1994, 2003; Mitchell 1995, 1998; Raftopoulos 2001). Initial observation of IMO's policy concerning MARPOL compliance deficiencies shows an inclination towards the 'compliance oriented' notion. This notion is stipulated by responding to the rise of environmental protection demands with amending the convention and adding new protocols, despite many state actors

still failing to fulfil the basic treaty requirements (e.g. providing adequate port reception facilities mandated by the classic Annex I) either due to inadvertence or in-capacitance (Levy et al. 1993; Mattson 2006a).

Focusing on the case of MARPOL compliance, previous research argues that many governments - while being member parties of the convention - are either unwilling or unable to fulfil their obligations according to the convention (Brookman 2002; Mattson 2006b; Sahatjian 1998). Such practices by governments intermingled with corporate economic determinism and micro-situational difficulties on board ships (e.g. difficulties in dealing with overboard discharge monitoring equipment), elicits, as this study suggests, the development and establishment of a set of salient perceptions among seafarers as a social and professional group. Perceptions raise many doubts about the seriousness of these key actors (i.e. governing bodies and state parties to MARPOL) and whether they are genuinely pursuing environmental goals or just accommodating contemporary political agendas. Being influenced by such perceptions and experiences, many seafarers build up a significant level of distrust regarding the intentions of global policy making institutions governing the marine pollution agenda. The argument is that this distrust is not yielding significant improvements in compliance practices with the growing body of marine environmental regulations mandated by international governing bodies such as the IMO. Moreover, amongst all these tensions, when contemporary seafarers feel the 'global' cry to protect 'the environment' they feel more committed and stressed especially if they face any prohibitive barriers to comply. These types of 'global' stressors are discussed below.

### 3.2 The 'Globality' Factor / Barrier

This section discuses the political and environmental priorities/pressures as perceived and voiced by seafarers representing a set of 'global' factors affecting their general understanding of marine pollution and compliance problems. In this context, many participants stressed the importance of the power of politicians and the importance of a country's political will to materialise and enforce the globally adopted marine environmental conventions. Because no questions were explicitly posed on this topic, interviewees who talked about issues of 'global' environmental concerns did so autonomously. Many seafarers from various nationalities and shipping companies commented on the importance of 'global' political agendas and various regional and local levels of implementation and enforcement of the MARPOL convention.

This unanticipated theme (at the beginning of the study) may be considered as another source of stress and pressure - as discussed below – for a transnational workforce in a globalised industry.

In contrast to policy makers, seafarers are often observed to evaluate the effectiveness of marine environmental conventions and especially the MARPOL convention in their own way. Interestingly, they are engaged in their own evaluation of the attitudes and behaviours of countries, shipping companies, and their peers in relation to MARPOL daily compliance. Their tool for this evaluation is by simply observing the sea water parameters and coastal areas in their own countries and comparing this with different coastal waters and ports of the world in terms of which is more polluted. Following these comparisons and observation autonomous tasks, it is clear from the data analysis that many respondents are also falling under the influence of 'global' public discourses intermingling issues such as 'global warming' and green house gas 'GHG' emissions with marine pollution problems in a rather confused way. In their accounts, seafarers are also ambivalent about the role of the shipping industry in protecting the marine and coastal environments. This 'confused' perception is expressed clearly by an Asian Second Officer when asked about the reasons behind protecting the marine environment in general:

Well, it is what we know at the moment about the global warming...that is the main issue I think...there are so many phenomena happening because of this global warming...

However, along similar lines, a Nordic Master in the same company summarises the 'global' pressure he feels with this explicit account:

...the more talk out there about the environment...the more you feel the pressure to apply...and you don't want to do things that will result in a pollution...you want to behave as good as you can....

This perceived 'global' pressure is seen by most respondents (from all nationalities contributing to this study) as being dynamically progressing during recent years and some respondents go as far as speculating that it is going to be harder in the years to come. This theme is clear from the account of an experienced Chief Engineer referring to criminalisation of seafarers in the aftermath of any pollution incidents:

... regarding these incidents or accidents that are happening... and I can say things are going to be harder in the days to come as we have all these environmental issues .... all these rules and regulations coming in...

In this context, my argument is that adding a global 'macro' socio/political stressor to the 'micro' situational compliance atmosphere on board ships represents significant pressure on individual seafarers as they try to fulfil perceived social and professional roles. A view supported by previous shore-based regulatory compliance studies which argued that this multiplicity of social and professional commitments can lead to a significant level of stress on regulatees potentially affecting their professional performance, especially when they try to pursue, simultaneously, incompatible goals (Haines and Sutton 2003).

#### 3.3 The National Theme

Interestingly, amidst all the above mentioned tensions, many seafarers have chosen a 'national' self representation when asked about their feedback regarding compliance levels with marine environmental regulations. For example, some European respondents are claiming that their care for the environment was due to their native countries' culture and how they were brought up and taught how to preserve the environment in their childhood. In employing such a position they are acknowledging their countries' efforts for environmental protection, in general concluding by showing their national superiority in environmental issues. This can be seen, on the one hand, from the explicit account of a Nordic Chief claiming his country's superiority in environmental protection:

...for example (country name)...we divide our garbage to glass, paper...what do nine million people do...we do our best...but you think what are they doing in (another densely populated developing country name)... nothing....

On the other hand Asian and Middle Eastern seafarers reported their despair of the lenient environmental policies adopted by their countries regarding the protection of the marine and coastal environments (i.e. territorial waters, beaches, ports etc.). The account of an Arab Chief Engineer depicts the state of the marine environment in some Arab countries and the associated feelings of despair: ... I feel great pain when I see our Arab countries' ports...the pollution in it can be easily seen with your bare eyes. It is a disgrace ...

This account - and many others - depicts these general feelings of victimisation that could be sensed in many interviews with seafarers from less developed countries. It is clear that such feelings contribute, to a large extent, to the establishment of 'interest based' perceptions that negatively impact on environmental practices of seafarers in various geographic areas. In other words it elicits negative perceptions that may lead to a general feeling of despair - as sensed from the account - among seafarers witnessing such persistent pollution especially when this pollution is observed in their own countries. My argument is that these evaluating/monitoring processes ultimately result in more dumping activities in these sea areas belonging to such countries, which end up to be perceived by seafarers as environmental pariahs.

To explore these issues further, differences between developed and developing countries were explored in the literature in an attempt to locate the links between seafarers' sociodemographic variables and their behaviours towards the marine environment. This was explored in a more holistic approach about differences between developed and developing countries citizens' behaviours toward the environment in general. Some of the existing literature suggests that; in developed nations the government and industry's rising level of environmental concern are mainly due to public perception and demand for corrective and preventive actions. The case of developing countries differs as pro-environmental behaviours are mainly emerging from government and Non Governmental Organisations (NGOs) rather than from the public at large (Rice 2006). Bearing in mind the internationalised structure of ships' crews in the contemporary shipping industry, and within the context of different behaviours towards the environment, a very relevant study by Inglehart (1995) implied that the inhabitants of such poorer countries are less likely to demonstrate concern and proenvironmental behaviour. This study also tried to identify the links between sound environmental behaviours and demographic variables, beliefs, values and religiosity (Inglehart 1995).

In this context recent studies identified some pivotal elements affecting a person's engagement in Environmental Responsible Behaviour (ERB). This person must feel that their

efforts make a difference, and avoid the feelings of helplessness which depress proenvironmental behaviours (Kaplan 2000). This body of literature also suggests that there are differences between peoples' perceptions of the environment within a certain country and between countries. Such comparative studies provided some explanations to different seafarers' perceptions about marine pollution and compliance problems, which proved to be helpful in studying seafarers' environmental compliance practices.

#### 3.4 The Shipping Companies' Theme/Barrier

Ship Masters, in this study, clearly perceive themselves as targets of contradictory coercive environmental policies adopted by their shipping companies. They, while positioned in command of their ships, strongly feel that they are being remotely managed much more than ever with the rise of environmental concerns and the resultant regulatory instruments. Such instruments usually mandate certain compliance elements on shipping companies who try - at times - to evade and/or to reduce the cost of their implementation by adopting implicit dumping policies across their fleets. These evading policies can be popular among seafarers especially when they are overworked, fatigued or when they feel over regulated. The feedback of a European Master when asked about new environmental policies of his company exemplifies the feeling of 'over regulation':

I can tell you...I don't need it....because I have the feeling inside to protect the environment... [...]...for myself ...the ISM code guide the company....for good guys never necessary...now we have the paper work growing and growing......I can't manage anymore... the company just adds to our agony with this array of environmental stuff....

Along similar lines, some shipping companies, taking advantage of the insecure employment situation and deregulation of the maritime industry, keep switching between 'complete control' and 'semi-autonomy' management models causing more confusion and stress to ships' Masters. Other companies (the ones mainly flagged at open register countries for their lenient taxation and labour laws- also known as flag of convenience countries - FOCs), for example, are reported to put the ship's Master in the position of "*handle the situation Captain*" (quote by one Master) in relation to oily waste disposal which is widely perceived as a deceptive form of "responsible autonomy" by Masters (Willmott 1993). Similar experiences re-emerge from the accounts of ships' Masters and other members of staff during

interviews affecting their understanding of their daily compliance tasks on board ships. Following this, it is reasonable to argue that such experiences lead to the establishment of salient negative perceptions regarding compliance practices, and contribute to the building up of an un-healthy environmental culture on board ships.

Taking this point further, it is clear, on the one hand, that corporate and management environmental strategies in some shipping companies (mainly FOCs) compel concentrated and stressful work experiences among seafarers. It clearly disrupts the basic social aspirations of seafarers as humans and as professionals amidst the 'global' cry to preserve/protect the environment for future generations. This resulted in accounts and feelings of tension, anxiety, contradiction, confusion and distrust, explicitly and implicitly expressed in this study's data. On the other hand, EU national flagged ships are a clear example of corporate regulation which achieved many of its goals. However, the question still remains: was the intent to produce seagoing staff that are competent and committed to corporate strategies; or to produce staff identities that are only receptive to managerial? For example, in this study, Masters of EU flagged ships perceived the 'quasi-autonomy' given to them by management as 'trust and liberation', while Masters of FOC ships interpreted any form of autonomy as a 'trap' that could lead to 'self-incrimination' in case of polluting the marine environment either intentionally or accidentally.

#### **4.0 Conclusion**

Within the context of enhancing environmental compliance to marine environmental conventions, seafarers viewed dumping pollutants overboard as a non professional as well as a non ethical act. However, as professionals in the current competitive shipping market, they neither enjoy being autonomous (through their involvement in power relations and regulatory discipline), nor fully alienated from the professional values from which they derive their environmental practices and around which they articulate their personal and ethical desires.

Trying to cope with such demands not only creates a conflict between seafarers' personal interests (professional excellence) and being 'compliant' to MARPOL as an example of an established marine environmental convention, but also with a set of growing 'global' environmental values dominating today's world. As a result, seafarers as a global work force

appear to suffer from ambivalence regarding MARPOL compliance practices, especially when being employed by a very cost-conscious industry in a volatile labour market (Donn and Morris 2001; Wu and Winchester 2005). According to this study, shipping companies tend to mask their dominant commercial ethos by embedding it in counter-norms and unwritten policies rather than in formal management control systems (Bloor and Dawson 1994; Kosmala and Herrbach 2006).

This research suggests that one of the major challenges for seafarers is trying to fill in the gap between compliance demands, professional practice, and personal interests which require all stake holders to fulfil their social and legal obligations. While most shipping companies are largely driven by their economic revenue and competitiveness agendas, some are choosing to force their seagoing staff to solve waste disposal problems in the most, as they term it, 'economic' way possible. At the same time, many countries have also chosen to limit their investment in providing 'adequate' reception facilities as per MARPOL requirements (both developed and developing as reflected from respondents' accounts), or to provide proper surveillance for their coastal and territorial waters. These implementation and enforcement difficulties clearly reflect on seafarers' understanding of the whole marine pollution issue.

On micro-situational and daily compliance levels, one of the findings of this study is the detected struggle in seafarers' accounts that their persistent attempts in trying to link a sense of trustworthiness to higher ranks on board, is mixed with fears of disappointing them. In doing this, they are attempting to avoid being overwhelmed with helpless feelings in relation to their personal aspirations (i.e. to stop polluting the marine environment). On a wider level, seafarers are clearly influenced by 'global' environmental discourses which seem to have added pressures to their personal and professional demands. The data provides evidence of their attempts to balance between one's satisfaction of doing a 'good and professional' job, with the potential guilt resulting from committing 'back stage' or environmental non-responsible behaviours as demanded by their corporate masters.

From the above discussion, I may argue that the established perceptions presented by experienced and new entrants to the seafaring profession in relation to countries, companies and peers are, to a large extent, a result of global, managerial and micro-situational compliance experiences. Such experiences -at times- force the regulatees to re-interpret the whole environmental legislative process in the maritime sphere and question its legitimacy.

A more in-depth understanding of such perceptions may aid the maritime policy makers to reconsider their compliance monitoring systems associated with current and future marine environmental conventions. However, so far, for seafarers, it is clear that they are continuing their attempts to protect the beautiful ocean from the pollution beast.

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