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Non-verbal markers of modality and evidentiality in MarENG

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ABSTRACT

This article examines a variety of options for expressing speaker and writer stance in a subcorpus of MarENG, a maritime English learning tool sponsored by the EU (35,041 words). Non-verbal markers related to key areas of modal expression are presented; (1) epistemic adverbs and adverbial expressions, (2) epistemic adjectives, (3) deontic adjectives, (4) evidential adverbs, (5) evidential adjectives, (6) evidential interpersonal markers, and (7) single adverbials conveying the speaker's attitudes, feelings or value judgments. The overall aim is to present an overview of how these non-verbal markers operate in this LSP genre. An examination of the data show that in expressing stance, MarENG speakers and writers use three primary means: epistemic adjectives are more frequent than epistemic adverbs, the deontic adjectives *necessary* and *essential*, and centralized assessment adjectives combining with intensifiers, mainly with a positive axiology. They are also keen on more subtle and less subjective evaluative devices like adjectives pertaining to time, novelty, importance such as *new* or *recent*. Future research includes the study of verbal modality markers in MarENG.

Keywords: Maritime English, epistemic, deontic, evidential, attitudinal stance.

Stance expresses an evaluation which is understood as “the speaker or writer’s attitude, viewpoint on, feeling about the entities or propositions that he or she is talking about” (Hunston and Thompson, 2000, p. 5) which create an identity in the text. The present article aims to illustrate that MarENG, an innovative maritime English learning tool not only promotes the maritime English language competences of those working in the various maritime professions in Europe but also shows uses of language which acknowledge, construct and evaluate (Thompson 1994; Hyland 2000; Leech 2003; Samson 2006). This study is a preliminary exploration of the expression of speaker and writer stance by means of the use of non-verbal markers of modality and evidentiality in a sample corpus of twelve texts from different topics presented in MarENG’s advanced level (35,041 words). The texts cover the following topics:

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- | | |
|--|-----------------------------------|
| 1. Port Management | 7. Port State Control |
| 2. Shipping and Maritime Management | 8. Vessel Traffic Services |
| 3. Cargo Handling | 9. Ice Navigation |
| 4. Vessel types | 10. Weather |
| 5. The Engine Room | 11. Radio Conventions |
| 6. Cargo Space | 12. Radio Medical |
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Figure 1. Topics in MarEng corpus

This study is organized as follows. Firstly, I sketch briefly the theoretical underpinnings of this research: how evaluation is presented in the literature and how modal and evidential meanings are expressed. Section two introduces the data, the methodology and the hypotheses. Section three reports on the quantitative and qualitative results of the study in different sections: epistemic modality, evidentiality and attitudinal stance. Section four closes the article with a discussion of the relevant findings.

1. Modality and Evidentiality, a blurred distinction

Several authors have discussed the difference between modal and evidential meanings (Carretero, 2004, p. 27; Downing, 2001, p. 255; Kiefer, 2009, pp. 67-94; Nuyts, 1992, p. 91). There is a certain overlap between the two categories as both express attitudes, commitment and judgements to the content of a proposition (Nuyts, 2000, p. 27, Marín Arrese et al., 2002). In this article, I consider that evidential and modal meanings form part of the interpersonal function of language and also belong to the speech event and not the proposition itself (Nuyts 1992, p. 91; Downing and Locke, 2002, p. 383).

As regards evaluation, Hunston and Thompson (2000) identify three important aspects: lexis, grammar and text. By lexis, they refer to adjectives, adverbs, nouns, verbs. Many adjectives and adverbs are used to describe things or situations in maritime discourse in a way which involve approval or disapproval, as well as giving information about them. This aspect will be the main focus of this study. By grammar, Hunston and Thompson (2000) refer to intensifiers, repetitions, comparators, non-finite, -ing clauses and explicatives. By text, they mean different structures and syntactic patterns that are related to a particular point of view about a certain event or situation. The approach taken in this article is to present a classification of the examples which point to the expression of the speaker's or writer's attitudinal stance, that is, how such attitude is encoded in the adjectives and adverbs used in twelve documents from MarENG (35,041 words).

Conrad and Biber (2000) arrange stance adverbials into three sub-groups: epistemic, attitudinal and style stance adverbials. The expression of epistemic stance comprises epistemic and evidential modality (Palmer, 2001, p. 8). Epistemic modality is related to the speaker's assessment of the likelihood concerning the

described situation and the validity status of a proposition. Epistemic modal markers refer to the knowledge of the speaker as regards the realization of the event and/or her/his assessment of the validity of the proposition designating the event.

Evidentials also point toward speaker's assessment of the validity of the information on the basis of its evidential source (Plungian, 2001; Marín-Arrese, 2004). Evidentiality not only refers to source of information but also to speaker's "epistemological stance". These markers reflect the speaker's interpersonal style and her/ his rhetorical intentions.

Speaker stance also involves attitudinal stance, which indicates feelings or judgments about what is said (Chafe and Nichols, 1986; Biber and Finegan, 1986; Biber et al., 1999, Chapter 12; Conrad and Biber, 2000; Hunston and Thompson, 2000; Hyland, 2000)¹.

2. Data and Methodology

The aim of this article is to investigate how non-verbal "stance" or personal position in MarENG is expressed from a quantitative and qualitative point of view. This article explores the functional uses of adjectives and adverbs as rhetorical devices that Naval English tools use. The epistemic, deontic, evidential and attitudinal stance markers commenting on the certainty (or doubt), reliability or limitations of a proposition under study are indicated in figure 2. Hyland's (1998) comprehensive taxonomy of interpersonal metadiscourse devices has been used for these texts. Apart from this, other interpersonal markers have also been included, from Biber et al's (1999) *Longman Grammar of Spoken and Written English (I guess, I think)* and other studies have been consulted such as Swales &

1 The theoretical underpinnings of modality also take into account that there are several studies which explore the interface between modality and Language for Specific Purposes. To name only a few examples in Spain, Piqué-Angordans, Posteguillo, Andreu-Besó (2002), Alonso-Almeida, F. and Vázquez, N. (2009) and Alonso-Almeida, F. and Vázquez, N. (2010). However, in an overview of the field, I was surprised to find that no specific studies have carried out to investigate how modality markers function in Maritime English discourse.

Burke's study (2003) or Hoyer (1997). A sample of the most frequent 50 tokens found in these sources was selected for the quantitative search. The pragmatic purposes of these interpersonal mechanisms within their contexts of use have been outlined in the qualitative analysis to explore the social norms used by this Naval English tool, MarENG.

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- **Epistemic adverbs and adverbial expressions** indicating actuality and reality, limitation and viewpoint or perspective² (*like, basically, really, actually, absolutely, certainly, clearly, definitely, doubtless, essentially, from our perspective, in fact, in our view, mainly, maybe, no/ without doubt, perhaps, possibly, probably, of course, generally, truly, typically*, etc.)
 - **Epistemic adjectives** (*most, possible, probable, likely, unlikely, sure (enough), improbable, impossible, true, certain*, etc.)
 - **Deontic adjective:** *necessary*.
 - **Evidential adverbs:** *apparently, clearly, presumably, seemingly, supposedly, plainly, obviously, evidently*.
 - **Evidential adjectives:** *clear, evident, plain, obvious, presumed*.
 - **Evidential interpersonal markers:** *I guess, I think, it seems*.
 - **Single adverbials conveying the speaker's attitudes, feelings or value judgments** include a wide range of meanings (*unfortunately, sensibly, amazingly, hopefully, conveniently, curiously, fortunately, happily, interestingly, ironically, luckily, oddly, paradoxically, regrettably, sadly, surprisingly*, etc.)
 - **Centralized evaluative adjectives conveying the speaker's attitudes, feelings or value judgments** (*important, central, main, major, relevant, serious*, etc.)
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Figure 2. Stance markers in MarENG

2 The search has been limited to the most usual epistemic adjectives and adverbs on the basis of different well-known and widely-cited studies: Biber et al. (1999), Hoyer (1997), Hyland (1998a, 1998b) and Swales and Burke (2003).

The article addresses the following issues:

- a. The identification of the most common lexical markers for the expression of epistemic non-verbal markers and attitudinal non-verbal markers.
- b. What these features show about speaker stance.

An electronic search in the MarENG pilot corpus was carried out to ensure that all the instances present had been identified using WordSmith tools. A manual search was also carried out afterwards to ensure that the number of identified tokens was correct, eliminating the irrelevant cases. The results are presented in raw numbers. The data were submitted to the chi square test to establish the cases where differences between frequencies were significant.

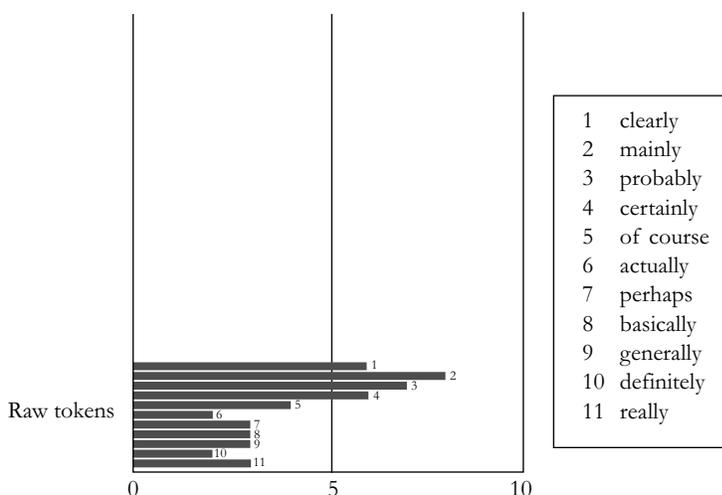
The hypotheses are:

- A lower frequency of epistemic adjectives is expected compared to adverbials, as other studies have found: Simon-Vandenberg & Aijmer (2007) and Nuyts (1993).
- Some epistemic adverbs are in the process of grammaticalization: *definitely*, *really* are sometimes used as adjectival modifiers reinforcing the adjective.
- The use of deontic markers such as *necessary* create a persuasive stance style in both written and oral speech.
- The highest percentage of more subjective directive cognitive evidential markers is typically found in conversations (*I think, I guess*) and perceptual markers of indirect access to the information (*seems, appear*) are found in reports and written texts.
- Writers and speakers mark their attitude through the use of centralized assessment adjectives (*good, important*, etc.) combining with intensifiers (*very, really*), polarized adjectives (*amazing*) and adverbs (*unfortunately*). The latter are expected to be less frequent than epistemic adverbs.

3. Analysis and Results

3.1. Epistemic adverbs

An examination of MarENG data show that in expressing epistemic modality, speakers use two primary means: *mainly* (8) and *probably* (7). The total raw number of epistemic adverbs is 47. Some adverbs have not been found such as *truly*, *apparently*, *supposedly*, *evidently*, *obviously*. Adverb uses will be examined from the most to the least frequent in the pilot corpus. Graph 1 shows the overall results for this category. The eleven adverbs found show features of the styles which Biber and Finegan (1986) describe as ‘expository expression of doubt’ and ‘oral controversial persuasion’, the former characterized by adverbs expressing doubt and related meanings, while the latter is characterized by certainty adverbs.



Graph 1. Epistemic Adverbs in MarENG

Epistemic adverbs are normally used in MarENG with two different functions: to point out the limitations on a proposition, specifying that it takes

place in most cases or to a large degree as in examples (1) and (2) with *mainly* (about the differentiation of port types in example 1 that normally holds or the most important elements in a lubricating oil system in example 2) or showing the main signs or qualities of a particular group or class (a big cargo container ship cost) as in (3) with *typically*:

- (1) *A Port VTS is **mainly** concerned with vessel traffic to and from a port or harbour or harbours, while a Coastal VTS is **mainly** concerned with vessel traffic passing through the area.*
- (2) *The internal system **mainly** consists of passages, piping, valves and filters, sometimes pumps. The external one includes such parts as tanks and sumps, pumps, coolers, strainers and filters.*
- (3) *The container cargo of a ship of this size would **typically** be worth \$150m, indicating that the loss could outstrip damage to the hull.*

Probably provides an assessment of certainty or doubt. There is this implication thus in (4), that the engineer's judgment is based on facts that are somehow 'known' rather than inferred:

- (4) *In the following audio clip Peter Lund talks first about his least favourite tasks as an engineer and then about what he finds is most important.
I guess it would *probably* be finding the tools and equipment that had dropped down into the bilge. I'd say that would **probably** be the worst.*

In the realm of possibility, the adverbs *mainly* and *probably* do not show clearly in the examples the distinction between experience and general knowledge since there is scarce difference between 'absence of real confidence' and 'absence of good grounds for a conclusion' (Palmer, 2001, pp. 34-35) as in (5):

- (5) *I guess the administration is **probably** the Chief Engineer's biggest task now.*

Clearly and *certainly* come third in frequency in the sample corpus. The former can be paraphrased as "in a clear manner, undoubtedly". *Clearly* expresses a higher degree of conviction than either *evidently* or *apparently* (Hoye, 1997, p. 192),

as in (6) where the writer is sure about a concept: it is very important to understand the doctor's advice and directives correctly in ship radio conversations:

- (6) *It is very important that all the information possible should be passed on to the doctor and that all his advice and directives should be **clearly** understood and fully recorded. (International Medical Guide for Ships. 1988 WHO Geneva)*

Certainly is at the extreme positive end of the scale for marking the degree of likelihood of a state of affairs. The speaker emphasizes the speech-act function of the main clause: 'there is good news', using this epistemic stance adverb by endorsing (Papafragou, 2006, p. 1697). Papafragou argues in favour of the truth-conditional nature of modals as exemplified in (7):

- (7) *SH "But is there any good news on the horizon?"
JA "There **certainly** is. For the new Deurganck Dock, officially opened on June 6th 2006, there is provision in the agreement by the companies running the new dock, HN-PSA and (...)."*

Of course is used to show that other people probably already know what they are saying is true, or expect to hear it as in example (8) where the lecturer reminds her students of the name of cell receptors. *Of course* conveys the speaker's strength of conviction in the truth of the adjoining proposition (contracts vary depending on the needs and resources); the effect is, certainly, to emphasize it:

- (8) *I: Moving on then, can you tell us more about the contract itself?
JR: Contracts vary, **of course**, and are again dependent on the needs and resources of the contracting parties involved.*

Finally, *really*, *perhaps*, *actually*, *generally*, *basically*, *definitely*, *maybe*, *absolutely*, *possibly*, *like* occur only rarely. *Really* and *perhaps* are prevalent in oral speech as in the following examples (9 to 11). *Really* in example (9) means emphasis rather than certainty. Likewise, in (10), it is functioning like a pre-modifying intensifier:

- (9) *Thank you Karin Mattsson! We **really** appreciate you taking the time to answer our questions! (ending of a radio conversation)*
- (10) *It is **really** exciting to see that, at last, seafarers will have somewhere relatively accessible where they feel welcome.” (Mission to seafarers in Antwerp, conversation topic).*
- (11) *A voyage charter would best suit your needs, I think. And if things go well, and you're in the business of shipping grain on a regular basis, we could always move on to a time charter in the future, **perhaps**.*

Really has become delexicalized in positive contexts as in the examples above, being largely reduced to an alternate for *very*. *Actually* & *really* can comment on the reality or actuality of a proposition. *Actually* also performs a cohesive function and it's a typical 'add-on' strategy of conversation (Biber et al., 1999, p. 1068) as in example (12):

- (12) *In another example the ship owner himself may retain a technical department to run a core fleet of, let's say, bulk carriers, but should be then acquire a fleet of specialist vessels he would need to use a ship manager to provide the skills required for that specialist (...). These are just two examples though. To sum it up, it's **actually** the contract between the manager and the owner which defines the exact relationship.*

A final remark about *actually*: It is sometimes an insert in responses as in (13)

- (13) Q. *Which nationalities have the vessels you worked with represented – I mean which flags have they had?*
A. *Most of them have Swedish flags.. er.. I think 60-70 % are **actually** Swedish. The rest come from all different countries:*

Generally comments on the likelihood of a proposition and its generalizability as shown in (14) and (15):

- (14) *At the beginning of the year freight rates **generally** were at an all-time high.*
- (15) *Lub Oil Duplex Filter: This is an assembly unit of two parallel filters with special valving design for the selection of full flow through either of the filters. **Generally** used in lubricating oil lines to allow for changeover without the stopping the flow.*

Basically is used in oral registers to emphasize the most important reason or fact about something, or a simple explanation of something. *Basically* appears when text producers want to stress the main point in argument, without considering additional details or differences (example 16) where the writer is explaining the essential features of the Panamax Bulk carrier:

- (16) *As I said, it's a Panamax bulk carrier, 69,100 dwt., built in Japan in 1994. I'm sure you're familiar with the vessel type, but **basically** it has a framework for the carriage of dry solids in bulk without packaging (topic 2).*

Definitely points to maximum degree of certainty and emphasizes agreement. The writer's attitude or comment on the content -how to avoid ship disasters as the Estonia's adding another collision bulkhead- is also overtly stated (Biber et al., 1999, pp. 853-854):

- (17) *Another theory is based on the fact that the Estonia had not met the requirement of having an extra collision bulkhead, which should have been placed at more than 5% of the ship's length from the forward perpendicular. This would have **definitely** increased her chances of surviving the loss of the visor.*

Maybe is used to say that something may happen or may be true but you are not certain [= perhaps]. It seems somewhat stronger than *possibly*. The speaker expresses some level of doubt about spending his entire career on the sea in (18):

- (18) *I didn't know then that it would provide professional training for a lifelong rewarding career. After a number of years at sea I decided that an entire life on the ocean waves was **maybe** not what I wanted, and in 1985 made the move back to land, where I swiftly entered the world of ship management.*

Absolutely is an amplifier indicating an endpoint on a scale (Biber et al., 1999, p. 555) as exemplified in (19), where the speaker BJ emphasizes that the Panamax is able to meet the proposed deadline and provides further information to convince JM that the cargo will be handled properly:

(19) BJ: *And the ship has to arrive in Tallin in May, doesn't it?*

JM: *Yes. The grain has to be there by 28th May at the latest. That should be possible with the Panamax though, shouldn't it?*

BJ: **Absolutely.** *I'll get this proposal off to you as soon as possible, Mr McCarthy, and don't worry – all the contract details can be negotiated to ensure that the vessel is capable of handling the cargo in a damage-free manner.*

Possibly is in the middle between the positive and negative side of the scale. The speaker marks precision to the listener about the options a ship contract has using this epistemic stance marker:

(20) I: *Moving on then, can you tell us more about the contract itself?*

JR: *Contracts vary, of course, and are again dependent on the needs and resources of the contracting parties involved.*

*As I mentioned earlier, the manager provides a single or a range of services. The ship owner elects to use a comprehensive range or **possibly** just one service from those offered by the manager.*

Last but not least, *like* is used to convey imprecision (“box-like housing”). This type of adverb is also called a hedge (Biber et al, 1999, p. 557).

(21) *The design of both the visor and ramp were very popular at the time. The installation included a bow visor and a loading ramp. The ramp was hinged at car deck level and was closed when in a raised position. In a closed position, the upper end of the ramp was extended into a **box-like** housing on the forecastle deck.*

The above statement is a suitable example that *like* is sometimes connected with difficulties of planning or of expression (Downing, 2006, p. 66), where the writer has some difficulty explaining how the upper end of the ramp is extended in a closed position. He is engaged in thinking trying to clarify what this extension is. *Like* is a pragmatic marker indicating here a rough approximation.

As a coda for epistemic adverbs, they are applied to evaluate and adopt stances, and to create solidarity and affiliation with speakers/readers to mitigate the speaker's or writer's floor-maintaining positions in maritime contexts. They are

also used in teaching materials when transmitting disciplinary knowledge (Hyland, 2000). The analysis of these adverbs gives us insights of the interactive processes of meaning making, understanding meaning as an interplay between producers of maritime English texts and receivers (students) taking into account “the institutional position, interests, values, intentions and desires of producers (...) and the institutional positions, knowledge, purposes, values of receivers” (Fairclough, 2003, pp. 10-11).

3.2. Epistemic adjectives

Graph 2 shows the 50 epistemic adjectives in MarENG. Some adjectives are not attested: *probable*, *impossible*, *improbable*, *evident*. Generally speaking, these ‘downtoners’ of median probability (Halliday, 1994, pp. 358-363) are viewed as conventionalized features and are often used as an interpersonal strategy by English speakers to mitigate potential face-threatening acts. Our hypothesis is that speakers may not use them very much as no face-threatening situations have taken place. Thus, differences in discourse mode seem to influence the frequency and use of epistemic modality used (Carretero, 2002).



Graph 2. Epistemic Adjectives in MarENG

As shown in graph 2, the most recurrent epistemic adjectives are objective: *most*, *possible* act as “interpersonal metaphors of modality”, according to Halliday and Matthiesen (2004, 613ff.). The second important aspect to be noted is that speakers and writers express intersubjective certainty through these adjectives (*sure*, *true*, *significant*), which also tend to be salient and can be descriptive.

Overall results in graph 2 indicate clearly that the most conspicuous adjectives are *most* (24), *possible* (17 tokens) *certain* (10) and *sure* (8). Speakers and writers seem concerned to point out with them whether a concept or procedure is accurate, well-founded or not. Truth and certainty are, on anyone’s account, difficult concepts and marENG actors struggle with them in different maritime contexts: engine maintenance procedures, port state control documents, as in (23) and (24) or ice navigation (25).

Most scores the highest ratio per 10,000 words: 6.84 and it reduces the speaker’s or writer’s categorical commitment as in:

- (22) *There are different kinds of internal-combustion engines. The **most** commonly used nowadays are diesel and petrol engines.*

Possible is one the main hedging devices as in research articles (Hyland, 1988b, p. 130), with an even higher ratio than in Hyland’s study: 4.85 per thousand words:

Injection Valve

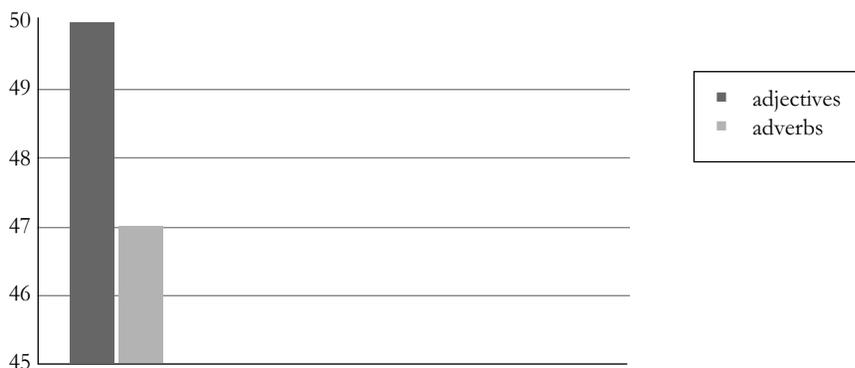
- (23) *The liquid fuel injection system e.g. of a diesel engine, consists of injection pump, high pressure pipe and injection valve. The injection valve injects fuel into the cylinder of the engine. It is important that the distribution of the fuel spray is as even as **possible**. Checking the distribution is a standard maintenance procedure of an engine.*
- (24) *Bulk carriers are inspected for **possible** corrosion of deck and machinery foundation.*
- **possible** deformation and corrosion of hatch covers
 - **possible** cracks or local corrosion in transverse bulkheads.

Certain in its epistemic modal interpretations is ‘subjective’/‘speaker-oriented’; that is, it indicates speaker commitment to a (base) proposition, in this case, that heavy cargoes have to be loaded and discharged in a specific order as in (25):

- (25) JM: OK, *but can I just run over a couple of points with you? I'm sure I don't have to tell you that grain is a free running cargo. It's prone to shift in heavy weather and if the ship's not up to it this could threaten the safety of the ship herself. Heavy cargoes like these have to be loaded and discharged in a **certain** sequence, otherwise we're talking about serious stress to the structure of the ship.*

Finally, it is also worth pointing out that when comparing the use of epistemic adverbial markers and epistemic adjectives (graph 3), it seems that text producers prefer to use epistemic adjectives rather than epistemic adverbs, but the difference is not significant (Chi-square = 0.093; Df:1, $p < 0.76039737$). This result is contrary to what Simon-Vandenberg & Aijmer (2007, p. 423) and Nuyts (1993, p. 937) found, indicating that there are genre preferences that cannot be overlooked by research.

The overall results of epistemic adjectives and adverbs (2,76 markers per thousand words) support the findings in Biber et al's (1999) study, in which epistemic meanings are the most frequent indicators of stance in English if we compare them with indicators of deontic modality (0,37 markers per thousand words) or evidentials (0,22 markers per thousand words).



Graph 3. Comparison of Epistemic Adjectives and Adverbs in MarEng

3.3. Deontic modality: *necessary*

Deontic modality is related with the speaker's observations about whether he or others have permission, duty or obligation to perform particular actions. The only significant use in marENG is the adjective *necessary* in the subcorpus, with 13 tokens (Examples in 26 in figure 1):

N Concordance

1 engine operation, air contains oxygen **necessary** for combustion, and ignition
2 times and intervals or when deemed **necessary** by the VTS centre
3 and will provide the vessel with the **necessary** information and instructions
4 The private port companies make the **necessary** investments in
5 engine load. The system includes the **necessary** shut-off and venting valves
6 desired air-fuel ratio together with the **necessary** amount and timing of pilot
7 request of a vessel or when deemed **necessary** by the VTS Centre. When
8 measures which are considered **necessary** by the VTS authority. The
9 affect the flow of other traffic. When **necessary** VTS gives instructions on
10 difficult ice conditions, towing may be **necessary**. Three diferent towing
11 vessel of other ships in the area and, if **necessary**, will specify the order of
12 keep to the planned departure time. If **necessary**, the VTS Centre will
13 and provides the M/S Marina with **necessary** information and instructions

Figure 1. Examples in 26 with deontic necessary in MarENG

According to truth semantics, a truth is *necessary* with respect to a possible world w if it is true at every world that is accessible to w : oxygen is required for combustion (Example 26.1) or the system requires shut-off and venting valves (26.5). Its frequency is 3.70 per 10,000 words.

Five instances of the deontic adjective *essential* have also been found, showing an “oral controversial persuasion” in the light of the findings of Biber and Finegan’s (1986) classification of stance styles as in examples 27 and 28:

- (27) *The centrifugal separator is used to separate oil and water, or a liquid and solids in the contaminated oil. The separation of impurities and water from oil is **essential** for good lubrication.*
- (28) *The combination of the cargo temperature requirements and the climatic variations means correct temperature control of the refrigeration unit is **essential**, ensuring the cargo reaches its final destination in the desired condition.*

Findings show that the hypothesis about deontic markers is confirmed: all the examples indicate a persuasive stance style by Marine writers and speakers.

3.4. Evidential adjectives, adverbs and interpersonal markers

With regard to the expression of markers of evidentiality, there is a scarce use of evidential adjectives: two examples with *obvious* and one with *clear* have been found. Within the category of adverbs, the only evidential adverb found is *clearly* with six tokens. *Clearly* expresses a higher degree of conviction than either *evidently* or *apparently* (Hoye, 1997, p. 192) as in example (29):

- (29) *It is **clearly** understood that the responsibility for ensuring that ships comply with the provisions of the relevant instruments rests upon the owners, masters and the flag states.*

Maritime speakers and writers seem to prefer interpersonal markers instead of using evidential adjectives or adverbs but still their use is scarce. The hypothesis stated in section two, namely, that the highest percentage of more subjective directive cognitive evidential markers is normally found in conversations (*I think, I guess*) and perceptual markers of indirect access to the information (*seems, appear*) are found in reports and written texts has been only partially confirmed: an examination of the data show five instances of *I think* and two of *I guess* in conversations. Constructions indicative of indirect access to facts and information are also used in oral speech as exemplified in (30):

- (30) *It **seems** obvious that the nature of the cargo should not get in the way of welfare of the crew, but more often than not it **seems** the cargo is valued more highly than the welfare of the seafarers.*

3.5. Attitudinal Stance

Evaluative expressions are common enough in different genres such as the academic (Mauranen, 2000). However, evaluation, also commonly known as “evidentiality” or more recently as “stance” (Biber et al., 1999) and “appraisal” (Martin, 2000), is a very complex phenomenon. Evaluation in speech and also in academic lectures performs three basic functions according to Hunston and Thompson (2000, p. 6):

- 1) to express the speaker’s or writer’s opinion, and in doing so to reflect the value system of that person or that community;
- 2) to construct and maintain relations between the speaker or writer and hearer or reader;
- 3) to organize the discourse.

According to Biber et al. (1999, p. 974) these stance markers report personal attitudes or feelings. Some of these stance forms are clearly attitudinal (e.g. *unfortunately*), while others mark personal feelings or emotions, such as verb+extraposed complement clause: (*it is essential that, it is critical, it’s important, etc.*)

How is attitudinal stance expressed in MarEng? Surprisingly, some attitudinal adverbs and adverbial clauses are not attested in any of the topics. These are *as might be expected, inevitably, sensibly, curiously, disturbingly, frankly, honestly, predictably, sadly, wisely, even worse, to tell you the truth, to put it bluntly, strictly speaking*. Furthermore, attitudinal adverbs overall results indicate that their frequency is significantly lower compared to epistemic adverbials. *Unfortunately* appears only once as evaluation marker functioning at boundary points in discourse. It is comparative, subjective and value-laden. Both coherence and cohesion depend on the evaluation given by this adverbial disjunct.

One might wonder why this Maritime English tool does not practically use stance adverbials despite the fact that actors involved in maritime affairs are surely concerned with expressing their attitudes and evaluations about norms, procedures and problematic situations. A possible answer to this may be the alternating use of post-predicate that-clauses and extraposed to-clauses: following verbs and adjectives which convey emotional or evaluative meanings as in (31), reinforced by the emphatic adverb *very*:

- (31) *It is very **important that** all the information possible should be passed on to the doctor and that all his advice and directives should be clearly understood and fully recorded.*

There are five examples of *it is important that* construction in MarENG. Interestingly, this adjective –which in spoken discourse is considered one of the most common (Swales and Burke 2003)– has a relatively low frequency. It should also be noted that post-predicate *that*-clauses are very sparse evaluating situations, events, concepts etc. No examples have been found for *it is + appropriate, odd, advisable*. It seems that speakers are not keen on using overtly positive judgement when they talk.

With reference to extraposed *to*-clauses, example (32) with the adjective *good* expresses the speaker's opinion about the importance of a sound technical knowledge. :

- (32) *You can always, it's **good to** have technical knowledge on everything but sometimes it's very difficult because machinery changes so much, electronics change so much and you can always, if you need to know, you can always find this information (...)*

Finally, no examples of *useful, useless, convenient + to* clauses have been found. Why? A possible explanation may be that other centralized adjectives are used such as *main, major* or *huge* in MarENG. Evaluative adjectives tend to co-occur as in (34): *main, major* and notice also that *huge* in (35) is typical of conversation:

- (33) *The **main** difference between the two engines is the power developed. The two-stroke engine, theoretically, develops twice as much power as the four-stroke one. Inefficient scavenging, however, reduces the power advantage.*
- (34) *The Exhaust Gas Collector (or receiver) is an integral part of the **main** engine. Gaseous products of the combustion process are collected in it to avoid pressure differences resulting from rapid exhaust gas emission. Exhaust gases are the **major** source of waste heat and noxious emissions.*
- (35) *A recent incident has highlighted problems with sub-standard ships. It has been revealed that a boxship which sank off the coast of Yemen following a **huge** fire had recently failed a port state control inspection. At the time of the incident the vessel was reportedly travelling from Korea to Rotterdam.*

Graph 4 characterizes attitudinal stance adjectives . Data show that speakers and writers prefer *main*, *important* and *good*. These adjectives fit into Biber et al's (1999, p. 509) subcategory of descriptors. As the frequency counts indicate, the positive adjectives tend to occur more frequently than the negative adjectives (*bad*, *hard*). This finding is also corroborated in Frankenberg-Garcia et al's (2011, p. 201) study about the use of adjectives in an English learner's corpus.



Graph 4. The expression of stance by evaluative adjectives in MarEng

Graph 5 shows that MarENG speakers also express more subtle and less subjective evaluative comments with adjectives pertaining to time, novelty and importance such as *new*, *big* or *recent*.



Graph 5. Adjectives pertaining to time, novelty and importance in MarENG

Finally, example (36) with the adjective *amazing* illustrates affective or evaluative word choice as it involves only a single proposition, rather than a stance relative to some other proposition. It is clear that the speaker values positively the Titanic. He uses a declarative utterance that gives the impression of presenting stanceless ‘facts’:

(36) *Titanic was an **amazing** ship.*

The kind of evaluation is closely linked to specific pragmatic and rhetorical functions in the conversation (e.g. demonstrating a sound knowledge of facts as in examples (33) and (34); discussing or commenting problems as in example (35), etc).

4. Discussion of findings and final considerations

The comparison of the findings with the hypotheses which served as a starting point for the present study yields relevant information about how speakers and writer encode modal meanings in MarENG. Since we are dealing with a relatively minor corpus, our conclusions are *perforce* tentative: Quantitative findings confirm

that, in particular, epistemic adjectives are more frequent than epistemic adverbs, thus not corroborating the first hypothesis and the findings in other studies (Simon-Vanderbergen and Aijmer, 2007; Nuyts, 1993). This is indicative of differences in use according to genre. *Most* and *possible* are the most conspicuous epistemic adjectives in MarENG and for maritime speakers, the distinction between experience and general knowledge is also blurred as stated by Palmer (2001, pp. 34-35), since there is little difference between ‘absence of real confidence’ and ‘absence of good grounds for a conclusion’ in the analyzed examples.

Concerning the second hypothesis, there are a few instances of *really* and *definitely* functioning as intensifiers. Bigger amounts of data would be necessary to ascertain whether they are in the process of grammaticalization. It seems reasonably certain that this finding is not conclusive, given that MarENG is relatively small. At best, it offers an overview, leading to a plausible probability.

With regard to the third hypothesis, that the use of deontic markers creates a persuasive stance style in both written and oral speech, findings show that the hypothesis is only confirmed with the use of *necessary* and *essential*. A more complete picture of deontic modality would emerge with the study of modal verbs.

As regards the fourth hypothesis, namely, that the highest percentage of more subjective directive cognitive evidential markers is normally found in conversations and perceptual markers of indirect access to the information are found in reports and written texts has been only partially confirmed: five instances of *I think* and two of *I guess* have been found in conversations.

If we consider the fifth hypothesis, that writers and speakers mark their attitude through the use of centralized assessment adjectives combining with intensifiers, polarized adjectives and adverbs, findings show that text producers use these centralized assessment adjectives, mainly with a positive axiology. They are also keen on more subtle and less subjective evaluative devices like adjectives pertaining to time, novelty, importance such as *new* or *recent* or centralized assessment adjectives. Both types of adjectives let speakers hold authoritative positions as expert maritime speakers. MarENG genre is not only a discourse practice but also a social practice.

In closing, MarENG speakers and writers express their attitude towards the propositional content they are dealing with and these adverbials and words to convey a writer’s stance are also crucial when organizing the speech or text.

Maritime English speakers and writers are producers who shape reality and express their own view of the Maritime world, exploiting different linguistic resources in English, mainly those associated with the expression of modality, evidentiality and attitudinal stance. However, a more complete picture of the stance tendencies will no doubt be offered when considering the role of modal auxiliaries and other verbal markers in the MarENG corpus.

References

- Alonso-Almeida, F. and Vázquez, N.** (2009). Modality and stance in the Modern English section of the Corpus of Early English Recipes. In P. Cantos Gómez & A. Sánchez (Eds.), *A survey on corpus-based research / Panorama de investigaciones basadas en corpus* (pp. 1171-1179). Murcia: EDITUM.
- Alonso-Almeida, F. and Vázquez, N.** (2010). Modal verbs in early Modern English recipes. In A. Sánchez & M. Almela (Eds.), *A mosaic of corpus linguistics. Selected approaches*. (pp. 237-247). Studien zur romanischen Sprachwissenschaft und interkulturellen Kommunikation, 66. Frankfurt am Main: Peter Lang.
- Biber, D. and Finegan, E.** (1986). Styles of stance in English: Lexical and grammatical marking of evidentiality and affect. *Text* (9), 93-124.
- Biber, D. et al.** (1999). *Longman Grammar of Spoken and Written English*. London: Longman.
- Carretero, M.** (2002). The influence of genre and register on epistemic modality in spoken English: a preliminary study. *Estudios Ingleses de la Universidad Complutense* (10), 11-41.
- Chafe, W. and Nichols J. eds.** (1986). *Evidentiality: The Linguistic Coding of Epistemology*, Norwood, NJ: Ablex.
- Conrad, S. and Biber D.** (1999). Adverbial marking of stance in speech and writing. In S. Hunston & G. Thompson (Eds.) *Evaluation in Text: Authorial Stance and the Construction of Discourse*. (pp. 56-73). Oxford: OUP,
- Downing, A.** (2006). Discourse Markers, Pragmatic Markers, Stance Markers. In J. Salazar, M. Amengual & M. Juan (Eds.), *A survey in Usos sociales del lenguaje y aspectos psicolingüísticos: perspectivas aplicadas*. (pp. 59- 76). Illes Balears: Universitat de les Illes Balears.

- Fairclough, N.** (2003). *Analysing Discourse. Textual Analysis for Social Research*. London: Routledge.
- Halliday, M.A.K.** (1994). *An Introduction to Functional Grammar* (Second Edition). London: Edward Arnold.
- Halliday, M.A.K. and Matthiessen, C.M.I.M.** (2004). *An Introduction to Functional Grammar*. 3rd ed. London: Arnold.
- Hoye, L.** (1997). *Adverbs and Modality in English*. London: Longman.
- Hyland, K.** (1998a). Persuasion and context: The pragmatics of academic metadiscourse. October 1998, 437-455.
- Hyland, K.** (1998b). *Hedging in Scientific Research Articles*. Amsterdam: Benjamins.
- Hyland, K.** (2000). *Disciplinary Discourses: Social Interactions in Academic Writing*. London: Longman.
- Hunston, S. and Thompson G. eds.** (2000). *Evaluation in Text: Authorial Stance and the Construction of Discourse*. Oxford: Oxford University Press.
- Kiefer, F.C.** (2009). On defining Modality. *Folia Linguistica*. Volume 21, Issue 1, 67-94.
- Leech, G.** (2003). Modality on the move. In R.Facchinetti , G. Manfred, R.M Krug & F.R. Palmer (Eds.), *Modality in contemporary English* (pp. 223-240). Berlin: Mouton.
- Mauranen, A.** (2001). Reflexive academic talk: Observations from MICASE. In R. C. Simpson & J. M. Swales (Eds.), *Corpus Linguistics in North America: Selections from the 1999 symposium* (pp. 165-178). Ann Arbor: University of Michigan Press.
- Marín-Arrese, J.** (2004). Evidential and epistemic qualifications in the discourse of fact and opinion: a comparable corpus study". In Juana Marín Arrese (Ed.), *Perspectives on Evidentiality and Modality* (pp. 153-184). Madrid: Editorial Complutense.
- Martin, J.R.** (2000). Beyond exchange: APPRAISAL systems in English. In Hunston & Thompson (Eds.), *Evaluation in Text: Authorial Stance and the Construction of Discourse*. (pp. 142-175). Oxford: Oxford University Press.
- Nuyts, J.** (1993). Epistemic modal adverbs and adjectives and the layered representation of conceptual and linguistic structure". *Linguistics* 31, 933-969.

- Palmer, F. R.** (1986/2001). *Mood and modality*. Cambridge: Cambridge University Press, 2nd edition.
- Papafragou, A.** (2006). Epistemic modality and truth conditions *Lingua* 116, 1688–1702.
- Piqué-Angordans, J. , Posteguillo, S. and Andreu-Besó, J.V.** (2002). Epistemic and deontic modality: a linguistic indicator of disciplinary variation in academic English. *LSP & Professional Communication*, vol (2), 2, 49-64.
- Plungian, V.** (2001). The place of evidentiality within the universal grammatical space. *Journal of Pragmatics*, (33), 349-357.
- Preacher, K. J.** (2001, April). Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence [Computer software]. Available from.
- Rezzano, N. S.** (2004). Modality and Modal Responsibility in Research Articles in English”. In R. Facchinetti & F. Palmer (Eds.), *English Modality in Perspective*. (pp. 101-118). Frankfurt am Main: Peter Lang.
- Samson, C.** (2006) ‘... is different from ...’ A corpus-based study of evaluative adjectives in economics discourse, *IEEE Transactions on Professional Communication* 49, (3), 236-245.
- Simon-Vandenberg, AM and Aijmer, K.** (2007). Functionality of adjectival and adverbial epistemic expressions. In C. Butler, H. T. Downing, J. Lavid & A. Downing (Eds.), *Functional perspectives on grammar and discourse*. (pp. 419-445). Amsterdam: John Benjamins.
- Swales J. and Burke A.** (2003). It’s Really Fascinating Work: Differences in Evaluative Adjectives Across Academic Registers. In C. Meyer, (Ed.), *Proceedings of The Third Corpus Linguistics Symposium* (pp. 1-19). Amsterdam: Rodopi.
- Swales, J.** (2006). Corpus Linguistics and English for Academic Purposes. In E. Arnó, A. Soler & C. Rueda, (Eds.), *Information Technology in Languages for Specific Purposes*. (pp. 19-34). New York: Springer.