

REGISTER OF ELECTRONIC COMMUNICATION AT SEA

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Abstract. Electronic communication is one of most frequent written communication means used by marine officers to exchange any information relevant to the safety of life at sea. Due to dire consequences which might be a result of miscommunication caused by a lack of proper English language use, the International Maritime Organization highlights the importance of working knowledge of written English for marine officers. Since there is limited research on the linguistic aspects of Maritime English correspondence, it is important to determine the linguistic features of this specific maritime genre. Therefore, the aim of this study was to conduct a register analysis of a specialized corpus of electronic mail, written by chief engineers. The results revealed that professional electronic communication among chief engineers exhibits the features of written and spoken register and creates a hybrid form constructing a new genre of language use. The findings of this study revealed some register features, for example, the omission of some parts of speech, abbreviations and shortened forms of specific terminology and the use of emoticons.

Key words: electronic communication, Maritime English, specialized corpus, register analysis, situational and linguistic characteristics of emails

INTRODUCTION

English as a lingua franca is widely used in maritime communication on board and ashore, for instance, in cargo handling, meteorology, marine engineering, port operations, ensuring safety at sea, marine insurance and shipping.

In recent years, text-based interaction via electronic means has increased, and the genre of electronic mail (e-mail) has become an inevitable part of everyday written communication, being also thoroughly integrated into professional settings at sea. Considering the widespread use of e-mails nowadays, it is important to study the genre from the register perspective which comprises an analysis of linguistic features typical of the genre and an analysis of the situation of use.

The term 'register' as a text variety was first mentioned by Reid (1956), but it received its present broad currency due to the register theory proposed M.A.K. Halliday (1978) as a language variety according to use. Since this seminal theory, the term register has been broadly employed in linguistics. The present paper treats the term as a 'variety associated with a particular situation of use' (Biber and Conrad, 2009: 6). Considered from the register perspective, typical lexicogrammatical features in a register are seen as functional, that is, they are pervasive

in the genre as they help to achieve its communicative purpose in the relevant situational context.

Orlikowski and Yates (1993) claim that the lexico-grammatical features found in e-mails are more related to spoken register than to the written one. However, many scholars (e.g. Yates, 1996; Crystal, 2001; Gimenez, 2000, 2006) point out that the language of the e-mail does not belong to either written or spoken discourse, as it tends to fall into the domain of a flexible register which is closer to spoken than to written genres. In fact, Yates (1996) considers it to be a new form of language. Biber and Conrad claim (2009: 178) that the e-mail is 'a general register' with a distinguishing feature; that is, it is sent with the help of a computer from one mail account to another, and it can be written to achieve different communicative purposes, ranging from general to specific professional ones.

Despite the widespread use of the e-mail nowadays, systematic studies of e-mail communication motivated by professional communicative purposes at sea do not seem to be conducted. Therefore, the present research seeks to determine pervasive linguistic characteristics of maritime electronic mails in a specialized corpus written by chief engineers to a charterer and a technical manager.

THEORETICAL BACKGROUND

The Internet has tremendously impacted communication due to the advantages of fast information exchange from one recipient to another. Computer-mediated communication (CMC) is 'a domain of information exchange' (Baron, 1998: 142) taking place 'via the instrumentality of computers' (Herring, 1996: 1).

Computer-mediated communication can be of two types: synchronous and asynchronous (Herring, 1996). The former is communication in real time (e.g. WebCT chat rooms, MUDs (Multi-User Dimensions), MOOs (Multi-User Object-Oriented environments)); thus, the recipients' presence and instant replies are expected in order for communication to be successful. On the contrary, the latter type does not require an immediate answer since the sent information is stored and could be accessed at any time (e.g. e-mails, discussion forums, weblogs). The electronic mail, as the most widespread digital medium nowadays, is one of the oldest forms of asynchronous CMC, and its asynchronous nature largely determines the pervasive linguistic features employed.

In order to understand the linguistic peculiarities of the e-mail, scholars have looked at its evolution. It is claimed that the e-mail originated from the written genre of memorandum (Yates and Orlikowski, 1992). It is also argued that the e-mail evolved from telephone communication (Gimenez, 2000: 240). In this regard, it is stated that e-mails share some features of unplanned spoken discourse compared to carefully planned written discourse; however, it has to be emphasized that e-mail messages cannot be completely considered unplanned because an immediate response is not usually expected; therefore, interlocutors have more time to think and to plan an answer (Gimenez, 2000).

Gimenez (2000: 240–243) contends that e-mails possess several features of spoken discourse: use of ‘informal and straightforward language’, simple coordinate syntax preferred to subordinate syntax, use of elliptical forms, standard and unconventional abbreviations, and contracted forms. The author arrives at the conclusion that ‘efficiency, one of the features of e-mail messages frequently mentioned by e-mail users, seems to equate with informal and flexibility of style’ (ibid.: 249–50). Koester (2010) points out that e-mail users try to imitate the spoken conversational style in order to sound friendly, relaxed, and willing to communicate. Likewise, Baron claims that the e-mail is informal if we compare it with academic genres, and it ‘encourages personal disclosure’ and ‘can become emotional’ (2000: 249).

However, it has also been emphasized that the formality level in e-mails depends on the established relationship between the sender and the receiver of the message and the sub-registers of e-mail messages: e-mail messages to strangers in professional contexts tend to use the formal language one would find in written discourse, and e-mails between colleagues on professional topics tend to exhibit linguistic characteristics of conversation as well as written formal discourse (Biber and Conrad, 2009: 187).

Thus, it can be seen that the e-mail can have the characteristics of both spoken and written discourse, and it can be called a ‘hybrid’ genre (Yates and Orlikowski, 1992; Gimenez, 2000; Koester, 2010). Crystal argues that the e-mail is ‘identical to neither speech nor writing, but selectively and adaptively displays properties of both’ (2001: 47).

The lack of unanimous opinion about the emergence of the e-mail seems to have affected the nature of the e-mail as a flexible register, which demonstrates elements of spoken and written discourse. It is vital for the present research to establish the typical overlapping features of written and spoken discourse that are present in the selected corpus of maritime electronic mails in order to identify their pervasive features.

METHOD AND SITUATIONAL CHARACTERISTICS

Since the term register envisages language use in a particular context, it is necessary to consider some situational characteristics of the e-mail messages pertaining to the professional setting, as well as the method used to conduct the study.

The present research is a small-scale case study of a total of 20 maritime e-mail messages, with a sample of 1866 words; it uses a qualitative and quantitative register analysis of the selected linguistic features in the corpus of e-mails communicated within a Norwegian maritime company among individual seafarers, in particular, chief engineers to a charterer and a technical manager.

According to the addressee and purpose of the e-mails, the present corpus of e-mails is a sub-category of e-mails from colleagues on professional topics (Biber and Conrad, 2009: 186). The e-mails were collected during a two-month period

from 4 September 2013 to 7 November 2013. The social characteristics of the interlocutors do not seem to be decisive in the present research; nevertheless, they have been identified and are as follows: age – from 32 to 45 years; gender – all males; education background – university degree in maritime engineering; English proficiency level – tested by the Marlins English Test, ranged from 73 to 94 per cent (intermediate – upper-intermediate).

From the point of view of situational characteristics of the e-mail, several similarities with and differences from the conversation can be pointed out, the fundamental difference between the email and the conversation being the mode and the medium: the email is written and sent electronically, whereas the conversation is spoken, and it takes place in real time and place.

The email is interactive, ensuring direct communication with people all over the world, which means that the addressor of the message expects the addressee to reply irrespective of the social roles of interlocutors. Thus, a similarity with the conversation, in which people take turns, can be observed. The e-mail, as an asynchronous form of CMC, does not share physical space with the interlocutors. It shares time to a lesser degree than in conversations, unless the sender and the receiver of the message are on-line at the same time, or e-mails are exchanged within a short period of time. This allows writers to attend to emails whenever they want as well as plan and revise them, if they wish.

RESULTS AND DISCUSSION

The analysis of the typical characteristics of e-mail messages reveals the correlation with the situational context, in particular the interactivity of emails. The length of turns is quite equal; however, the message in the third turn is usually quite short as it aims at expressing gratitude to the interlocutor for something or at acknowledging the receipt of the information. The average number of words per e-mail, which is 93.3, illustrate that the e-mails do not share the characteristics of a face-to-face conversation, where a minimal response is common (Biber and Conrad, 2009).

The setting characteristics of time have implications on the language used in synchronous genres, as the temporal aspect is related to the concept of linguistic economy or the economical use of language. Such a linguistic device as ellipsis, which is typical of conversation, has been often employed by chief engineers in their e-mails, which is an asynchronous form. In the examined corpus, for instance, such initial elements of the clause as the subject *I* and a part of the predicate (auxiliary verb *be*) as in *I am* and *I will* have been clipped in the phrases that appeared at the end of the emails: *waiting for confirmation* and *see you*. It is expected by the writer that the elements of the clause that have low information value are recoverable from the situation in which the language is used, which is the case with the above mentioned omitted functional elements, as they can be interpretable from the context. Other types of ellipses have not been identified as

the omission of subjects in emails can be done only if the subject can be recovered by using information in the co-text because the phenomenon of linguistic economy can be in conflict with the need for comprehensibility in the maritime context.

The large number of abbreviations and shortened forms identified in the corpus testifies to the temporal pressure towards linguistic economy, as the provided information is frequently condensed. It has been found that every e-mail has at least four abbreviated or shortened forms (frequency of 69 %). The identified shortened forms can be understood by marine professionals only, for instance, the abbreviations *ME TC* (*Main Engine Turbocharger*) as in *good performance of ME TC* and *BMS* (*Bridge Manoeuvring System*). The e-mails comprise not only standard abbreviations in the maritime industry, but also unconventional forms, which show that the e-mails are often informal and personalized. For example, such personalized shortened forms as *S'pore* (*Singapore*), *plse* (*please*), *f/ER* (*for engine room*) can be mentioned.

Emoticons convey non-linguistic information, which is performed with the help of body language and facial expression in face-to-face communication (Dresher and Herring, 2012) such as conversation. However, in textual computer-mediated interactions, addressors are restrained in conveying their message non-verbally; therefore, emoticons are often employed instead (*ibid.*). Having searched for emoticons in the e-mail messages, it was found that their frequency is only three per cent, which proves that the exchanged professional emails are of factual nature. The following emoticons have appeared in maritime e-mails: ;-) (i.e. wink), :- ((i.e. sad) and :-) (i. e. happy).

Further, it has been discovered that contracted forms are not employed in the maritime e-mails, which indicates that these professional e-mails possess some formal features common for written discourse.

Another consideration related to the setting characteristics of time is the extent to which the interlocutors share direct demonstrative references in the e-mail. Thus, the reference to the noun phrase *this evening* in an e-mail sent in the morning, for example, is understood if the time is shared by the interlocutors. Otherwise, it would be hard to interpret the message without checking explicitly the date when the e-mail has been sent. Thus, it must be emphasized that the presence of time-lag in e-mails might cause many inconveniences, and in the maritime setting this may even affect the ship's and crew's safety.

Following Biber and Conrad (2009), lexical verbs, nouns and pronouns were investigated. Figure 1 shows the frequency of three basic grammatical features in the corpus of e-mail messages. Maritime e-mails are task focused, resulting in the use of relatively short clauses and high frequency of lexical verbs. The achievement of the communicative task is ensured with the help of the imperative used to give commands and requests, for example, *please advise our future actions, reply soon, arrange delivery*. The forms are characterized by the subject ellipsis which is pragmatically understood by the addressee and the

use of the base form of the verb. The verbs imply a second person subject (the pronoun *you*), which also explains the higher use of verbs than pronouns in the corpus of maritime e-mails.

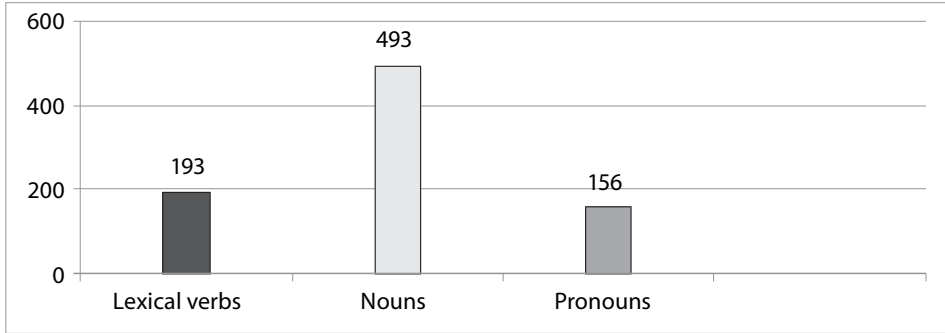


Figure 1 Use of major word classes in e-mails

E-mail messages are interactive; consequently, it was expected that the number of pronouns would be the same as in spoken discourse. Pronouns substituting for noun phrases that are retrievable from the context can also serve as a form of condensation, that is, their use reduces the length and complexity of clauses. However, this research shows that the nouns outnumber the pronouns in the e-mail messages, which is characteristic of written discourse (Biber and Conrad, 2009).

Sentences in maritime e-mails are often long; they consist of several clauses and employ co-ordination, e.g. *Sorry for slow response, but we conducted a lot of tests to reach final conclusion*. The first independent clause with the omitted subject and a part of the predicate *I am* is followed by a second independent clause, conjoined with the coordinating conjunction *but*. In the following example two independent clauses are linked with the conjunction *and* in order to suggest that one action is chronologically sequential to another: *The button was flickering for some time and then nothing happened*.

Sentences have one or two lexical verbs and many nouns, as their presence in the e-mails contributes to the informational focus, for example, a sentence (*But in this mess of the first supply nobody concentrated exactly on this purchase order*) of a total of 15 words has one verb *concentrated* and four nouns *mess, supply, purchase, order*. In addition, nouns are often modified by adjectives and prepositional phrases, adding to the information density of the register, for instance, *a wet cleaning of compressor* and *a dry cleaning of turbine, steam blowing of sea chests*. As it can be seen from the examples, the nouns are modified by the adjectives *wet* and *dry*. In general, adjectives are denotative referring to physical properties, for example, speed, dimensions, and position, which is in contrast to conversations, where one would frequently find evaluative and emotional adjectives. Many identified prepositional phrases are *of-phrases*; the use of other prepositional

phrases can also be observed (especially, *in, with, for, to*), for instance, *flexible hoses for steam blowing, a device for water washing of a compressor side*.

Having analysed the major word classes, it was necessary to explain a low frequency of pronouns in the corpus. For this purpose, the pronouns were grouped into the first, second and third person pronouns. It can be seen from Figure 2 below that the first person pronoun occurs far more frequently than the other types of pronouns, whereas the use of the second person pronoun outnumbers the use of the first person pronoun. This could be explained by the fact that addressors mostly use the first person plural pronoun *we* to describe what has been done on board a ship since all work is not done by one person. The second person pronoun is not used very often; however, it is employed more often than the third person pronoun, as it is used for asking the addressees' opinion or giving instructions for future actions as in *the copy of this document can help you to trace the missing PO*. As it has already been mentioned above, the use of the third person pronoun is not frequent, and all cases with the third person pronoun are anaphoric, as it can be seen in the following example: *We have not any spare pressure transmitter on board. When will it be delivered?* The pronoun *it* refers back to the noun phrase *spare pressure transmitter* in the previous sentence. Its infrequent use could be explained by the fact that e-mail interlocutors might have problems in understanding correctly the message if the reference is not clear or ambiguous, as they do not belong to 'the same physical space' (Biber and Conrad, 2009: 184). In order to avoid any misunderstandings, the addressee writing e-mail messages tends to rely on nouns or noun phrases for the third person references.

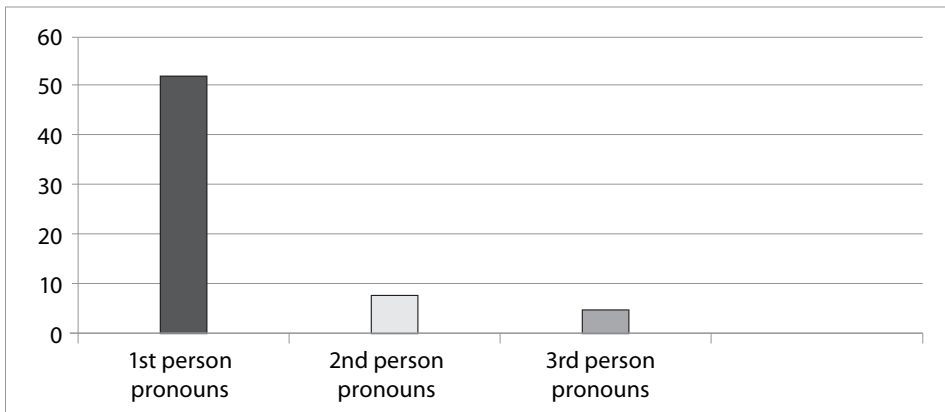


Figure 2 Use of pronoun classes

Table 1 shows the distribution of some typical verb features. The data analysis revealed that the distribution of the present tense and the active voice is higher than that of the past tense and the passive voice. In terms of tense analysis, a more frequent use of the present tense can be explained by the fact that seafarers report on the present state of affairs and that they use a lot of imperatives in their e-mails. A dense

use of the active voice might indicate the addressor's intention to make clear requests and simplify the language, since English is a foreign language for the interlocutors. The obtained results with the high frequency of the present tense and the active voice indicate that e-mails possess features that are common in spoken discourse.

Table 1 Use of typical grammatical features of the verb

TENSE	Present	56
	Past	32
VOICE	Active	135
	Passive	23
MODALS	Can, may, must, will, would	16

The frequency of modal verbs in maritime e-mails is low, which is typical of written registers in contrast to conversations, where modal verbs and semi-modal verbs are most common (Biber, Conrad and Leech, 2003: 177). The modal verb *can* is the most frequent one in the present corpus with a total of seven occurrences; for instance, it is used in the meaning of ability and possibility in the following sentences *How can we provide oil pre-heating? Perhaps the copy of this document can help you to trace the missing PO.* The modals *will*, *must*, *may* and *would* are followed with frequencies ranging from five to one. For instance, the modal verb *must* is used in the meaning of obligation or necessity in the following sentence *What must we do next?*

The table below summarizes the results obtained from the register analysis of the corpus of maritime e-mails.

Table 2 Distribution of selected linguistic features

Linguistic features		Spoken discourse	Written discourse	E-mail
Nominal features	Verbs	✓		✓
	Nouns		✓	✓
	Pronouns	✓		
Verb characteristics	Present tense	✓		✓
	Past tense		✓	
	Active voice	✓		✓
	Passive voice		✓	
	Modals		✓	
Paralinguistic features	Emoticons	✓		✓
	Abbreviations			✓

The register of e-mails is determined by the situation; namely, the seafarers use language forms that functionally match the requirements of the situation.

CONCLUSIONS

Electronic mails have become a communication medium of choice for marine engineers.

This research on the pervasive linguistic characteristics of maritime electronic mails in a specialized corpus suggests that the lexico-grammatical features of e-mails are affected by the situational characteristics of the genre. E-mail messages to colleagues on professional issues tend to share the linguistic characteristics of formal writing as well as some characteristics of conversations, which result in e-mails being less formal than some other varieties of written professional communication.

The synchronous nature of conversation with the temporal constraints of the medium has impacted the production of e-mail. They are expected to be attended to fairly quickly, and they are interactive, but less directly interactive than conversations. The interactivity of e-mails is exhibited in the series of turns such as a request for information, followed by a response and an acknowledgement. This, in turn, has resulted in the use of such features as ellipsis and shortened forms, serving as evidence that email users seek to imitate spoken conversation.

The main situational characteristic shared by the electronic mail in the maritime context with formal written registers is the focus on information exchange, evidenced by a frequent use of nouns, noun phrases and prepositional phrases, which are the main carriers of information in sentences. The absence of contracted forms testifies to formal register, typical of written discourse.

The analysed emails show the evidence of temporal pressure towards linguistic economy that also helps to achieve the communicative purpose by facilitating information transfer and processing. The findings reveal a range of features of e-mail messages unique to the specific genre of communication such as work-specific abbreviations and shortened forms that are acceptable forms shared by the target maritime community, as well as a high frequency of the present tense and the active voice.

Although the analysis shows that the register of e-mails corresponds more to spoken discourse as it comprises the features of conversation, they still depend on written medium. The results prove that the electronic professional mail by chief engineers exhibits the features of written and spoken register and creates a hybrid form constructing a new genre of language use.

The most important limitation of this study lies in the relatively small corpus of the emails that does not seem to be enough for generalizing the findings. Further research might explore a broader range of linguistic features in a larger corpus of maritime e-mails.

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