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WORLD MARITIME UNIVERSITY

Malmö, Sweden

**ON BOARD COMMUNICATION
PROBLEMS DUE TO THE LACK OF A
COMMON LANGUAGE**

By

MIGUEL ENRIQUE CLEMENTS

Argentina

A dissertation submitted to the World Maritime University in partial
fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

in

**GENERAL MARITIME ADMINISTRATION AND ENVIRONMENT
PROTECTION**

1996

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

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ACKNOWLEDGMENTS

To write this dissertation would not have been possible without the invaluable help and guidance of several people.

I would, therefore, like to express my sincere gratitude to Dr. Kit Porter who helped me during the first steps of my research.

I remain in debt with Clive Cole for his continuous guidance and help.

I wish to thank Jan Horck for his assistance.

I would like to express my gratitude to John Burne, Susan Wangeci-Eklöv, and Cecilia Denne for their dedication and help.

I am grateful to Inger Battista for her comments and advice.

I wish to express my gratitude to Diane Factuar, Guanghuang Ye, and Edgar Martinez for their comments.

I wish to thank Dr. Ulla Thagg Fisher and professor Lars Hjelm from Lärarhögskolan of Malmö for their assistance.

I wish to thank Hans Broby Hansen from A.P. Møller for his prompt response and assistance.

Finally I wish to express my gratitude to my course professor, Theodore Sampson, for his initial guidance and support on the performance of this paper.

ABSTRACT

On board communication problems due to language barriers have been affecting maritime safety during the past years.

This problem is found on board ships having multilingual crews and a lack of a common language. It increases during emergency situations when people must react as fast as possible under conditions of extreme pressure.

In the special case of passenger ships the lack of a common language can make emergency situations become critical. Reviewing the “*Scandinavian Star*” disaster, examples of on board communication problems because of failures in the use of the English language can be clearly found.

After the *Flag of Convenience* criteria was adopted by shipowners, multilingual crews became very common on board all kind of ships, and language and even cultural problems, which seldom used to happen, started to take place. It was not until *Flag of Convenience* came into the maritime business that problems related to crew communication started to receive some considerable attention.

This work will focus mainly on the human aspect of the problem, and will try to analyse the problem itself and the attention that the different branches of the maritime society (shipping industry, IMO, maritime academies) has given to it. Argentina, author’s country, will also be analyzed.

Finally, it is not the aim of this paper to demonstrate that the lack of a common language is the main cause for accidents on board ships, but to state that it must be highly considered as one of the issues influencing maritime safety.

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INTRODUCTION

Since the beginning of time humans have tried to communicate with one another and through this languages have developed. In the early years of humanity a tribe used to speak a unique language so there were no problems for the members to communicate between themselves. But when for the first time and because of its nomadic customs, a tribe met with another tribe communication difficulties commenced.

Henceforth, humans have strongly tried to improve mutual communication. Many different languages have been developed throughout the centuries, but humans have always looked for a common language that can be used as a link. Latin may have been that very first common link as it was the first spoken and written method for universal understanding. Currently, the English language has started to take that place. The International Maritime Organization (IMO), as many others of its kind, has three official languages, but English is at the moment and according to practical use, the only one universally accepted.

A common language is the answer to the necessity of humans to communicate with each other, this means to understand each other. When there is no common language to be used communication misunderstandings appear and difficulties and problems of many kinds take place.

When men started to sail they found that communication with those on land or with another ship, mainly if both the land station and the vessel were foreign or did not fly the same flag, resulted in problems. To solve these problems seamen have developed codes using flags or light signals.

In recent years seamen have started to use English as a common language in order to improve communications with foreign land stations and / or with foreign ships. This kind of communication (bridge to bridge or bridge to coastal station) is made in most of the cases by officers who normally have an adequate command of the English language to carry out this basic type of communications.

Just fifty years ago communication problems on board ships between crew members rarely happened since they all spoke a common language (at that time fleets were national, and sailors belonged to the same country, or came from ex-colonies i.e. British officers with Indian ratings). But after shipping companies, due in most cases to economic reasons, started to adopt the criteria of *Flag of Convenience*, crews became multilingual and communication problems commenced. Today this problem is more relevant on board passenger ships because the result is the loss of lives.

No precise statistic is available with regards to the number of situations or potential accidents happened on board that may have had communication problems because of the lack of a common language for a cause. However, there is the perception that the situations affecting maritime safety, in which language problems are involved, constitutes a considerable number. The "Scandinavian Star" disaster have called the attention of many sectors of the maritime activity and many concerns have been brought to the floor; language difficulties is one of these concerns.

Ro-Ro passenger ships have shown difficulties in the use of a common language on board. As stated before this was the case with the "*Scandinavian Star*", in April of 1990, where the crew were mainly Portuguese with some Filipinos, all with a poor command of English or even none at all. The members of the crew were therefore not able to communicate with the passengers who were Norwegians in majority, as it was stated in the Official Report produced by the Norwegian Government (NOR 1991:1E, pages 88-94).

Sometimes humans do learn from experience; but sometimes they do not. The "*Scandinavian Star*" caught fire in March 1988 whilst sailing from St. Petersburg, Florida, to Cozumel, Mexico. The fire started in the engine room. The motorman who saw the leak of fuel oil was Honduran and was only able to communicate with the watch engineer, who was a Filipino, with hand signals. The crew was mainly Portuguese and Filipino and during the fire they could **not** make themselves understood to the passengers, who were mostly American, because of their low level of English. There were no casualties in this accident. Two years later, the fire that the ship caught in the Baltic Sea caused 158 fatal casualties. The inability of crew members to communicate with passengers was present in both events, as was stated by the NOR 1991: 1 E, and by the U.S. National Safety Board 1988 report on the fire on board the "*Scandinavian Star*".

The recommendations made in 1989 by the National Safety Board in a study about safety on passenger vessels covered many aspects from technical to training and professional skills, and were related to vessel maintenance, fire protection, and crew qualifications. Most of these were not implemented by the "*Scandinavian Star*" at the time of the second fire. The National Safety Board believes that if those safety recommendations had been implemented, the loss of life would have been significantly reduced (NTSB/SIR-93/01, 1993, page 4). One of the recommendations was on the capacity that crew members must have to communicate between themselves and with passengers in a common language.

On board communication problems are increasing every day. The case of the "*Scandinavian Star*" is one of the many examples of communication problems on board ships carrying multilingual crews, as it will be seen in the pages to come. At IMO, in an attempt to face the problem, the 18th Assembly adopted Assembly Resolution A.770 (18) "Minimum Training Requirements for Personnel Nominated to Assist Passengers in Emergency Situations on Passenger Ships. Also, and according to IMO News No 4 (1994), a proposal to review safety aspects on board Ro-Ro passenger ships concerning, among other things, on board communication

matters when ships are manned by mixed crews, was presented to the Chairman of the Maritime Safety Committee (MSC) by IMO's Secretary General. Furthermore, the revised 1978 STCW Convention appointed some minimum standards regarding the command of English that some of the crew members must have. Finally, a working group appointed by IMO is expected to complete its work on an expanded version of the Standard Marine Navigational Vocabulary by 1996; the new version will be titled "Standard Marine Communication Phrases".

But are all these initiatives from IMO enough to solve the problem of communication within mixed crews?; and is the solution to come only from IMO?. What to expect from the shipping industry regarding this problem? And what about those maritime academies who are the major providers of seafarers to the world fleet, what are they doing to improve the current situation?

Furthermore, it has also to be considered that language barriers on board are not only a matter of understanding orders or reading instructions properly; other kinds of situations concerning the social and cultural aspects may take place on board. It is not only the language itself which can create problems within multilingual crews. Socially conflictive situations may arise because of different nationalities or different cultures, or even because of different religious beliefs.

Therefore, it can be appreciated that language barriers on board, and the problems that they can create in the communications between crew members, are presently a very important subject not only in technical-operational matters but in human social behaviour, and that although a common language may be necessary on board there are also some sociological aspects which can not be left aside.

CHAPTER 1

THE PROBLEM

1.1 Addressing the problem of communications on board

People who are involved in maritime activities have heard, and surely more than once, that most accidents are caused by human error. The percentage varies but 80% is the figure most usually heard and the most widely accepted. Language barriers that usually lead to communication problems among crew members are a contributor to the so called "human factor". Even though statistics are not accurate with regards to language issues, there are indeed a large number of accidents that give clear advice, and justify the fact that language difficulties might be considered to seriously harm maritime safety.

Flags of Convenience have been the main cause to bring about the multilingual crew phenomena, and multilingual crews spread onto the maritime scene the problem of seafarers being unable to communicate with one another. For reasons that will be presented later, multilingual crewing is here to stay in the maritime business, so no one can think national crewing is a solution for solving the problem of communication on board. Discussions have to be held and analyses made accepting the premise that the solution, if any, is to be found by placing multilingual crews in the equation.

In order to try to understand the size of the problem let us start by analysing the issue of communication between people who speak the same language.

First of all language can be defined as "A system of communication which consists of a set of sounds and written symbols which are used by people of a particular country or region for talking or writing in" (Collins Cobuild English Language Dictionary, 1994, page 809).

To put it simply, those sounds and symbols mentioned in the definition are used to make words and these words are used to construct sentences. The words are then put together in a proper order so that they can mean something that people using the same system will be able to understand. However, in almost all languages there are words that have different meanings (and therefore, the sentences will have different meanings too). An example in English is the word "*cap*" which is a soft flat hat, but that also means a small amount of explosive that is wrapped in paper and causes a small explosion when it is fired; and if one looks into the American slang, a police officer is also called a cap. Going now to Spanish, the word "*banco*" not only means a seat usually found in parks but also a place where people can keep their money and savings.

Finally, and in order to give examples of the three official languages at IMO, in the French language the word "*cap*" also means a soft flat hat (like in the English) but it is also a large piece of land sticking into the sea.

Referring now to another very important language, not an IMO official language but one of the United Nations official languages, which is Mandarin Chinese (the language spoken by the 90% of the Chinese population, i.e. about one billion people), the word "*shu*" means book, and also means to write. If one looks into the Filipino, an important language in maritime activities considering the huge amount of seafarers of that nationality, is "*mahal*" which means love or dear and expensive.

There is also the case of people using the same system of communication (which means that they speak the same language according to the above definition), but using different words to describe the same thing. For example, an American citizen will call *eraser* a soft thing that is currently being used for deleting words or symbols

placed in written form on a piece of paper, whilst a British citizen will call the same object a *rubber* usually understood by Americans to mean condom.

False friends are another interesting subject. According to the Cambridge International Dictionary of English, a false friend is: "A word which learners often confuse with a word in another language because the two words look or sound similar, but have different meanings". *The French word "actuellement" and the English word "actually" are false friends*" (page 500). Another example of a false friend is the Spanish word "*argumento*" and the English word "*argument*", both sound very similar but while the first one means a story or an outline, the last one means a disagreement over a particular matter between two or more people. One may find false friends between the English language and several other languages as: Greek, Japanese, Italian, Korean, Swedish, Norwegian, Portuguese, Polish, and German. For example, and taking the Portuguese language (Portuguese seafarers are very often an important contributor to mixed crews), the Portuguese word "*casualidade*" and the English word "*casualty*" are false friends, but, the former one means fortuity or chance, while "*casualty*" is a killed or injured person in a war or accident.

When words are put together in a sentence, i.e. in context, it is easier to understand the meaning of them. But, again, in several cases, and because humans are not machines and therefore they have different skills, two or more people speaking the same language will understand different things from what has been said to them by a speaker. This can be demonstrated by placing a number of persons in a row where the first one is given a statement which he has to transmit to the second one and this one has to repeat it to the third one and so on. When the message arrives to the last person the output is usually something very different from what was said by the first person in the row.

The military have learnt from experience that even if a common language is being used, there is the possibility for a misunderstanding, so in order to avoid potential

operational mistakes that could cause loss of lives, they use procedures where the sender of the message asks the receiver to repeat the message.

In relation with the aforesaid, Captain Brenan King an MSA(N) 96 WMU student, placed a clear and real life example of people misunderstanding a message. It is common, when speaking English, that a pilot conducting a ship to its berthing place, gives the order "Stop both" meaning that port and starboard engines must stop. The duty officer may understand "Stop port" and therefore the starboard engine will continue running. By the time pilot and master may realised that, it could be too late to stop the vessel to go aground.

Intonation is another aspect to be considered when writing sentences. The way intonation is done when pronouncing a sentence may lead to different interpretations.

Referring now to how words are put into context, the case of English written instructions placed on products made in Japan to be sold in the United States some years ago, may serve as a useful example. The instructions were in English but written by Japanese people, so it was difficult for American customers to understand *Japanese English*. This situation grew up to such an extent that many Americans stopped buying Japanese products for the simple reason that they could not understand the instructions. Eventually the Japanese had to start writing the instructions in American English (Porter, 1995). Interestingly, poor language of this sort often in the customer's eye reflect the quality of the product, i.e. the customer sees a lack of attention to detail (the poor language) and assumes the same lack of attention applying to the product. This was clearly wrongly founded when applied, for example, to Japanese cars.

The aforesaid demonstrates that people speaking the same language but belonging to different countries or different regions within a country may find it difficult to understand each other. For example, talking about the same country it is known

than the English from Texas sounds different than the English from New York. Similarly, the English spoken in the south of England is different from that spoken in the north. In my personal experience attending regional meetings in South America it is difficult for an Argentinean to understand the Spanish that a national from Paraguay speaks (even though the countries are neighbours).

If all the above applies to people speaking the same language, it is easy to infer what extensive communication difficulties people not speaking the same language may have to overcome, when trying to communicate with each other.

It is very possible that people with a poor command of a foreign language will develop a shy behaviour and will tend to hide themselves when being asked in that foreign language about a subject, even if they know the issue from the technical point of view. For example, a seafarer with an insufficient domain of English who is asked about how to repair something or what the cause of a failure could be, will find himself driven into discouragement because of his inability to communicate his technological knowledge to others.

To summarise, language difficulties among people speaking the same language exist. Many more difficulties may be found among people not speaking the same language and having a poor command of a certain language which is used as a link.

Nowadays it is common to find multilingual crews on board ships, and it is also common that not two but many different languages are present. So it is easy to imagine the wide sort of problems that may arise when a vessel has, within its crew, a considerable percentage of seafarers that are not able to communicate with each other, and also unable to understand orders. This is even worse when an emergency takes place and quick response is required. In these cases language difficulties may lead to very dangerous situations from the point of view of maritime safety. It is well known, and it has been mentioned before by Moreby (BIMCO Bulletin 2/93) and Lord Donaldson (Donaldson Report, page 100) that people panic

in their own language during emergency situations. Even if crew members have an elementary domain of a certain language which is usually spoken on board they will tend to speak in their mother tongue in an emergency situation. So if this is the case of a fire on board a tanker carrying a multilingual crew and, let us say, seven different nationalities are present within the crew, it is very possible that seven languages are going to be heard on board during the emergency.

If human error has proved to be the cause of about 80% of accidents affecting maritime safety, that language difficulties are recognised as human failings, and that it seems that multilingual crews will continue to stay on the scene, then it has to be accepted that a certain degree of importance must be given to communication problems on board ships as they contribute to the human factor.

Some case studies that will be presented in the next section will prove that maritime safety is very closely related to communication problems on board.

1.2 Case studies that are relevant to the subject

In recent years, people involved in maritime activities has heard and read many times, up to an extent that no quotation is needed, that if a common language is to be promoted on board multilingual crew vessels this should be English. At the same time it is extremely rare to hear, or read in the specialised press, about communication problems on board involving any other common language than English. This is the reason why the case studies that follow, which intend to demonstrate the communication problems arising from language difficulties on board, are related to English.

1.2.1 Misunderstandings inside the winch room

The author of this paper used to work as operation officer on board oceanographic research vessels carrying Argentinean crews and American scientists. Once I was

told that there was a minor mechanical problem in the winch room which I went to investigate. By the time I arrived at the winch room the problem was not longer a minor one but instead it had developed into a major problem, but certainly not because of mechanical reasons. There were language problems inside the winch room.

The Chief Scientist was discussing with an Argentinean technician about how to solve a problem in the winch; they were saying rather the same things but in different languages (the first one in English and the second one in Spanish) and the tone of the discussion was getting louder and louder. There was also an American technician taking part in the discussion; suddenly he took a tool from the toolbox with the intention of trying to turn the discussion into some work. The Argentinean technician thought that the American technician was going to attack him so he took a bigger tool and said to the American in Spanish: *"If you come any closer I'll smash your head in"*. I jumped into the winch room and stopped the action which in the beginning sounded funny to me because I understood both languages - I could see that the three men agreed on the cause of the problem, which was really a simple one, and how to solve it. After explanations on my part men realised that they were saying the same thing but in different languages, so everything came back to normality. The two technicians became very close friends for the rest of the trip after that incident.

This story is in fact just one small example of communication problems on board which could have ended in a very serious way if a person who was able to communicate with the two Americans and the Argentinean technician had not been around.

1.2.2 The "Kayax" case

The "Kayax" a 23,277 dwt Panamanian-flag bulk carrier was alongside in Portland, Australia, and a lifeboat launching drill was about to be carried out by the Port State

surveyors. The lifeboat was supposed to be lowered to the boat deck and then to be recovered to its normal position. During the exercise the boat was accidentally released by one of the participants and fell down onto the deck and from there into the water. The people involved in the drill were the Korean master, an Indonesian second mate, a Korean oiler and a Chinese rating. All were seriously injured.

As a result of the inquiry it was pointed out that the safety pin of the release mechanism was not in position and the release system was in the armed position. Also, it was stated that the members of the crew had not too much practice on how to carry out such drill. Finally, the languages used in the manuals and in the attached operational notices in the boat were Japanese and English; so people not having a good command of either of these languages were unable to understand the operation instructions. Even though there were drawings in the attached notices illustrating the operation procedure, the inquiry was of the opinion that they were not sufficient in order to properly understand the manoeuvre.

But there was something else regarding this accident. The Australian Department of Transport determined that as the people involved in the drill were of different nationalities there were communication problems between them due to language difficulties. The Department of Transport pointed out that those communication problems had contributed to the accident (The Sea, 1995 and Michael Grey, 1995).

1.2.3 The collision of the Tuo Hai and the Tenyo Maru

In July 1991 the *"Tuo Hai"* a Chinese bulk carrier and the *"Tenyo Maru"* a Japanese fishing vessel, collided in the vicinity of Cape Flattery in the state of Washington, USA. The Transportation Safety Board of Canada carried out the inquiry, and the conclusions were that the collision took place because neither of the ships were using the appropriate procedure for a fog situation, and because of the inability of the seafarers of the Chinese bulk carrier to understand communications in English.

The *"Tuo Hai"* was entering a zone with a high concentration of fishing vessels. The VTS (Vessel Traffic System) of Tofino, British Columbia, Canada, called the vessel by using a geographic location reference without obtaining any answer, but later when the VTS station called the vessel by its name it responded. This implies that the VHF equipment was on and in the appropriate frequency and that the officer on watch recognised the name of the vessel and the call sign. But it also implies that they were unable to understand a more elaborate message in the English language.

The inquiry also revealed that when the VTS station requested the *"Tuo Hai"* to alter course to the south because of the presence of fishing vessels in the area, the master thought that this was general information about fishing vessels. The inquiry pointed out that if the message had been understood the collision could have been avoided. Also, the crew members of the *"Tuo Hai"* were unable to communicate with the VTS station after the collision because of their lack at any command of the English language. The VTS station received "formal notification" of the collision from a fishing vessel that was nearby.

Even though the language difficulties occurred between the people on watch in the *"Tuo Hai"* and the VTS station, and there were no language problems in the messages transmitted by the Japanese fishing vessel because some Canadians who were working on board took care of the radio communications, a further investigation performed by the Transportation Safety Board demonstrated that the officers and crews of both ships had a poor knowledge of English.

The collision caused the *"Tuo Hai"* to spill 120,000 gallons of intermediate fuel oil and 53,000 gallons of diesel oil. 4,600 birds were killed and 97 kilometres of beaches were washed up. The damage to the environment and cleanup operations were estimated to be US\$ 10 million (OSIR, 1995).

1.2.4 A fin is not a pin

The bulk carrier "*Federal St. Clair*" struck the Canal Bank when approaching the port of Montreal, Canada, on the 28 June, 1992 (TSB, 1992).

The manoeuvring capability of the "*Federal St. Clair*" was reduced because of the loss of the fin on the steering nozzle during the crossing of the Atlantic. When the pilot came on board to take the ship to the port of Montreal, the master told him about the loss of the fin. Because of the poor command of the English language which the master had, the pilot thought that it was something about a missing pin and therefore he gave no significance to the master's remark. As full manoeuvring capacity was required to enter the South Shore Canal, the loss of the fin was in fact a very important issue to be taken into consideration for the steering of the vessel.

As a direct result of this misunderstanding the "*Federal St. Clair*" struck the Canal Bank.

If the pilot had understood what the master was saying, he would surely have been able to evaluate the magnitude of the situation in its real dimension and assess the steps to follow, for example to ask for tugboats.

1.2.5 The case of the Seiko

On December 1993, the Panamanian flag tanker "*Seiko*" on its way to Ghent, Belgium, while sailing along the SW traffic lane of the Dover Strait Traffic Separation Scheme in the vicinity of the South Falls buoy, made contact with the Dover Coast Guard station announcing its intention of anchoring.

Because of weather conditions pilotage was temporarily suspended and, therefore, the "*Seiko*" was unable to pick up a pilot.

The Dover Coast Guard told the master not to anchor in the South Falls area. For some reason, the master altered course with the obvious intention of looking for a place to anchor. By that time the Dover Coast Guard had realised the bad command of English the master had. The Coast Guard tried to make the master understand that the best option was to get a local pilot, who would lead the vessel to a safe anchorage, through the owner of the vessel or his representatives. However, because of the lack of English of the master, Dover station experienced huge difficulties in trying to get information from the master regarding who the owner of the ship was. In the end, the Coast Guard got the necessary information about the owner, who was a Greek, and connected him to the master. The owner instructed the master to take a local pilot, and the Coast Guard monitored the "Seiko" to the local pilot station of Wandelaar. (Donaldson Report, page 477).

This case of a vessel sailing in a high density traffic area and being manned by a master with a poor command of English, did not end in an accident, but the potential was there. According to the report, the vessel was very close to go aground in the area of the Goodwin Sands.

1.2.6 The case of the *Etilico*

On the 23 February, 1994, the Dover Coast Guard station received a complaint from the container vessel "*OOCL Bravery*" stating that whilst crossing the SW bound traffic lane of the Dover Strait, the chemical tanker "*Etilico*" had not given way according to COLREG 72, and obliged the "*OOCL Bravery*" to make a complete circle to avoid a collision.

After identification, the Coast Guard contacted the "*Etilico*" by VHF to verify if the officer on watch had noted that the vessel was in the wrong lane of the separation scheme. It did not take too much time for the Coast Guard to note that the officer on the bridge had a very poor level of English as he did not understand some "basic nautical expressions" like "*What is your position?*". Later, when the master took

over radio communication he realised that the ship was on the wrong side of the traffic lane and he proceeded to change course. The case was reported to the Spanish authorities. (Donaldson report, page 479).

It was very possible that the officer on watch, because of his lack of English, may have kept his mouth shut when receiving calls from other vessels. It became clear that he was not feeling confident to carry out radio communications. Such behaviour, was in fact a threat to maritime safety.

1.2.7 The case of the Wealthy River

On the 2 May, 1995, the Panamanian container vessel *Wealthy River* was approaching the port of Charleston. A boat carrying the local harbour pilot was sailing alongside the *Wealthy River*. According to the U.S. Coast Guard records, the pilot on board the container vessel that was guiding it through the entrance channels told the master: "Pilot boat" (meaning that the boat carrying the new pilot was sailing alongside the ship). The helmsman thought the pilot said "Hard a port" and acted consequently turning to port. The master said to the pilot "We are hard a port now", and the pilot answered "Pilot boat". At that time the vessel was out of the channel, and then the pilot shouted "Hard a starboard". The master told the pilot that he had indicated the helmsman "Hard a port" to which the pilot answered that he did not give that order, and that he said "Pilot boat". The vessel avoided hitting a buoy but went aground. It took a day to release the ship (Lloyd's of London Press Ltd, 1990).

1.2.6 A case in the very south of South America

On the 29 May, 1993, the fishing vessel "*Esamar III*", which was flying the Argentinean flag but carrying Korean officers and crew, was sailing out of the port of Santa Cruz located on the south coast of Argentina. A Panamanian flag vessel, the "*Rio Naruto*", was entering the channel heading to the port with an Argentinean pilot

on board. Both vessels met in the channel and as the fishing vessel was not doing things right the pilot on board the *"Rio Naruto"* tried to get in touch by VHF. It was impossible for the pilot to communicate with anybody in the *"Esamar III"* by using both Spanish and English. As a result of this communication problem both vessels collided, the *"Esamar III"* sunk and 3 of its seafarers died in the accident.

After the collision the port had to be closed for nearly a week, and the land bearing line for entering the channel had to be modified (one of the light signals on land had to be changed from its position). Even though the communication difficulties on this occasion were a bridge to bridge case, it can be seen, as it was verified by the inquiry later, that nobody on board the *"Esamar III"* had any knowledge of English at all. If just one of the officers had had some grade of proficiency in English, the collision could have been avoided and also the loss of lives.

1.2.6 The case of the *"Sea Empress"* accident

On the 15 February, 1996, the 147,273 dwt oil tanker *"Sea Empress"*, carrying crude oil from the North Sea, went aground at the entrance of Milford Haven in South Wales.

According to preliminary reports, the responsibility was on the side of the pilot and the way he performed the approach to the port. 70,000 tonnes oil spread along 190 km of the coast of Wales and reached the marine nature reserves of Skomer and Lundy Island, where several bird colonies were affected and hundreds of oiled sea birds died. At the time of the disaster, the *"Sea Empress"* was managed by a British company, owned by a Norwegian company under the Liberian flag. The master and crew were Russians.

Commentators said that there were some language difficulties on board between the British pilot and the crew because the last ones were not able to speak English (Waste Environment Today, 1996, page 19). The UK Marine Accident Investigation

Branch (MAIB) stated in his preliminary report that no communications problems existed. But the MAIB also stated that both master and pilot did not discuss and agreed on a plan to entrance the West Channel. This last could had happen because may be according to the criteria of the pilot there was no necessity for to discuss such matters; but, also, could had happen that language capabilities of master and officers were just appropriate to understand basic orders or indications but not enough to involve themselves into the discussion of a plan. The final inquiry is expected to deal, among other things, with *the master/pilot relationship and the use of English*.

Also, the Lloyd's List (April 1996, page 3) and Fairplay (February 1996, page 21) pointed out that waiters from a Chinese restaurant had to be brought on board for translating the master and crew members of the Chinese tug "De Yue" how the rescue operations were going to be carried out . Usually you go to a Chinese restaurant for good food and not seeking help for vessels. This language problem with the Chinese tug made Lord Donaldson come out with the following: "There can be no more visible demonstration of the need for a common language than the spectacle of a huge Chinese salvage tug which could not be used because none of the crew spoke English" (Safety at Sea, 1994).

Mr. David North, the Isle of Man minister of shipping and Chairman of a European Union working group (France, Italy, Netherlands, UK) appointed, after the "Sea Empress" disaster, by the Alliance of Maritime Regional Interests in Europe to look deeply into sea safety, said (Lloyd's List, 1996, page 3):

"It is vital that people working on board ships can not only communicate with each other, but also with shoreside services, particularly emergency services".

* It is all very well to have vessels manned by a crew of mixed nationalities which manage to communicate through a series of

hand signals and translators in order to reduce operational costs. However, in an emergency, when most needed, these forms of communication break down and, as a result, the safety of the vessel is impaired. This is when disasters occur. Had there been a common language, and thus understanding, they could possibly have been avoided".

"It is necessary to ensure that vessels, particularly those flagged in member states and those foreign vessels operating in European waters, are manned with crews having a commonality and good basic understanding of a language, internationally accepted by the shipping and marine industry".

It was said that this request for the use of a common language on board ships carrying multilingual crews will be presented to the European Parliament.

The case of the "*Sea Empress*" is chronologically the last of those presented in this paper involving language difficulties on board vessels, but there is a fear that it will not be the last one.

As it may be appreciated, the examples presented above run from cases that were very close to funny situations up to cases where severe damage to the environment was caused and lives were lost. All of them have to do in some way or another with maritime safety. As was stated before, language difficulties among multilingual crews are not the main cause for accidents but are recognised today as being an important contributor, particularly in making serious situations worse.

When talking about cargo ships, professional seafarers are, in most cases, the only human beings present on board. Therefore, in an emergency situation, all of them know what to do, providing, of course, they have the necessary training. The

situation changes when the majority of the people involved in an emergency are not seafarers but common people, i.e. passengers.

Up to now it has been demonstrated that language difficulties are a part of human error affecting maritime safety, but no examples have been presented so far as to which language difficulties among multilingual crews have proved to be a high risk to human life from the point of view of the number of people involved. This is the case of passenger ships and it will be treated in the following section.

1.3 The special case of passenger ships

On board passenger ships, not all the people are professional seafarers. In fact the large majority are *passengers*. This means that if an emergency on board like a fire occurs and the crew is not able to communicate with the passengers due to language difficulties, the situation may very well become near to chaos.

A relevant case is the tragedy of the "*Scandinavian Star*" where 158 people lost their lives.

According to the Norwegian Official Report -NOR 1991:1 E-, the "*Scandinavian Star*" left Oslo on the 6 April, 1990 at 21.45 hours carrying on board 99 crew and 383 passengers. Sometime between 01.45 and 02.00 a fire started outside cabin 416 of deck 4. The fire was suffocated but some minutes after 02.00, a new fire started in the starboard corridor of deck 3 (certainly initiated by a naked flame). After some minutes flames and toxic smoke took over the cabin section on decks 4 and 5 and kept moving upwards. At 02.24 the "*Scandinavian Star*" sent its distress message. Around 03.20 the master requested the crew to abandon ship. At 16.00 of the 8 April the fire was extinguished, and at 21.17 of the same day the vessel berthed at Lysekil in Sweden. It is believed that the 158 people who lost their lives were already dead by 02.45 on 7 April.

The "*Scandinavian Star*" had, in fact, caught fire in an early occasion in 1988. At that time the damages were around 3,5 US\$ millions, and the National Transportation Safety Board of the United States (NTSB), which might be considered as the first official organism that took the lead for the seeking of solutions for language difficulties on board ships carrying multilingual crews, arrived to the following "shortcomings" stated in the Marine Accident Report NTSB/MAR-89/04:

- "the firefighting equipment was inadequate;
- the firefighting training of crewmembers was inadequate;
- the firefighting procedures were inadequate;
- the emergency plan for evacuation of passengers was inadequate; and
- the ability to communicate among crew members and between crew members and passengers was inadequate due to the lack of a common language."

By the time of the second fire, 27 different nationalities were present onboard the vessel and there were great communication difficulties between the crew and between the crew and the passengers because of the poor knowledge of English of the former (NOR 1991: 1 E, page139). Also, by the time the disaster took place, on the other side of the North Atlantic, the U.S. Coast Guard was concentrating efforts on ensuring "effective communication among crew members and with passengers when conducting emergency drills on board passenger ships" (NOR 1991: 1 E, page 161).

In its 1989 study (NTSB/SS-89/01), the NTSB stated that the lack of a common language between crew members and between crew and passengers was an important subject regarding safety on ships under foreign flags and carrying multinational crews. Hence, the NTSB made recommendation **M-89-129** to the U.S. Coast Guard in the NTSB/SIR-93/01 (page 21) report:

"Seek legislative authority to require that passenger vessels, as a condition for operating from U.S. ports and embarking U.S. passengers, have safety fire protection improvements including but not limited to a crew composition in each passenger vessel department such that at least 75 percent of crew responsible for emergency, firefighting and life saving service be able to understand and communicate in a common language with the officers and to understand and communicate in English with passengers".

It can be seen here that, in 1989, the NTSB was recommending the use of what IMO defined some years later as a *"working language"* to be used on board between officers and crew members. Also, and as was mentioned before, the NTSB believed that if the safety recommendations for passenger vessels, which included language, made in its 1989 study and in its report of the first fire on board the *"Scandinavian Star"* (1988) were implemented, the number of fatal casualties resulting from the 1990 *"Scandinavian Star"* tragedy could have been considerably less.

Moreover, the NTSB, in its NTSB/SIR-93/01 report, stated that an IMO resolution was not enforceable and therefore an amendment to SOLAS regarding this issue was necessary (page 22).

Also, in the above document the Coast Guard emphasised the point that even the NTSB were some steps ahead of IMO regarding, among other issues, language problems, the policy of the United States might be to look for international consensus on these matters under the direction of IMO.

Let us now have a look on the way the *"Scandinavian Star"* disaster had impacted the press and the people. The April 1993 issue of the journal *Safety at Sea International* in its article *"Are passenger ships safe"* when mentioning factors that,

according to the official investigations, played a significant role in the accident, stated that "Communications between crew members was hindered by lack of a common language".

The *Sunday Express* headlined its article "Scandal of the Floating Tomb" in its issue of April 8, 1990. Reporters said that the crew of Portuguese, Norwegians and Phillippino were speaking their own language or broken English, and that they had difficulties in understand each other (page 2).

"It was absolute chaos. The crew were speaking Spanish or Portuguese and English. They didn't seem to be able to communicate with each other or the passengers", Leo Otland, a Norwegian passenger, pointed out. On the other hand the crew (strongly Portuguese) claimed that "the captain only spoke in Norwegian" (page 1).

The *International Herald Tribune* in its issue of April 9, 1990, quoted Henrik Berlau, from the Danish Seamen's Union, who said that the Phillippino and Portuguese ratings could not understand each other (page 1).

Michael Grey in the *Lloyd's List* issue of April 9, 1990, pointed out the language difficulties among the crew (page3). Grey also remarked that "ironically" the NTSB had commented and made recommendations about language and communication problems in its 1989 report on the occasion of the fire on board the "*Scandinavian Star*" in 1988. Another part of the article mentioned the concern of seafarers' unions regarding safety implications from multilingual crews and the absence of specific rules in relation with the matter.

James Koldstad, Chairman of the NTSB, said to *Lloyd's List* (1990, page 2) that similarities between the 1988 situation and the 1990 disaster were "disturbing", and that whether the crew had changed or not there were still language problems.

Jose Daniel Brito da Silva, the helmsman on watch at the time of the disaster, said that he was not able to understand orders in any other language than Portuguese (Lloyd's List, 1990, page 1).

Most of the articles in journals or newspapers, as a result of the disaster, pointed out the issue of flag of convenience and the hiring of multilingual cheaper crews as a detonator for such types of accidents.

The "*Scandinavian Star*" will be remembered as a very sad example of maritime safety issues and the human factor in emergency situations where language difficulties, because of multilingual crews, have proved to be a contributor to the disaster.

1.4 Multilingual crews enter the maritime activity

It has been said before that multilingual crews are not expected to leave the arena of maritime activity in the foreseeable future, and that when thinking in solutions to solve the problem of communications on board because of the lack of a common language, they must be a part of the equation.

In past years, officers and crews were, in most cases, of the same nationality. Large shipping companies used to employ their ratings themselves and among nationals on a long term contract basis. It was common practice that officers and seafarers used to work for the same company and in many cases on board the same vessel. Moreover, after serving on board, officers and experienced seafarers came to work ashore at the company office. So seamen were used to having a sort of link for life with a shipping company (it was like a big family).

Open registries and/or developing countries offering flags of convenience, both making their appearance in the arena of the shipping activity, altogether with a large number of officers and ratings from developing maritime nations, including Eastern

Europe countries, gaining the decks and engine rooms of ships while Western European seamen were quitting the activity, were the detonator for the advent of multinational crews.

In recent years, in the United States and may be in Japan and Western Europe, people going to sea realised that they could make the same amount of money, or maybe more, if working in the comfort of an office, and that there was also the possibility of spending more time with the family and getting better social benefits. Corroborating these facts, *Lloyd's List* published in an editorial in November 1993: "Who ashore in last days of the 20th century would be prepared to work a 12-14 hour a day with broken sleep patterns for a whole unremitting year?."

The aforesaid, and the strong competence of seamen from developing maritime nations because of the low salaries these were accepting, were the reasons for American, Japanese and Western European citizens to decline joining the maritime activity.

In order to have an idea on crew costs, let us take the ISF (International Shipping Federation) 1993-1994 report on crew costs with relation to nationalities. Accordingly, a Japanese chief officer cost 149 units, an Indian chief officer 45 units, and a Chinese chief officer 28 units. In the same report, an American seaman cost 186 units while a Filipino and a Bulgarian seaman cost 38 and 33 respectively (Port and Shipping, 1995).

These figures clearly show why shipowners are each time more tempted to hire low salary seafarers. It can be inferred from the above that with the cost of one American seaman you can hire four/five Filipinos.

In the case of Japan, research carried out by JAMRI (the Japan Maritime Research Institute) in December 1993 stated that the Japanese shipping industry was having difficulties in finding national seafarers so they were looking for foreign seamen.

Also, the research found that accidents were more common on board vessels carrying multinational crews, or mixed crews of Japanese and foreigners, than on board vessels manned by nationals, attributing in part this fact to the inability of crews to communicate with each other (Port and Shipping, 1995). In order to give an example of this in figures, NYK employed almost 4,000 Filipino ratings in 1993, and was looking forward to reduce the number of Japanese officers on board (whilst investing in officer training in the Philippines). Also, it was developing a maritime training centre in Manila with an expectation of promoting 300 seamen a year. Corroborating the situation, the Ministry of Transport of Japan said that it was inevitable that the Japanese shipping industry has to reduce its operating costs in order to be able to compete with foreigners (Lloyd's of London Press Ltd, page 5).

But this phenomena of certain developing country seafarers taking over the maritime activity while seamen of developed countries are giving it up, is also making its appearance in some other countries which are more likely to be considered, because of their recent, and significant economic growth. This is the case of South Korea.

During the 70s and the 80s, South Koreans seafarers were considered to be very well trained. They were better than any other Asian seamen, and companies like Amoco, Chevron and Maritime Overseas used to employ them because of their ability and reputation, even if salaries were high. South Koreans were, in most cases, not fluent in English, but as they were good at doing their job, companies established English training schools to improve their language skills.

However, because of the growth of the economy, the need for shore jobs, and their linked benefits, the number of men willing to enrol for sea duty started to decrease. In 1985, the number of seafarers working on board foreign flag vessels was 37,000, whilst in 1995 this number had gone down to 14,000. Important companies such as Chevron and Maritime Overseas turned to other Asian nationalities as they estimated that the unavailability of South Koreans seafarers would remain a fact in

the future. South Korean shipping companies also realised that availability of national seafarers was decreasing, and started to hire foreign crews from countries like Myanmar, China, and the Philippines (Manning Quarterly, page 33).

Due to the growth of the economy, the South Korean merchant fleet developed not only very rapidly but also in a very sophisticated way (chemicals, gas carriers), and the scarcity of qualified national seamen became more obvious. As an example, in 1985 nearly 11.000 South Koreans seamen were working on board national vessels, and nowadays that number has decreased to around 8.000. An interesting fact is that in the 70s and 80s, while foreign companies were paying high salaries to South Koreans seafarers because of their high capability and skills, national shipowners were doing the contrary.

Nowadays, the situation has reverted and national shipowners are offering high salaries and benefits to national seafarers in order to encourage South Koreans to join a maritime career. South Korean seafarers of today are very well paid by South Korean shipowners, and foreign shipowners do not hire them in the number they used to in the past because they consider their wages to be expensive (Manning Quarterly, page 33).

Even though national shipowners are offering better financial conditions, it seems to be a fact that the number of active South Korean seafarers will keep on declining. In relation to this, Korean Maritime and Port Administration (KMPA) is very close to authorize national shipowners to employ foreign seafarers on board their ships on a 50% crew basis (ITF Seafarer's Bulletin, page 42). So it is very possible that South Korea together with the USA, Western Europe countries, Singapore, and Hong Kong, will have to accept the fact that the time of good and capable national seamen is gone maybe for ever.

It appears a clear fact that, in general, large maritime nations are definitively giving up jobs at sea, and that a certain number of developing countries, led by the Philippines and China, are taking their places.

It can almost be concluded that maritime countries with strong economies will find it more and more difficult to encourage people to join a seafaring career. But if this is the trend, what should we expect in 30 years, or so, from now?. If multilingual crews are taking over the "on going to sea" activity today, it is very possible that tomorrow's multinational seafarers will be leaving the ships to take over managing posts ashore (national shore based managers will retire just because of age as multinational captains take their place). Therefore, there will be many shipowners having to rely on people not only belonging to another country but with different cultural customs. Also, some of these multinationals could be able to climb to the top and become the head of a whole company.

As an example, it seems to be that China is strongly committed to take the "pole position" in feeding the international maritime market with Chinese seafarers (putting the Philippines aside), and it could be that, in 50 years from now, a large portion of maritime transport will belong to Chinese entrepreneurs.

What is meant by what was said above is that, maybe, giving up jobs at sea is just the beginning of the end for today maritime developed nations.

History gives some examples. In the Roman Empire of the Occident men gave up the army for the pleasures of life, so Rome, in order to preserve the empire, started to hire soldiers from other countries to feed the army. Later, Roman leaders hired foreign generals to command the army. Finally, Roman leaders lost their empire at the hands of those generals.

Therefore, multilingual crews on board must not be treated solely as a problem of communication. There is also the cultural aspect which is an integral part. The next chapter deals with this side of on board communication problems.

CHAPTER 2

THE CULTURAL ASPECT

2.1 Culture in relation to multilingual crews

A study entitled *The Human Factor*, made by the UK P&I Club on 555 vessels of its members' ships, came out with some interesting conclusions regarding, among other things, multilingual crews and their relation to language. Even though the number of vessels was not big, the research proved to be broad enough as well as comprehensive, and seems to be the first of its type.

Of the total number of vessels inspected, 56% had mixed crews. If Asia is considered as a whole (Far East, South East Asia, and the rest of Asia), about half of the ratings were Asian natives. It materialized that where crews were mixed, Asian ratings were in the majority.

With regards to officers, single nationality, the Far East was in second place with 12%, and Europe as a whole (European Community and Eastern Europe) was first with 43%.

The dominant nationalities found on board among officers in this study were:

- Greek 27%
- CIS 10%
- Filipino 10%
- Chinese 6%

- South Korean 5%

Even though this study showed that 43 % of officers were from European countries, a remark must be introduced here with regards to future sources of senior officers. Mr. J Kelly, President of the International Shipping Federation, pointed out that presently half of the senior officers employed in the world's fleet come from OECD countries, but the average age is much higher compared to the rest, and the level of recruitment is low. Mr. Kelly says that the shipping industry needs to consider urgently from which region the next generation of senior officers will come from (The Sea, Issue 122, 1996).

The dominant nationalities found on board among crew members were:

- Filipino 26%
- CIS 10%
- South Korean 6%
- Chinese 5%
- Greek 5%

The typical ship appears to be composed of European (EU and Eastern Europe) Officers and Asian (Asia as a whole) ratings. English was declared to be the working language on board almost 50% of the ships, but only 3% had crews which, in the majority, had English as their mother tongue (Australia, Canada, Ireland, New Zealand, South Africa, UK, and US). An interesting point in relation to this is that 90% of the crews who said English was their working language were not English native speakers.

As a general conclusion the study pointed out the following:

- There is, in general, a substantial ability in English among officers whose first language is not English (deck and radio officers are over engineer officers, due, perhaps, to the type of professional activity of the former).
- It would appear that English is the ship's first language of choice.
- A large number of ships have multinational crews from non-English speaking countries where English is declared as the ship's language, but is probably used only when necessary.

Even though this study bases its conclusions on information obtained from only 555 vessels, it is something unique and attention might be paid to it. The study shows that a mix of nationalities and languages were present on board the vessels interviewed. This also means people belonging to different cultures.

Very different ways or forms of human behavior are found within different cultures. And culture is said to be a key point much more important than language itself, when dealing with multilingual crews. The present chapter intends to prove this belief.

Let us introduce this issue of culture to see to what extent it can be of importance in the subject of communication on board vessels carrying mixed crews. According to the Collins Cobuild English Language Dictionary, Culture consists of "the ideas, customs, and art that are produced or shared by a particular society" (page 345). This means how the people belonging to that particular society are supposed to think and behave, and what are the values or ideals these people consider to be the most important.

Culture defines the conduct of an individual inside and outside his country (Patwardhan, 1995).

Thus, different societies have different cultures, and when two peoples of different cultures interact these differences are in many cases the cause of adverse effects.

Different societies, and therefore different cultures, do not only mean an occidental country and an oriental country, or a country from the north and a country from the south. Even though it is true that whilst an American businessman tends to separate the product from the person an Asian and a Middle Eastern Businessman will consider the person as a whole. Neighboring countries have cultural differences too because of cultural differences in the way of doing business, e.g. Americans failed in their attempt to treat Canadians just as mere branches (Harris and Moran, 1987).

Anders Hovemyr, a Norwegian intercultural management consultant presents in the video "The Cultural Gap" a very interesting example of where cultural differences can be appreciated. Very briefly, the action takes place in one of the bars in Tokyo airport. While waiting for his flight, an American citizen meets a Japanese citizen, and because of the nice and educated manners of the Japanese citizen a comfortable and relaxing conversation in English starts.

When it is time for the American citizen to go for his flight, he says good bye to the Japanese citizen and leaves. When he arrives at the departure gate almost all passengers have boarded. At that time he realizes that his boarding pass is missing. In the believe that he may left it on the table of the bar whilst talking with the nice Japanese citizen, he returns to the bar. When he arrives, the Japanese citizen is still there. Showing preoccupation and agitation, he anxiously asks the Japanese citizen for his boarding pass. The Japanese citizen, keeping his eyes down, that is without looking to the eyes of the speaker, answers that he is very sorry but has not seen the boarding pass.

To the eyes of an American citizen (and most citizen from the western hemisphere) the behavior of the Japanese (avoiding eye contact) may appear suspicious, guilty, or as if he wanted to hide something. Instead, in the Japanese culture, this kind of behavior means that the Japanese citizen is sharing the preoccupation of the American citizen, he is putting himself in the shoes of the American trying to

demonstrate that he is sad and worried about the loss as much as his occasional friend is.

Imagine now that a similar situation happens in a cabin of a vessel, which is shared by two seamen of different nationalities (and therefore, different cultures). One of them (let us say a Portuguese) cannot find a gift he bought for his wife at the last port, and when asking about it his cabin mate (let us say a Chinese) says he has not seen it and his attitude is very similar to that of the Japanese citizen.

In the case of the American citizen earlier, he could have talked with the attendants of the flying company who would surely have him on the flight list. After a quick verification he would be seated comfortably on the plane, savoring a delicious bloody Mary, and heading home, trying to forget his "bad" experience (which in fact was a misunderstanding due to culture) with that suspicious and misleading Japanese citizen; tomorrow that will be history.

But, in the case of our two seamen tomorrow will not be history. They have to keep on sharing the same cabin, and they are not heading home. It is very possible that their future lives on board will proceed with a lot of mutual suspicion and misunderstandings because of one not understanding the cultural behavior and values of the other.

Suppose now that they do not speak a common language, or that one does not speak the mother tongue of the other so that there is not even the possibility of clarifying the situation by having a conversation. Everyday life for these two seafarers will be, no doubt, terribly unpleasant.

Language is a component of the culture of a society. Cultural differences are to be expected between two or more people from different nationalities or regions when sharing any activity. If they speak different languages and do not have a good

command of a certain language which enables them to interact, cultural differences might be difficult to overcome.

In almost all activities, but mainly on board vessels, these cultural differences may result in isolation, depression, or stress.

In 1978 the Argentinean government signed a two-year political - commercial agreement with Japan and the former West Germany through which four factory fishing vessels (two Japanese and two Germans) were allowed to fish in certain areas within the limits of the Argentinian platform and under the Argentinian fishing regulations. As a part of the agreement, Argentinian inspectors, with experience at sea, had to stay on board verifying the fulfillment of the terms of the agreement during fishing trips (which averaged 75 days at sea without calling at any port, except in the case of a *force majeure*).

The author was assigned to the "Johan D Broelemann" and used English to communicate with the German master, officers, and some ratings of the German crew, because not all spoke English. Communication with Portuguese crew members was practically impossible in English. English helped me not only in my job as inspector but to overcome some cultural differences like the devotion that this German crew in particular had for alcohol which the Argentinians did not.

An interesting experience on board that vessel was that I taught some Spanish to the third officer and he taught me some German by using English as a link-language.

However this was not the case with some of the inspectors that were assigned to the Japanese fishing vessels. The inability to communicate in English with most of the crew members and officers, and cultural differences, which ran from the food to the way of taking a bath, were difficult issues to overcome. Because of the incapacity to understand each other life was very hard for all inspectors on board the Japanese vessels. One inspector, who used to talk to me every three days for

nearly an hour by VHF using a non-working channel, was obviously in a situation of isolation. Another one lost 20 kilos, and a third one was found to have minor cardiac problems after disembarking. These last two also manifested frustration because of the inability of most of Japanese crews to speak English, and even they were treated well, they suffered from isolation because of culture differences.

A ship is a confined environment where people have not only to work but live. This means that when the working day is over seafarers do not leave the vessel and go home to share a life with wife and children. The vessel is their home, and they have dinner or join the video or the rest room with the same people they have been working with, and maybe having an argument with, on deck a few minutes ago. If human relations between some of them are not good there is no escape, they have to live together.

If crew members cannot communicate by using a common language, communication and therefore human relations, can improve by using signals, mainly hand signals. Dr. Albert Mehrabian (Harris and Moran, 1987) found that 55% of a message sent to a receiver is based on non-verbal communication like facial expressions, hand gestures, body positions; the rest is 38 % of how words are said and 7 % of words used.

But in a multicultural environment, non-verbal communication can create misunderstandings because of the different meanings and interpretations given to those signals. For example, the gesture used by Americans to mean that everything is OK means something obscene to Brazilians and at the same time, means money to the Japanese. Harris and Moran in their book "Managing Cultural Differences" give some interesting examples of hand signals or gestures and their different meanings among cultures.

For an American and many others from the Western Hemisphere, a pat on the head given to a child or even to an elderly person means "good girl/boy", but for a

Malaysian, as well as for some other Islamic countries, the head is something sacred and the source of intellectual and spiritual power and should not be touched.

For an Australian, folding three fingers of the hand against the palm and keeping the thumb and little finger in a straight up position means that it is time for a drink, but for a Chinese it means six and for a Malaysian it means something related to evil.

Anglosaxons, and some other Northern Europeans raise a finger or tilt the head to one side to call the attention of a waiter, whilst Africans will knock the table and people from the Middle East will clap hands. The gesture used by Africans is considered uncouth by Asians, and the second gesture will be interpreted as bad manners if done in America or Northern Europe.

Most people move the head up and down to mean Yes but the same gesture means No in some other countries (i.e. Albania). Filipino do not say No the way Occidental people do; a jerk of the head downwards is used instead, sometimes accompanied by the word Yes. In Indonesia something very similar is done; because of culture it is very difficult for an Indonesian to come out with a No.

A widening of the eyes for most Occidental people means astonishment or surprise, but if done by a Chinese is a clear sign of "politely suppressed Oriental anger".

From these few examples, it can be seen that even the percentage of 55 % could be considered high enough, compared to the 38 % of how words are said and the 7% of words used, to encourage non-verbal communication within a multinational/multilingual environment, this is not a recommendable solution.

However, verbal communications when done between people coming from different cultures, even if they speak the same language, may result in some difficulties too if what Hovemyr (1995), in his video "The Culture Gap" from Videotel, calls "culture

filters" are not used by both the sender of a message and the receiver. Eye contact is one example of culture filters. For Americans and Europeans to look directly into the eyes means honesty and integrity, but for the Japanese it means disrespect and bad manners. Hovemyr presents an interesting example of culture filters with the phrase "I will do my best". A Swedish manager requests from an Italian employee that a certain task is to be accomplished by tomorrow morning, the Italian employee answers "I will do my best".

For a Swedish citizen, the phrase "I will do my best" is a serious compromise of performance, almost a promise. But for an Italian is a sort of polite answer that does not imply any compromise at all. If the Swedish manager does not know that Italians have a different perception with regards to certain values, and therefore does not apply culture filters when sending his message, the next morning he will be surprised as well as angry when finds that the task has not been done.

It is very important for both sender and receiver of a message, when working in a multicultural environment, to understand that they must make use of these cultural filters in order to avoid misunderstandings and improve harmony and efficiency at work.

Another well-known case in the maritime activity, where culture filters have to be applied, is when an Occidental officer asks an Oriental rating: "Do you understand what I have said?", or "Do you understand what you have to do?", to which the rating will always respond with a Yes even if he did not understand what is he required to do.

Cultural values are another aspect to be considered when dealing with people from different cultures. The author carried out a test presented in the "Culture Gap" from Videotel (Hovemyr, 1995) with 10 students from WMU from different countries: Congo, People's Republic of China, South Korea, Lithuania, Bahrain, Peru, Iraq, The Philippines, and Cambodia. The test requires that each person selects from a

list of 14 values/ideals two which he/she considers the most important, and to discard the four least important. The list of values consists of the following:

Generosity	Reliability
Honour my parents	Honesty
Being successful	Loyalty
Love my country	Respect
Openness	Being religious
Harmony	Fairness
Hospitality	Courage

The test has no statistical value because the number of participants was too small. However, it did show, among other things, that certain values selected by some students as the most important were discarded by others who considered them less important. For instance, three students chose *Being successful* whilst four discarded it; two selected *Respect* whilst two removed it from the list; two chose *Love my country* and three discarded it; four chose *Honesty* but one discarded it. From the last case for example, one can infer that some problems may arise if two people who have a different perception of *Honesty* as a value are expected to work together, or work and live together, which is the case on board a ship.

According to Hovemyr these values/ideals represent the criteria people use when judging other people's behavior. In the case of *Honesty*, discarding this value does not mean people are thieves. On the contrary, here one must ask to oneself what is the meaning of this value for these people.

Cultural aspects also have to do with the way seafarers, within multilingual crews, think about their jobs and the way their superiors care for them or consider them. It is very possible that a seaman, being the only one of his nationality present on board, thinks that the master, officers and some of the crew do not like him or

consider him an inferior because of his nationality, customs, or behavior. This may affect his performance on board.

Nowadays the maritime activity is not like it use to be before when there were strong links between the shipping company and the seafarer. In the old days seafarers used to stay with the same company for life and this resulted in strong feelings of mutual loyalty between the seafarer and the company. Furthermore, it was common that after being at sea for a long time, master, officers, and seamen were offered a job in the offices of the shipping company ashore as managers or supervisors. Seafarers felt they were useful to the shipping company, which also cared for them, and this enhanced their performance and increased their motivation.

But from 1960, the shipping industry mainly because of economic reasons, and trying dramatically to keep a competitive advantage, started demanding cost reduction together with an increase in productivity. The phantom of bankruptcy was threatening the shipping industry . Flags of Convenience and the possibility of hiring multinational crews were two major answers for surviving that dilemma.

From the hand of multilingual crews came the shore crew hiring companies, totally independent from the shipping companies, and the reduction of wages, as stated in chapter one, where some examples of large differences in salary amounts paid to seafarers of different nationalities were given. The Motivation of seafarers within multilingual crew turned to economics and as they did not know in many cases who their employer was (shipping company, crew hiring shore company, master) they subconsciously became loyal only to themselves.

Seafarers within multilingual crews think they are contracted because they are cheap and not because of their professional knowledge. Also they are, in most cases, hired by shore companies which may require some money in return for the job given, as stated by Daubeny in an article in The Nautical Institute on Command,

and this may permit people without enough professional capacity to go on board with the dangerous consequences this implies.

Going to sea just for the money and the perception seafarers within multilingual crews have of how they are considered by companies, will undoubtedly have a negative influence on their performance on board; this is the effort they put into their tasks will be according to the salary they get and not a dime more. This situation shows the materialistic attitude of people motivated only by an economic objective. A person who falls into materialism leaves aside some qualities like friendship, kindness, loyalty, and fairness. It is no longer the case of being at sea for the adventure or the fun together with the expectation of following a career for life; only money is what matters. As Daubeny said, seafarers on board foreign vessels are there for the money and not for the beer.

On board foreign flag vessels it is very common to find two/three or even more many nationalities within the crew - i.e. 8 nationalities among 24 crew members (Daubeny, 1986), or 7 within a crew of 11 as highlighted by the Salvage Association in May 1994. Susceptibilities due to cultural reasons which may be aggravated by communication problems for not speaking a common language are to be expected, and this may result in a general low performance of the crew. As an example, whilst European seafarers prefer to read and enjoy privacy, Filipinos like noise and therefore sing and share social activities in a group.

In order to give another example of cultural susceptibilities let us take the case of the World Maritime University where nearly 40 different nationalities can be found among an average of 200 students. For a person coming from Latin America it could sound strange and uncouth when people from Asia or Middle East burb and, in much the same way the custom Latin Americans have of making a noise when using a handkerchief in public could be seen to be impolite. But in this multilingual environment we do not make the mistake of confounding foreign customs with bad

manners and we learn to accept them and live with them. This may not be the case on board many vessels manned by multinational crews.

Religion is another important issue, maybe the most important, strongly related with culture. Religion has different implications according to countries. Under some religions to drink alcohol is forbidden, and the same happens to some foods. Sexual behavior is another matter regulated by religion, and under some of them impositions are very strong. In order to give an example, suppose that a Russian seafarer invites a seafarer from an Islamic country to drink. For some Islamic countries drinking is strongly forbidden, and for Russians (the author know by experience) it is an offense to refuse to drink with them. Both seafarers may explain to each other about their customs and what religion allows to do and not to do, but if because of language difficulties they cannot communicate this may lead to an uncomfortable situation.

Also, some religions do not consider Sunday a holiday. Any given working day may have for other religions the same status that Sunday has for Occidental people.

Shipping companies personnel managers should pay attention to any aspect that may have a relation with religion in order to avoid problems on board. An attitude or a say may have a different meaning and this may lead to a misunderstanding but, if there is a relation with religion, consequences may be more serious.

It seems to be that there is a sort of controversy between those who say that vessels operating with multilingual crews are less efficient than those operated by one single nationality. The UK P&I Club in its paper "The Human Factor" (1996) states that, according to their study, there is not a close relationship between mixed crews and efficiency on board. Anyhow it has to be accepted, because it is part of human nature, that when a seafarer, who is living in a confined environment like a ship, has to deal with cultural susceptibilities, and has the perception that whoever his employer could be he does not care about him, and that he is given a job

because he is cheap, and that the master and officers may think of him as an inferior because of the country or region he comes from; his performance and efficiency in doing his job will be low. As a consequence of this, the efficiency and safety of the ship may be affected. There are of course, and will be, few exceptions where lack of efficiency can be found on board ships carrying single-nationality crews, like the "Exxon Valdez" manned by a US crew and the "Herald of Free Enterprise" manned by a UK crew.

For these seafarers confined to a multinational environment, knowing the language commonly spoken on board will help them to overcome difficulties arising from cultural matters and to get closer to their superiors and comrades. They will feel confident to demonstrate and share their professional knowledge by being able to talk with the officers. They will even be able to understand the terms of their contracts. To sum up, being capable of commanding the common language spoken on board will do a favor to their motivation to perform better, and it will also be helpful to defeat the problems of isolation, depression and stress.

Cultural behavior or cultural prejudices are not something that may only separate or form a barrier between officers and ratings. As an example, Scandinavian and European officers do not like the familiar way that the Filipino officers usually treat ratings. Also junior officers from developing countries state that discrimination and lack of respect from the traditional maritime nations' superior officers occur with regards to their professional capability because the latter do not trust the training system of the former (Moreby, 1993).

Another aspect related to culture has to do with history and colonialism. Could it be that a vessel with a mixed crew may work in an harmonic as well as safe and efficient way with the master and officers from country A and the ratings from country B, where country B had been a colony of country A in the past. Argentina had been in the past a Spanish colony. Years ago when Argentinian factory fishing vessels started operations in Argentinian waters master and officers were Spanish,

because of their experience in fishing, and the crew was a mix of Argentinians and Spanish. Time passed and because of national legislation on the one hand and because of Argentinian officers gaining experience of fishing vessels on the other, Argentinian officers started to gain posts on board factory fishing vessels. As a consequence of this many problems between Spanish fishing foremen and Argentinian officers started because the former could not accept the idea of receiving orders from these officers who were coming from an ex-colony. This was a clear case of cultural susceptibility. Here there were no language problems.

Moreby presented a similar case of cross-cultural clashes in his article "Cross Cultural Issues in the Manning of Ships". It is possible to have an harmonious working environment on board a ship with a British master and senior officers and a crew composed of ratings from a former Commonwealth country like India or Burma (Myanmar), but it will be disharmonious if the master and senior officers were Indians and the ratings British.

It could also be that cultural susceptibilities and despise occur between seafarers of different European nationalities like Germany and Portugal. The author remember from his experience on board the German flagged fishing vessel "Johan D Broelemann" (1978) that German ratings did not like Portuguese ratings and there was animosity between them.

Another example of cultural difference is the departure in 1993 of a Filipino crew composed of 21 Filipino junior officers and ratings from the vessel "Bow Fortune" apparently because of a matter of human relations with the Norwegian officers. One interesting point was that the ship was not a fishing vessel or an old bulk carrier, it was a chemical carrier (Lloyd's List, 1993).

It has been appreciated from these pages that language is not the only problem present on board when facing the issue of communication between people. Culture is another aspect affecting this matter in a more critical way than language does.

Language appears to be the initial step to overcome these problems arising from culture. To support this, the Donaldson report (8.41) points out the "existence of fundamental problems of communications within mixed crews" and attributes them to language and cultural differences.

How to solve these communication problems when dealing with different cultures on board is the key to obtain a better crew performance, and the answer seems to lay in management. Nevertheless, there will always be some company owners profiting from paying low salaries, exploiting seafarers, and not taking proper care in improving cultural mutual understanding, which includes language training, within their multilingual crews.

2.2 Cultural aspects related to Chinese and Filipinos

It has already been explained that culture is an important matter, if not the most important, when facing the problem of communication within multilingual crews. As Filipino and Chinese are the two main nationalities present on board within multilingual crews, some examples of cultural behavior that follow - taken from "Managing Cultural Differences" (Harris and Moran, 1987, pages 403-407) concentrate on them.

2.2.1 Cultural aspects related to the Chinese

- Chinese stick to their word.
- Chinese are sensitive to national slights.
- Chinese are linked to their traditions.
- Chinese seem to have a compelling need to dwell on the subject of friendship.
- Chinese do not like to shake hands or to be touched or slapped on the back (on the contrary, a slight bow is more appropriate).

- Chinese appear to be more reticent, reserved or shy than Occidental people.
- Chinese avoid open displays of affection. They do not like loudness or aggressive attitudes.

2.2.2 Cultural aspects related to the Filipinos

- Hospitality, friendship and sincerity are prominent aspects of the Filipino culture. They generate warmth and friendliness. 400 years of Spanish influence are the reason for certain everyday life characteristics like gaiety. They are also sensitive and emotional due to this influence.
- They place great importance on the family. All goals, undertakings and effort have the well being or better comfort of the family as the supreme objective.
- Shame (*Hiya* in the Filipino language) is an important social aspect for a Filipino. If a Filipino is said or accused of not having this feeling of shame or that he has lost his *Hiya*, this means that he is no longer able to feel any other emotion. When someone is criticized in public the shame is put on him and this is considered a great insult.
- Filipinos are in some way fatalistic. Success or failure is considered more a function of fate than of personal merit. The saying *bahala-na* means something like "accept what comes and bear it with hope and patience" or "God wills it". "It was my fate" is a common reaction for disasters like typhoons or epidemics.
- Ancient beliefs with regards to ghosts and spirits have strong influence in everyday life. Some Filipinos may blame these ghosts and spirits when not able to accomplish a task in time.
- Filipinos like entertainment, so it is frequent to see them gambling and singing.
- Filipinos try to avoid confrontation. They may say Yes and put the head downwards to mean No.

2.3 How the aviation industry has faced communication problems and cultural issues

Aviation moved faster and started targeting this issue of communication in a common language long before the maritime industry. Why did this happen in this way? Perhaps the higher speeds of airplanes compared to ships move brains faster, or perhaps air accidents have occurred more often and many more people have died in aircraft accidents than in shipping accidents.

Despite whatever the reasons have been, the fact is that the aviation industry tackled this problem of cross-culture and language within aircraft mixed crews early and deeper, for not to say more seriously. Michael Grey pointed out in an article in Lloyd's List, April 12, 1990, that like the shipping industry there are some air companies that would like to hire cheaper crews from developing countries but civil airline authorities will not let them. Civil airline authorities have legally discourage any attempt in this regard because they consider passenger safety as a paramount issue, and will check very carefully several aspects related to crews like language skills.

Cockpit Resource Management (CRM), a training system which emphasizes the managing of the human factor together with communication: phraseology and language, work sharing, and cultural and social aspects, was founded in the United States in the late seventies when a number of accidents involving loss of life took place, and where human error was in most cases the cause. One illustrative example of those which foster the creation of the CRM and its corresponding courses, is the case of a plane of Eastern Airlines which in 1972 crashed into the swamps of Florida. A technical error followed by a communication problem due to a question incorrectly phrased, were the reasons for the accident with a considerable loss of lives (Racca E, 1995).

When preparing to descend to Miami airport the crew noted that the nose gear down lock green light was not working. The crew obtained permission to hold at 2,000 feet to investigate the cause of the malfunctioning. The three members of the crew were absorbed in checking the problem up to the extent that they did not realize the automatic pilot had disengaged and the plane was descending. At the height of 900 feet the ATC station called the plane and asked "What are you doing?" instead of asking why were they at 900 feet. The pilot answer that they were trying to replace the light cover and that there was no problem. As radar was not reliable in that area, the ATC controller disregarded the information on his screen. When the plane was close to the ground (300 feet) the altitude alert sounded twice but when the crew noticed they were nearing the ground it was too late. The plane crashed into the swamp.

In general there were two errors both due to the human factor. The first one was the entire crew focusing on the problem of the light and no one taking care of the flight itself. The second error was a question made in a common language but in the wrong way. This second error appears to be the most important because if the question was phrased correctly the crew would surely have noticed the altitude they were at. One can observe that the language itself was not a problem here because both controller and pilot were speaking the same language. The problem consisted in the way the air traffic controller (the sender of the message) decided to make the question. Perhaps the air traffic controller, when asking the question, wanted to say "Why is your plane flying at an altitude of 900 feet instead of the 2,000 that were authorized?". But, and quoting here Hovemyr from his video and book "The Culture Gap", there is a distinction between understanding what people say and what people mean.

In the United States language issues are growing in importance. In 1994 the NASA's Voluntary Aviation Safety Reporting System consisted of a 15 cm thick file of incidents having a connection with language. When language has to interact with culture, as stated before, further difficulties may arise. An American pilot asking a

flying attendant, who was not American, for "coffee and creamer" is a clear example. The attendant came a few minutes later bringing a yellow life-vest, because she did not understand the American term "creamer". The incident took place during cruise time, but if it had happened when preparing for landing the cockpit crew would have been put under a lot of pressure (Harrigan P, 1995).

Again, as explained in chapter 1, if these misleading or misunderstanding events happen to people of different nationalities that have problems to communicate because of not being fluent in a certain common language, the situation is worse; mainly in the Aviation field where, due to the speed of aircraft events happen very quickly.

Saudi Arabian Airlines is a clear example of mixed air crews, where the human factor and the issue of language are most relevant. The airline operates in 44 international airports, carrying 12 million people a year. Its fleet is composed of 747, 737, L1011. Besides this, 23 B 777-200 and 29 MD 90 are expected to start operating in 1997. The flying deck crew total one thousand people where 39 different nationalities are present, and cabin attendants come from 50 different countries. A large spectrum of cultures and languages is present in this working environment.

The responsible authorities of the Airline noticed this and in 1980 started an intensive CRM program which, among other issues, included enhancement of culture issues and required all airline staff to follow English training courses (Harrigan P, 1995).

Anticipation is the key word in aviation. The pilot has to "think in English" because most of the information is presented in English, Alain Sabatier, an AIRBUS flight simulator instructor said. The language barrier is a very important factor when training pilots, because they have to make not only quick but right decisions in a very short time. If translating back and forth between English and his mother tongue

the pilot's decision-making process is retarded and this may result in a dangerous situation, mainly because the speed of airplanes, as well as events, is high.

CRM trainers pay attention to many aspects (language, culture susceptibilities, social, political, religion) when having to train a multilingual group in order to avoid any possibility of offense. Also great importance is given to common language training (English) together with briefing and debriefing techniques, and to the cultural behavior of both crews and potential passengers.

The Scandinavian maritime industry, which seems to be always a step ahead, together with the Americans, in maritime safety matters related to the human factor, has took the example of the aviation industry and started developing the Bridge Resource Management (BRM) course in close cooperation with SAS Flight Academy. The following maritime companies have contributed to the development of this project:

- The National Board of Navigation of Finland
- The Dutch Maritime Pilots' Corporation
- The Norwegian Shipowners' Association
- Silja Line AB
- The Swedish Club
- The National Maritime Administration of Sweden
- The Swedish Shipowners' Association

The main objective of this three-day course is "to support a change of attitudes and increased knowledge about managing human and technical resources in an operational maritime environment". Time will tell about its effectiveness, but at least is not a wrong idea to adapt techniques from others who have similar problems.

Finally, and as an example of how relevant English seems to be for aviation, pilots and controllers being unable to communicate in each other language must

communicate in English. This is stated in DOC 4444, Annex 10, by which English has been given mandatory status.

2.4 A common language. To what extent a feasible solution?

In the present chapter some information has been presented in order to state that the problem of communication on board within multilingual - multinational crews is not only a matter of understanding words or sentences in a certain language, but a question of cultural issues which may go against positive attitudes for the improvement and development of human relations and work relationships on board.

However, it is also stated that a common language may help to overcome susceptibilities due to cultural differences, because having the possibility to communicate with each other people can explain and understand points of view, customs, systems of work, etc.

Daubeny, in his paper "Operating ships with multinational crews" says that good communications is vital on board any ship, but that on board multinational vessels is of paramount importance, and he remembers many times being the only English native speaker on board.

Nowadays, the need of a common language on board is something that cannot be denied. The IMO is presently recommending the adoption of a working language and has the intention to make it compulsory through new amendments to SOLAS Chapter V.

In chapter I, real life examples of communication problems due to a lack of a common language were given. All of them proved to be related to the human factor, and in different degrees threatening safety. Sections 2.1 and 2.2 of the present chapter show that cultural susceptibilities exist on board and that language

may help to overcome them. There is an old Spanish saying: "By talking, people understand each other".

Accepting the point that there has to be a common language on board, the second question is what language and why?

Let us start by quoting some authors. James Kelly, in his paper "Language and Communications: Strategies for survival" says that by historical accident English has become the language of the sea. As a second language, it is spoken by more people than any other language. Presently, there are more non-native English speakers than native speakers. After World War II, English speaking countries: the United States, Canada, The United Kingdom, and Australia started to control the bulk of the world's fleet.

Lord Donaldson in his report "Safer Seas, Cleaner Seas" makes a parallel with aviation and recommends the adoption of English as the common international language for the maritime industry, because its use has become common practice (8.51).

Moreby (1993) says that English is widely accepted as the international language of shipping.

Daubeny (1986) says that English is the "lingua franca" of the sea. The shipping business around the world, and most other business too, is conducted in English.

It seems to be the fact that English is the common language for the maritime industry because of economic reasons. In the early years of aviation, French was the language dominating the scene because they were dominating most of the international air traffic, but after 1930 the United States started to take over the scene of the international air traffic and aircraft manufacturing industry due to its "spirit of free enterprise" (Cole C, 1996). During World War II, the United States

took advantage of its geopolitical position whilst France was directly involved in the conflict. After World War II the United States definitively took over the first place, developing this industry worldwide. As a consequence of this, English was practically auto-imposed as the international language for aviation.

English is the language spoken to do business worldwide. After World War II, two superpowers took over the control of the world scene, the United States and the Soviet Union. But it was the United States who managed to spread its power in the form of economics. Therefore, English became the language for making money. English started spreading as a business language in almost all parts of the world particularly in the countries of South East Asia, including Japan, that saw the United States as a huge and promissory market by which they were able to develop their economies by way of low production costs. Even Germany, presently an economically powerful nation, has taken English as the language for business, and it seems that it will remain the same.

Japan, a nation that seems to increase its economic power every day, uses English for business, and the demand for this language is increasing hugely every day in that country to the extent that it is very difficult to get a job if the applicant has not a good knowledge of English.

To summarize, it seems to be that the economic power of the world is here to stay, for the foreseeable future, within nations using English as the language for business.

Focusing on a bibliography regarding maritime English, THAMES, task 5: Multilingual Crews, a research study prepared by the World Maritime University for the Institute of Shipping Economics and Logistics (ISL), contains in its annex a list of material for use in teaching maritime English. The number of publications totals 59, from which 3 are from IMO, and 1 is from Videotel. Of the other 55, 18 belong to English speaking countries (United Kingdom, United States, and Canada). The

rest, which constitutes the large majority, comes from non-English speaking countries (14 countries) where Germany followed by Spain, Poland, and China occupy the leading posts in the number of publications offered.

This is another indication that, according to the number of publications and non-English speaking countries involved, proves English to be widely accepted by maritime institutions as the language for the maritime industry.

Another point in favor of English as a global language is that the new phenomena called Internet has all its database almost in English. A huge amount of information regarding science, business, industry, politics, etc., is available at one's finger tips in just a matter of seconds in the English language. Also, because of the computer software being dominated by English, the Academy of the Spanish Language is thinking very seriously in suppressing some letters from the Spanish alphabet, like the *ñ*, and the *ll* (double l), which will have an important effect in writing.

Also, many maritime magazines come in the native language together with the correspondent translation to English, like "Port Newspaper" from Spain.

Finally, a last show of English global concern is *English 2000*, a project by the British Council which seeks to forecast the future use of English worldwide.

- What will the role of English be in the world in 20 years, 50 years, at the end of the century?
- How will English be learned and taught?
- What does the future hold for the goods and services provided in English language teaching, including courses, examinations, learning and teaching materials and the media?

These are among the questions that the British Council is currently exploring under this project. *English 2000* got underway in 1994 with eight regional seminars

looking at English language teaching (ELT) held in east and central Europe, the European Union, east Asia, the Middle East and North Africa, the Americas, south Asia, south and east Europe, and Africa. The issues raised were tested and refined and a consultation questionnaire was developed. The questionnaire was targeted at 2.000 leading ELT specialists around the world (including WMU). As a result of this, key development areas were identified. Some of them are: *The impact of new technology, benchmarks for the global English market, a market intelligence service, a forecasting and development service, and landmark review of ELT in China* (Cole, 1996).

All these remarks justify English to be the language used as a link to communicate seafarers on board.

The author was asked once why should Spanish not be the working language on board, as it is also widely spoken. The answer to this is that traditionally English has been the language of the sea. But also, there are economic reasons that reject this possibility. Economic power is what rules the world, and the Spanish speaking nations are not economically powerful, so this language cannot be imposed as the common language for shipping. The bimonthly Spanish magazine Port Newspaper with all its articles in Spanish and English is one example of Spanish maritime industry accepting the importance of English as the language for the shipping industry.

Another point is that Spain has started to improve the learning of English in their maritime academies at a national level, as stated by Mrs. Mercedes Herrera Amaiz, Director of the Maritime School of Bilbao. "Maritime English Language Education and Training in the Spanish University. Present and Future", a paper by Losey Leon and Bocanegra Valle, is another example of this trend.

However, now the point is to foresee to what extent a common language is a feasible solution for solving the problem of communications on board.

In the present chapter the importance of culture in almost all aspects of on board everyday life has been fully justified. A language permitting people on board to communicate with each other has been distinguished as a helpful tool to overcome culture differences and susceptibilities. But language by itself is not enough. A proper management commanded from the shipping company or shore managing company, is to be established to face cultural matters with care and sensitivity in order to reach an harmonic working environment on board vessels. Motivation plays a paramount role here to get crew members involved. Involvement is one of the keys, if not the most important, to commit workers to perform well.

Susceptibilities due to culture must also be taken into consideration by managers. For example, with regards to the behavior of ratings and junior officers, managers might require from senior officers to always "praise in public and reprimand in private".

A good example of a step forward to overcome cultural differences, is the video "What is a Norwegian?" produced by the Norwegian Shipowners' Association, which explains the cultural background of Norwegians and Filipinos, and is directed at Norwegians senior officers and Filipino junior officers and ratings (Moreby, 1993). This video was made, perhaps, because of the problems occurring on the chemical carrier "Bow Fortune", where the Filipino crew left the vessel after having some human relation problems with the Norwegian master and Norwegian senior officers. The way culture management is done within multilingual crews will reflect on the performance of tasks done, on the working environment, and on the degree of harmony in everyday life. And as long as a common working language can be introduced on board and people are motivated to use it, the aforesaid will become something easier to achieve by managers.

CHAPTER 3

THE IMO RESPONSE

3.1 Resolutions, Amendments to SOLAS, the STCW Convention, and Standard Marine Communication Phrases

The “*Scandinavian Star*” disaster, with a loss of 158 lives, was the activator for more intensive action from IMO regarding communication problems on board ships carrying multilingual crews due to a lack of proficiency in English.

The media, several organizations like ITF and BIMCO, and some official papers like the Donaldson report, put pressure on IMO too.

IMO was aware of the existence of this problem. The Standard Marine Navigational Vocabulary and some regulations of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW 1978 Convention) were there to give some advice on this issue. However, it seems to be a fact that this accident in particular alerted IMO that regulatory instruments focusing on common language policies on board were not enough.

What follows is a list and comments on the general steps taken by IMO up to the actual situation where some provisions of the revised STCW Convention, as amended in 1995, and the STCW Code, together with some resolutions agreed during a conference held at IMO regarding Ro-Ro passenger ships safety in November 1995, are the latest outcomes.

In 1991, IMO came out with Resolution A.691(17) - Safety Instructions to Passengers. In that resolution, IMO recommended that emergency instructions to passengers, according to SOLAS regulations III/8.2 and III/8.4 - *Master list and emergency instructions*, were to be shown in the form of announcements in appropriate languages.

In 1993, IMO came out with another resolution concerning language issues, Resolution A.770(18) - Minimum Training Requirements for Personnel Nominated to Assist Passengers in Emergency Situations on Passenger Ships. In this resolution, IMO emphasized communication skills to assist passengers recognizing English vocabulary for basic instructions, even if elementary, as a means of communication between crew and passengers whether or not they shared a common language. Regarding this resolution, it has been already mentioned in chapter I that the NTSB pointed out, in 1993, that resolutions were not enforceable and that an amendment to SOLAS was necessary.

The criteria to be followed recommended by resolution A.770, were:

- The language or languages appropriate to the principal nationalities of passengers carried on a particular route.
- The likelihood that an ability to use elementary English vocabulary for basic instructions can provide a means of communicating with a passenger in need of assistance whether or not the passenger and crew member share a common language.
- The possible need to communicate during an emergency by some other means (e.g. by demonstration, or hand signals, or calling attention to the location of instructions, muster stations, life-saving devices or evacuation routes) when verbal communication is impractical.
- The extent to which complete safety instructions have been provided to passengers in their native language or languages.

- The languages in which emergency announcements may be broadcast during an emergency or drill to convey critical guidance to passengers and to facilitate crew members in assisting passengers.

Also, the 18th Assembly in 1993 came out with Resolution A.742(18) - Procedures for the Control of Operational Requirements Related to the Safety of Ships and Pollution Prevention. This resolution differs from the previous one in that it deals with the issue of a working language on board. The Annex to this resolution states that Port State Authorities may carry out detailed inspections if "clear grounds" of ships not meeting the requirements of relevant instruments are found. "Indications that *key crew members* may not be able to communicate with each other or with other persons on board", is one, among six, "clear grounds" stated in this resolution that, if found, requires from Port State Control officers the application of relevant control operational procedures.

Furthermore, the Guidelines for Control of Operational Requirements stated in the Annex to Resolution 742(18), establishes in point 2.2, that the control officer may determine if the way *key crew members* communicate with each other and with passengers may not constitute an impediment to the safe operation of the ship, especially during emergency situations. For this, the control officer may ask the master which language or languages are used as the working language on board, and determine the ability of *key crew members* to understand each other during inspections and drills.

Regulation 4 of the new chapter XI of SOLAS 1974 includes this resolution, and therefore crew members being unable to communicate with each other constitutes a valid cause to carry out an inspection on board foreign flag vessels.

During the SOLAS conference held at IMO in November 1995 an amendment to Regulation 13 of SOLAS Chapter V, which refers to manning, was agreed. The intention was the improvement of crew performance with regards to safety. By the

amendment, the establishment of a working language on board passenger vessels is required. This must assure that every seafarer is able to understand and give orders in that language.

The 1995 SOLAS Conference, also came out with 13 resolutions. One of them, requires parties to the SOLAS convention to take necessary measures to establish a working language on board all type of vessels. But, as this is a resolution and not a binding instrument, it has not, of course, the compulsory status of the aforementioned amendment.

The 19th IMO General Assembly also adopted Resolution A.792(19) - Safety Culture in and Around Passenger Ships. This resolution states the necessity of establishing a safety culture among crew members as the only foreseeable way to lead seafarers in developing a "safety-oriented attitude". It also states that the International Safety Management Code (ISM Code) is expected to establish a safety-oriented attitude among shore-based personnel.

Besides IMO resolutions, the Marine Standard Communication Phrases, has been another attempt by IMO to improve communications between vessels and between vessels and shore stations. The Germans were who took the initiative for this process. The instrument was then developed by a working group chaired by Dr. Peter Trenkner of Germany and constitutes an expanded and improved version of the Standard Marine Navigational Vocabulary. Nevertheless, it does not seem to be a very useful tool for the particular problem of on board communications between seafarers within multilingual crews. A similar situation is that of the ESP in aviation.

In chapter II, concerns from the aviation industry regarding the importance of the English as the common language for international aviation was mentioned. A strong commitment from the side of industry to improve this issue was also stated.

ESP English words to be used by pilots are not more than 300. However, problems arise when something which is not pure routine happens, and regular language is required. The world's worst air disaster - 1977 KLM -747 crash in Tenerife with 583 fatal casualties - was caused by the incorrect use of the preposition "at". The Dutch pilot informed the control tower "We are now at take-off". The air controller understood the plane was at the take-off point, while in fact what the pilot was really saying was that they were "taking off", that is moving down the runway. What followed was a collision between the 747 and another plane that was landing (Nurden R, 1995).

Steven Cushing, professor of linguistics at Chicago University, believes that the cause of the misinterpretation was the wrong use of the preposition "at". The Dutch pilot wanted to say "We are taking off", but the present continuous tense in Dutch can be expressed by the equivalent of "at" plus the verb's infinitive, but this could not be known or inferred by the air traffic controller, who was Spanish.

This suggests, once more, that English for communication matters is much more than simple and specific phrases. And, again this is another parallel with aviation with regards English language instruments (ESP and Marine Standard Communication Phrases) playing a very similar function.

The STCW 1978 Convention, including the 1992 amendments (adopted by MSC Resolution MSC.21(59)), placed mandatory minimum requirements regarding the knowledge of English for officers in charge of navigational watch on ships of 200 gross register tons and above (Appendix to Regulation II/4.16). These requirements, however, referred to the understanding of charts, publications, meteorological information and messages concerning safety, and to communications with other ships and shore stations, and the use of the Standard Marine Navigational Vocabulary. No indication was given regarding communications with crew members in English; for example, the helmsman or the engineer on watch who may be of a different nationality than the officer on watch.

For radio personnel and operators this convention established mandatory minimum requirements regarding the knowledge of the Standard Marine Navigational Vocabulary, in Chapter IV, and in Annex IV of Resolution 7. For radio officers, Annex to Resolution 14, established the same mandatory minimum requirements as for radio personnel and radio operators. This resolution recommends that English should be taught "to a suitable level within the limits necessary for exchange of radiotelephone and radiotelegraph communications relevant to the safety of life at sea". Annexes I and II of Resolution 15 made the same recommendations for radiotelephone operators with restricted and general certificates respectively.

It can be appreciated that mandatory requirements, as well as recommendations regarding the English language, have focused on communications from the ship to the outside. No advice has been given to improve communications on board for people speaking different languages. Only Resolution 22, *Human relationships*, came out with a recommendation to governments regarding the improvement of human relationships. The two first points of this resolution (a and b) states:

- To establish or encourage the establishment of training programs aimed at safeguarding good human relationships on board ships.
- To take adequate measures to minimize any element of loneliness and isolation for crew members on board ships.

But if the intention of proposing a common language (or the English language), as a means of improving human relations and minimizing isolation and loneliness was there, that intention was hidden within the text and left to the free interpretation of governments.

The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995; and the Seafarer's Training, Certification and Watchkeeping Code (STCW Code), concentrate more

on the use of the English language on board than the STCW 1978 Convention. It is therefore relevant and important to consider its content.

The Code has two parts, one, Part A, which is mandatory and another, Part B, which is a guidance to assist Parties to the convention in applying or enforcing its measures, but without having a mandatory status. Provisions regarding the English language and communications on board within each part are treated in the following paragraphs.

1. Section A-I/14 - Responsibilities of companies (page 24).

Trough this companies must develop policies that enable masters to provide newly employed seafarers with enough time to become familiar with shipboard equipment and operational procedures for the proper performance of their duties. To achieve this it is required, among other things, that a "knowledgeable crew member" must be appointed to give new crew members essential information in a language seafarers understand.

This is a positive step in order to improve isolation, discrimination and cross-cultural problems. However, it also means that no specific (common) language is required from the new seafarer coming on board, except for the performance of certain duties. It is a fact that some companies go further and require newly employed seafarers to know the common language spoken on board, but it is not a compulsory issue according to what the code demands in this section.

2. Table A-II/1 - Specification of minimum standards of competence for officers in charge of a navigational watch on ships of 500 gross tonnage or more (page 34).

In the Function "Navigation at the operational level", under the title *English language*, it can be seen that the text regarding knowledge, understanding and

proficiency is practically the same of that of the 1978 STCW Convention (Regulation II/4-16). The difference is that under the STCW Code it is also required that the officer must be able to perform his duties with a multilingual crew.

The problem here could be that it is not explained how the officer is going to communicate with the members of the multilingual crew in order to perform his duties. One way could be by speaking the languages of the ratings with whom he is performing his duties. Even though some companies require their officers to speak two or three languages, this does not seem to be the most appropriate solution.

Another way, more simple and logic, is that duties are performed in a common (working) language.

One can say that as Table A-II/4 - Specification of minimum standards of competence for ratings forming part of a navigational watch, requires that ratings must be able to understand orders and to communicate with the officer of the watch in matters relevant to watchkeeping duties, no additional remarks are needed. However, in Section B-II/4 (not mandatory), Parties are encouraged to, among other things, give the necessary English knowledge to ratings, to perform duties during a navigational watch, that enable them to understand wheel orders in English given by pilots. So, if there is the need for a recommendation in Part B of the code, then the mandatory requirements of Table A-II/4 in part A are not supposed to refer to the English language.

It has been stated above that Regulation 13 of SOLAS Chapter V has been amended and that the establishment of a working language on board passenger ships is now mandatory, and that IMO wants to extend it to all types of vessels. This constitutes a further step by IMO to avoid, among other things, any misunderstandings in the STCW Convention.

3. Table A-III/1 - Specification of minimum standards of competence for officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room (page 75).

The Code requires here that officers must have a knowledge of English sufficient to enable them to understand publications and to perform their duties. This is an improvement with regards to the STCW 1978 Convention, where no requirements regarding the English language were stated for engineering officers.

4. Requirements for Radio Personnel.

Requirements regarding the use of English are similar to those stated in the STCW 1978 Convention; this is the use of the Standard Marine Communication Phrases which have replaced Standard Marine Navigational Vocabulary, and the use of written and spoken language for the communication of information relevant to the safety of life at sea.

The main difference is that the latter one of these was not mandatory under the 1978 STCW Convention. Another difference is the introduction, through the 1991 amendments, of the same English requirements for GMDSS radio operators.

5. Chapter V - Section A-V/2 - Mandatory minimum requirements for the training and qualifications of masters, officers, ratings and other personnel on Ro-Ro passenger ships (page 108).

Under the title of "Safety training for personnel providing direct service to passengers in passenger spaces", Resolution A.770(18) has been placed into this section acquiring therefore mandatory status for parties under the STCW

Convention, as amended in 1995. This resolution refers, in general, to the ability seafarers must have to communicate with passengers.

This constitutes another improvement regarding the 1978 STCW Convention.

6. Chapter V - Section A-V/2 - Crisis management and human behavior training (page 110).

This point deals with the training on crisis management and human behavior that all personnel on board passenger ships, from the master to any person having responsibility for the assistance of passengers in an emergency situation, must have. This training has to be approved by each single Administration.

A remark that might be made here is that communication abilities by using a common language must be understood by Administrations as an important part of this training.

7. Section B-VI/1 - Guidance regarding emergency, occupational safety, medical care and survival functions (page 243).

Under the title "Personal safety and social responsibilities", IMO recommends Parties to ensure seafarers have an "elementary English vocabulary". IMO emphasizes that English is the standard language for maritime safety purposes. Also, the Organization highlights the ability that crew members dealing with passengers might have in order to be able to communicate with them.

A comment was made before in this chapter regarding Resolution 22, *Human relationships*, in the STCW 1978 Convention. It referred to the apparently hidden intention to suggest, among other measures, the establishment of a common language as a means to improve human and social relations on board, and to reduce isolation and loneliness. It seems that this aspect, which is closely related to

culture matters, did not find a place in the revised Convention. It seems also that the need of English for the communication of fundamental information to passengers, and the proper care to prevent drugs and alcohol abuse (page 255), have replaced it.

The amendments to the 1978 STCW Convention, and the STCW Code, have been a great improvement for safety matters. Nonetheless, the general perception might seem to be that the amended convention concentrates on English for ship to ship and ship to shore communication purposes and the performance of certain duties. However, little emphasis is placed on matters relating to communication problems on board due to the lack of a working language, except in the case of passenger ships. Not understanding an order or misunderstanding it whilst doing a maneuver in the tanks of an oil-tanker or a chemical-tanker, may lead to considerable safety problems.

A point to mention here is that owning an elementary English vocabulary is recommended in the Convention for ratings performing navigational watch tasks. However, no recommendations are given (neither mandatory nor voluntary) with regards to ratings who have to perform auxiliary tasks in, for example, the engine room (motormen, etc.). It is clear that the STCW Convention states minimum English standards for a crew composed of master, chief engineer, deck officers, engineering officers, radio personnel, and helmsman; but it is also true that today there are many non automated vessels which need auxiliary personnel for deck and engine tasks and no recommendations are given regarding these ratings.

Besides the STCW Convention, the Standard Marine Communication Phrases is another step forward compared to the Standard Marine Navigational Vocabulary. But, as the ESP in aviation, and the Rules of the Air and Division traffic Services - Doc 4444-RAC/501, it is only a helpful tool for routine operations. When non-routine events occur or when normal English is needed, problems or confusing situations may still arise.

CHAPTER 4

THE ISM CODE COMES ONTO THE SCENE

4.1 Safety through motivation. The implications of not having a common language on board

The objectives of the ISM Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance or damage to the environment, in particular to the marine environment and to property (ISM Code, page 2).

All matters and examples presented in previous chapters prove communication problems on board due to a lack of a common language to be a potential hazard to the objectives of this Code.

The Code place responsibility on the company or entity responsible for the operation of the ship regarding matters endangering the objectives of this Code. The company must develop a safety and environment protection policy or Safety Management System (SMS). The master is released from some responsibilities, but is responsible for the implementation of this policy on board, and for "motivating the crew in the observation of that policy".

To motivate people is always a very difficult task, but is also one of the key factors for the proper management of human resources. According to Maslow (Mottram D, 1995) motivation begins with needs, and the hierarchy of these needs is as follows:

**Self Realization
Needs**

(reaching your potential, creativity, self expression)

Esteem Needs

(responsibility, self respect, recognition)

Social Needs

(companionship, acceptance, love and affection, group membership)

Safety Needs

(avoidance of risks, pain and harm)

Physical Needs

(food, clothing, comfort)

According to the expectancy theory of Vroom, "The level of motivation a person feels for doing a particular activity depends upon the extent to which the results are expected to contribute to his particular goals" (Mottram D, 1995).

The Encyclopedia Britannica defines motivation as "The characteristics that drive one person to achieve a particular end that another individual with similar endowments apparently lacks".

In chapter II, the author dealt with many matters, mainly cultural, affecting the performance of seafarers within a multilingual crew. Having considered this, it appears to be that it will be more difficult for a master to motivate a multilingual crew than to motivate a single-nationality crew. Mixed crew seafarers who feel that the company that contracts them, which in many occasions is not the shipping company, only does it because they are cheap, and that also feel discrimination from senior officers because of their culture or the country they come from, will not be a fertile ground for a master to sow the seed of motivation.

The way some multilingual crews are treated by shipping companies or shore recruitment companies with regards to low salaries, salaries not paid in time, "favors

requested" to get a job, discrimination depending on nationality, etc., works against the achievement of the basic needs stated by Maslow.

Usually multilingual crews do not last too long on the same vessel. Companies keep moving them from one ship to another. This has many adverse effects that run from safety considerations to human relations, therefore, some, not to say all, of the needs stated by Maslow remain unsatisfied.

Masters of today on board vessels carrying multilingual crews face the problem of coming back to their vessels after a holiday or a short leave and find that the crew has been replaced from let us say Indians to Indonesian, or from Chinese to Filipinos, and they have to start once again to accommodate themselves to the new culture. And if something was done on board before, by him or his officers, to improve English, they have to start all over again.

If there are language difficulties within the crew, how is a master supposed to communicate the policy of the company to his crew, as required by the ISM Code.

A very common way used to communicate subjects to a multilingual crew is through key persons. These people speak the different languages existing within the crew. Another one is the master says something to the senior officers, who in turn transmit it to the junior officers, and these tell the petty officers who in the end tell the crew. These approaches both have negative aspects, mainly for the particular case of communicating the policy of the company; firstly the master does not do it personally, like the case of British Airways, and therefore the crew may think that the issue is not relevant; secondly, if the message reaches the crew after passing through two or three persons it is likely that the final outcome may be quite different than the initial message; the example of the message passed from left to right in a row of people, mentioned in chapter I, applies here.

The ISM Code establishes that "The company should ensure that the ship's personnel are able to communicate effectively in the execution of their duties in relation with the SMS". The Code also states that "the company should establish procedures by which the ship's personnel receive relevant information on the SMS in a working language or languages understood by them" (page 5). Even though *should* is used instead of *shall*, this is a positive step forward for the adoption of a common language on board.

To motivate people is not an easy task. However, it is one of the main keys for success. Masters in general cannot do it just by themselves; support is needed from the top to establish on board the spirit of a team.

4.2 Proper management. The key for motivation

One can contract a crew and try to run a vessel, or one can build up a team and run a vessel efficiently and safely.

To build up a team means that shipowners or shore recruiting companies must take proper care of their employees; let them feel they are a part of the company and that the effort they exert to perform their jobs efficiently will in the end benefit themselves. In short: find the way to motivate.

Suppose there is a crew who has good professional skills according to international standards. There is no one single magical solution to guarantee a strong commitment from the seafarer to the company, except maybe for a very good salary. However, this is not the case within multilingual crews because shipowners use this to cut costs.

However, there are other less expensive improvements that companies may attempt rather than paying high salaries: respect for the different cultures/religions present on board, appropriate food regarding the countries the crew members are

coming from instead of imposing the menu, rapid delivery of mail, good selection of games, videos and magazines in the various languages of the crew. As an example, the author remembers when he was on board the German fishing vessel "Broelemann", videos with all the games of the last football World Cup, 1974, were available on board. Food can be bought cheaper at the calling ports instead of sending it through the managing company.

This way of looking at the subject of salaries the author has must not be misunderstood. It does not mean good salaries are not important, or that the author does not care about seafarers having good salaries. It is a fact that multilingual crews are hired because shipowners or managing companies want to reduce costs; therefore, paying good salaries could not be presented here as a solution for proper management and team building within multilingual crews since this is likely to be ignored in reality.

Another important measure, to motivate the crew to perform as a team, which is not as economic as the ones mentioned above but is less expensive than high salaries, is the development on board of a working language. As stated before in this paper, a common language not only improves efficiency and safety but helps to enhance human relations. As an example, A.P. Møller requires crews to speak English on board its vessels engaged in international trade (Broby, 1996).

Maritime academies have the primary responsibility to teach a common language which according to general opinion must be English. However, and according to the various English courses and different related alternatives the market presently offers, shipowners and managing companies have enough facilities to improve the knowledge of English within their multilingual crews. There are ways Administrations and the IMO could follow to encourage shipowners and managing companies to improve the level of English within their multilingual crews. This will be discussed in a later chapter.

The point to clarify here is that shipowners and managing companies must understand the important role they have in motivating their crews and in building up a team spirit.

To overcome the problem of substandard training and skills of which language is a part, Administrations and IMO can regulate through national laws and conventions, like new amendments to SOLAS Chapter V where a working language is required under Regulation 13, and Regulation 4 of Chapter XI, through which Port State control officers can inspect foreign flag vessels where there are "clear grounds" that a master and crew are not familiar with essential safety procedures, within which communication problems due to language are included. However, it is only through proper and careful management that crews will be motivated, and this can only be achieved by shipowners and managing companies.

Mr. William O'Neil, IMO's Secretary-General, approached the issue of multilingual crews, of which the need for a common language on board was one of the issues, on the occasions of World Maritime Day 1994, and 1995. In the latter speech, he focused especially on manning. He said that investigations into recent accidents have proved that consequences may have been less severe if there had not been language difficulties within the crew. He called attention to the fact that ships are increasing in diversity and therefore in complexity and that, also, demand for seafarers is expected to increase in the near future.

Therefore, taking into consideration the points made up by Mr. O'Neil, together with the thoughts and statements presented in this section, it is likely that a better broad management attitude should be required especially from shipping companies and/or seafarers recruiting companies dealing with multilingual crews.

CHAPTER 5

THE ACADEMIC RESPONSE

5.1 The Swedish case, an example of Improvement In the learning of the English language

One issue that may call the attention of a foreigner who visits Sweden, is the high standard of English speaking skills that people, mainly under 40 years of age and coming from all social levels, have.

The author, during his stay in Malmö, visited Lund, Trelleborg, Ystad, Helsingborg, and Stockholm, and in each of these places found a high level of English language competence. In most places when asks for something in English, Swedes, especially the younger generations, will answer in English as if it was the most natural thing to do.

Another interesting issue is accent. Most Swedish people of around 35 years and older speak English with a Swedish accent . This can be appreciated at WMU when one talks to Professor Per Ericksson, Captain Jan Horck, Mr. Peter Rohmée, Mr. Mats Johansson, Mrs. Stani Hayes from the reception office, or Mrs Cecilia Denne from the library, to give some examples. Even though these people are almost constantly speaking English, because of their job, they have kept their Swedish accent; they cannot get rid of it.

However, people under 35 years of age, and mainly the younger people, have no accent at all; the way they speak is very similar to that of an American. The British accent is very rarely found.

The author has been to Hamburg, Düsseldorf and Bonn, in Germany, and did not find the same high standard with regards to speaking skills. German University students have a good level of English as was appreciated during a short visit to the university of Hamburg. However, it is not the same with, for example, young people working in gas stations or stores; their level of English is considerably lower compared to people doing similar jobs in Sweden.

In Norway, Denmark, the Netherlands and Belgium the level of English is very close to that of Sweden.

A very interesting thing to observe is tennis players. Those who watch tennis tournaments on the Eurosport channel may have the opportunity to listen to many players from many parts of the world speaking English during interviews. Discarding native speakers, one can find that Swedish players speak English much more fluently than Germans, Croatians, Spanish, Dutch, Belgians, Italians, French, Rumanians and Argentinians.

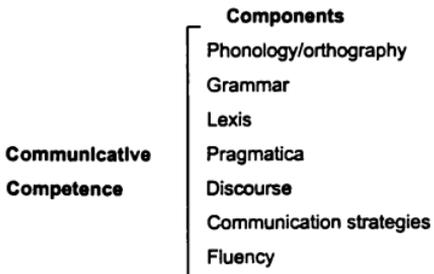
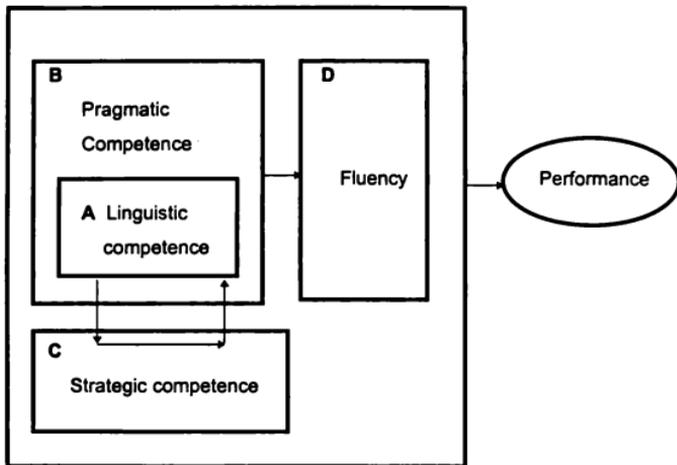
There are about 8.5 million Swedes within a total world population of nearly 3 billion. As not many people outside Sweden speak Swedish they need English in the same way their grandfathers needed German, in order to be able to do business with the outside world; Sweden is highly dependent on its export industry. Nevertheless, the high standard of English, particularly among young people, is surprising.

In 1945, English became the first foreign language in Sweden. Before it was German. Children start with English in grade 3, which means between 9 and 10 years of age. However, at present, there are some schools which, on an

experimental basis, have started to teach English at the age of 6 (Fisher and Hjelm, 1996).

The following diagram, shows what the philosophy currently being used to teach English in Sweden is.

COMMUNICATIVE COMPETENCE



The key word is communication; linguistic competence itself is not enough. Pragmatic competence together with a well developed strategy to achieve fluency is needed in order to perform well. The teachers' objective of today is to get students closer to English, and in order to accomplish that task they, to put it simply, look for the best story to tell. Actually they may be right because the next century will be the century of the story-tellers from the social point of view.

Before 1945, German was the first foreign language taught in Sweden. During those days teaching techniques were based on linguistic competence. Language was taught in a very structured way; teachers were just grammarians and students were learning a language instead of acquiring it; one acquires a language when using it instead of focusing on grammatical structures and formal accuracy. What is meant by this is the understanding of input that contains structures a bit beyond the current level of the student's competence (Stevick English, 1976). Some years ago, English teachers in Sweden started to develop English learning through communicative competence, as shown in the above diagram. Teachers became more than grammarians; they tended to provide input and strong motivation for their students by creating a more friendly learning environment in order to promote acquisition (Fisher and Hjelm, 1996).

One reason that explains why young people have a high standard of English and an accent very similar to Americans is that movies on TV are in the original language, which in most of cases is English, with subtitles in Swedish. Because movies usually come from the United States and not from the United Kingdom, the accent is not British. Dr. Ulla Thagg Fisher and Mr. Lars Hjelm, both at the English Department of the Malmö School of Education, explained that when dubbing arrived in Sweden, the authorities did not have the money to implement that technique and decided to keep the subtitles. Some years after, they realized how lucky they had been; younger people had incorporated English in the most natural way watching movies or their favorite TV programs. Nowadays, Swedish educational authorities

continue this policy of subtitles in the national language although they can afford to dub. This is not the case in Germany for instance.

One last but not least important aspect, Dr. Fisher points out, is that a Swedish student may receive 3 hours a week of English at school, but outside the classroom they may be exposed to an average of 20 hours a week of English in the form of movies, TV and radio programs, advertising, music, etc. They incorporate English in a natural way.

5.2 English programs in some maritime academies

Maritime academies have the primary responsibility for teaching English to seafarers. In this section it is intended to analyze the effort certain academies put into teaching the English language.

China and the Filipines are the largest suppliers of seafarers worldwide, with China trying to gain first place. The Dalian Maritime University, which is the largest institution governed by the Ministry of Communications of the People's Republic of China, is analyzed; also the most important maritime academies in the Filipines are analyzed, together with those which are not reliable. Furthermore, information from the Maritime School of Bilbao from Spain is presented; and finally, information from the Merchant Maritime Academy in Argentina, the author's country, is discussed.

5.2.1 The Dalian Maritime University, China

The main objective of this university could be summarized in the words of president Jiang Zemin: *"With steadfastness, prudence, diligence and pioneering spirit, build a first-rate maritime institution of higher learning in the world"*.

According to official statistics, China has 315.000 seafarers, of which approximately 30.000 are working on board foreign flag vessels (Zhang, 1995).

All courses at Dailan University have a duration of four years, and many of them include 8 months of practice at sea. The different courses are listed below together with the number of subjects for each course, and the correspondent number of class hours allocated to English per subject. Only the obligatory courses have been considered for the total amount of class hours; the optional ones have not been considered. In all courses the number of class hours allocated to the teaching of the English language are by far the largest; they are stated in the list below in relation to the total number of class hours of each course.

Course	Number of Subjects	Number of class hours for English	Total Number of class hours
1. Marine Navigation	38	546	2980
2. Maritime Radio Communication and Navigational Aids	31	620	2790
3. Navigation Aids Management	36	390	2800
4. Maritime Administration	33	640	2774
5. Electronic Engineering	32	306	2592
6. Computer Communication	36	306	2588
7. Communication Engineering	32	376	2502
8. Marine Engineering Management	33	465	2695
9. Marine Electrical Engineering Management	33	320	2585
10. Automatic Control	28	320	2660
11. Maritime Law	29	798	2823
12. Shipping Management	35	340	2780
13. International Trade Transportation	30	803	2705
14. Combined Transportation	36	803	2688
15. Computer Science	33	438	2732
16. Managerial Information System	32	395	2713
17. Port and Shipping Administration	39	315	2697

From these figures (Dalian Maritime University Brochure, 1994) it can be inferred that, considering all courses, English amounts to 17.7% of the total number of class hours for four year of study. Considering that the average of the number of subjects is 33.3, which means that English is one subject within 33.3 subjects, 17.7% appears to be most significant.

In order to give a more comprehensive idea of how relevant English is compared to the rest of the subjects in each course, Electronic Engineering with 306 hours is the course with least hours of English. However, the subjects that follow English in number of class hours, within the same course, are Social Science and Advanced Mathematics with 164 and 150 hours respectively. This means that in this case English class hours are almost the double.

If one looks at Combined Transportation, the total amount of hours allocated to English is almost 5 times that of the subject that follows it, which is Social Science with 164 class hours.

These two examples are enough to demonstrate that this university is actually giving to English a very high degree of importance.

However, let us just concentrate on Marine Navigation and Marine Engineering Management, totaling 38 and 33 subjects respectively, which are the two courses that allow graduates to obtain sea-going certificates of Second Deck Officer and Third Engineer after one year of training on board. For the former, English represents 18.3% of the total number of class hours, and for the latter English represents 17.2%. Also, in the case of Marine Navigation, English doubles the subject that follows it, which is Social Science, in number of class hours; the same happens with Marine Engineering Management, where Advanced Mathematics is almost half. It can be seen from this that English is given equal importance in both courses.

To learn English is not something easy for the Chinese; the root of the Chinese language is totally different from Latin which is the root of the English language. According to the English Department of WMU, Chinese have problems with speaking and listening skills, but on the other hand, they are good in grammar and writing (Battista, 1996).

As may occur in many parts of the world, lack of proficiency in English increases within ratings. Vocational Schools in China are the schools where ratings are trained. These schools do not give the same importance to English as maritime universities do. This is due in part because courses are shorter, and also, because the background and previous level of English of students going to these schools is low compared to the knowledge of the students at maritime institutes and universities (Zhang, 1995).

Maritime universities in China dedicate much more time to English language training. It is true that perhaps they should focus more on the practical aspect of the activities on board, as Shiping Zhang from Dalian University pointed out in his WMU dissertation "Maritime Casualties and the Human Factor". However, it seems that they are going in the right direction. As an example of improvement, in 1990 and 1991 five students from China came to WMU and all of them took the IELP (Intensive English Language Program). Five years later, in 1996 and 1997, only four of the nine Chinese students that came to WMU took the IELP.

A late comment might be stated with regards Vietnam Maritime University, where similar dedication to the teaching of English is found. According to the present five-year long curriculum, there are 510 class hours allocated to English in the Navigation course, and 460 in the Marine Engineering course. The subject that follows English in number of class hours in the Navigation course as well as in the Engineering course is Advanced Mathematics with 300 class hours. The total number of subjects in the Navigation course is 33 totaling 4090 class hours, and in the Marine Engineering course is 35 totaling 3804 class hours.

From this it can be seen that English almost doubles the number of class hours of the next subject in each item; and also, that English represents 12.5% and 12% of the total number of class hours for the Navigation course and the Marine Engineering course respectively.

At the moment, and according to Mr. Tran Dac Suu, Vietnam Maritime University Vice Rector, the university is trying to apply a more ambitious curriculum for which the students will receive 500 class hours of English during the first two years, and starting in the third year all maritime subjects will be taught in English.

5.2.2 The Philippines Merchant Marine Academy

The Philippines is presently known as the major supplier of seafarers for foreign vessels. In 1991 there were 57 maritime institutes of which 9 belonged to the government and 48 were private (Siddayao, 1992). According to *The Sea*, July/August 1996, and *Lloyd's List*, 20 April 1996, this number has currently reached 111. However, there are many concerns with regards the quality of training being imparted at the maritime academies of the country. As Sven Erik Nylund from the ITF said, the quality range of the maritime training goes "from the very good to the very poor". Even so, the maritime institutes of the Philippines represent the 25% of the total number of maritime academies around the world, and in 1992 Filipino officers accounted for the 50% of foreign officers on board Norwegian owned and controlled vessels (Almazan, 1996).

According to John Briggs, an Australian lecturer on maritime safety, one of the reasons for the lack of quality of the maritime institutes is that as the government's support to maritime education was inadequate, the officials left this task in the hands of the private sector (Almazan, 1996).

However, the problem with the substandard levels of Filipino seafarers, and the subsequent dilemma of not being capable of achieving the standard of the revised

STCW Convention by 1 July 1998, is more related to technology than to English skills. If compared to Chinese, Filipinos have more ability to learn English. Nevertheless, the lack of English may be more evident among ratings than among officers.

Although Filipino crew members on board the "Scandinavian Star" were not fluent in English, this does not seem to be the general pattern concerning Filipino seafarers.

In the Philippines Merchant Marine Academy (PMMA), as well as in many other private and state maritime institutes, all books concerning technical matters such as chemistry, physics, mathematics, navigation, etc. are in English. The same happens with primary and high school text books. Also, English is taught at all private schools (Martinez, 1996).

The PMMA has a four-year course of study for the branches of Deck (Marine Transportation) and Marine Engineering. The English curriculum (PMMA Catalogue, Vol. II, 1994) is as follows:

Deck Officers (Marine Transportation)

Course	Number of Subjects	Number of class hours for English	Total Number of class hours
1. First Course	16	120	1080
2. Second Course	*	*	*
3. Third Course	13	120	900
4. Fourth Course	16	120	960
Total	45	360	2940

Marine Engineering Officers

Course	Number of Subjects	Number of class hours for English	Total Number of class hours
1. First Course	16	120	940
2. Second Course	*	*	*
3. Third Course	18	120	980
4. Fourth Course	16	120	1040
Total	50	360	2960

* One year training on board.

Both graphics show the number of subjects per course together with the number of class hours allocated to English and the total number of class hours. From this it can be seen that the total percentage of class hours allocated to English is 12.3% and 12.1% for the Deck and Marine Engineering branches respectively.

The minimum standards required for English by the Commission of Higher Education of the Philippines for all maritime institutes is 45 class hours per a 15 weeks semester. The curriculum from above shows that at the PMMA the number of class hours allocated to English per semester is 60. However, in the case of the PMMA each semester consists of 20 weeks. Therefore one can see that the effort put on the learning of English is almost the same at all maritime institutes.

The difference in the amount of class hours allocated to English when compared with Dalian Maritime University may be justified because Filipino youth have more contact with English than Chinese youth from the very beginning of their primary

schooling. Also, the influence of the American military bases had played a very important role.

Nevertheless, a point to bring up here is that the level of English of most Filipino seafarers is lower compared to that of university students. However, as a general pattern, Filipino seafarers English listening skills are better than speaking skills. Post graduate courses for improving English skills have been lately implemented (Factuar, 1996).

5.2.3 The Maritime School of Bilbao, Spain

The maritime School of Bilbao is one of the best maritime institutes for merchant marine officers in Spain. Lets us have a look at how much importance they give to English. The number of class hours allocated to English for the Deck and Marine Engineering branches together with the number of subjects and the total number of class hours for each course, is presented below.

Deck Officers

Course	Number of Subjects	Number of class hours of English	Total Number of class hours
1. First Course	6	60	750
2. Second Course	7	90	810
3. Third Course	8	90	780
4. Fourth Course	5	90	660
5. Fifth Course	7	-	780
Total	33	330	3780

Marine Engineering Officers

Course	Number of Subjects	Number of class hours for English	Total Number of class hours
1. First Course	6	60	750
2. Second Course	8	90	810
3. Third Course	7	-	900
4. Fourth Course	7	90	630
5. Fifth Course	6	-	690
Total	34	240	3780

This curriculum (Guia Docente 96-97) states an academic year of 30 weeks. The total percentage of class hours allocated to English during the five years of study, in relation to the rest of the subjects, is 8.7% and 6.3% respectively for both the deck and marine engineering branches.

Spanish is the language being most widely spoken in the world following English, and this is an increasing tendency. Argentina's language and cultural background come from Spain. Therefore it is interesting to see how relevant English is in a maritime institute from Spain.

If one compares Bilbao Maritime School with Dalian Maritime University some interesting points can be noted. At Bilbao, English is one subject among 33/34 subjects and almost the same happens with Dalian Maritime University where English is also one subject among 33.3. However, in the latter the average number of class hours allocated to English is more than the double, 18.3 and 17.2 % against 8.7 and 6.3% respectively. Compared to Dalian Academy percentages from Bilbao

Maritime School are considerably lower. To a lesser extent the same happens when Bilbao English curriculum is compared with the Philippines Merchant Marine Academy.

Another peculiar thing found in both branches at the Spanish institute is that English is not taught during the last course.

Also, PMMA average number of English class hours is higher than Bilbao Maritime School.

Lastly, Bilbao Maritime School English programs have not been modified since 1977.

As this institute is one of the most important in Spain for graduating maritime officers, it seems that English should be improved at Spanish maritime schools.

According to Mrs. Mercedes Herrera Arnáiz, director of Bilbao Maritime School, updating process currently undertaken regarding English will be implemented in 1997. As a result of this process English annual number of class hours for the first three years of study will be as follows:

Deck Officers

Course	Number of class hours for English
1. First Course	60
2. Second Course	75
3. Third Course	75
Total	210

Marine Engineering Officers

Course	Number of class hours for English
1. First Course	45
2. Second Course	45
3. Third Course	45
Total	135

When compared with the present curriculum, it can be seen that for the first course of the Deck Department the number of class hours will stay the same. For the second and third course the number of class hours will decrease in 15. In the case of the Engineering Department, where total number of class hours for the first three years of study will decrease from 150 to 135, English will be taught in the third course.

A New English timetable for the fourth and fifth courses have not been developed yet. It is expected that English will be taught, for the two branches during both the fourth and fifth courses, and that it will total a higher number of class hours.

Finally, the paper "Maritime English Language Education and Training in the Spanish University. Present and Future" by Losey León and Bocanegra Valle is another evidence of the intention of Spanish maritime institutes to improve the learning of English.

5.2.4 The maritime institutes of Argentina

During the last years, Argentina has had to face two problems with regards its shipping industry. Firstly, the National fleet is disappearing while flags of convenience are taking over, and secondly, a large number of foreign fishing vessels with Taiwanese, Chinese and Korean crews have started to sail in the Argentinian waters. Even though these vessels are not allowed to fish on the Argentinian platform, they go to some Argentinean ports located on the south coast to discharge. This means two things; first, many graduating officers, after obtaining their certificates, must go to foreign companies to get a job and, therefore, English is much more needed than it used to be before. Second, foreign fishing vessel crews do not speak Spanish, they speak only a little bit of English; so, English is what shore control station officers, seafarers navigating ships in Argentinian waters and Argentinian seafarers joining foreign fishing vessels need in order to communicate with them.

In Argentina there are two maritime schools, the Merchant Marine Academy (Escuela de Náutica), and the Inland Waters National School (Escuela Nacional Fluvial). Both institutes perform a four-year career, the first one being the most important.

At the Merchant Marine Academy, the average number of class hours allocated to English, for the entire period of study, is 11% of the total for deck officers, 8 % for engineering officers, and 9.7% for radio-communication officers (Programa ENN 95). These total 368, 300, and 306 hours respectively. When these figures are compared with those of Dalian University the difference is remarkable.

In the case of the Inland Waters National School, the average number of class hours allocated to English, for the entire period of study, is 6% of the total. For both courses, deck and engine, the timetable is four hours per week during the first two years of study, and two hours per week during the last two (Programa ENF 95).

Many seafarers have graduated from the Inland Waters National School to sail on board fishing vessels where there might be multilingual crews, or where they may have to deal with foreign fishing vessels operating in the vicinity. Considering this, the programs and time allocated to the learning of English needs to be improved.

The English programs of the Marine Merchant Academy are focused on the maritime activity to 80% whilst the programs of the Inland Waters National School are dealing with the maritime activity only to 25%.

The programs seem to be impressive when one looks at them, but according to the English department of WMU they need to be improved in terms of bibliography and maybe in teaching techniques. The programs for both institutes have been approved by the Secretary of Transport in August 1995. This means that the assessors who had revised them actually think that everything is correct and that what is being taught, as well as the way it is done, is all what officers may need to perform well on board any vessel. If this is the case, the author has the perception that authorities seems not to be going in the right direction with regards to English learning.

5.3 Some economic and political implications in increasing the level of English language competence in the maritime institutes of Argentina.

Argentina, as well as the rest of South America, is not like Western Europe where English is accepted as the common language in almost all countries. Spain and especially Italy, are two countries where English, even if accepted to be the common language, is not spoken fluently as it is in the rest of Western Europe. In Italy, for example, one may has the perception that, generally speaking, Italians do not care about English. France is another country where people do not like to speak English even if they know it. Argentina's largest immigration source has been Spanish and Italians; France also exerted a strong influence in Argentina during the first part of this century, not in the form of immigration but in the way of

incorporating customs. These issues, together with geographical position, have been the main reasons for the delay in the learning of the English language on a broad level.

Most English immigrants coming to Argentina were from a social and economic higher level compared with the Spanish and Italians. Therefore, they were accustomed to be confined inside their own environment, and as a consequence of this their children went only to English schools. This has been another contributing factor which has stopped English from being widely spread among the youth at a more early stage.

Today, the number of private schools in Argentina where English is the second language is huge. Nevertheless bilingual schools with a high level of excellence in English are not that many. English is also taught at all state schools, and the policy of the government is to foster it as the second language.

Having said this, let us concentrate on the maritime field in Argentina. The 3.442 km waterway Paraná-Paraguay, a regional joint venture including Argentina, Bolivia, Brazil, Paraguay and Uruguay, will lead to an increase of the international maritime traffic in the near future. Therefore, the volume of communications between vessels and coastal stations, and between masters and pilots, will increase too. Communications in a common language, which should be English, will be needed mainly in the deep water stretch between the open sea and the port of Rosario where Panamax operate, more than ever before. A misunderstanding because of language difficulties between a pilot and a master, or between a foreign vessel and a coastal station, in this congested and narrow sailing area, may constitute a threat to safety and/or be the potential for a pollution incident.

/ Training is not cheap. However, certain aspects of training are cheaper than others. To improve navigational skills, the use of simulators is requested by the STCW Convention. Fortunately, English training does not require such expensive tools

and devices with the only exemption of multimedia equipment for independent learning. Therefore, proper English training in maritime institutes is not mainly a matter of money.

Figures tell us that the Merchant Marine Academy is teaching English to deck courses on an average of 2.7 class hours a week, this being the highest average. Engine courses and Radio communication courses average 2.2 and 2.3 hours a week respectively. On the other hand, the Inland Waters National School averages 3.3 class hours a week, but as stated before it deals with maritime English only to 25%.

Nevertheless, the main problem is the ratings who do not receive any English training at all. Although new ships are synonym of automation, old ones, and there are still a lot of them sailing around, need ratings to perform tasks on deck and in the engine room.

The general educational background of ratings is not good and the salaries they get today on board are low because of cheaper multinational crews. They will therefore be reticent to study a foreign language like English.

There are also some emotional issues regarding the war between Argentina and the United Kingdom for the Falkland islands in 1982, that may make ratings reticent to learn English. With regards to officers, the matter is different because due to their social and cultural background they understand when to separate professional matters from political matters.

According to the information presented in this chapter it seems that maritime institutes in Argentina should at least increase the number of class hours for English, and then look out for new educational techniques that may help in improving the acquisition of this language.

For the case of ratings, it is not possible, nor logical, to make proficiency in English a requisite to obtain a certificate of competence mainly when the STCW convention is not placing any mandatory requirement for ratings in general; only under SOLAS will passenger ship crew members be requested to be fluent in a common language after 1 July 1997 when the tacit acceptance procedure will apply.

However, within the maritime industry and enterprises related to it, there is an interesting number of courses with different teaching techniques, that can be used for officers as well as ratings, making learning easier and more pleasant for seafarers like, for example, "Understanding English on board ships" from Videotel, or "Marlins" from Acomarit, which have courses for all levels on board.

Another example is the launch of a pilot program in 1993 by the Norwegian Torvald Klaveness Group on board the "Baoshan". This program consisted of an onboard teacher together with an English language laboratory valued in 70.000 NOK. The company said that crew members were highly motivated to learn English under this program (Lillestolen T, 1993). This is a clear example of how much managers of a company can commit themselves in order to improve English skills on board their vessels. After all what is needed is not a Ph.D. in English, just the ability to communicate efficiently in English.

There are people who forecast a lack of availability of seafarers for the coming years and people that argue the contrary. Whatever the case will be, seafarers with a good knowledge of English have a competitive advantage over those who do not. Argentinean Maritime institutes must visualize changes that are appearing on the horizon of maritime business and emphasize English as an opportunity instead of just one more academic subject. Students should be advised that English will not only be useful on board vessels but on most of other future activities concerning the shipping business they may be engaged in.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

The need for a common language on board vessels carrying multilingual crews, has been addressed in this paper and, both, the language itself and the cultural aspects have been analyzed.

IMO is fostering the adoption of a working language on board. The revised STCW Convention and its Code, the Standard Marine Communication Phrases, and mainly the last amendments to SOLAS, like the ISM Code that acquired mandatory status as chapter IX, Regulation 13 of chapter V, and Regulation 4 of new chapter XI, are clear examples. Nevertheless, it remains to be seen whether individual members or regional groupings will develop IMO's initiative into something more accessible to the users.

The lack of a common language, mainly during emergency situations, has proved to be a contributing factor to the human element affecting maritime safety. Some case studies presented in chapter 1 support this argument.

A ship is a close environment where cultural differences, as well as different religious beliefs, among crew members may result in misunderstandings which in turn may lead to serious problems if the possibility to communicate is not there.

Seafarers being able to communicate with comrades, as well as with superiors, by joining in a common language will in general perform better on board. There will be

less potential to threaten maritime safety and to damage the environment through pollution.

English has largely proved to be the language of the maritime industry by customary practice, and should be accepted as the common language to be used on board vessels having mixed crews. This has been substantiated by the many examples described in chapter 2. However, when talking about the English language in maritime activities, two points must be stated very clearly; firstly in no way is a Ph.D. in English required. In relation with this, Daubeny, in his article "Operating ships with multinational crews" (1986), stated that he used to talk to non-native English speaker seafarers in the most simple way possible and without any flourish. Secondly, academic language is not the only thing; technical English is needed too.

English as a second language is the one most largely taught at schools all around the world. Therefore, English is something common at almost all maritime institutes. What does not seem to be common is the methodology used and the effort put on teaching it by the wide spectrum of maritime academies of the globe. This has to do, to some extent, with the difficulties diverse nationalities have in acquiring the language; for instance, Northern Europeans when compared with Asians and Spanish find learning English easier due to the similarities existing with their own languages, let us say Swedish, Norwegian, Danish, Dutch and German. Culture and politics also influence the way English is taught. Other aspects related to this are the disparate relevance English teachers are given in different countries which may affect their motivation in various grades.

However, it is likely that the learning of the English language has improved in the last years in some maritime academies as it is the case of Dalian Maritime University where the English curriculum has a very important amount of class hours. The Vietnam Maritime University, for instance, is intending to launch a program where technical subjects will be taught in English as a way to improve the learning of the language. Maritime institutes in the Philippines have good curricula of

English taking into consideration the previous background of the language Filipinos have from school. The Philippines Merchant Marine Academy is one example of maritime institutes in this country where the English curriculum exceeds the minimum standards required by local authorities. On the other hand, it seems that English deserves more attention at maritime institutes in countries where Spanish is the mother tongue deserves more attention.

Nevertheless, it is also true that learning the English language in maritime academies is not only a matter of a higher number of class hours. Sometimes, a lesser number of class hours but giving English the status of a basic subject like navigation or mathematics, making it mandatory for graduation, may bring better results with regards to the level acquired. Nonetheless, this policy may face in certain countries some resistance from the political side.

Actually, and in addition to the academic and cultural aspects, language is also a political issue. Most officials acting on behalf of their governments will agree in private that the use of English as a common language on board vessels makes sense in today's shipping world. But representatives would not be able to confirm that in public, for instance at IMO meetings. In this regard aviation has proved to be a step ahead because, as stated in chapter 5, English is mandatory. Nevertheless, it is feared that the potential for loss of lives is higher in aviation than in shipping, and this may explain why the aviation industry has moved faster in this regard when compared to the shipping industry. The author does not want to forget that the issue of communication problems on board due to language difficulties reached its peak with the "Scandinavian Star" disaster.

Even primary responsibility for English training lays on the back of maritime institutes, shipping companies and recruiting managing companies play an important role in improving the English skills of crews as a way of ameliorating cross-cultural issues and developing the "team spirit".

English training by shipping companies and recruiting managing companies can be done either on board or ashore. There are companies like the Klavness Group from Norway that carry out training programs on board and ashore. However, it seems that there are, and will continue to be, some companies in the shipping market, mainly recruiting managing companies, which due to saving money policies do not want to invest in English training.

An easy way to solve the problem of communication on board could be by having a key person with a good knowledge of English, very close to that of a native speaker. Even though there are people that support the idea, to adopt this choice could be extremely dangerous for the safety of the vessel as in an emergency or accident the key person may be one of the first to get hurt or even die.

Nonetheless, having lessons on board could be sometimes rather heavy for seafarers. Today reduction of crew is a main objective and this results in an accumulation of tasks. The author remembers when, as an inspector on board the German fishing vessel "Broelemnn", he was teaching Spanish to the third mate, while at the same time the third mate was teaching German to him, using English as the link language. The tasks of the third mate were heavier than the author's, so he got bored and gave up after 25 days of half-hour classes each.

The most feasible solution in general would be maritime training centers depending either on the government or shipping companies. Maritime academies have the facilities, in buildings and academic staff, for post graduate courses, therefore English maritime training centers can be developed within. As an example of this, the Merchant Marine Academy of the Philippines, together with some other maritime institutes of that country, have started to implement English courses for post graduates. Training centers can also be useful in helping surveyors and port authorities to carry out inspections in accordance with Regulation 4 of SOLAS Chapter IX (ISM Code), with regards to language capabilities of crews.

Maritime training centers for English can be followed up or advised by an international competent body which should be appointed by IMO. The English department of WMU has the necessary expertise capable for accomplishing this task. The infrastructure and staff facilities should, however, be improved through sponsors and/or IMO.

Another aspect that may help maritime training centers in improving post graduate English courses, are statistics. Maritime accidents, as well as minor incidents involving communication problems, because of language difficulties should be recorded at IMO for further analysis by either the Organization or the competent body mentioned above. Major accidents are assessed and reported by maritime authorities, like the NOK of Norway and NTSB of the United States. Therefore, statistics can be easily developed. However, it must be taken into account that minor incidents are the ones which happen more frequently but, at the same time, the least recorded because they are seen as being of due lower importance. In this case statistics are more difficult to develop.

IMO together with WMU should develop standard orientation English programs for maritime training centers. Also, standard tests according to the different tasks done on board, should be developed in a similar way that the EUROCONTROL tests for air traffic controllers were developed. This is not whatsoever an easy task because, for instance, of the resistance from maritime academies or governments. The author refers to orientation programs in order not to exacerbate people or hurt susceptibilities. If they proved to be useful, there is always time to give these programs a regular standard status.

Regarding technical devices, THAMES-Task 5, on page 17, is against the use of tape recorders as "black boxes". The author agrees. The help that it can bring is minor compared with the danger of a helmsman being afraid to talk or ask for confirmation of a rudder order because he may think the recording can take his job

away. It will be very difficult to adapt the mind of a seafarer to that of an airplane cockpit staff member in this respect.

If looking forward, Millet and Kopp, in the July/August 1996 issue of *The Futurist* (page 19), presented the top 10 innovative products for the year 2006. One of them is the "Spontaneous Translator", an electronic device that enables the user to talk to people in person, by phone, or through a computer, in his own language whilst being simultaneously translated to other selected languages. This device, when used either alone or connected to a loudspeaker, should be very useful for solving communication problems on board.

If one looks to a nearer future (today is still expensive), to have access to Internet on board will be a way to improve English. Furthermore, there are many software, some of them related to the maritime activity, like *Stratship* and *Mariner* for instance, that can be brought on board and, therefore, English can be improved through them.

It is almost a certainty that multilingual crews will continue to stay within the shipping industry. However, tomorrow's crews will be smaller because of technology, and therefore it is expected that communication problems on board will diminish because of this. It is one thing to deal with a multilingual crew of let us say 35 people where different languages are present, and another very different thing to have a multilingual environment within a crew of only 15 people. Also, and again because of technology, the crews of tomorrow will need to be more intelligent to deal with the more sophisticated equipment, and therefore it will be easier for them to acquire a new language or to improve it.

Moreover, it seems to be that the tendency for tomorrow is not so much nationalities within a mixed crew. It is discussed in chapter 2 that seafarers from developed countries prefer jobs ashore rather than going to sea due to better salaries and living conditions. Also, some developing countries which used to be larger suppliers

of seafarers, like South Korea, are going through the same process because better living standards have been achieved. The author believes that China and the Philippines will play a much more important role in the future of multilingual crews than what they do today. Unless much more attractive job conditions are offered, only a few nationalities will remain interested in joining a sea going activity in the near future.

Nevertheless, because multilingual crews will continue to exist, there will always be the need for a common language and this will remain as English. Seafarers, being proficient in English, will find themselves in a much better position to get jobs at sea.

Therefore, maritime authorities, and here the author refers especially to his home country Argentina, should consider English as an opportunity for seafarers that will give them a competitive advantage in the maritime business. In this sense they should guide maritime institutes to adopt this way of thinking.

BIBLIOGRAPHY

- Almazan A. (1996). 'Philippines maritime schools warning'. *Lloyd's List*, April 20.
- Battista, I (1996). Interview by the author. World Maritime University, Malmö, Sweden.
- Broby H (1996). Letter. A.P. MØLLER, Copenhagen, Denmark.
- Catalogue of the Philippines Merchant Marine Academy (1994). Volume II.
- Cole C (1995). *Aviation English - The background*. English Lecturer. World Maritime University.
- Cole C (1996). Personal Communication. English Lecturer. World Maritime University.
- Crebbin, K (1996). 'Marine group seeking common ship language'. *Lloyd's List*, April 20, page 3.
- Dalian Maritime University Brochure (1994). People's Republic of China.
- Daubeny, E B (1986). 'Operating ships with multinational crews'. *The Nautical Institute on Command*, Volume , pages 113 and 114.
- 'Disaster on the rocks', (1996, 29 February). *Fairplay*, pages 19-21.
- 'Donaldson calls for common language'. *Safety at Sea*, March 1994.
- Factuar D (1996). Interview by the author. World Maritime University, Malmö, Sweden, September 1996.

'False Friends' (1995). *Cambridge International Dictionary of English*. New York: Cambridge University Press.

Fisher, U (1996). Interview by the author. Lärarhögskolan (The Malmö School of Education), Malmö, Sweden.

Guest A (1993). 'The challenge facing shipping over multinational crewing'. (1996, March 2). *Lloyd's List*.

Guia Docente de la Escuela Superior de la Marina Civil de Bilbao (1996).

Harrigan P (1995). 'Operational teambuilding in an international airline'. *International Aviation English Association, Newsletter Issue No 6, December, page 4-6*.

Harris, P and Moran, R (1987). *Managing Cultural Differences*. Houston: Gulf Publishing Company.

Herrera Arnáiz, M (1996). Letter. Escuela Superior de la Marina Civil de Bilbao, Bilbao, Spain.

Hjelm, L (1996). Interview by the author. Lärarhögskolan, Malmö, Sweden.

Hovemyr, A (1995). 'The Culture Gap'. Videotel Marine International Ltd.

'Language Barrier Key Cause of Tenyo Maru Oil Spill, Canadian Safety Board Says', (1995, 27 April). *Oil Spill Intelligence Report*, page 2.

Lillestolen, T (1993, 5 February). 'Klaveness tackles the crew language barrier'. *Trade Winds*, page 26.

Martinez E. (1996). Interview by the author. World Maritime University, Malmö, Sweden, September 1996.

Moreby, D H (1993). 'Cross Cultural Issues in the Manning of Ships'. *BIMBO Bulletin*, Volume 2/93, March/April, pages 7-12.

Motram D. (1995). 'Principles of Management'. Handout No. 5. World Maritime University, Malmö, Sweden.

NOR 1991: 1 E. Norwegian Official Report. The Scandinavian Star Disaster of 7 April 1990. Main Report.

NTSB/MAR-89/04. National Transportation Safety Board. Marine Accident Report. *Fire on Board the Bahamian Passenger Ship SCANDINAVIAN STAR, Gulf of Mexico, March 15, 1988.*

NTSB/SIR - 93/01. National Transportation Safety Board. Special Investigation Report. *Accidents Involving Foreign Passenger Ships Operating from U.S. Ports.*

Nurden R (1995). 'Language lapses cause carnage'. *EFL Gazette*, April, page 7.

Patwardhan V S (1995). 'The perfect cultural match - Is it affordable?'. *The 1st LSM Philippine Manning & Training Conference* (October 1995: Manila, Philippines).

Porter, Kit. 1995. Personal communication. Intensive English Language Program. World Maritime University.

Programa ENN 95. Escuela Nacional de Náutica, Argentina.

Programa ENF 95. Escuela Nacional Fluvial, Argentina.

Racca E (1995). 'The Background to CRM'. *International Aviation English Association*, Newsletter Issue No 6, December, page2-3.

'Shipping World', (1996), *ITF Seafarer's Bulletin*, Volume 9, page 42.

Siddayao C. (1992). 'Philippine Shipping Today: Policies and Activities for Training and Education'. *The Cyprus Shipping Council* (May 1992, Cyprus)

Stevick E. (1976). *Memory, Meaning, and Method*. Bowley, MA: Newbury House.

TSB (1992). *Striking of the Canal Bank by the Bulk Carrier Federal St. Clair*. (Report N° M92L3035). Canada: Transportation Safety Board.

'Warning on shrinking manpower supply - New STCW convention could make problem worse', (1996, July/August). *The Sea*, page 3.

Waste Environmental Today (1996). *The Sea Empress Accident*. News Review Journal Vol. 9 No. 3.

'Wealthy River', (1995, 19 June). *Lloyd's of London Press Ltd*.

'World Maritime Day', (1995, January). *Port and Shipping*, Report N° 34, page vi.

Zhang S (1995). *Maritime Casualties and the Human Factor*. GMEP dissertation. Malmö, Sweden: the World Maritime University.