Cuilin Liu¹, Se-Eun Jhang¹ & Sunghwa Lee^{2*}

(¹Korea Maritime and Ocean University & ²Korea International University in Fergana)

Liu, Cuilin; Jhang, Se-Eun & Lee, Sunghwa. (2023). From gender-biased to gender-specific and gender-inclusive words: A corpus-based study. The Linguistic Association of Korea Journal, 31(1), 85-112. The purpose of the present study is to gain insight into the trends in using SEAMAN and SEAFARER in maritime English and general English while tracking changing features in using gendered and gender-inclusive personal nouns in maritime English in order to investigate the popular gender-specific words used in contemporary English. We diachronically examine the frequency of some pre-determined terms such as seafarer, *he*, or *she* as well as the context by relying on the corpus-based approach. Gender-inclusive words like seafarer/s and he or she have been used in maritime English. In contrast, male-biased SEAMAN is still more frequently used than SEAFARER. Gender-specific words that refer to women began to appear in the 2000s in maritime English, and various forms like seawomen/female seafarers have appeared in contemporary English with compounds more popularly. Comparatively, gender-biased occupational nouns seem to gain more attention than gendered pronouns, which makes gender-inclusive occupational nouns adopted earlier than pronouns.

Key Words: maritime English, gender-biased, gender-inclusive, diachronic, ESP, corpus-based approach

^{*} The first author is Cuilin Liu, the corresponding author is Se-Eun Jhang, and the co-author is Sunghwa Lee.

86 | Cuilin Liu, Se-Eun Jhang & Sunghwa Lee

1. Introduction

Gender markers are embedded in the pronouns and possessives (*he, she, her* and *his*), a few nouns referring to specifically masculine or feminine (*actor/actress, waiter/waitress*), and forms of address (*boys/girls, Mr/Miss/Mrs*). Another case that needs special detailed attention is the generic use of *man* or *he* that refers to both genders. Gender in English is primarily a semantic category with critical social implications (Hellinger, 2001).

Feminist linguists have been active in promoting the implementation of gender- inclusive languages¹) to avoid sexist languages. Specifically, gender-inclusive (also gender-neutral) language has been defined as "speaking and writing in a way that does not discriminate against a particular sex, social gender or gender identity, and does not perpetuate gender stereotypes" (United Nations, 2020²)). The concept of gender neutrality is closely related to and similar to gender inclusivity. While gender neutrality avoids marking gender at all, gender-inclusive language recognizes that there are more than two genders. In this paper, we treat the two terms as semantically identical and select to use *gender-inclusive* to refer to languages that show either inclusivity or neutrality. Another point should be noticed is that despite the argument that the generic use of *man*, *he* or terms compounded with *-man* was previously accepted as gender-neutral (Benatar, 2005), feminist linguists have convincingly argued that such terms are gender-exclusive (the use of pronouns or words to refer to one gender while neglecting the other) by drawing on the historical process (Milne, 1989).

Sexist languages take many forms in English: the generic use of gender-biased *he-man* words (For example, "Every Permanent Representative must submit his credentials to Protocol.") criticized as unrightfully exclusive of women, the gender-marked reference to women or men when it is irrelevant to gender but rather because of some stereotypes (such as *family man, career woman*), the use of pejorative forms in metaphorical reference terms such as *bitch* and *stud* as synonyms for women, and *-ess* words which contains some derogatory implications (*actress, poetess*) to refer to women in some professional fields. Gender-specific words is likely to become gender-marked in specific situations. For example, sometimes writers intentionally modify occupational nouns to indicate the sex of the person holding that position, which happens most often when the sex of the person goes against conventional expectations. People may assume, perhaps intuitively, that doctors are men

¹⁾ For more detailed information, visit https://www.un.org/en/gender-inclusive-language/guidelines.shtml.

²⁾ For more detailed information, visit https://www.un.org/en/gender-inclusive-language.

and that nurses are women. Sentences like "The female doctor walked into the room" or "The male nurse walked into the room" reinforce such assumptions.

Fortunately, the past few decades have seen the guidelines to use gender-inclusive (gender-neutral) words to avoid sexist lexical terms, that is, to replace gender-exclusive or gender-marked terms. For example, some nouns that once ended in -man have shown a steady decline tendency (Holmes, 1993). Some gender-neutral occupational labels with -man, which have been generically used to refer to two genders in traditionally male-dominated industries, now have neutral equivalents used to include both genders (spokesperson for spokesman, chair/chairperson for chairman, mail carrier or mail worker for mailman). Gender-biased job titles are discouraged from being used. They might appropriately be replaced by gender-inclusive terms (such as firefighter, flight attendant, or police officer) unless the sex of the subject is important to the meaning of the sentence. A few discriminatory occupational reference words with suffix -ess have also gained more gender-inclusive strategies, like *flight attendant* for steward or stewardess. Gender-inclusive instances can be noticed in daily addresses, like family terms. Examples are lexical terms like partner is used to refer to boyfriend or girlfriend, spouse for husband or wife, and sibling for brother or sister. Using gender-specific terms to refer to males and females neutrally and specifically is also considered as another important strategy to avoid gender inequality in language. This strategy aims to explicit the gender-marking in human referent (an example in English is the use of *he* or *she* to replace the generic use of *he*).

Despite the guidelines and increasing instances of gender-inclusive words, reasons for adopting them vary a lot. It can fall into two general categories: individual differences and social factors. In terms of individual difference variables, past research mainly related the adoption of gender-inclusive language to psychological gender-schema, users' sexist beliefs, attitudes towards sexist language, intentions of adopting (non-)sexist language, and habitual patterns. For example, Sczesny, Moser, and Wood (2015) have found that the spontaneous use of gender-inclusive personal nouns is guided by explicitly favorable intentions as well as habitual processes involving past use of such language. As for social reasons, studies have shown that feminist movements, political reasons, and nonsexist language guidelines have significant effects. Even with the grossest method, indications can be noticed that the position of women in society has changed. Feminist linguists have relied on corpus methods to examine the practice and effects of feminist initiatives to help avoid sexist languages in general English in correspondence with social changes.

In this paper, we examine some gender-inclusive and gender-specific words used in

the maritime community that is still highly male-dominated. Among the corpus studies on gender and language, however, only a limited number of studies have investigated gender-related representations from a diachronic perspective and with even less attention on English for Specific Purposes (ESP). Maritime English is one of the branches of ESP (Hong & Jhang, 2010) and is used as an official language within the international maritime community, which is traditionally male-dominated, with women seafarers in deck and engine departments representing only 1% of all seafarers (BIMCO & ICS, 2016). Hence, it will be especially interesting to investigate the gender-related words and examine the implementation of the strategies to use gender-inclusive English in such a male-dominated industry. We have the following three research questions in mind:

- 1. What are the trends of using SEAMAN and SEAFARER³) in maritime English legal texts and general English over time?
- 2. How are the gendered and gender-inclusive personal pronouns used in maritime English over time?
- 3. How are the gender-specific occupational terms for the position of seafarers used in contemporary general English?

2. Literature Review

In the past, corpus methods tended to be eschewed by linguists interested in gender and language, who held a misconception that corpus methods put emphasis on the notion of comparative difference and just consider a paradigm of number-crunching (Baker, 2010). The truth, however, is that the relationship between gender and language can be thoroughly investigated through quantitative work combined with qualitative analysis in corpus linguistics. As Biber (1988) pointed out, corpus linguistics depends on both qualitative and quantitative methods: 'Association patterns represent quantitative relations, measuring the extent to which features and variants are associated with contextual factors. However functional (qualitative) interpretation is also an essential step in any corpus-based analysis'. For example, Pearce (2008) used Sketch Engine to explore the functional distribution of MAN and WOMAN by investigating their collocational and

³⁾ SEAMAN/SEAFARER means a lemma (all forms) of the noun, containing the plural, single and possessive.

grammatical behavior in British National Corpus (BNC). Recently there have been an increasing number of researches in this field by relying on corpus methods (e.g., Holmes & Sigley, 2001; Romaine, 1999, etc.) through which large collections of computerized texts can be involved.

Two approaches are clarified in corpus research, corpus-driven and corpus-based, according to Tognini-Bonelli (2001). Through a corpus-driven approach, the analysts start with no hypothesis and summarize the frequent or salient linguistic patterns when they are uncovered. In terms of a corpus-based approach, the analyst intends to explore a pre-determined hypothesis, topic or linguistic theory. But the two approaches seemed to be extreme situations, which means they are combined in many researches to various degree. Researchers (e.g., McEnery, Xiao, & Tono, 2006), have argued that, as it is difficult to approach a corpus from a completely naïve stance, such positions can perhaps be thought of as extremes on a continuum. The present study to larger extent falls in the corpus-based approach, which hypothesizes that gender-inclusive words have been increasingly used, and the idea to explore the formation of gender-specific and gender-inclusive words is also based on the widely-accepted gender-inclusive instances in general English.

To some extent, inspired by the feminist movements arising around in the 1970s, investigations on language and gender have become lively in the branch of sociolinguistics. The underlying idea is that the inequality of men and women in society is mirrored in language and also conversely that the oppressive societal structures are preserved by language (Lindquist, 2009). There are several ways of investigating gender roles in languages. Corpus linguistics researches show two prominent directions. One strand shows great interest in the distinctions of languages used by males and females, for example, how men and women interact by means of language in everyday communications, who tends to use more hedges, and who laughs more. The other one focuses on the representation of men and women in various conditions, i.e., how men and women are referred to in texts. The present study belongs to the second direction.

In terms of the way men and women use language, the situations are never straightforward but are rather complicated, and no "gender-difference" model of language use is agreed to be established. In 1975, Robin Lakoff suggested that the speech of women is, from one point, characterized by "hedging" (the way speakers mark tentativeness or uncertainty about their claims) more than men, which indicates women show greater insecurity and tentativeness in a male-dominated culture. However, Holmes

(1986) suggested that the larger proportion of women using hedges does not necessarily need to be a sign of submissiveness but can be that of politeness and a will to mitigate. Even further studies have been done based on British National Corpus (BNC). Rayson, Leech, and Hodges (1997) used 4.2 million words of transcribed speech from BNC's spoken demographic section (consisting of private conversations), using chi-squared tests to identify which words were distinctive of male and female speech. Typical words of males and females were found (e.g., forms of the taboo word like fuck are typical of male words, and certain adjectives like nice/lovely are typical of female words). And this study was to some extent complemented by Kilgarriff's (2001) study in which he used the Mann Whitney test on the same data and found stronger differences (than the frequency-based method) in lower frequency words such as record, shot and square for males, and children, clothes, dish and shopping for females. Schmid (2003) looked for differences in particular domains, which other authors have claimed to be indicative of gender differences by taking a corpus-based approach. Although he found that in most domains, the frequency scores were indicative of widespread stereotypes about female and male preferred topics, Schmid (2003) pointed out that the result represented more than just language differences between the two genders. Differences shown in language by the two genders also mirror some cultural or social aspects, like their different social roles (e.g., jobs, daily routines, obligations and activities). What is of particular interest is the complex conditions between gender and social gender stereotypes he investigated indicated. As Baker (2010) pointed out, the results showed that women used certain swear words more than men (including *shit* and *dann*), while men utilized certain hedges more often than women (maybe, perhaps and sort of). This was in line with what Rayson et al. (1997) noted that the differences they found only reflect tendencies, not absolutes.

It is reasonable that there is a different direction that centers on the representation of two genders in languages rather than comparing how males and females use language. These studies tend to revolve around the social implications based on gender-inclusive or gender-exclusive references to women. For example, Milne (1989) make some arguments on the masculine nouns and pronouns used for generic references, including *man, he* and related terms like *mankind, chairman, policeman, workman,* etc. Milne (1989) also pointed out that man had lost its original meaning which meant "a person of either sex, a human being" in Old English by the 18th century and has continued to the present by stressing that man has gained a gender-specific meaning to refer to a "male person" which is too strong to make man used unambiguously as a generic term. By intuition, native speakers

know it is not proper to use it as a generic form, which is more gender-exclusive than gender-inclusive. For example, it is not appropriate to say, "Marilyn Bell was the first man to swim Lake Ontario". Milne (1989) also examined the process of the grammatical rules for the generic use of *he* which indicated male superiority or male-biased development. It derived from the androcentric view of those male grammarians in the 16th and 17th centuries, who insisted on the use of the pronoun referent *he* to refer to "everyone", "someone", "no one", etc. They resorted to obtaining the force of law to sustain it—in 1850 the British Parliament passed an act which legally replaced "he or she" with "he". From this process, it makes sense why feminists committed themselves to changing the rules.

Feminist linguists and some researchers interested in this field have carried out many investigations to examine the asymmetric representation of two genders from various perspectives. For example, Kjellmer (1986) examined the frequency and dispersion of gender-marker pronouns together with general feminine and masculine terms of MAN and WOMAN, reporting that terms for males were more frequent than female terms in the 1961 Brown and London-Oslo-Bergen (LOB) corpora. Romaine (1999) found that the overall increase of references to women doubled between 1961 and 1991. However, Romaine (1999) also cited evidence from BNC to show the gender-markedness of women and a particular gender-marked case of man. Romaine (1999) paid attention to the lack of gender parallelism in patterns such as lady doctor (125 instances) vs gentleman doctor (no instances), career woman or even career girl (but rarely career man), and family man but not family woman. As she pointed out that this gender-marked term (career woman/girl) for women in professionals indicates two strikes against women: On the one hand, they suggest that as women, females cannot be real professionals, and on the other, they suggest that as professionals, females cannot be real women (Romaine, 1999). Biber, Johansson, Leech, Conrad, and Finegan (1999) examined the Longman English Corpus, revealing that 620 nouns were compounded with the ending of man, whereas only 38 were compounded with the ending of woman.

In the 20th century, two tendencies can be noticed in the studies. One is the tendency to investigate the comparative frequency of masculine and feminine terms diachronically. The other is to use corpus-analysis techniques to scrutinize the context (concordance or collocates) and derive social and cultural information. For example, Holmes and Sigley (2001) diachronically examined the frequency and context of some gender-specific and gender-inclusive terms and phrases by using five parallel million-word corpora of edited

written English: the Brown Corpus of American English (known as Brown Corpus), the Lancaster-Oslo-Bergen Corpus (LOB) together with the Wellington Corpus of Written New Zealand English (known as WWC, texts from 1986-90), the Freiburg-Brown Corpus of American English (known as Frown, texts from 1991-2) and the Freiburg-LOB Corpus of British English (FLOB, text from 1990-1). She made comparisons between the frequency of masculine nouns or occupational labels with corresponding feminine terms and looked into the context of some feminine occupational terms in detail. Similarly, Baker (2010) also comparatively examined the frequency and context of some gender-related professional nouns (like police-) or social roles (chair- and spokes-) as well as some addressing terms (Mr./Ms.) over time. He utilized the corpora of Brown family (Brown corpus, LOB corpus, Frown and FLOB corpora) combined with a new British branch of contemporary data in 2006 called British English 2006 (BE06). All the possible gender-inclusive (e.g., not only police officer, but also policeperson and cop) terms of a certain investigated occupation or social role were carefully picked out and meanwhile, adjective collocates and concordance lines of BOY and GIRL were examined. He concluded that some gender-neutral terms were being taken up and also made predictions on future promising gender-inclusive forms (like *firefighter* and *chair*) based on analyses from both societal and linguistic perspectives. Different from centering on gender-related lexical terms and their contexts, a series of studies are also interested in the collocations of some well-known pairs of gender-specific terms, such as master and mistress, god and goddess, governor and governess, wizard and witch, and bachelor and spinster, from which different grammatical relations and functional behaviors are observed and discussed (e.g., Caldas-Coulthard and Moon, 2010; Pearce, 2008; Romaine, 2000). The findings based on investigations on collocates (words that tend to co-occur with node word significantly regularly) seem to be a little more sexist. For example, Pearce (2008) carried out a detailed study on the collocates of the lemmas MAN and WOMAN in BNC (1980s-early1990s) using the corpus analysis tool Sketch Engine. Across five domains he investigated, the collocates of MAN and WOMAN often seem to represent gender in stereotypical ways.

Overall, the previous studies give some implications in both data and methods for the present study. For one thing, the studies show some encouraging trends in using gender-inclusive languages in the 2000s despite some sexist features in the 1990s. For another, the tendency of interest in the diachronic analysis is clear, but almost all the studies centered on the general English corpus. Additionally, the reasons for more usage of gender-inclusive terms rather than gender-exclusive forms were less analyzed from a

linguistic perspective, and why some gender-inclusive terms are preferred to others was rarely discussed except for the study of Baker (2010).

Hence, the present study follow the corpus analysis from a diachronic perspective but examine both general English and specific English to gain a complementary result of the changing trends of the gender-related target occupational terms and pronouns in maritime English as ESP. Different from the previous socio-linguistic studies limited to analyzing how gender-inclusivity and gender-bias are represented in languages, this paper explores why some gender-inclusive words are more prevailing than other gendered forms and why a particular gender-inclusive version is preferred over another.

3. Data and Methodology

3.1. Corpora

For the current study, diachronic corpora are needed in order to give us some insights into the changing tracks of *seaman/men* and *seafarer/s* and other gender-specific pronouns or nouns for this position. Besides, the maritime English corpus is expected to show some strong evidence of changing features in line with some institutional policies or guidelines that promote to use gender-inclusive words instead of gender-biased terms in maritime communities. The diachronic general English corpus will be used to obtain sufficient evidence to show some stable linguistic features of the established gender-inclusive terms.

Maritime conventions and recommendations featured by legal texts were selected as the target data, which could allow a collection of SEAMAN/SEAFARER-related texts and was expected to show some diachronic features of both the traditionally gender-neutral generic word SEAMAN and the contemporary gender-inclusive word SEAFARER. All the maritime conventions are collected either from the website of International Labour Organization (ILO) or that of International Maritime Organization (IMO) by searching for the two target lexical terms and their lemmas (including plural forms and genitive forms). Both the title and contents of conventions are considered as our selecting criteria for integrating the related legal written texts. For example, if the title of a given convention are related to seafarers (or seamen), the convention will be incorporated (see Appendix: Data compiled in the study corpus).

In addition, it is a design feature of the most diachronic corpora to hold the type of the text constant. Hence, in order to reduce possible influential factors to as few as possible for the present study, at each interval all the maritime conventions relating to *seafarers* or *seamen* have been withdrawn from all maritime conventions after the 1990s, with the earliest ones from the 1920s. The total number of tokens of the target ESP corpus (Corpus of Maritime Conventions, COMC) was about 3.7 million. The overall texts are divided and then categorized together per decade as a subcorpus. The basic information was listed in Table 1.

Table 1. Basic information of the Corpus of Maritime Conventions (COMC)

Dataset	1920s	30s	40s	50s	60s	70s	80s	90s	2000s	2010s	Total
Texts	6	5	12	3	1	5	5	7	2	1	47
Tokens	7,240	10,396	33,853	6,890	9,113	54,295	11,745	61,986	60,461	118,726	374,705

It needs to be noted though that the target maritime corpus includes solely the seafarers-related maritime legal documents which lead to an uneven dispersion of the legal texts for each year within each ten-year interval. For example, the 1920s subcorpus compiled six maritime conventions whereas the 1960s subcorpus merely one convention. The reason is easy to understand that the content of the conventions concerns various issues in maritime industry, which means those concerning seafarers will not be published every year as expected.

WordSmith 8.0 were used to search for the pre-determined lexical terms to obtain information about their frequency and concordance. The right adjacent collocates of sea were examined in the pilot study with the purpose of determining whether the occupational terms have gender-related terms of two-word style (searching instances: *sea man, sea farer* or with hyphen: *sea-woman* etc.) Based on the pilot study on the maritime English corpus, no such collocates were found, which indicated that theses occupational labels were popularly used in one-word style.

In terms of the comparative corpus—a general English corpus, rich resources of historical English corpora for the study of linguistic changes can be found. For example, Helsinki Corpus, the Brown family of corpora and ARCHER were selected by many linguists for the study of various lexical and grammatical changes (e.g., Baker, 2010;

Curzan, 2003; Holmes, 2001). For the current study, Corpus of Historical American English (known as COHA, Davies, 2010) balanced by genre decade by decade was selected, through which we can make necessary parallel comparisons with the target maritime English corpus so as to yield some contrastive results (between general English and maritime English) of a pair of occupational terms like *seaman/men* and *seafarer/s*. A set of data from 1920s to 2010s was selected to be correspondent to the target corpus. The basic information of the sampled corpus from the COHA was listed in Table 2 blow.

The web program of the COHA is available online at https://www.english-corpora.org/coha, by which the frequency and context of the searching lexical terms can be obtained. A pilot study was also carried out to check the right adjacent collocates, no occupational terms about the observed position was found among the top 100 instances. Thus, it was safely decided that the searching words in this study only include the one-word style.

Dataset	1920s	30s	40s	50s	60s	70s	80s	90s	2000s	2010s
Tokens (million)	25.77	27.71	27.40	28.66	29.12	28.83	29.85	33.15	34.82	35.45
Genres	4	5	5	5	5	5	5	5	5	5

Table 2. Basic information of COHA

As can be seen from Table 2, the COHA doesn't contain natural languages used in 2020s. In order to have a close investigation into the gender-specific words for this position in 2020s, we also gathered data from the New on the Web (NOW Corpus). It contains 16.5 billion words of data from web-based newspapers and magazines from 2010 to the present time (the most recent day is Dec. 27, 2022). More importantly, the corpus grows by about 180-200 million words of data each month (from about 300,000 new articles), or about two billion words each year. From this corpus, we can conveniently obtain the latest features of gendered words in contemporary English.

3.2. Process of the Study

To reach the purpose of the present study, we need to determine the observed lexical terms in advance. Based on the pre-determined target lexical terms, the study mainly consists of two stages. In the first stage, we centered on the changing features of occupational nouns and personal pronouns. With the hypothesis that the occupational

nouns to refer to the position of seafarers in maritime English might change into gender-inclusive terms, frequencies of both the traditional generic form SEAMAN and gender-inclusive form SEAFARER are firstly searched in the COHA and the COMC. Their frequencies were reported from a diachronic perspective and then trends of their frequencies were compared between two corpora.

Regarding third-person singular personal pronouns, nominative pronouns (*he, she, he or she*), objective pronouns (*him, her, him or her*) as well as possessive pronouns (*his, her, his or her*) in the maritime corpus are subsequently investigated so as to gain different insights into implementations of gender-inclusive languages and help get more solid evidence for some assumptions. In the second stage, the predetermined gender-specific terms for females and males regarding the position of seafarers in maritime industry (like *seawomen* or *male seafarers*) were examined by using the NOW Corpus. During each stage, the context (mainly concordances in the present study) will be turned to in order to get a closer observation of the features in using gender-related languages.

4. Results and Discussion

4.1. Frequency and Concordance of Gender-Inclusive Terms

The pre-determined investigated terms for the position of seafarers include the nouns *seaman/men* and *seafarer/s*, pronouns *he*, *she*, *he or she*, and gender-specific words, such as *seaman/men*, *seawoman/women*, *man/men seafarer/s*, *male seafarer/s*, *woman/men seafarer/s*, *or female seafarer/s*. It should be noted that according to the study of Baker (2010) where he found some instances of *s/ne* and previous argument that the female pronoun should be put first (Hartman & Judd, 1975; Sunderland, 1992), gender-inclusive pronouns *she/ne*, *she or he*, *s/ne* were examined in the pilot study, but no instance was found. In addition, the possessive form of *seaman/men*, *seafarer/s* are also involved when counting the frequency of occupational nouns, which however only occupy very few instances.

4.1.1. SEAMAN or SEAFARER

In this section, we aim to find different trends of using gender-exclusive and gender-inclusive occupational nouns for this position and expect different features shown between general English and maritime English. Let's first take a close look at the use of SEAMAN and SEAFARER in a general English corpus, the COHA. Since the number of tokens of each decade is different in the COHA, raw frequencies of SEAMAN and SEAFARER (listed in Table 3) have been normalized to tokens per million as is graphed in Figure 1.

Dataset	1920s	30s	40s	50s	60s	70s	80s	90s	2000s	2010s
SEAMAN	223	302	381	257	165	208	113	94	150	81
SEAFARER	9	11	16	76	13	12	9	9	36	8

Table 3. Frequencies of SEAMAN and SEAFARER in COHA

SEAMAN is the traditionally generic word for the occupational reference to seafarers, which is expected to be decreasing and even replaced by the gender-inclusive word SEAFARER. However, from Table 3, it can be clearly noted that the frequency of SEAMAN is greatly higher than that of SEAFARER across all these decades.

However, it seems that the distance between the frequency of two terms show relatively obvious different features in some decades. Let us take a look at Figure 1 below.



Figure 1. Frequencies of SEAMAN and SEAFARER in COHA (per million)

Figure 1 reveals that the frequency of SEAMAN have steadily reduced since 1950s. While the use of SEAMAN decreased sharply in 1950s, the frequency of SEAFARER shows an obvious increase. Another increase in the use of SEAFARER appears in 2000s when the use of SEAMAN also rises obviously (so it tends to because the topic about this occupation happened to increase, which means no relation with the adoption of gender-inclusive words). In addition, it can be noticed that the distance of frequencies between SEAMAN and SEAFARER tends to be narrowing since 1980s, which seems to be attributed to the continuous decreasing frequency of SEAMAN.

Having gained some information from general English, now let us focus on the maritime English corpus. Similar to the figures obtained and shown above in general English corpus, the raw frequency of two occupational reference lemmas SEAMAN and SEAFARER are listed in Table 4 and the normalized figures are graphed in Figure 2 below. From Table 4 below, it can be noticed that overall, the frequency of SEAMAN shows a reducing trend, whereas that of SEAFARER reveals an increasing trend. Now let us look at some detailed changing features through the normalized figures.

Table 4. Frequencies of SEAMAN and SEAFARER in COMC

	1920s	30s	40s	50s	60s	70s	80s	90s	2000s	2010s
SEAMAN	89	46	16	6	0	1	1	9	1	5
SEAFARER	0	0	121	63	6	121	166	432	826	367

As is shown in Figure 2, the frequency of SEAFARER was zero from 1920s to 1930s. In contrast the frequency of SEAMAN was rather high in 1920s but it greatly dropped down in 1930s and even dropped to almost zero in 1940s. Exactly since that decade (1940s), the frequency of SEAMAN have maintained at an extremely low level, whereas the use of SEAFARER began to exceed SEAMAN and have kept rising steadily since 1970s.



Figure 2. Frequencies of SEAMAN and SEAFARER in COMC (per million)

Compared the results of the two corpora, some points can be indicated. First, the use of the gender-exclusive generic form SEAMAN is still more popular than the genderinclusive word SEAFARER in general English. In contrast, the gender-inclusive word SEAFARER has, to great extent, replaced the gender-exclusive form SEAMAN in maritime conventions, or more broadly in maritime legal texts. Second, in both general English and maritime conventions the use of SEAFARER had a great increase in 1950s but no increase for SEAMAN, which indicates that in this decade gender-inclusive words are more prevailing. It is a little surprised because the feminist movement started in the 1960s-1970s. This might have something to do with women pouring into the maritime industry as seafarers after World War II, which drove people to think about the use of gender-inclusive term to refer to both man and woman. The changing divisions of labors continuously inspired feminist linguists to have gendered language under scrutiny. Third, it seems that the awareness of using the gender-inclusive word SEAFARER has been established since 1970s in maritime English not in general English. It could be due to the efforts made by IMO or ILO (specialized agencies of UN) to empower women and promote gender-equality and/or even directly the gender-inclusive guidelines given by United Nations, which is in line with Cooper's argument in 1990 that language reform is invested in institutional policies and practices, such as government edicts, publisher's guidelines and school curricula, etc. It is thus assumed that the specific English is more greatly influenced than general English by the gender-inclusive policies or guidelines.

Although we cannot get direct evidence to explain the reasons because of the limitations of the size and time period of the data collected, some indirect implications can still be gained through the concordance lines. In 2006, an official proposed the use of the word 'seafarer' instead of 'seaman' by putting:

Mr. …in the resolution concerning the ILO minimum wage for able seamen… also suggested the use of the word "seafarer" instead of "seaman". (ILO 2005, p. 10)

Hence, we examined and compared the distributions of able seaman and able seafarer across the decades in two corpora to get more evidence for the above-mentioned assumption, as is listed in Table 5.

Table 5 shows two interesting points which can give strong evidence to the assumption mentioned above. One is that able seafarer only appears in the maritime

English corpus, a specific English corpus whereas never appears in the COHA, a general English corpus. The other point is that able seafarer only appears in 2000s and 2010s which has much to do with the influence of the official's propose of using able seafarer instead of able seaman in ILO (2005).

COMC	1920s	30s	40s	50s	60s~90s	2000s	2010s
able seaman	0	0	10	5	0	0	0
able seafarer	0	0	0	0	0	3	26
COHA	1920s	30s	40s	50s	60s~90s	2000s	2010s
able seaman	15	4	5	8	0	6	0
able seafarer	0	0	0	0	0	0	0

Table 5. Frequencies of able seaman and able seafarer in COMC and COHA

However, questions still remain whether the increasing usage of the gender-inclusive form SEAFARE in the legal texts really integrate the female seafarers, and likewise whether the gender-exclusive looking word SEAMAN is used when expecting male seafarers. We turned to the personal pronouns used to refer to this occupation to examine the questions.

4.1.2. Third-Person Singular Personal Pronouns

This section is intended to compare the occupation of male with female pronouns and to investigate how gender-inclusive personal pronouns are used in maritime conventions. The raw frequency of nominative pronouns *he/she* and *he* or *she*⁴), objective pronouns *him/her* and *him* or *her*⁵), and possessive pronouns *his/her* and *his* or *her*⁶) are examined and listed in Table 6.

Table 6 shows that from 1920s to 1970s, all the personal pronouns are gendered forms and all are male personal pronouns, despite one exceptional instance *she* shown in the subcorpus of 1940s, which actually refers to the ship rather than people (the concordance of *she* is not listed). In terms of the gender-inclusive personal pronouns, they started to appear in 1980s and seemed to be kept to use since then. One important reason could still be the efforts made by IMO since 1988 to empower women in maritime industry,

⁴⁾ Note that he or she consists of he or she and he/she.

⁵⁾ Note that him or her consists of him or her and him/her.

⁶⁾ Note that his or her consists of just his or her.

and it seems not related to the occupation of female seafarers, who are still only minor population. (e.g., Drewry, ILO, & ITF, 2009; Kitada, 2021) In addition, Table 6 has found no female personal pronouns being used before or after the gender-inclusive pronouns occurred in the 1980s, which reflects the reality that females were invisible for a long period and are now still less influential on language.

	Туре	1920s	30s	40s	50s	60s	70s	80s	90s	2000s	10s
	he	19	15	25	2	5	67	1	11	2	0
	him	1	7	43	8	2	21	13	1	0	0
Gendered pronouns	his	31	18	24	6	11	97	0	10	0	1
	she	0	0	1	0	0	0	0	0	0	0
	her	0	0	0	0	0	0	0	0	0	0
Gender-	he or she	0	0	0	0	0	0	6	0	3	0
inclusive	him or her	0	0	0	0	0	0	0	1	2	0
pronouns	his or her	0	0	0	0	0	0	6	1	13	3

Table 6. Frequencies of personal pronouns in COMC

It also should be noted that despite the adoption of gender-inclusive pronouns since 1980s, the male-biased pronoun *he* still exists in the same subcorpus. For example, in the subcorpus of 1980s, the frequency of gender-inclusive objective pronoun *him or her* is zero, whereas the frequency of male-biased pronoun *him* is 13. Since the figures for male-biased pronouns will become complicated for its specific reference to males apart from its generic usage, the question now is whether the generic use of *he* has been completely replaced by *he or she*.

That interesting issue requires close attention to the context of male-biased pronouns, hence the concordances of the nominative pronoun *he* have been sampled and then their corresponding extensive contexts are obtained as listed in Table 7. For one thing, it reveals that instances of *he* in subcorpus of 1980s and 1990s are still pertaining to the generic usage with only two instances in the 2000s used to refer to specific male persons, which to some degree suggests that the gender-inclusive pronouns has not gained a completely established position until the 2000s. For another, it reveals some interesting results on how gender-inclusive occupational nouns are connected with pronouns. The first, second, eleventh, and twelfth concordance lines reveal that although the occupational nouns are gender-inclusive lexical terms (like *seafarer* or *radio officer*), the denotational

pronouns are gender-biased *he*, even when the nouns are plural forms, like in the twelfth concordance line (plural drivers denoted by singular *he*).

No.	Context	Subcorpus	Generic pronoun
1	Whenever a <i>seafarer</i> is detained for any reason in the territory of a Member, the competent authority should, if <u>he</u> so requests, immediately inform \cdots	1980s	+
2	that of the radio officer or radiotelephone operator, except as provided by the relevant Radio Regulations, for which <u>he</u> does not hold the appropriate certificate \cdots	1990s	+
3	if such a <i>person</i> holds no appropriate certificate, <u>he</u> shall be required to pass a test accepted by the Administration \cdots	1990s	+
4	It should be remembered that it may take the <i>master</i> a few minutes to reach the bridge before <u>he</u> can take over the operation…	1990s	+
5	it may take the <code>master</code> \cdots some decisions need to be taken before $\underline{\rm he}$ reaches the bridge.	1990s	+
6	If any <i>person</i> working in a space feels in any way adversely affected \underline{he} should give a pre-arranged signal	1990s	+
7	the person is situated so that \underline{he} can be hauled out	1990s	+
8	If a person working in the space indicates that <u>he</u> is being affected by the atmosphere \cdots	1990s	+
9	An incapacitated person should be removed from the space as quickly as possible, unless \underline{he} is gravely injured	1990s	+
10	Should the responsible <i>officer</i> enter the space alone for any reason, <u>he</u> should notify the bridge duty officer	1990s	+
11	the bridge $duty$ officer who should arrange to check on his well-being frequently and at specific times as long as <u>he</u> remains therein.	1990s	+
12	crane drivers should have a clear view of the vessel's deck. If $\underline{\rm he}$ cannot see the deck then a seafarer should	1990s	+
13	$\it Mr.$ Sprague Ackley $\underline{\rm He}$ notes, however, that correct printing is very important.	2000s	_
14	Mr. Sprague Ackley \cdots has indicated \cdots He also recommends that the barcode generation software be \cdots	2000s	-

Table 7	Context	of	he from	1980s 1	to	2000s	in	COMC

Note 1. The referents are italicized and the male pronoun he is underlined.

2. "+" means the pronoun was truly generically used, whereas "-" means the opposite condition.

The above results have some further indications. First, the tendency in using gender-inclusive pronouns seems to be more likely owing to the prescribed rules or institutional policies instead of the changes of traditionally dominant masculine work culture in maritime communities (Kitada, 2013). Additionally, from a sociolinguistic perspective, it indicates that gendered personal pronouns seem not to have gained as much attention as gendered occupational nouns so that gender-inclusive personal pronouns were adopted much later than gender-inclusive occupational nouns. This point could show some answers to the remaining questions mentioned in previous section that female seafarers have not been integrated in legal texts before 1980s, as revealed by the first concordance in Table 7, despite the gender-inclusive seafarers occurring as early as 1940s.

4.1.3. Relations between Gender-Related Nouns and Their Denotational Pronouns

Based on the above results and discussions, we had another assumption, from the linguistic perspective, that gender-biased generic use of *-man* nouns might strengthen the use of *he*-biased personal pronouns, because it will be very possibly followed by the gender-biased generic word *he*, meanwhile occupational gender-inclusive nouns might strengthen the use of gender-inclusive pronouns to maintain the consistency of both gender-inclusive styles and meanings.

To gain more evidence of the above-mentioned assumption regarding the grammatical relation of gender-related nouns and pronouns, we sampled the context of *seaman* and *seafarer* with personal pronouns followed from two same conventions of the 1926 version and its 1987 revised version, as listed below:

- (1) Concordance list from the 1926 version:
 - a. Any <u>seaman</u> who is landed during the term of his engagement or on its expiration shall be entitled to be taken back to his own country, or to the port at which <u>he</u> was engaged...
 - b. A <u>seaman</u> shall be deemed to have been duly repatriated if <u>he</u> has been provided with suitable employment…
 - c. A <u>seaman</u> shall be deemed to have been repatriated if <u>he</u> is landed in the country to which he belongs...
 - d. The expenses of repatriation shall not be a charge on the <u>seaman</u> if <u>he</u> has been left behind by reason of…

- e. When a <u>seaman</u> is repatriated as member of a crew, <u>he</u> shall be entitled to remuneration for work done during the voyage.
- (2) Concordance list from the 1987 version:
 - a. The <u>seafarer</u> shall have the right to choose from among the prescribed destinations the place to which <u>he or she</u> is to be repatriated.
 - b. ... the moment the <u>seafarer</u> leaves the ship until <u>he or she</u> reaches the repatriation destination.
 - c. ...pay and allowances from the moment <u>he or she</u> leaves the ship until <u>he or</u> <u>she</u> reaches the repatriation destination.
 - d. ... the <u>seafarer</u> is to be repatriated or the State of which <u>he or she</u> is a national may arrange for his or her repatriation.
 - e. A <u>seafarer</u> shall be deemed to have been duly repatriated when <u>he or she</u> is landed at a destination.

From the concordances, it can be noted that gender-biased generic noun seaman always co-occurred with gender-biased generic *he*. In contrast, gender-inclusive seafarer co-occurred with gender-inclusive personal pronouns *he or she*.

4.2. Gender-Specific Occupational Terms

In this section, we will investigate the gender-specific terms for women and men who take the occupation of seafarers with the purpose of finding some tendency in developing new gender-specific words and with which ground to figure out the answers to the third question.

The corpus adopted here is the NOW Corpus (texts: from 2010 to Dec. 28, 2022), which better represents the contemporary English being used. Another reason for choosing this corpus is that in the pilot study, we have found there is no gender-specific instances to refer to females of this occupation of *seafarers* in the COHA and only one instance in the COMC, as is shown below:

... the resolution concerning the promotion of opportunities for women seafarers adopted by the International Labour Conference of the International Labour Organization on 22 February 2006 ... (2006 MLC) Based on the above results and our pilot study, we make assumptions that the gender-specific terms for women of this occupation as *seafarers* should start to appear in 2000s and might even later in general English. Hence, we hold that this corpus is necessary and appropriate for the purpose of the present study.

Gender–specific	seawoman/	male	female	man/men	woman/women
terms	seawomen	seafarer/s	seafarer/s	seafarer/s	seafarer/s
Frequency	36	13	65	1	63

Table 8. Frequency of gender-specific terms in NOW Corpus

From Table 8, it can be noted that, in terms of female references to this occupation, the frequency of *female seafarers* and *woman/women seafarers* is higher than that of *seawoman/seawomen*. The use of *male seafarers* is more frequent than *men seafarers*.

It is of special interest that *seawoman/women* are also used to refer to females of this position (despite rare), which means that *seaman/men* are likely to be regarded as a gender-specific word for males only instead of a generic reference with the epicene meaning. By examining the concordances, it is noticed that *seamen* can be specifically used to refer to males by co-occurring with *seawoman*. All such concordance lines have been picked out and listed below:

- (3) a. There's an immediate need for our <u>seamen</u> and <u>seawomen</u> to be trained and equipped with a standard protocol… (Philippines)
 - b. …raised funds for a permanent memorial to the <u>seamen</u> and <u>seawomen</u> from the Dundee area… (Great Britain)
 - c. There was, in fact, a bar with the sign, "Seamen and Seawomen Welcome" but there was no mention of how corpulent the seawomen had to be… (Canada)
 - d. They handed skills to later generations of <u>seamen</u> and seawomen, and this role became the proof of their necessity… (Great Britain)
 - e. …identifying all possible factors that contribute to the current gender disparity between <u>seamen</u> and <u>seawomen</u>… (Great Britain)
 - f. ...the lifestyle reflected in signs like Seamen and Seawomen... (Gambia)

Based on the results, three points can be noticed. First, to gain gender equality in language it is expected that some traditionally generic occupational words tend to reduce to gender-specific words so as to reach symmetric denotational references to two genders, just like man now only have the meaning to refer to male adults in most dictionaries. It is predicted seaman will very likely to be reduced to a completely gender-specific word. In addition, the popularity or success of adopting certain new gender-specific word seem to intuitively follow some morphological rules. In this case, compound forms (*female seafarers/women seafarers*, 128) seem to be more popular than the derivational form (*seawomen*, 36), it might be related to the fact that *seaman* is a compound word rather than a derivational word with suffix -man. Third, the denotational symmetry in language guise when using gender-specific words, as the concordances reveal, is in line with the argument that speech needs to sound natural, articulate or aesthetically pleasing which derives from a long history of socially informed norms of use.

5. Conclusion

Based on quantitative results, we can conclude that gender-exclusive (male-biased) word SEAMAN is still more prevailing in general English, but in maritime English legal texts gender-inclusive word SEAFARER has taken the dominant place since 1940s. The occupation of women in maritime industry tends to have less influence on the adoption of gender-inclusive word SEAFARER compared with feminist language policies and guidelines in this field. This point can obtain evidence from the changing features of gendered and gender-inclusive personal pronouns as well, which is not until in 1980s that began to appear and established its position in maritime legal texts around in 2000s. Another evidence obtained from personal pronouns is that no female gendered personal pronouns appeared before 1980s when feminist linguistic movement was prevailing and spreading in more countries. Gender-inclusive personal pronouns take the form of he or she and he/she (him or her and him/her, his or her) in the maritime English corpus. It seems that attention on gender-inclusive adoption of pronouns is less paid than occupational nouns among maritime community. In terms of gender-specific words, although females are still gender-marked, while males maintained unmarked positions, female seafarers have become visible in contemporary English with the compound style (female/women seafarers) more popularly adopted than the derivational form (seawoman/women).

Combining quantitative results with qualitative results, we made some assumptions and arguments. One important assumption based on the different features in a general

English corpus and a special English corpus regarding the use of SEAMAN and SEAFARER is that gender-inclusive policies affect people within the maritime community more than the others. The case of comparative results in using able seafarer to large extent supported that point. Another assumption which also obtained encouraging evidence through the detailed analysis on typically sampled concordances is that gender-inclusive occupational nouns tend to habitually co-occur with gender-inclusive personal pronouns, while male-biased nouns (*-mun*) seem to be grammatically related to male-biased pronouns (*he/him/his*). The last assumption we have is that the success of certain newly-adopted gender-specific words seem to follow some morphological rules (e.g., regarding lexeme or phonology) to grammatically right or to keep aesthetic, which however, needs further exploration.

References

- Baker, P. (2010). Will Ms ever be as frequent as Mr? A corpus-based comparison of gendered terms across four diachronic corpora of British English. *Gender and Language*, 4(1), 125-149.
- Benatar, D. (2005). Sexist language: Alternatives to the alternatives. *Public Affairs Quarterly*, 19(1), 1-9.
- Biber, D. (1988). Variation across speech and writing. Cambridge: Cambridge University Press.
- Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). Longman grammar of spoken and written English. Harlow: Pearson Education Limited.
- BIMCO, & International Chamber of Shipping (2016). *Manpower report: The global supply and demand for seafarers in 2015*. Maritime International Secretariat Services Limited.
- Caldas-Coulthard, C. R., & Moon, R. (2010). 'Curvy, hunky, kinky': Using corpora as tools for critical analysis. *Discourse & Society*, 21(2), 99-133.
- Curzan, A. (2003). *Gender shifts in history of English*. Cambridge: Cambridge University Press.
- Davies, M. (2010) *The corpus of historical American English* (COHA). Available online at https://www.english-corpora.org/coha/.
- Drewry, International Labour Organisation, & International Transport Workers'

108 | Cuilin Liu, Se-Eun Jhang & Sunghwa Lee

Federation (2009). Manning 2009. London: Drewry Maritime Research.

Hartman, P., & Judd, E. (1975). Sexism and TESOL materials. *TESOL Quarterly*, 12(4), 383–393.

- Hellinger, M. (2001). English—gender in a global language. In M. Hellinger & H. Bußmann (Eds.), Gender across languages: The linguistic representation of women and men, (Vol. 1, pp. 105–113). Amsterdam, The Netherlands: John Benjamins Publishing Company.
- Holmes, J. (1986). Functions of you know in women's and men's speech. Language in Society, 15(1), 1-21.
- Holmes, J. (1993). He-man beings, poetesses, and tramps: Sexist language in New Zealand. In L. Bauer and C. Franzen (Eds.), Of pavlova, poetry and paradigms: Essays in honour of Harry Orsman (pp. 34-49). Victoria: Victoria University Press.
- Holmes, J. (2001). An introduction to sociolinguistics (2nd ed.). London: Longman.
- Holmes, J., & Sigley, R. (2001). What's a word like girl doing in a place like this? Occupational labels, sexist usages and corpus research. *Language and Computers*, 36, 247-263. https://www.researchgate.net/ publication/233615516
- Hong, S. C., & Jhang, S. E. (2010). The compilation of a maritime English corpus for ESP learners. *Korean Journal of English Language and Linguistics*, 10(4), 963-985.
- ILO (2005). A global alliance against forced labour—Global report on forced labour 2005. https://www.ilo.org/global/publications/books/WCMS_081882/langen/index.htm Accessed on January 3, 2023.
- Kilgarriff, A. (2001). Comparing corpora. *International Journal of Corpus Linguistics*, 6(1), 97-133.
- Kitada, M. (2013). Code of behaviour at sea: Women seafarers' shipboard identity management. WMU Journal of Maritime Affairs, 12(2), 213-227.
- Kitada, M. (2021). Women seafarers: An analysis of barriers to their employment. In V. O. Gekara & H. Sampson (Eds.), *The world of the seafarer: Qualitative* accounts of working in the global shipping industry (Vol. 9, Ser. WMU Studies in Maritime Affairs, pp. 65–76). Cham, Switzerland: Springer.
- Kjellmer, G. (1986). 'The lesser man': Observations on the role of women in modern English writings. In J. Arts & W. Meijs (Eds), *Corpus linguistics II* (pp. 163– 176). Amsterdam: Rodopi.

Lakoff, R. (1975). Language and woman's place. Language in Society, 2(1), 45-80.

- Lindquist, H. (2009). *Corpus linguistics and the description of English*. Edinburgh: Edinburgh University Press.
- McEnery, T., Xiao, R., & Tono, Y. (2006). Corpus-based language studies: An advanced resource book. London/New York: Routledge.
- Milne, P. J. (1989). Women and words: The use of non-sexist, inclusive language in the Academy. *Studies in Religion/Sciences Religieuses*, 18(1), 25-35.
- Pearce, M. (2008). Investigating the collocational behaviour of MAN and WOMAN in the British National Corpus using Sketch Engine. *Corpora*, 3(1), 1–29.
- Rayson, P., Leech, G., & Hodges, M. (1997). Social differentiation in the use of English vocabulary: Some analyses of the conversational component of the British National Corpus. *International Journal of Corpus Linguistics*, 2(1), 133–152.
- Romaine, S. (1999). *Communicating gender*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Romaine, S. (2000). *Language in society: An introduction to sociolinguistics* (2nd ed.). Oxford: Oxford University Press.
- Schmid, H.-J. (2003). Do women and men really live in different cultures? Evidence from the BNC. In T. McEnery, P. Rayson, & A. Wilson (Eds.), Corpus linguistics by the Lune: A festschrift for Geoffrey Leech (pp. 185–221). Frankfurt: Peter Lang.
- Sczesny, S., Moser, F., & Wood, W. (2015). Beyond sexist beliefs: How do people decide to use gender-inclusive language? *Personality and Social Psychology Bulletin*, 41(7), 943–954.
- Sunderland, J. (1992). Gender in the EFL classroom. ELT Journal, 46(1), 81-91.
- Tognini-Bonelli, E. (2001). *Corpus linguistics at work*. Amsterdam, The Netherlands: John Benjamins Publishing Company.
- United Nations. (2020). Gender-inclusive language. https://www.un.org/en/gender-inclusive-language/Accessed on January 3, 2023.

Period	Text ID	Titles
	M1	Placing of Seamen Convention, 1920
	M2	Unemployment Indemnity (Shipwreck) Convention, 1920
1020-	M3	Medical Examination of Young Persons (Sea) Convention, 1921
19205	M4	Labour Inspection (Seamen) Recommendation, 1926
	M5	Seamen's Articles of Agreement Convention, 1926
	M6	Repatriation of Seamen Convention, 1926
	M7	Holidays with Pay (Sea) Convention, 1936
	M8	Hours Of Work And Manning (Sea) Convention, 1936
1930s	M9	Shipowners' Liability (Sick And Injured Seamen) Convention, 1936
	M10	Seamen's Welfare in Ports Recommendation, 1936
	M11	Sickness Insurance (Sea) Convention, 1936
	M12	Food and Catering (Ships' Crews) Convention, 1946
	M13	Certification of Ships' Cooks Convention, 1946
	M14	Social Security (Seafarers) Convention, 1946
	M15	Seafarers' Pensions Convention, 1946
	M16	Paid Vacations (Seafarers) Convention, 1946
1040c	M17	Medical Examination (Seafarers) Convention, 1946
13405	M18	Certification of Able Seamen Convention, 1946
	M19	Accommodation of Crews Convention, 1946
	M20	Wages, Hours of Work and Manning (Sea) Convention, 1946
	M21	Paid Vacations (Seafarers) Convention (Revised), 1949
	M22	Accommodation of Crews Convention (Revised), 1949
	M23	Wages, Hours of Work and Manning (Sea) Convention (Revised), 1949
	M24	Wages, Hours of Work and Manning (Sea) Recommendation, 1958
1950s	M25	Seafarers' Identity Documents Convention, 1958
	M26	Wages, Hours of Work and Manning (Sea) Convention (Revised), 1958

Appendix: Data Compiled in the Study Corpus

Period	Text ID	Titles
1960s	M27	Convention on Facilitation of International Maritime Traffic, 1965
	M28	Prevention of Accidents (Seafarers) Convention, 1970
	M29	Merchant Shipping (Minimum Standards) Convention, 1976
1970s	M30	Seafarers' Annual Leave with Pay Convention, 1976
20100	M31	Continuity of Employment (Seafarers) Convention, 1976
	M32	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978
	M33	Seafarers' Welfare Convention, 1987
	M34	Health Protection and Medical Care (Seafarers) Convention, 1987
1980s	M35	Repatriation of Seafarers Convention (Revised), 1987
	M36	Seafarers' Welfare convention, 1987
	M37	Social Security (Seafarers) Convention (Revised), 1987
	M38	Fatigue Factors in Manning and Safety
	M39	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995
	M40	Accident prevention on board ship at sea and in port (2nd edition),1996
1990s	M41	Seafarers' Hours of Work and the Manning of Ships Convention, 1996
	M42	Labour Inspection (Seafarers) Recommendation, 1996 (No. 185)
	M43	Recruitment and Placement of Seafarers Convention, 1996
	M44	Labour Inspection (Seafarers) Convention, 1996
20005	M45	Seafarers Identity Documents Convention (Revised), 2003
20003	M46	Maritime Labour Convention, 2006
2010s	M47	International Convention on Standards of raining, Certification and Watchkeeping for Seafarers, 1978, as amended in 2010

112 | Cuilin Liu, Se-Eun Jhang & Sunghwa Lee

Cuilin Liu

PhD Student Department of English Language and Literature Korea Maritime & Ocean University 727 Taejong-ro, Yeongdo-Gu, Busan 49112, South Korea Phone: 051-410-4590 Email: Claire1182904043@outlook.com

Se-Eun Jhang

Professor Department of English Language and Literature Korea Maritime & Ocean University 727 Taejong-ro, Yeongdo-Gu, Busan 49112, South Korea Phone: 051-410-4595 Email: jhang@kmou.ac.kr

Sunghwa Lee

Associate Professor English Philology Department Korea International University in Fergana 9Q7J+3JM, Alisher Navoi Street, Fergana, Uzbekistan Email: esunghwa@gmail.com

Received on February 17, 2023 Revised version received on March 16, 2023 Accepted on March 31, 2023