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ENGLISH MODAL VERBS IN MODAL VERB PHRASE STRUCTURES AND LEXICAL ASSOCIATIONS OF MODALITY IN 'STANDARD TERMS AND CONDITIONS OF SALE'

1 INTRODUCTION

The advances in corpus linguistics and corpus analysis software have enabled researches to carry out analyses of lexical and grammatical characteristics of the English language based on large corpora of texts. On the one hand, corpus studies of English can be focused on vast corpora of general written and spoken English (e.g. British National Corpus, Corpus of Contemporary American English, TIME Magazine Corpus of American English, International Corpus of English, etc.). On the other hand, the English language used in certain professions or scientific disciplines is best studied by the help of more narrow specialised corpora.

According to Fuertes-Olivera (2008: 69) a “specialized corpus comprises representative oral and/or written texts which reflect the kind of language of a particular domain”. Since the corpora which comprise specialised uses of English are not readily available, the researchers usually have to compile them on their own. The parameters that must be taken into consideration during corpus compilation are the genre and the topic of the texts, the type of texts, and the corpus size and language variety. For example, if one wishes to focus on language structures of written business communication, they would have to compile a corpus of various types of business letters, memos, reports, proposals and e-mails. Similarly, lexical and grammatical characteristics of court judgments would be best analysed by looking at relevant written documents in this domain.

The aim of this paper is to present the findings of a study of modal verbs and semi-modals, modal verb phrase structures and lexical associations of modality in a special type of professional texts, i.e. ‘standard terms and conditions of sale’.

1.1 Standard terms and conditions of sale

‘Standard terms and conditions of sale’ are legally binding documents in the domain of commerce. They define the arrangements, rules and specifications (i.e. the obligations and the rights of sellers and buyers) for the provision, payment and delivery of goods as well as for the rendering of services. As such, they belong to the genre of written legal discourse, more specifically to commercial law. Commercial law consists of “legal rules that (1) determine the rights and duties of parties engaged in trade and commerce, (2) govern disputes arising out of ordinary

transactions of buyers and sellers, and (3) settle issues concerned with affreightment, banking, insurance etc.” (Business Dictionary Online).

As a text type, these documents have a number of specific lexico-grammatical features. They have a highly complex syntactic structure of sentences, which is characterised by a large number of qualifications and discontinuous phrases. For instance, they comprise a variety of *binominal expressions*, *initial case descriptions* such as adverbial clauses, and a variety of *complex noun phrases*, *complex prepositional phrases* and *complex verb phrase structures* including *complex modal verb phrase structures*.¹ This complexity of sentence and phrase structures makes them precise, clear, unambiguous and all-inclusive. The following sentence serves as an example of the type of sentences that are often found in ‘standard terms and conditions of sale’.

Example:

Where any valid claim in respect of any of the Goods (which is based on any defect in the quality or condition of the Goods or their failure to meet the agreed specification) is notified to the Seller in accordance with these Conditions, the Seller shall (subject to (i) the Seller giving its prior written consent to return of the Goods; and (ii) the Buyer returning the Goods at its own expense to such location as the Seller may notify in writing with details of the invoice covering the purchase and a description of the problem) be entitled to repair or replace the Goods (or the part(s) in question) free of charge or, at the Seller’s sole discretion, refund to the Buyer the price of the Goods (or a proportionate part of the price), but the Seller shall have no further liability to the Buyer².

Since ‘standard terms and conditions of sale’ are legal documents, they consist of rules and specifications (i.e. provisions) which refer to *definitions and interpretations*, *basis of sale*, *orders and specifications*, *price*, *payment*, *delivery*, *risk and retention of title*, *assignment*, *right to return goods*, *refunds*, *guarantees*, *confidentiality*, *force majeure*, *waiver*, *severance*, *third party rights*, *consumer rights* and *law and jurisdiction*. Rules are a major characteristic of legal documents as a genre and ‘standard terms and conditions of sale’ mainly include *definition rules*, which apply to the entire text and provide terminological explanations, and *action rules*, which impose duties and obligations, give rights, prohibit actions and state the law, as it can be seen from the examples below.

Examples:

- (A) *“Buyer” shall mean a customer identified in the quote and the purchase order issued by Seller.*
- (B) *The Company shall have the right to deliver Goods in instalments.*
- (C) *Buyer shall not be permitted to cancel any order which has been accepted by Seller without Seller’s prior written consent.*
- (D) *Seller may invoice Customer separately for partial shipments, and Seller may invoice Customer for all of the Services described in a Statement of Work or any portion thereof.*

1 Our discussion is based on Bhatia (1993: 101-118).

2 This and all following examples are taken from our corpus of ‘standard terms and conditions of sale’.

- (E) *All contracts under these Terms shall be governed by and construed in accordance with the Laws of England and all disputes shall be submitted to the non-exclusive jurisdiction of the English Courts.*

These examples clearly illustrate that modal verbs and, consequently, modal verb phrase structures present an integral part of the sentences in ‘standard terms and conditions of sale’.

1.2 Modal auxiliary verbs and semi-modals and modal verb phrase structures in English and lexical associations of modality

According to Biber et al. (1999: 483-4), modality in English can be expressed by nine central modal auxiliary verbs, i.e. *can, could, may, might, shall, should, will, would* and *must*, and a number of semi-modals, i.e. marginal auxiliary verbs and fixed idiomatic phrases that function as modals (e.g. *need (to), ought (to), dare (to)* and *used (to)* and *(had) better, have to, (have) got to*, etc.).

Further, these modal auxiliary verbs, marginal auxiliary verbs and fixed idiomatic phrases (i.e. modal verbs and semi-modals) “can be grouped into three major categories according to their main meanings” (Biber et al. 1999: 485). Thus, modal auxiliary verbs *can, could, may, might* express permission, possibility and ability; modal auxiliary verbs *must* and *should*, marginal auxiliary verbs *need to* and *ought to* and fixed idiomatic phrases *had (better), have (got) to* and *be supposed to* denote obligation and necessity, while modal auxiliary verbs *will, would* and *shall* as well as the phrase *be going to* indicate volition and prediction (*ibid.*).

Although Biber et al. (1999: 469-470) place *shall* into the category of modals which express volition and prediction by stating that in academic prose *shall* expresses personal volition while in conversation it denotes offers and suggestions, this modal verb also expresses strong obligation in legal texts such as contracts, directives and judgements. Leech and Svartvik (1994: 165) state that *shall* “in the sense of ‘obligation’ is normally limited to official regulations and other formal documents”. Quirk et al. (1985: 230) discuss a “restricted use of *shall* with 3rd person subject [...] in legal and quasi-legal discourse, in stipulating regulations or legal requirements.” Quirk et al. further claim that in these contexts “*shall* is close in meaning to *must*” (*ibid.*). According to Swan (2005: 220), “in contracts and other legal documents, *shall* is often used with third-person subjects to refer to obligations and duties”. Similarly, Krois-Lindner and Translegal (2006: 26) observe that “in legal documents, the verb *shall* is used to indicate obligation, to express a promise or to make a declaration to which the parties are legally bound”. This is consistent with the statement by Brown and Rice (2007: 42) who claim that “the specific use of the modal verb ‘shall’ to impose an obligation or duty on someone” and that “the use of ‘shall’ in a directory sense” (*ibid.*) are typical characteristics of legal texts. Also, Trosborg (1991: 79) establishes that “modal *shall* typically expresses obligation in legal acts” and that “*shall* has been employed to state obligations of the court and of a party of the contract” (*ibid.*).

English modal verbs and semi-modals colligate with lexical verbs to express the attitude towards the information and intentions (i.e. towards the actions and

states) denoted by lexical verbs. Biber et al. (1999: 497) state that modal verbs and semi-modals “combine with marked aspect and voice”. They can thus be found in verb phrase structures with passive voice, perfect aspect and/or progressive aspect (*ibid.*). Kennedy (2002: 89) states the following modal verb phrase structures in the English language:

1. *Modal alone*
2. *Modal + infinitive*
3. *Modal + be + past participle*
4. *Modal + be + present participle*
5. *Modal + have + past participle*
6. *Modal + be + being + past participle*
7. *Modal + have + been + past participle*
8. *Modal + have + been + present participle*
9. *Modal + have + been t participle*

Apart from these main structures, semi-modal verbs *have to*, *need to* and *be going to* can appear in verb phrases with other modal or semi-modal verbs (i.e. *modal + have to*, *modal + need to*, *modal + be going to*) (Biber et al. 1999: 501-502).

1.3 Complexity of modal verb phrase structures in ‘standard terms and conditions of sale’

Our review of ‘standard terms and conditions of sale’ revealed another aspect of the use of modal verbs and semi-modals in modal verb phrase structures. We found that the highly complex structure of provisions in these documents (e.g. qualifications and discontinuous phrases, enumeration, etc.) adds to the complexity of modal verb phrase structures as well. On the one hand, modal verbs and semi-modals occur close to the lexical verbs while on the other hand many of the modal verbs are not placed directly next to lexical verbs they colligate with. Examples (F) and (G) below show the first category of structures whereas examples (H), (I), (J), (K) and (L) are all instances of more complex cases.

Examples:

- (F) *Prices in brochures and leaflets may go out of date.*
- (G) *Where Product can be returned to Seller by Customer, under the terms of this Agreement, Customer must supply clear details of identity and address when returning any items. In addition, all items should be made available for collection at a time which is mutually convenient insofar as possible.*
- (H) *Seller may change or withdraw credit amounts or payment terms at any time for any reason.*
- (I) *Buyer may not change, adulterate, obscure, remove or deface trademarks, trade names or labels appearing on any Product by Seller.*
- (J) *If any product is other than as so warranted, Buyer will notify Seller within thirty (30) days of the date of shipment thereof, and Seller may at its option: (a) replace the product with one which conforms to the specifications, or (b) refund the purchase price.*

- (K) *The Customer may not resell, assign at law or in equity (including by way of a charge or declaration of trust), sub-license or deal in any other manner with this Contract or any rights under this Contract or sub-contract any or all of its obligations or purport to do any of the same.*
- (L) *8.3 Until ownership of the Products has passed to You, You must: 8.3.1 hold the Products on a fiduciary basis as Our bailee; 8.3.2 store the Products, at no cost to Us, separately from other products belonging to You so they remain readily identifiable as Our property; 8.3.3 not destroy, deface or obscure any identifying mark or packaging on or relating to the Products; 8.3.4 maintain the Products in satisfactory condition, insured on Our behalf for their full price against all risks to Our satisfaction; 8.3.5 hold the proceeds of the insurance referred to in Condition 8.3.4 on trust for Us and not mix them with any other money nor pay the proceeds into an overdrawn bank account.*

These examples present an important fact for our analysis of lexical associations of modality as one modal verb very often colligates with more than one lexical verb in one sentence.

1.4 Research questions

Stemming from the purpose of ‘standard terms and conditions of sale’ as the documents which include provisions that impose obligations on and confer rights to sellers and buyers, and based on the fact that verbs as a grammatical category indicate the performance of actions as well as express states and conditions, and that English modal verbs and semi-modals convey attitudes and opinions of speakers towards these actions, states and conditions (by expressing permission, possibility, ability, obligation, necessity, volition and prediction), the aim of this paper was to investigate the occurrences of modal verbs and semi-modals in ‘standard terms and conditions of sale’. Since modal verbs and semi-modals occur in modal verb phrase structures, we were also interested in establishing the main modal verb phrase structures in these documents. In addition, we wanted to find out which lexical verbs most predominantly colligate with these modals, i.e. we wanted to establish what Biber et. al (1999: 490) call lexical associations of modality to obtain a comprehensive view of modal verbs in this specific text type.

For the purpose of our study, the following research questions were thus formed:

What is the frequency and distribution of modal verbs and semi-modals in ‘standard terms and conditions of sale’?

What is the distribution of modal verbs and semi-modals per individual modal verb phrase structures in ‘standard terms and conditions of sale’?

Which lexical verbs colligate with modal verbs and semi-modals in ‘standard terms and conditions of sale’?

2 METHODOLOGY

2.1 Data gathering

To investigate English modal verbs and semi-modals in ‘standard terms and conditions of sale’, we compiled a specialised corpus of 1,000,645 running words of documents titled ‘standard terms and conditions of sale’, which we obtained on the websites of companies from the UK and the USA. We decided to include two major varieties of the genre, i.e. the texts written in compliance with the English law and the texts construed according the laws of the USA, to cover a wider span of texts. We therefore worked with a corpus that combined two sub-corpora (494,430 running words of documents published by the UK companies and 506,215 running words of texts published by the USA companies). To assure the similarity of the texts we decided to include only those documents that included the clause on the court of competent jurisdiction. All ‘UK documents’ had to include a reference to the English courts while all ‘USA documents’ had to state the law of a US state or county as their governing law.

2.2 Data processing

After the corpus was compiled, we used corpus analysis software AntConc (Anthony 2011) and ConcGram (Greaves 2009) to search for instances of modal verbs and semi-modals in modal verb phrase structures. Since we did not work with an annotated corpus, we had to analyse every occurrence of modal verbs and semi-modals separately.

We undertook the following steps to answer our research questions. First, we performed a frequency count of all modal verbs and semi-modals in our corpus and analysed every concordance line in detail. That was a necessary step for the modal auxiliary *should* since we had to exclude all the occurrences of this verb that functioned as the expressions of condition (e.g. ‘*Should the...*’, ‘*Should a...*’, ‘*Should Buyer...*’, etc.). There were 163 such cases in our corpus. The analysis of concordance lines for the modal auxiliary *may* revealed that the software did not make the distinction between the modal auxiliary and the word *May* as the name for a month. Therefore, we had to exclude the references to the month of *May* (3 instances). Similarly, the concordances for modal auxiliary *will* showed that phrases ‘good will’ and ‘will call’ occurred in the corpus (10 times in total). This was taken into account when we calculated the number of occurrences of this modal auxiliary.

Next, to obtain the answer to our second research question, we carried out a quantitative and qualitative analysis of each concordance line for every modal and semi-modal verb in the corpus in order to determine the number and the type of different modal verb phrase structures they occur in.

Finally, we set out to establish which lexical verbs most frequently occur with modal verbs and semi-modals in ‘standard terms and conditions of sale’. This was the most challenging part of our research due to a large number of complex sentences and, consequently, complex modal verb phrase structures in our corpus.

Namely, it was not sufficient to only look at concordance lines of each modal verb since lexical verbs were often separated from lexical verbs by other verbs and complex phrase structures, which is illustrated by the example sentences (H), (I), (J), (K) and (L) above. For example, in the sentence (I) above modal verb *may* colligates with five different lexical verbs, and modal verb *must* in example sentence (L) colligates with eight different lexical verbs. We therefore had to count every lexical verb associated with each modal verb and semi-modal verb separately to establish the overall number of different lexical verbs that colligate with modals and semi-modals in the investigated documents.

After we obtained the numbers of lexical verbs per modal verbs and semi-modals in individual modal verb phrase structures, we combined the lists of lexical verbs per modal and semi-modal and turned all participle and progressive forms of verbs into their infinitive forms to calculate the overall number of different lexical verbs that associate with these modals and semi-modals. We studied the data obtained in more detail to gain a comprehensive picture of lexical associations of modality in ‘standard terms and conditions of sale’. The results of our analysis are given below.

3 RESULTS

Our **first research question** was concerned with the frequency and the distribution of modal verbs and semi-modals in ‘standard terms and conditions of sale’. The analysis revealed that there were 26,523 instances of these words and phrases in our corpus. We found that the corpus included all nine central modal auxiliary verbs (i.e. *can*, *could*, *may*, *might*, *shall*, *should*, *will*, *would* and *must*), two marginal auxiliary verbs (i.e. *need to* and *ought to*) and one fixed idiomatic phrase functioning as a modal (i.e. *have to*). Table 1 presents the overall percentages of these modals and semi-modals in the corpus and their distribution according to their meaning. Stemming from the observations about the typical use of the modal verb *shall* in legal language, i.e. expressing obligation in legal texts, and based on the fact that the focus of our research is placed on a specific form of legal documents, i.e. ‘standard terms and conditions of sale’, we decided to include the modal verb *shall* in the category of modal auxiliaries that denote obligation and necessity.

Table 1: The frequency and the distribution of modals and semi-modals in ‘standard terms and conditions of sale’

	PERMISSION, POSSIBILITY AND ABILITY				OBLIGATION AND NECESSITY						VOLITION AND PREDICTION	
MODAL VERB	CAN	COULD	MAY	MIGHT	MUST	SHOULD	NEED TO	OUGHT TO	HAVE TO	SHALL	WOULD	WILL
%	2.85	0.22	15.99	0.20	4.99	1.57	0.18	0.07	0.18	48.50	0.83	24.43
TOTAL (%)	19.25				55.49						25.26	

Table 1 demonstrates that due to the high percentage of the modal verb *shall*, the group of modals which express obligation and necessity is the most common in the corpus (55.49%). It is also worth noting that modal verb *shall* is far the most frequent of all modals and semi-modals in the corpus (48.50%). This category is followed by the modals indicating volition and prediction (25.26%), which is the result of a strong presence of the modal verb *will* in ‘standard terms and conditions of sale’ (24.43%). Modals and semi-modals denoting permission, possibility and ability are the least frequent ones (19.25%). Here, the modal verb *may* is pre-dominant (15.99%).

Our findings also show that all modals and semi-modals occur more often in affirmative than in negative form, which can be seen in Table 2.

Table 2: Frequency of modals and semi-modals in ‘standard terms and conditions of sale’ per their affirmative and negative forms

	PERMISSION, POSSIBILITY AND ABILITY				OBLIGATION AND NECESSITY					VOLITION AND PREDICTION			
MODAL VERB	CAN	COULD	MAY	MIGHT	MUST	SHOULD	NEED TO	OUGHT TO	HAVE TO	SHALL	WOULD	WILL	
AFFIRMATIVE	58.47	75.44	89.53	98.15	97.35	93.22	95.74	100	95.83	83.34	92.31	86.81	
NEGATIVE	41.53	24.56	10.47	1.85	2.65	6.78	4.26	0	4.17	16.66	7.69	13.19	

As Table 2 shows, semi-modal *ought to* appears only in the affirmative form. Also, most other modals and semi-modals appear far more frequently in the affirmative form (the average of 88.85%) than in negative form (the average of 11.15%). The modal *can* is the only modal in our corpus that appears with almost equal frequency in both the affirmative form (58.47%) and the negative form (41.53%).

The **second research question** in our study addressed modal verb phrase structures and the distribution of modal verbs and semi-modals in modal verb phrase structures in ‘standard terms and conditions of sale’. Table 3 presents all modal verb phrase structures that occur in our corpus. Table 3 also shows how many different lexical verbs these modals colligate with per modal verb phrase. These numbers reflect the numbers of lexical verbs in affirmative and negative forms of modal verb phrase structure. For example, the verb *accept* in phrases ‘*can accept*’ and ‘*cannot accept*’ was counted just once.

Table 3: Number of different lexical verbs that colligate with modal verbs and semi-modals in 'standard terms and conditions of sale'

	MODAL ALONE	MODAL + INFINITIVE	MODAL + BE + PAST PARTICIPLE	MODAL + BE + PRESENT PARTICIPLE	MODAL + HAVE + PAST PARTICIPLE	MODAL + HAVE + BEEN + PAST PARTICIPLE
CAN	3	102	121	-	-	-
COULD	-	16	8	-	1	7
MAY	-	365	226	2	23	14
MIGHT	-	19	3	-	1	1
MUST	-	145	118	-	-	7
SHOULD	-	67	64	-	6	9
NEED TO	1	18	5	-	-	-
OUGHT TO	-	2	-	-	1	1
HAVE TO	-	13	7	-	-	-
SHALL	-	354	257	-	18	17
WILL	-	361	274	1	3	
WOULD	-	47	13	4	7	9

The data in Table 3 show that modal verbs *may* and *would* appear in all modal verb phrase structures except on their own (i.e. 'modal alone'). We can also see that all other modal verbs and semi-modals appear in 'modal+infinitive' phrase structure and that only semi-modal *ought to* does not occur in 'modal+be+past participle' phrase structure. The next two modal verb phrase structures per number of different modal verbs and semi-modals are phrase structures 'modal+have+past participle' and 'modal+have+been+past participle' with eight different modal verbs. Only three modals appear in 'modal+be+present participle'. Also, the numbers of different lexical verbs per individual modal verb and semi-modal show that 'modal+infinitive' and 'modal+be+past participle' phrase structures are the prevalent ones in 'standard terms and conditions of sale'.

Special attention has to be paid to 'modal+infinitive' structure, which included the instances of modal verbs and semi-modals and the infinitive of verb *be* followed by nominal, adjectival or prepositional phrases (e.g. 'shall be 30 days', 'shall be applicable', 'shall be responsible', 'may be null and void', 'will be inclusive of VAT', 'may be up to 5 per cent', 'shall be by letter of credit', etc.). Namely, the number of these types of phrases in our corpus is quite high, i.e. 4291 in total. We show the number of these structures per modal verb in Table 4.

Table 4: The number of 'modal+be+NP / AdjP / PrepP' structures in 'standard terms and conditions of sale'

MODAL VERB	PERMISSION, POSSIBILITY AND ABILITY				OBLIGATION AND NECESSITY						VOLITION AND PREDICTION	
	CAN	COULD	MAY	MIGHT	MUST	SHOULD	NEED TO	OUGHT TO	HAVE TO	SHALL	WOULD	WILL
BE + N / ADJ / PREP	9	3	<u>312</u>	4	143	25	2	2	2	<u>2471</u>	35	<u>1283</u>
TOTAL %	7.64				61.64						30.72	

The data here show that the 'modal+be+NP/AdjP/PrepP' structure is far the most frequent in the category of verbs expressing obligation and necessity (61.64%), followed by the category of modal verbs expressing volition and prediction (30.72%) and the category of modal and semi-modal verbs denoting permission, possibility and ability (7.64%). The rankings are again a direct result of the high frequency of the modal verbs *shall* and *will* in their respective categories.

Apart from the above modal verb phrase structures, our corpus revealed a small number of sequences of modals and semi-modals. That is, the modal auxiliary *may* colligated with semi-modals *have to* (eight different verbs), including one passive construction (i.e. '*may have to be extended*'), and *ought to* (one instance), whereas modal auxiliary *will* co-occurred with semi-modals *need to* (thirteen different verbs) and *have to* (one instance).

Our **third research question** addressed the issue of lexical associations of modality in more detail. We found that the total number of lexical verbs in modal verb phrase structures in our corpus is 18,140 and that total number of different lexical verbs in these structures is **718**. Table 5 illustrates the most frequent lexical verbs in modal verb phrase structures in the corpus.

Table 5: The most frequent lexical verbs that modal and semi-modal verbs colligate with in 'standard terms and conditions of sale'

RANK	VERB (FREQUENCY)	RANK	VERB (FREQUENCY)	RANK	VERB (FREQUENCY)
1	have (987)	16	require (217)	31	permit (123)
2	pass (911)	17	refund (215)	32	transfer (121)
3	make (539)	18	affect (195)	33	store (110)
4	apply (481)	19	deem (188)	34	contact (109)
5	pay (425)	20	become (174)	35	invoice (109)
6	accept (343)	21	exceed (168)	36	modify (109)
7	cancel (334)	22	give (166)	37	defend (108)
8	return (321)	23	hold harmless (166)	38	ship (108)

RANK	VERB (FREQUENCY)	RANK	VERB (FREQUENCY)	RANK	VERB (FREQUENCY)
9	use (307)	24	reimburse (166)	39	govern (107)
10	provide (295)	25	assign (164)	40	entitle (105)
11	constitute (290)	26	terminate (161)	41	comply with (101)
12	notify (286)	27	include (160)	42	repair (97)
13	remain (247)	28	replace (153)	43	change (92)
14	charge (226)	29	take (127)	44	add (91)
15	indemnify (223)	30	deliver (125)	45	receive (91)

It can be seen from Table 5 that the majority of the most frequent lexical verbs in modal verb phrase structures in ‘standard terms and conditions of sale’ are action verbs related to the provision and payment of goods, the communication between the buyer and the seller and the legal aspects of the contract.

We also analysed lexical verbs in modal verb phrase structures in terms of the types of modal verbs they most frequently associate with. We established that the number of different lexical verbs that colligate with individual modal and semi-modal verbs varies from 464, 442 and 354 for modal verbs *will*, *may* and *shall* respectively to 22, 19 and 3 for semi-modals *need to*, *ought to* and *have to*. The numbers of different lexical verbs that colligate with all modal verbs and semi-modals are given in Table 6.

Table 6: The number of different lexical verbs that colligate with modal verbs and semi-modals in ‘standard terms and conditions of sale’

MODAL VERB	PERMISSION, POSSIBILITY AND ABILITY				OBLIGATION AND NECESSITY						VOLITION AND PREDICTION	
	CAN	COULD	MAY	MIGHT	MUST	SHOULD	NEED TO	OUGHT TO	HAVE TO	SHALL	WOULD	WILL
NO. OF LEXICAL VERBS	189	28	442	24	148	76	22	3	19	354	62	464

As Table 6 demonstrates, modal verbs *will*, *shall*, *may* and *can* colligate with the highest number of different lexical verbs across modal verb phrase structures. The most frequent lexical verbs that associate with individual modal verbs and semi-modals are given in Table 7 below.

Table 7: The most frequent lexical verbs that associate with modal verbs in semi-modals in 'standard terms and conditions of sale' (per modal and semi-modal verb)

MODAL /SEMI-MODAL VERB	LEXICAL VERBS (NUMBER OF OCCURRENCES WITH A MODAL /SEMI-MODAL VERB)
CAN	accept (52), return (49), cancel (42), make (41), guarantee (30), hold responsible (20), provide (19), contact (15), use (14), pay (13)
COULD	expect (11), discover (4), identify (4), recognise (4), cause (4), foresee (3), affect (3), avoid (2), constitute (2), encourage (2)
MAY	cancel (245), have (228), require (169), make (140), terminate (116), return (114), assign (112), use (85), change (84), modify (77)
MIGHT	have (11), apply (5), arise (5), exercise (5), make (5), entitle (3), imply (3), incur (2), reveal (2), use (2)
MUST	notify (65), return (29), provide (27), obtain (21), receive (18), have (17), comply (16), include (16), inform (15), contact (14)
SHOULD	read (23), notify (19), include (12), contact (11), allow (10), check (9), discover (9), print (4), return (4), review (4)
NEED TO	know (5), return (4), sign (3), defend (2), register (2), settle (2), take (2), appear (1), change (1), communicate (1)
OUGHT TO*	discover (13), reveal (3), know (1)
HAVE TO	provide (4), agree (2), give (2), pay (2), accept (1), carry out (1), comply with (1), conduct (1), effect (1), hold (1)
SHALL	have (560), apply (268), constitute (249), pay (229), pass (219), remain (184), indemnify (159), exceed (129), become (128), hold harmless (112)
WILL	pass (681), make (246), accept (221), refund (174), have (163), deem (161), pay (160), apply (140), charge (140), use (132)
WOULD	like (24), cause (7), receive (6), infringe (1), affect (5), create (5), have (5), entitle (4), prevent (4), avoid (3)

N.B.: *Semi-modal *ought to* colligates with only three lexical verbs.

Our study also uncovered that certain lexical verbs colligate with more modal or semi-modal verbs. The verb *make*, for example, colligates with 11 modal and semi-modal verbs (all except *may*), verbs *include* and *return* were found with 9 modals and semi-modals, and verbs *appear*, *have* and *obtain* associated with 8 modal and semi-modal verbs. The numbers of lexical verbs that colligate with a certain number of modals and semi-modals in our corpus is given in Table 8 below.

Table 8: The number of different lexical verbs that associate with modal and semi-modal verbs in 'standard terms and conditions of sale'

NUMBER OF MODAL / SEMI-MODAL VERBS	NUMBER OF DIFFERENT LEXICAL VERBS
11	1
9	2
8	3
7	13
6	17
5	59
4	95
3	102
2	155
1	271

We also studied the distribution of lexical verbs per individual modal and semi-modal verb from the viewpoint of the three categories they are grouped into according to their meaning (i.e. permission, possibility and ability; obligation and necessity; volition and prediction). We observed that many lexical verbs can be found with all three categories of modals and semi-modals, some lexical verbs colligate with modals and semi-modals from two categories, and some associate with modals and semi-modals from one category only. Table 8 presents these findings. (To present our data in a more manageable way, we assigned a code to each of the above three categories, i.e. A = volition and prediction; B = obligation and necessity; C = permission, possibility and ability).

Table 8: The number of different lexical verbs across categories of modal verbs in 'standard terms and conditions of sale'

CATEGORY/ CATEGORIES	A+B+C	A+C	A+B	B+C	A	B	C
NO. OF LEXICAL VERBS	241	72	65	49	94	62	131

The number of different lexical verbs that are found with individual categories of modal and semi-modal verbs and their combinations reflects the number of modal and semi-modal verbs in 'standard terms and conditions of sale'. As regards the presence of lexical verbs in more than one category, the following observations can be made. Data in Table 8 show that the three categories combined (A+B+C) colligate with the highest number of different lexical verbs. Further, modals and semi-modals in categories A+C and B+C associate with approximately similar number of lexical verbs. Turning to lexical verbs that occur with modals

from individual categories A, B or C only, we can see that although category C is proportionally the least common one (see Table 1), its modal verbs nevertheless colligate with the highest number of different lexical verbs.

To illustrate these numbers, we present the most frequent lexical verbs that occur with modal verbs and semi-modals from all three categories in Table 9. All these verbs appear more than 100 times with at least one of the modal and/or semi-modal verb from category A, B and C. For example, lexical verb *return* colligates with modals and semi-modals *can*, *may*, *must*, *shall*, *have to* and *will* (i.e. ‘... you can return it to us in its original condition...’, ‘Buyer may return the product within 30 days of invoice...’, ‘You must return the Goods to Us at your own expense.’, ‘...the Buyer shall return such damaged goods to the Company...’, ‘You will then have to return the product to the address below.’, ‘We will return the repaired or replacement products to you.’).

Table 9: The most frequent lexical verbs that occur across all three categories of modal and semi-modal verbs in ‘standard terms and conditions of sale’

RANK	LEXICAL VERB	RANK	LEXICAL VERB	RANK	LEXICAL VERB	RANK	LEXICAL VERB
1	have (987)	6	accept (343)	11	constitute (290)	16	affect (195)
2	pass (911)	7	cancel (334)	12	notify (286)	17	deem (188)
3	make (539)	8	return (321)	13	charge (226)	18	become (174)
4	apply (481)	9	use (307)	14	require (271)	19	exceed (168)
5	pay (425)	10	provide (295)	15	refund (215)	20	give (166)

4 DISCUSSION

When interpreting the overall frequency of modals and semi-modals in ‘standard terms and conditions of sale’, we must take into consideration the purpose of these documents, which is to impose obligations on and to confer rights to sellers and buyers as the parties to the contract. The analysis of the frequency of modals and semi-modals has revealed that *shall* (48.50%), *will* (24.43%), *may* (15.99%), *must* (4.99%) and *can* (2.85%) are the five most frequent modal auxiliary verbs in ‘standard terms and conditions of sale’. The predominance of the modal auxiliary verb *shall* is not surprising as this modal verb is used in legal documents primarily to show order, promise, requirement or obligation by expressing that something is required, compulsory, imperative, mandatory and obligatory (Legal Dictionary Online). Therefore, it is also not surprising that the high occurrence of the modal verb *shall* ranks the modals denoting obligation and necessity first among the three modal verb groups. Other modals in this group comprise only 6.99% of the entire number of modals and semi-modals in our corpus. It has to be observed that the modal verb *must* (as the modal verb expressing strong obligation) is the fourth most frequent modal verb in ‘standard terms and conditions of sale’. Similarly, a high percentage of the modal verb *will* places the modals indicating volition and prediction in the

second place, while the other modal in this group (*would*) presents only 0.88% of all modals in the corpus. The modals and semi-modals denoting permission, possibility and ability are the least frequent ones (19.25%) despite the fact that one of the purposes of 'standard terms and conditions of sale' is conferring rights. Nevertheless, a relatively high frequency of the modal auxiliary verb *may* reflects this very purpose.

As regards the ratio between the affirmative and the negative forms of modals and semi-modals in our corpus, the following can be concluded. A very strong inclination in the corpus towards the affirmative form of modal and semi-modal verbs indicates that the rules more often define what buyers and sellers are to do in certain situations, and not what they are not supposed to do. Of course, we also need to consider the fact that some lexical verbs associate with either the affirmative or the negative forms of modal and semi-modal verbs in 'standard terms and conditions of sale'.

The prevalence of modal verb phrase structures '*modal+infinitive*' and '*modal+be+past participle*' as well as a very high number of '*modal+be+NP / AdjP / PrepP*' structures in our corpus clearly reflects the legal nature of 'standard terms and conditions of sale'. That is, since these documents consist of provisions which state obligations and rights of buyers and sellers during and after the provision, payment and delivery of goods and services, and since these two modal verb phrase structures refer to either the present time or to the future, their strong presence in these documents is coherent with the genre. Consequently, a relatively small number of modal phrase structures with past participles referring to the past time, i.e. '*modal+have+past participle*' and '*modal+have+been+past participle*' is thus understandable.

Turning our focus on lexical associations of modality, we can see that the types of lexical verbs that most frequently colligate with modal and semi-modal verbs in 'standard terms and conditions of sale' reflect the purpose of these documents. Namely, they refer to various parts of these documents (e.g. *basis of sale, price, payment, delivery, right to return goods, refunds*, etc.). These verbs are mainly action verbs which indicate the actions of buyers and sellers during and after the duration of the transaction of goods for payment (e.g. *pay, cancel, return, indemnify, charge, reimburse, deliver, transfer, store, invoice, ship, refund, distribute, compensate*, etc.). Apart from that, the corpus has shown a number of lexical verbs denote the legal aspect of these documents (e.g. *comply with, infringe, constitute, entitle, fulfil, hold harmless, terminate, hold responsible, violate, bind, waive, construe, hold liable, obligate, prosecute* etc.). Also, the abundance of different lexical verbs in our corpus (i.e. 718) points to the complexity of the commercial transactions as such. The fact that most lexical verbs that colligate with modal and semi-modal verbs in 'standard terms and conditions of sale' occur less than 100 times per approximately million words (i.e. 94.3%) points to all the different aspects of commercial transactions that have to be defined in legally binding documents, i.e. in 'standard terms and conditions of sale'. On the other hand, those lexical verbs which are the most frequent (as shown in Table 5) can be defined as the verbs that denote the basic goals of commercial transactions (i.e. to provide and to obtain goods and/or services for payment).

5 CONCLUSION

This paper presented the findings of a corpus-based analysis of modal verbs and semi-modals in 'standard terms and conditions of sale'. Our research questions were concerned with the frequency and the distribution of these modals and semi-modals according to their key meanings (i.e. permission/possibility/ability; obligation/necessity; volition/prediction), the types of modal verb phrase structures and lexical associations of modality.

By performing a quantitative as well as qualitative analysis of these grammatical structures we established that (1) modal verbs and semi-modals play a significant role in the construction of provisions in 'standard terms and conditions of sale' as words which express attitudes and opinions regarding the actions, conditions and states conveyed by lexical verbs; (2) the types of prevalent modal verb phrase structures are indicative of the legal genre since they denote present and future actions referring to obligations and rights of sellers and buyers as parties to the contract; (3) a large number of lexical verbs in 'standard terms and conditions of sale' that predominantly express various actions points to all kinds of different activities that sellers and buyers may or may not, can or can not, must or must not, etc., perform when engaged in commercial transactions. In short, our findings have demonstrated how the purpose of a given text type and, consequently, of a genre that this text type belongs to is expressed with linguistic means, i.e. with two grammatical categories of a language (modal and semi-modal verbs and lexical verbs).

We see the findings of this research as a contribution to the existing knowledge about modal verbs and modal verb phrase structures in the English language. We believe that the main strength of our analysis lies in the established knowledge of how modal verbs and semi-modals function in 'standard terms and conditions of sale' as specialised texts that combine the characteristics of a legal genre (i.e. legally binding agreements) and a professional domain of commerce/trade. Of course, further research is always possible into these individual modal verbs and semi-modals as well as into the nature of modal verb phrase structures and lexical verbs that colligate with the above modals.

BIBLIOGRAPHY

- ANTHONY, Laurence (2011) *AntConc (Version 3.2.4)* [Computer Software]. Tokyo, Japan: Waseda University. <http://www.antlab.sci.waseda.ac.jp/>.
- BHATIA, Vijay K. (1993) *Analysing Genre. Language Use in Professional Settings*. Harlow: Longman.
- BIBER, Douglas/Stig JOHANSSON/Geoffrey LEECH/Susan CONRAD/Edward FINEGAN (1999) *Longman Grammar of Spoken and Written English*. Harlow: Pearson Education Limited.
- BROWN, Gillian D./Sally RICE (2007) *Professional English in Use Law*. Cambridge: Cambridge University Press.

- Business Dictionary Online. 20 June 2012. <http://www.businessdictionary.com/>.
- FUERTES-OLIVERA, Pedro A. (2008) Pedagogical application of specialized corpora in ESP teaching: the case of the UVaSTECorpus. *Scripta Manent* 3(2), 68-81.
- GREAVES, Chris (2009) *ConcGram 1.0. A phraseological search engine*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- KENNEDY, Graeme (2002) Variation in the distribution of modal verbs in the British National Corpus. R. Reppen, S. M. Fitzmaurice and D. Biber (Eds.) *Using Corpora to Explore Linguistic Variation*. Amsterdam/Philadelphia: John Benjamins Publishing Company, 73-90.
- KROIS-LINDNER, Amy/TRANSELEGAL (2006) *International Legal English: A Course for Classroom or Self-study Use*. Cambridge: Cambridge University Press.
- LEECH, Geoffrey/Jan SVARTVIK (1994) *A Communicative Grammar of English. Second Edition*. London/New York: Longman.
- Legal Dictionary Online. 27 November 2012. <http://legaldictionary.thefreedictionary.com/>
- QUIRK, Randolph/Sidney GREENBAUM / Geoffrey LEECH / Jan SVARTVIK (1985) *A Comprehensive Grammar of the English Language*. London/New York: Longman.
- SWAN, Michael (2005) *Practical English Usage*. Oxford: Oxford University Press.
- TROSBORG, Anna (1991) An analysis of legal speech acts in English Contract Law. *Hermes*, 6, 65-90. 26 November 2012. http://download2.hermes.asb.dk/archive/download/H06_05.pdf

POVZETEK

Angleški naklonski glagoli in polnopomenski glagoli v glagolskih besednih zvezah z naklonskimi glagoli v »splošnih prodajnih pogojih«

Članek predstavlja izsledke korpusne analize pojavnosti angleških naklonskih glagolov v glagolskih besednih zvezah ter polnopomenskih glagolov, ki se navezujejo na naklonske glagole v 'splošnih prodajnih pogojih'. 'Splošni prodajni pogoji' so pravno zavezujoči dokumenti s področja prodaje, ki določajo obveznosti in pravice prodajalcev in kupcev pri transakciji blaga za plačilo. Z našo raziskavo smo ugotovili, da so najpogostejši naklonski glagoli v teh dokumentih glagoli *shall*, *will*, *may*, *must* in *can* ter, da sta glagolski besedni zvezi *'modal+infinitive'* and *'modal+be+past participle'* prisotni najpogosteje. Nadalje, analiza je razkrila prisotnost kar 718 različnih polnopomenskih glagolov, ki označujejo dejanja, stanja in pogoje, ki so povezani s prodajo in nakupom blaga. Izsledki naše analize so skladni z namenom in značilnostmi teh dokumentov. Raziskava je primer, kako se pomen in značilnosti pravnega besedilnega žanra s področja komercialne kažejo skozi določeno slovnico kategorijo, t.j. skozi naklonske ter polnopomenske glagole.

Ključne besede: naklonski glagoli, glagolske besedne zveze z naklonskimi glagoli, polnopomenski glagoli, splošni prodajni pogoji, korpusna analiza

ABSTRACT

English Modal Verbs in Modal Verb Phrase Structures and Lexical Associations of Modality in 'Standard Terms and Conditions of Sale'

This paper presents the findings of a corpus-based analysis of English modal verbs and semi-modals in modal verb phrase structures as well as lexical association of modality in 'standard terms and conditions of sale', which are legally binding documents in the domain of commerce and whose purpose is to govern the obligations and rights of sellers and buyers in the transaction of goods for payment. Our research has established that the most frequent modal verbs in these documents are *shall*, *will*, *may*, *must* and *can*, and that the most common modal verb phrase structures in are 'modal+infinitive' and 'modal+be+past participle'. We found 718 different lexical verbs that indicate actions, states and conditions associated with commercial transactions. These results correspond with the definition of these documents. Our findings are a demonstration of how language expresses the characteristics of a legal text type in a professional domain of commerce/trade.

Key words: modal verbs, modal verb phrase structures, lexical verbs, »standard terms and conditions of sale«, corpus analysis