



## A Corpus-Based Analysis of Deontic Modality of Obligation and Prohibition in Arabic/English Constitutions

Hanem El-Farahaty<sup>1</sup> y Abdelhamid Elewa<sup>2</sup>

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**Abstract.** It is argued that legal language should be formal, precise and clear to avoid ambiguity and/or misunderstanding. As rights and duties are communicated through modals, clarity and precision in drafting and translating them is crucial. Otherwise, there is a possibility of conveying loose messages in the source text or different and/or inconsistent messages in the target text. However, the drafting of Arabic modal expressions does not follow clear guidelines, and their translation differs from one translator to another. This paper investigates how deontic modality of obligation and prohibition is used in *The Leeds Annotated Parallel Corpus of Arabic-English Constitutions* in comparison to *The Leeds Monolingual Corpus of English Constitutions*. More specifically, the paper presents a classification of these modal expressions and investigates the different lexical variants expressed in a Corpus of Arabic Constitutions. The paper uses corpus-based tools to analyse the different lexical forms used for deontic modality of obligation and prohibition in Arabic and how they are rendered into English. Results of such analysis are compared to a non-translated Corpus of English Constitutions to find out whether the deontic meaning of the modals is comparable to the set of deontic modals used in the constitutions originally drafted in English. The corpus-based analysis gave a detailed classification of a variety of modal expressions used in the Arabic Corpus. It also showed that the translation of deontic modals of obligation and prohibition from Arabic into English is influenced by the source text lexical variations; however, the corpus techniques employed in the study managed to capture some comparable modals in both corpora.

**Key Words:** Legal translation, Corpus linguistics, Parallel corpora, Deontic modality, Arabic/English Constitutions.

### [es] Un análisis de corpus de la modalidad deóntica de obligación y prohibición en las constituciones árabes/inglesas

**Resumen.** Es comúnmente aceptado que el lenguaje legal debe ser formal, preciso y claro para evitar ambigüedad y malentendidos. Dado que los derechos y deberes se comunican a través de verbos modales, la claridad y precisión al traducirlas son cruciales. De no ser así, existe la posibilidad de comunicar los mensajes del texto original de forma imprecisa o que los mensajes del texto meta sean diferentes o incoherentes a los del original. Sin embargo, el uso de las expresiones modales en árabe no se atiene a normas claras y su traducción puede variar de un traductor a otro. Este artículo investiga cómo se usa la modalidad deóntica de obligación y prohibición en *The Leeds Annotated Parallel Corpus of Arabic-English* en comparación con *The Leeds Monolingual Corpus of English Constitutions*. En concreto, el artículo presenta una clasificación de estas expresiones modales e investiga las diferentes variantes

<sup>1</sup> University of Leeds/UK / Mansoura University, Egypt  
h.el-farahaty@leeds.ac.uk

<sup>2</sup> Al Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia  
eleewah@gmail.com

léxicas que aparecen en un corpus de constituciones en árabe. El estudio utiliza herramientas de corpus para analizar las diferentes formas léxicas que se usan para la modalidad deóntica de obligación y prohibición en árabe, así como su traducción al inglés. Los resultados de este análisis se contrastan con un corpus de constituciones en inglés para dilucidar si el significado deóntico de los modales es comparable al conjunto de modales deónticos usados en constituciones en inglés. El análisis de corpus arroja una clasificación detallada de expresiones modales usadas en el corpus árabe. Asimismo, muestra que las traducciones de los modales deónticos de obligación y prohibición del árabe al inglés están influidos por las variaciones léxicas del texto original; a pesar de que las técnicas de análisis de corpus empleadas en el estudio consiguen capturar modales comparables en ambos corpus.

**Palabras clave:** Traducción jurídica, lingüística de corpus, corpus paralelos, modalidad deóntica, constituciones en árabe/inglés.

**Sumario.** 1. Introduction. 2. Drafting Legislations in the Arab World. 3. Drafting legislation in the EU: the modal auxiliaries. 3.1. Translation of Arabic/English Constitutions. 4. Modality in English and Arabic. 4.1. Deontic modality and legal discourse. 5. Corpus and methods. 6. Analysis of deontic modality in the Arabic corpus. 6.1. Deontic modality of obligation. 6.2. Deontic modals of prohibition in the Arabic corpus. 7. Discussion of modal frequency and deontic modality in the Arabic corpus. 8. Translation of Arabic deontic obligation into English. 8.1. Translation of deontic modals of prohibition. 9. Deontic modals in the monolingual corpus. 10. Conclusion.

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## 1. Introduction

Many Arabic linguists who investigated the Arabic modal system (Wright 1967, Su-leiman 1999, Badran 2001, Badawi et al. 2004, Abdel-Fattah 2005, Ryding 2005, Eades 2011, El-Farahaty 2015, among others) concluded that Arabic does not have a standard modal system the same way English does. This is due to the complexity of the formal grammatical structure of the modal system, in addition to several features which are inherent in the modal system in general such as indeterminacy and ambiguity and context-dependent semantic meaning (Leech & Coats 1980, von Fintel 2006, and Abdel-Fattah 2005)<sup>3</sup>. Translation of deontic modals in the legal domain has been the subject of interest of a number of researchers including Biel (2014), Jaskot & Wiltos (2017) who investigated English and Polish and Sathachai & Keny (2019) who investigated English and Thai. Translation of English deontic modals into Arabic in the legal genre has received little attention by a few researchers including (El-Farahaty 2015), but translating them into English has received almost no attention as yet. One crucial issue noted in Abdel-Fattah (2005) is that translating Arabic modals follows the stylistic preferences of the translator, a matter that will have a direct impact on the accuracy of the modal meaning and the consistency of translating them. Also, Abdel-Fattah's (2005) and El-Farahaty's (2015) studies have been applied to a small scale corpus, and due to the absence of authentic corpora, none of these or previous studies identified a well-defined list of deontic modal expressions and their equivalents in English. Hence this paper aims to fill this research

<sup>3</sup> For more information, refer to section (4) on Modality in English and Arabic.

gap in legal discourse in general and in legislative drafting in particular. More specifically, this paper aims to investigate how rights and commitments are expressed through deontic modality of obligation in translated and non-translated corpora (i.e. The Leeds Annotated Parallel Corpus of Arabic-English Constitutions, shortened to Parallel English Corpus (PEC) and The Leeds Monolingual Corpus of English Constitutions (shortened to Monolingual English Corpus (MEC)).

To achieve this aim, the following research questions will be investigated:

- 1) How are deontic modals of obligation and prohibition expressed in the Arabic Corpus?
- 2) What are the translation techniques used to convey the deontic meaning of these modals in the Parallel English Corpus (PEC)?
- 3) How can deontic modality in the translated parallel corpus be compared to the Monolingual English Corpus (MEC)?

To answer the above research questions, a corpus-based investigation will be undertaken that will analyse the frequency of different variants of Arabic deontic modals in the corpus of Arabic constitutions. The parallel corpus investigation analyses the different techniques of translating this set of deontic modals into English to test the precision of translating them. Using corpus tools and techniques in data analysis, we can identify salient features which may not be evident by casual observation.

Results of such analysis will then be compared to a non-translated corpus of English constitutions to check if the deontic meaning of the modals adheres to the set of deontic modals used in the constitutions originally drafted in English. The paper will be structured as follows. Section two briefly discusses the use of modals in Arabic legal discourse/legislations and gives brief background information about the translation of Arabic constitutions into English. Section three explains the concept of deontic modality in general and in English and Arabic legal discourse in particular. Section four introduces the data and methods used. Section five discusses the corpus-based analysis of deontic modals in the (AC) and the translation of these modals in the (PEC). Section six provides the outcomes of a comparison to the comparative MEC followed by the conclusion and ideas for further research.

## **2. Drafting Legislations in the Arab World**

Legal concepts are commonly clear and meaningful, but words are the carrier of meaning, and the linguistic choice complements the intended meaning of a particular legal concept (Bani Dhiyab 2011: 14). Hence, “legislative drafting manuals can contribute to coherent and consistent law drafting” (The Organisation for Economic Co-operation and Development/OECD). Drafting of legislative texts, constitutions being one category of them (Cao 2007) has been widely discussed by scholars and law professionals, law institutes, government bodies from different parts of the Arab world. Sabra 2008, Bani Dhiyab 2011, Al-Ganainy 2012, Suteu & Draji 2015, Al-Mu’min 2017, 2000, Sadun & Butshasha 2017, among others, gave general guidelines about language drafting that seem to echo general rules of drafting western legislations such as clarity, preciseness, accessibility, comprehensibility, legal certainty (European Union: Legislative Drafting Guide). Although

these authors and institutions write the manuals/rules related to their national legal systems, they all agree on similar legislative drafting pitfalls such as vagueness and complexity; inconsistent use and lack of rules on punctuation marks; unjustified repetition which leads to confusion and result in legal gaps; or even simple linguistic errors which existed in the drafts and were not corrected in the final printed version of a certain law as well as legal errors (in the form of absence of a legal term/concept which will impact on the legality of the ruling) that need to be corrected.

Drafting traditions in Arab countries could differ from a country to another. For instance, the legal system in Saudi Arabia is based on Islamic Law, mirroring the language and legislation of the early centuries of Islam. On the other hand, the laws in Egypt, Syria and Lebanon are based on Napoleonic civil law; there is no one uniform method of drafting Arabic constitutions as it is unique to each country and each era within this country. Therefore, some guidelines have been proposed to ensure some kind of uniformity of drafting Arabic legislations. For instance, Al-Ganainy (2012: 6-7) and Bani Dhiyab (2011: 120-7) highlighted some principles about the language and style of drafting Arabic legislations. These include: making sure that the structure of the legislation is clear and all relevant parts are included in their appropriate place, drafting clear simple short sentences which identify who does what to whom; sentences should be joined by punctuation marks; using the conjunctions ‘and’/ ‘or’ carefully and appropriately; avoiding vagueness and the use of synonyms of the same lexical term; using the active rather than the passive voice; using positive rather than negative sentences; using singular to mean plural and masculine to mean feminine unless there is a need to mention the feminine; using the imperfect (simple present tense) rather than future to convey obligation; using the Gregorian calendar unless mentioning the Hijri calendar is required (as in Saudi Arabia). All these rules were stressed by The OECD<sup>4</sup> in addition to stressing the need to avoid gender-specific terms in drafting legislations. None of these manuals, however, included details about deontic modals and the expressions used to express permissibility and obligation. Sabra (2008: 92), referred to a few examples about modality as in the case of using the positive structure of modality rather than the negative when possible so a drafter should not write:

لا يجوز لمن دون سن الثامنة عشرة أو أقل أن يصوت في الانتخابات

Any person below the age of 18 is not allowed to vote

But rather the drafter should write:

يجوز لمن بلغ سن الثامنة عشرة أو أكثر أن يصوت في الانتخابات

Everyone who has reached the age of 18 or over is allowed to vote

<sup>4</sup> This report (issued in August 2019) “looks at the role of legislative drafting manuals in enhancing legislative and regulatory quality. It presents experiences and good practices from both OECD and MENA countries in the preparation and application of these manuals” (OECD: online). Although it focuses on Egypt, its recommendations could be applicable to other countries in the MENA region. Another assessment report of the Palestinian legislative drafting manuals was issued by the OECD in 2011. For more information, please refer to this document: <https://www.oecd.org/mena/governance/50402734.pdf>.

Consequently, there should be some standards in the constitution drafting process which guarantee the involvement of all parties in the drafting process, be them “civil society groups, political parties, religious leaders, workers’ unions, and the general public to engage in meaningful deliberation” (Moustafa 2012: 3). The only available manual which was published by Interpeace in 2011, then issued in its Arabic form in 2012 is the *Constitution-making and Reform - Options for the Process* (Brandt et al. 2011). The handbook covers all the possible processes involved in drafting a constitution, structure and language is one of them. While some of the Arabic constitutions drafted or amended after the Arab Spring may have benefited from this manual, some others must not have followed it. In all of the manuals referred to above, there is no reference to the specifics of writing. For example, there are no guidelines for explaining the appropriate set of deontic modal expressions to be used.

Legal professionals have criticised the drafting and the language of some Arabic constitutions and their translations. An example to give here is the Iraqi Constitution: “The language used was incredibly weak and problematic, raising concerns about the ability of the body that drafted or translated the constitution” (Jawad 2013: 18). He (ibid.) comments on the use of modality in article 46 which starts with the words “*La yakoon (not to be)*, whereas the correct legal term is *La yajozze (may not)*” (see also Sabra 2008: 92-3). Allawi, a senior Iraqi politician, noted that “the constitution was utterly alien, in construction and phraseology, from the Arabic language and the Iraqi experience” (Allawi 2007: 222). The possible justifications one can give here about the above is the many challenges that faced the drafting of this Constitution, the heated debates and the turmoil that surrounded it and the lack of consensus on different aspects of it (e.g. women rights issues). (Iraq Democracy Information Centre 2006: 1-2).

### 3. Drafting legislation in the EU: the modal auxiliaries

Most English-speaking countries and European countries have used clear guidelines about modality, which are discussed in detail in Krapivkina (2017: 312-3). For example, Indiana Drafting Manual gives the following specific details about the concepts of modals:

- To create a right, say is entitled to.
- To create discretionary authority, say may.
- To create a duty, say shall
- To create a condition precedent, say must
- To negate a right, say is not entitled to
- To negate discretionary authority, say may not
- To negate a duty or a mere condition precedent, say is not required to.
- To create a duty not to act, say shall not (cf. Krapivkina)

Deontic modals, ‘shall’ and ‘must’ are heavily discussed in the literature of legal drafting and legal translation. According to Biel (2014: 341) and Garzone (2013: 70), “the English Style Guide (2012: 35–36) requires EU drafters to use certain modals (e.g. shall, may) but not others (e.g. must and should), the latter being a less binding or weak form of obligation”. However, Garzone also proved that the use of

‘shall’ has declined over the past four decades “with a more dramatic change recorded between 1989-1990 and 2005-2006” (2013: 70). According to the Parliamentary Counsel Office on the principles of clear drafting (online), “although ‘shall’ is used to impose a duty or a prohibition, it is also used to indicate the future tense. This can lead to confusion. ‘Must’ should be used in preference to ‘shall’ because it is clear and definite, and commonly understood”. Garner (2012: online) also argues that “in most legal instruments, shall violates the presumption of consistency... which is why shall is among the most heavily litigated words in the English language”. Alternatives to the translation of shall include “must, the simple present, the semi modal-is to and the imperative” (Garzone 2013: 75-78).

From this brief review, ‘shall’ or ‘must’ are used interchangeably due to drafting styles and conventions in different countries and whether they are used in enacting or non-enacting terms<sup>5</sup>. For example, UK drafters, due to the Plain English campaign, have opted out of shall and replace it with must, which is perceived as simpler, more direct and devoid of legalese. The EU English Language services guidelines use ‘must’ for all documents but not in legislations which are drafted by lawyers/legal drafters. They do not follow the language services guidelines, and they use ‘shall’ in drafting legislations (Strandvik European Commission’s Directorate-General for Translation (ECDGT), Oct 2018) as ‘shall’ is considered the ‘daily bread’ of the lawyers (Mellinkoff 1963: 13)<sup>6</sup>.

#### 4. Modality in English and Arabic

English modal auxiliaries, their criteria, and typologies, as well as the concept of modality, have been subject to exhaustive research by English linguists (von Wright 1951, Hoffman 1976, Leech & Svartvik 1975, Coats 1983, Quirk et al. 1985, and Palmer 1990, among others). In more recent years, English linguists such as (Hoye 1997, von Fintel 2006) discussed other expressions (adverbs, e.g. perhaps; nouns, e.g. possibility; adjectives, e.g. necessary) which could function as the deontic modality of obligation (Eades 2011: 284-85)<sup>7</sup>. Scholars differ among themselves to reach one standard typology<sup>8</sup>. Nevertheless, most of them agreed on two basic types of modality: epistemic and non-epistemic (deontic and dynamic)<sup>9</sup>. The study of English modals is both structural and semantic according to Palmer (1990), but recently linguists tend to use “purely meaning-based definitions of modality without recourse to structural criteria for the purposes of cross-linguistic comparison” (Eades 2011: 284).

Modality in Arabic is not as well-defined as it is in English. In other words, “the English modal system does not have a defined grammatical counterpart in Arabic”

<sup>5</sup> For more information on what is used in enacting and non-enacting terms, see Biel (2014) and Seracini (2015) on modals in UK English and EU English.

<sup>6</sup> It was challenging to gather information about the process of translating Arabic constitutions into English due to the large number of constitutions involved and difficulty of identifying the translators. Alternatively, we used two corpora (monolingual and parallel) to explore the deontic modality in legal discourse in an attempt to identify the critical differences between the translated and non-translated texts in this respect.

<sup>7</sup> For examples on these categories refer to Eades (2011: 84-85).

<sup>8</sup> See von Fintel (2006) about the possible modal categories and the etymology of each of them.

<sup>9</sup> Refer to Coats 1983 and Palmer 1990 for more information.

(Eades 2011: 287). The modal system in Arabic mostly follows a semantic system or rather a “pragmatico-semantic category” (Al-Karooni 1996: 76). They are labelled modal expressions by Anghelcu (1999: 130) because they can be lexical verbs, particles, prepositions, or prepositional phrases. Like any other modal system, modality in Arabic is surrounded by “questions of conceptuality, ambiguity, and indeterminacy” (Abdel-Fattah 2005: 31)<sup>10</sup>. One point to highlight here is that “in modal meaning, several contexts interact e.g. tense, aspect, intentionality (in addition to extralinguistic factors) which increase the degree of indeterminacy” (Abdel-Fattah 2005: 35). In addition to that, Arabic modals are inherently weak, and the dynamics of power relationships in English and Arabic are very different (Harris et al. 1997). One obvious example to give is the meaning of the modal (Abdel-Fattah, 2005: 39).

For the above reasons, translating modals from English into Arabic and vice versa is not an easy task, and when translating legal texts, caution is required to avoid possible mistranslations and misinterpretations. This is attributed to the notion of “indeterminacy” of modal auxiliaries English (Coats 1983), “where the specific set of modal auxiliaries in English can open possibilities for more than one interpretation, their Arabic counterparts rarely do” (Badran 2001: 48). Also, the fact that translators follow their stylistic preferences in translating modals into Arabic (Abdel-Fattah 2005) and these choices lead to possible looseness of meaning and changes the primary intended meaning of the original text. Abdel-Fattah (ibid.: 39) gives an example of the interchangeable use of the verb *ينبغي* (yanbaghi, should), *يجب* (yajib, must) and *يتعين* (yata‘ayn, have to): “Because there is no usage evidence where the meaning is clearly not epistemic, it is a matter of stylistic choice especially between *يجب* and *ينبغي*. Personally, I prefer *ينبغي* though *يجب* is not incorrect”. In fact, translating modal auxiliaries, in general, should rather depend upon “careful consideration of macro-textual factors (context, register, text-type, author’s intention, etc.) in both the ST and TT” (Eades 2011: 286).

#### 4.1. *Deontic modality and legal discourse*

The language of the law is communicated through the notions of obligation and permission, which are realised by the grammatical category of deontic modals, semi-modals and related patterns (Biel 2014: 158). Legislative texts, e.g. directives, regulations and constitutions communicate fundamental functions of the law (to oblige, to permit and to prohibit), hence impose duties and confer rights (Hart 1961: 27). These notions of deontic modality vary a lot across languages and are considered a beneficial area of interlingual research (Palmer 1990 and Biel 2014).

The term deontic is concerned with “language as action” (Palmer 1986: 121). It concerns what is possible, necessary, permissible, or obligatory, given in a body of law or a set of moral principles or the like (von Fintel 2006: 2). Deontic modals are essentially “performative” (Palmer 1990: 69), as they express “the possibility or necessity of acts in terms of which the speaker gives permission

<sup>10</sup> For more information and examples from Arabic and English, refer to Abdel-Fattah (2005: 32-35).

(e.g. may, can) or lays an obligation for the performance of actions at some point in the future (e.g. must) or make a promise or threat (e.g. shall)” (Hoye 1997: 43, Palmer 1990: 69).

There are two main types of deontic modality: obligation and permission. The legislature, through the use of deontic modals of obligation, “instructs the addressee to do X or outlines the obligations to which the addressee must conform” (Trosborg 1997: 45). Obligation is expressed mainly by the modals ‘shall’ and ‘must’ as well as (should, is/are to, have/has to, need to, ought to). Deontic modals of permission in legislations give the legislature an authority to grant a certain body the permission to perform an act (ibid.: 48). They are classified into (may, can, could, might, need not)<sup>11</sup>.

It is challenging to categorise the modal system in Arabic due to “the absence of linguistic corpora of usage” (Abdel-Fattah 2005: 34). He (ibid. 41-2) gave a list of deontic modals which is not finite and different from other lists suggested by other linguists such as Badawi, Carter & Gully (2004: 394-421) and the typology of Arabic deontic modals discussed in a small corpus of legal documents by El-Farahaty (2015: 118-138). This study attempts to derive a more holistic list of modal expressions supported by *The Leeds Annotated Parallel Corpus of Arabic-English Constitutions*. It focuses on “duty-imposing” deontic obligation, but “power-conferring” deontic permission (Biel 2014: 340) will be the topic of a separate study.

## 5. Corpus and methods

The study uses two corpora, one parallel corpus and a monolingual comparative corpus to complement the analysis by comparing translations to non-translations (Baker 1993, 1995, 1996; Biel 2014), and to provide some techniques of advanced comparative analysis (cf. Biel 2014). The two types of corpora complement one another in examining “how the same content is expressed in two languages” (Aijmer & Altenberg 1996: 13). Parallel corpora, in its own right, may fail to reflect cross-linguistic contrasts, because translated corpora cannot avoid the effect of deviation from the ST (i.e. translationese) (Baker 1993: 243-5, McEnery et al. 2006: 49). Therefore, to rely solely on parallel corpora could be misleading; “parallel texts are inappropriate because the filter of the translator and the translation strategies get in the way, and/or L2 texts may end up with a text structure very similar to that of the L1” (Iørn Korzen & Morten Gylling 2017: 39). Using the original English corpus in this paper could be regarded a tool for triangulation to compare the results obtained from the parallel corpora to find out whether the use of deontic modals is comparable to that of the Monolingual English Corpus. The MEC is almost three times bigger than the English sub-corpus in the parallel corpus and would more likely yield reliable results about the use of deontic modals in legal discourse. This method of triangulation is called “within-method corpus triangulation,” i.e. it still employs the quantitative research methods of corpus linguistics (Malamatidou 2018). Therefore, after analysing all the instances of deontic modals in the parallel corpus, MEC is consulted to provide another source of evidence

<sup>11</sup> For more information and examples, refer to Palmer (1990: 69-73) and El-Farahaty (2015: 68-70).

for the typical use of deontic modals in English and to see whether the translated corpus is comparable.

PEC consists of 219,212 Arabic words (243,486 tokens) and 206,318 English words (238,165 tokens). The original corpus includes the most current ratified constitutions of 19 Arabic countries and includes a sub-corpus of Preambles<sup>12</sup>. The corpus was collected from the World Intellectual Property Organisation (WIPO) and CONSTITUTE. It was then annotated and uploaded on Sketch Engine<sup>13</sup>. MEC (557,086 English words/ 677,056 tokens) was compiled<sup>14</sup> to provide some techniques of advanced comparative analysis (cf. Biel 2014). It comprises the up-to-date revised versions of the constitutions of eight countries whose formal language is English, the earliest revised version was Australia in 1985, and the latest revised version was the USA in 2016. These countries are Australia, Canada, Ireland, New Zealand, Singapore, South Africa, United Kingdom<sup>15</sup>, and the United States of America. The corpora were compiled, annotated and uploaded on Sketch Engine (Kilgarriff et al. 2014) which is the toolkit used for the quantitative analysis. It noteworthy that there is no consistency in the use of English across the above listed diverse regions, as demonstrated by Corpus Linguistics studies that there are different “world Englishes”, hence the limitations of the MEC corpus for “techniques of advanced comparative analysis”.

The methodology is divided into two phases: quantitative frequency analysis of the different variants of deontic modal expressions of obligation in the Arabic Corpus. By undertaking this frequency analysis, this paper introduces a typology of modal expressions in Arabic constitutions that can be indicative of the various modal expressions used in other Arabic legislative documents. The second phase will be qualitative analysis of the techniques used to translate Arabic modals into English modals. The aim of comparing the original Arabic text to its English translation is to analyse the techniques of translating the wide range of modal expressions identified in the first phase of analysis and see patterns of discrepancy, i.e. if translated modal expressions are either a stronger or weaker modal expression<sup>16</sup>, or if “they are placed on a different scale representing a different system of modality” (Badran 2001: 52). Then, a comparison to the MEC will be undertaken.

## 6. Analysis of deontic modality in the Arabic corpus

As discussed in section 4, Arabic expresses deontic obligation through the present tense (imperfect), certain lexical verbs, nouns, prepositions, particles and special phrases. These will be introduced in detail in this section.

<sup>12</sup> For more information on the original corpus, see Brierley & El-Farahaty 2019.

<sup>13</sup> The corpus was annotated in 2018 and uploaded in Sketch Engine by Abdulrahman Alosaimy as research assistant (and then a postgraduate in the School of Computing, University of Leeds) and now a lecturer at the Al Imam Mohammad Ibn Saud Islamic University, Riyadh, KSA.

<sup>14</sup> This corpus was collected and uploaded in Sketch Engine by Abdulrahman Alosaimy (see footnote above).

<sup>15</sup> The UK does not have a codified constitution, and the version used in this corpus is available on the Constitute Project Website. This version is compiled from: “texts collected from legislation.gov.uk. This complete Constitution has been generated from excerpts of texts from the repository of the Comparative Constitutions Project and distributed on [constituteproject.org](http://constituteproject.org)”. (Constitute Project): [https://www.constituteproject.org/constitution/United\\_Kingdom\\_2013.pdf?lang=en](https://www.constituteproject.org/constitution/United_Kingdom_2013.pdf?lang=en)

<sup>16</sup> For more information about the modal strength in translation, refer to Biel (2014) and Sathachai & Kenny (2019).

### 6.1. Deontic modality of obligation

Tables 1 and 2 introduce the list of Arabic modal expressions of obligation in the Arabic Corpus. *n* stands for the total size of the corpus, *m* for the calculated counts per million and *freq* for the frequency of the search term.

**Table 1. Frequency of modal expressions of obligation in the Arabic Corpus**

Arabic modal	Romanised		Syntax	n/m	
	Form	English Equivalent		Frq.	
وجب	wajaba	must/be incumbent on	verb, past tense	40	164.28
وجبت	wajabat	must/it is incumbent on	verb, past tense, with a fem pronoun	1	4.11
يجب	yajib	must/it is incumbent on	verb, present tense	148	607.84
تجب	tajib	must/it is incumbent on	verb, present tense, with a fem pronoun	4	16.43
يوجب	yūjib	necessitates	verb, present tense	4	16.43
تعين	ta <sup>ʿ</sup> ayana	be incumbent upon	verb, past tense	1	4.11
يتعين	yata <sup>ʿ</sup> ayn	is incumbent upon	verb, present tense	19	78.03
يحق	yaḥiq	is entitled to	verb, present tense	25	102.68
ينبغي	yanbaghī	should	verb, present tense	1	4.11
يلزم	yulzim	obligates/binds	verb, present tense	1	4.11
ما يلزم	mā yalzam	what is necessary	pronoun + verb , present tense	6	24.64
<b>Total</b>				<b>250</b>	<b>1,026</b>

Table 1 gives the whole list of modal expressions of obligation searched in the Arabic Corpus. This list comprises positive verbs of deontic obligation, and verbs in the past form and one modal expression. The overall count of these forms is (248) the most frequent of them is the positive present form of the modal verb يجب (yajib, must/it is incumbent upon) (148), the past form of the modal verb وجب (wajaba, must/it is incumbent on) (40). Other lexical verbs denoting obligation are the imperfect verb يحق (yaḥiq, is entitled to) (25); يتعين (yata<sup>ʿ</sup>ayn, is incumbent upon) (19) and its past form تعين (ta<sup>ʿ</sup>ayana, be incumbent upon) (1).

Deontic modality is also expressed through adjectives and nouns such as the concepts under discussion in table 2 below:

**Table 2. Phrases, nouns and adjectives conveying obligation in the Arabic Corpus**

Arabic modal	Romanised Form	English Equivalent	Syntax	Freq	n/m
لازم ، اللازم ، اللازمة	lāzim, al-lāzim, al-lāzimah	necessary	Adjective (indefinite masc; definite masc; definite fem)	90	369.63
واجب	wājib	duty/obligation	Noun	67	275.16
لازم و ضروري	lāzim wa ḍarūri	obligatory and necessary	Adjectives	1	4.11
من الضروري	min al-ḍarūri	it is necessary	Prepositional phrase	1	4.11
<b>Total</b>				<b>159</b>	<b>653.01</b>

Table 2 presents other adjectives and nouns which convey obligation such as the adjective لازم (lāzim, necessary) and its definite forms اللازم (al-lāzim, def, masc), اللازمة (al-lāzimah, def, fem) (90) and the nominal form واجب wājib (duty/obligation) (67). Despite the high frequency of these adjectives and nouns, some of them denote obligation whereas the majority of them are vague and indeterminate. They are used to lay a moral duty, not an obligation. Although drafted constitutions should be concise and intelligible, the use of adjectives such as necessary and appropriate is common in legal discourse, and usually, criteria of evaluating these terms are not specifically clear (Engberg & Heller 2008, El-Farahaty 2016).

## 6.2. Deontic modals of prohibition in the Arabic corpus

Deontic modality of prohibition “may be considered as an obligation to refrain from performing or acting. Therefore, the exponents of prohibition are usually the exponents of obligation followed by *not* or other forms of negative sentences” (Matulewska 2010: 82). More specifically, “‘may not’ is used in English to express general prohibitions and ‘shall not’ to express criminal prohibitions” (Rosenbaum 2007: 23). In the Arabic Corpus, prohibition is expressed by both positive lexical verbs and negative verbs (see table 3). The overall count of these verbs in the corpus is (608), the most frequent of which is the negative verb لا يجوز (lā yajūz, may not/it is not allowed/it is not permissible) (470), a negative form of the permission modal يجوز (yajūz, may). It denotes both forcible prohibition and lack of permissibility. In another small scale study, El-Farahaty (2015) found that it is the most frequent modal of prohibition. The second frequent modal is يمكن (lā yumkin, it is not allowed) (66) which is negative form of the permission modal يمكن (yumkin, it is allowed/it is permissible).

Positive lexical verbs denoting prohibition are يحظر (yahẓur, prohibits/forbids/prevents) (49) and يمنع (yamna<sup>c</sup>, prohibits/forbids/prevents) or its passive form يُمنع (yumna<sup>c</sup>, it is forbidden) (11). Other less frequent negative verbs include لا يحق (lā yaḥiq, is not entitled to) (6) and لا يمنع (lā yamna<sup>c</sup>, does not prohibit/ prevent) (4) and لا يجب ألا (yajib <sup>c</sup>allā, must not) (2), the latter negating the proposition not the verb, so it is not the direct negative of the positive verb يجب (yajib, must). There is no occurrence of لا يجب (lā yajib, must not) the direct way of expressing prohibition (Badawi, Carter & Gully 2004: 398).

**Table 3. Frequency of modal expressions of prohibition in the Arabic Corpus**

Arabic modal	Romanised Form	Type of Modality	English Equivalent	Syntax	frq.	n/m
لا يجوز	lā yajūz	prohibition	it is not allowed	negative particle+ verb, present tense	470	1.930
لا يمكن	lā yumkin	prohibition	it is not allowed	negative particle+ verb, present tense	66	271.06
يحظر	yahẓur	prohibition	prohibits/forbids/prevents	verb, present tense	49	201.24
يمنع	yamna <sup>c</sup>	prohibition	prohibits/forbids/prevents	verb, present tense	11	45.17
لا يمنع	lā yamna <sup>c</sup>	prohibition	it is prohibited/forbidden	verb, present tense	11	16.43
لا يحق	lā yahiq	prohibition	does not prohibit/ prevent	negative particle+ verb, present tense	4	24.64
لا يحق	lā yahiq	prohibition	is not entitled to	particle of negation + verb, present tense	6	8.21
يجب ألا	yajib <sup>c</sup> alla	prohibition	must not	verb, present tense + negative particle	2	8.21
<b>Total</b>					<b>608</b>	<b>2,497</b>

## 7. Discussion of modal frequency and deontic modality in the Arabic Corpus

The number of modal expressions given in table 1 and 2 does not reflect the actual modality in the Arabic Corpus. Modality is represented throughout the whole corpus, almost in every article by a wide variety of lexical verbs as a form of “constitutive statements which may serve laying down the law” (Trosborg 1997: 50), in the imperfect which is used in Arabic to express mood. It denotes that this action has already started and yet to be finished (El-Farahaty 2015: 121). These verbs are normally translated to the modal verb of obligation ‘shall’. The “latter is legally binding” (Tiersma 1999: 106), and it guarantees that the act will happen (El-Farahaty 2015: 121). A quick search into the PEC we retrieved (4695) occurrences of ‘shall’ in its positive form and (224) in its negative form (shall not) that express prohibition. This high frequency of ‘shall’ confirms that constitutive statements including the nominal declarative statements have been translated into ‘shall’ in most of the cases<sup>17</sup>. This can be tested statistically to figure out the significance of the high frequency of ‘shall’ as discussed below and examined further in Table 7. By way of illustration, the following excerpt shows that all the nominal declarative statements are translated into ‘shall’ plus the verb.

المادة 1: الجزائر جمهورية ديمقراطية شعبية . و هي وحدة لا تتجزأ  
 المادة 2: الإسلام دين الدولة  
 المادة 3: اللغة العربية هي اللغة الوطنية و الرسمية . تظل العربية اللغة الرسمية للدولة.

Algeria shall be a People’s Democratic Republic. It shall be one and indivisible. Article 2 Islam shall be the religion of the State. Article 3 Arabic shall be the national and official language. Arabic shall remain the official language of the State (Constitution of Algeria)

It is noteworthy to mention that, although the word ‘shall’ occurred 4,695 times, only 130 times are used as deontic obligation verbs, after manually refining the hits.

<sup>17</sup> It is noteworthy to mention that nominal declarative statements are not particularly the standard/common way of imposing obligation. Arabic uses the declarative imperfect verbs to convey obligation.

It was used for different senses such as assertion/intention (e.g. I shall be loyal to the king. As to the use of ‘shall’ for future references, it is not common today, and if it is used, it follows the pronoun ‘I’ and ‘we’ according to the Oxford English Dictionary<sup>18</sup>. That is why deontic modals do not occur with ‘I’ and ‘we’ in order to avoid the overlapping sense (El-Farahaty 2015: 69). This is why the bigram ‘I shall’ is not captured in the MEC at all, while ‘we shall’ occurs only once in an example derived from an English translation of the Magna Carta that dates back to 1215.

We have granted to be holden within this our Realm, as much as appertaineth to Us and our Heirs, we shall observe; and all Men of this our Realm, as well Spiritual as Temporal, as much as in them.

On the other hand, the PEC contains no instances of ‘we shall’, while ‘I shall’ occurred 12 times. Another form of deontic modality of obligation, which is not included in the above lists is the preposition على (ʿla, on) that occurred 2465 times as a preposition and 27 times (110.88 per million) for deontic modality of obligation, exceeding the total score of the verb يحق (yahiq, is entitled to) or يتعين (yataʿayn, is incumbent upon). To function as a deontic obligation verb, على (ʿla, on), introduces the sentence to give the meaning of an imperative form. In this case, it is classified in Arabic grammar books as a preposition functioning as a verb like the following example derived from PEC.

على كل مواطن سوداني أن يدين بالولاء لجمهورية السودان.

It shall be the duty of every Sudanese citizen to pledge allegiance to the Republic of the Sudan (Constitution of Sudan)

The frequency analysis presented in the tables above showed that some deontic modals are not frequent in the Arabic Corpus under investigation. One example is the modal verb of obligation ينبغي (yanbaghi, should) which occurred only once in the whole corpus. This may be attributed to the fact that it imposes weaker obligation and that there is no clear evidence on its usage when it is not epistemic (Abdel-Fattah 2005: 39). The same applies to the modal phrasemes of obligation that are likely to be used in other Arabic genres such as من الضروري (min al-ḍarūri, it is necessary) and من الواجب (min al-wājib, it is obligatory), etc., the former happened once, and the latter two did not happen at all. It is known in Arabic that the perfect carries no mood and it expresses events that “either actually completed or regarded as such” (Badawi, Carter & Cully 2004: 62) but one frequent obligation modal verb is وجب (wajaba, must) (40) occurred in the Arabic Corpus. These past forms continue to be used in legal texts and they mean the same as the imperfect form, but if the imperfect forms of the same verb are used in legislative legal drafting, drafters should not use the past form.

In terms of prohibition, there was no hit of the modal expression لا يجب (lā yajib, must not), the direct opposite of the obligation verb يجب (yajib, must) which is the most frequent modal of obligation in the Arabic Corpus. It is worth noting that لا يجوز (lā yajūz, may not/it is not allowed), the negative form of يجوز (yajūz, may), is used by Islamic jurisprudence to mean prohibited or not desirable. It is frequent in modern legal discourse and in formal legal settings to regulate behaviour, i.e. to stipulate the rules of the law, because “most modals are polysemous and their mean-

<sup>18</sup> <https://www.lexico.com/en/definition/shall>.

ing often changes when they are negated” (Biel 2014: 340). For example, ‘may not’ is used in English for a negative command: “This additive may not be used in foods (prohibition)” (Biel 2014: 341). However, it is not as strong as لا يجب (lā yajib, must not), or ألا يجب (yajib allā, must not) and can be vague.

## 8. Translation of Arabic deontic obligation into English

In this section, the translation of deontic modality of obligation into English in the PEC will be analysed. Due to the massive amount of data, in this section, we will focus more on the most common deontic modals and their translation into English.

**Table 4. Translation of Arabic modal expressions of obligation in PEC**

Arabic Word	Romanised Form	Freq.	n/m	PEC	Freq.	n/m
وجب	wajba	40	164.28			
				must	22	92.372
				shall	17	71.379
				should	1	4.19
وجبت	wajabat	1	4.11	shall	1	4.19
يجب	yajib	148	607.84			
				shall	84	352.69
				must	46	193.14
				should	5	20.99
				are to, is required to, are held to	4	16.79
				has to, has the duty to, the right to)	3	12.95
				cannot	2	8.39
				not translated (embedded in meaning)	2	8.39
تجب	tajib	4	16.43	must	3	12.95
				shall	1	4.19
يوجب	yūjib	4	16.43			
				require, requiring	4	16.79
تعين	ta'ayna	1	4.11			
				shall	1	4.19
يتعين	yata'ayn	19	78.03			
				must	10	
				shall	7	
				is held to	1	4.19
				should	2	
يحق	yahiq	25	102.68			
				shall	17	71.379
				has the right to, has the power to	3	12.95
				may	2	8.39
				must	1	4.19
				might	1	4.19
				are eligible to	1	4.19
ينبغي	yanbaghī	1	4.11			
				shall	1	4.19
يلزم	yulzim	1	4.11			
				shall (have the obligation)	1	4.19
ما يلزم	mā yalzam	6	24.64			
				may (take the necessary measures)	3	12.95
				shall (take the necessary measures)	3	12.95
<b>Total</b>		<b>248</b>			<b>249</b>	<b>1,045</b>

Translators have used an even wider variety of modals in translating the wide variety of the modal expressions used in drafting the Arabic constitutions into English. However, as noted earlier, the MEC could be used for triangulation to account for variation in translation strategies. Table 4 above shows a list of such variation where modals, semi-modals and modal phrasemes are used. The most frequent modal verb of obligation *يجب* (yajib, must/is incumbent upon) has been translated into 'shall' (84) and 'must' (46) (with the highest probability score of 352.69 and 193.14 per million respectively). This high frequency of the modal 'shall' as an equivalent of *يجب* (yajib, must/is incumbent upon) is a clear evidence of the target language (TL) impact, e.g. exaggeration of TL features (Baker 1993) or gravitational pull hypothesis (Halverson, 2007). It is noteworthy that 'must' was used in the case of procedural obligation as in the following example:

1. كل شخص يُقبض عليه يجب ان يبلغ اسباب توقيفه و حقوقه، و لا يجوز الاستمرار في توقيفه امام السلطة الادارية الا بامر من السلطة القضائية المختصة.

Any person who is arrested must be informed of the reasons for his arrest and his rights, and may not be incarcerated in front of the administrative authority except by an order of the competent judicial authority (Constitution of Syria)

Translators have also opted for other forms of modality such as the use of the semi-modals (are to, have to) (Palmer 1990: 25), lexical verbs (is required), nouns (the duty) and (should):

2. و يجب على الوزراء و جميع موظفي الدولة تقديم الشهادات و الوثائق و البيانات التي تطلب منهم.

Ministers and all State employees are to provide such testimony, documents and statements are asked of them. (Constitution of Bahrain)

3. المادة 80 : يجب على كل مواطن ان يحمي الملكية العامة ، و مصالح المجموعة الوطنية.

Article 80 The duty of every citizen is to protect public property and the interests of the national community and to respect the property of others. (Constitution of Algeria)

4. و يجب على كل واحد ان يشارك في تمويل التكاليف العمومية ، حسب قدرته الضريبية.

Everyone should participate in the financing of public expenditure according to his ability to contribute. (Constitution of Algeria)

5. فاذا كان الطالب صادرا عن مجلس النواب وجب ان يكون موقعا من ثلث اعضائه.

Should the request emanate from the House of Representatives, it should be signed by a third of its members. (Constitution of Yemen)

The variation of the translation in the examples given above account for the fact that the modal itself has different shades of meaning of necessity (Abdel-Fattah 2005: 38). However, when *يجب* (yajib, must/is incumbent upon) collocates with

على (ala) (20 times), it denotes a stronger obligation. But 'should' used for the translation of يجب (yajib, present) and وجب (wajaba, past) denotes weaker obligation as it is used "for recommendations" (Manual for Drafting International Labor Office (ILO) instruments 2007). Also, the English Style Guide (2012: 35–36) requires EU drafters to use certain modals (e.g. shall, may) but not others (e.g. should), the latter being a less binding or weak form of obligation (Biel 2014: 341, Garzone 2013: 70).

Other lexical verbs denoting obligation are the imperfect (present) verb يحق (yahiq, is entitled to/has the right to) which collocates mostly with the preposition ل (li, to). Another lexical verb, conveying strong obligation is يتعين (yata'ayn, is incumbent upon) and the past form of it تعين (ta'ayna, be incumbent upon) and both forms of the verb collocate with the preposition على (ala, on). Out of the 40 instances, more than half of the examples containing these verbs are translated into 'shall' (25) and the remaining examples are translated into 'must' (11). 10 of them are the translation of the verb يتعين (yata'ayn, is incumbent upon) which conveys strong obligation in the Arabic text. A number of other forms such as 'may', 'might', 'is held to' (see table 4 above) have been used in a very few examples as equivalents to the obligation verb يحق (yahiq, is entitled to/has the right to). Examples of these two verbs are given below:

6. يحق للجماعات تأسيس مدارسها و القيام عليها لتعليم افرادها على ان تراعي الاحكام العامة المنصوص عليها في القانون.

Congregations shall have the right to establish and maintain their own schools for the education of their own members provided that they comply with the general provisions of the law... (Constitution of Jordan)

7. يصدر رئيس الجمهورية القوانين التي يقرها مجلس الشعب ، و يحق له الاعتراض عليها بقرار معطل خلال شهر من تاريخ ورودها الى رئاسة الجمهورية.

The President of the Republic shall pass the laws approved by the People's Assembly. He might also reject them through a justified decision within one month of these laws being received by the Presidency (Constitution of Mauritania)

8. ويبين القانون الاحوال التي يتعين فيها حضور محام عن المتهم .

The law specifies the cases where a counsel for defense must represent an accused person (Constitution of UAE)

9. في حالة التلبس يجب اخطار المجلس بما اتخذ من اجراءات في حق العضو المخالف و في غير دور انعقاد المجلس يتعين ان يتم ذلك الاخطار عند اول انعقاد لاحق له.

In case of flagrante delicto, the Council must be notified of the measures taken against the offending Member; where the Council is not in session, such notification should be made at the first subsequent session (Constitution of Qatar)

**Table 5. Translation of adjectives and nouns of obligation**

Arabic Word	Romanised Form	Frq.	n/m	PEC	Frq.	n/m
لازم ، اللازم اللازمة	lāzim, al- lāzim, al- lāzimah	90	369.63			
				necessary	72	
				as may be necessary, to the extent		20.99
				necessary	5	
				required, requirements, due		25.19
				attention	6	
				as quickly as possible	1	4.19
				requisite	1	4.19
				in accordance with	1	4.19
				should	1	4.19
				(ignored)	3	12.95
واجب	wājib	67	275.16			
				duty (56 only denote obligation)	63	264.52
				obligation	4	16.79
لازم و ضروري	lāzim wa ḍarūri	1	4.11			
				it is necessary	1	4.19
من الضروري	min al- ḍarūri	1	4.11			
				it is essential	1	4.19
<b>Total</b>		<b>159</b>	<b>653.14</b>		<b>159</b>	<b>667.60</b>

Table 5 gives the translation of a frequent category of modal expressions of obligation. The adjective لازم (lāzim, necessary) and its definite forms اللازمة ، اللازم ، (al-lāzim, def, masc and al-lāzimah, def, fem). The most common term used is ‘necessary’ (72 out of 90), 16 out of the remaining 18 examples were translated into different terms and expressions: ‘as may be necessary’, ‘to the extent necessary’, ‘required’, etc... Whereas some of the translations carry a modal meaning of obligation (such as required, should), these are less frequent and not representative of modality. The rest of the translations convey the same meaning of uncertainty and vagueness of these terms in the source text:

10. المادة 150 تعمل السلطات الاتحادية على استصدار القوانين المشار إليها في هذا الدستور بالسرعة اللازمة، لكي تحل محل التشريعات و الاوضاع الحالية ، و خاصة ما يتعارض منها مع احكامه .

Article 150: The federal authorities shall strive to issue the laws referred to in this Constitution as quickly as possible so as to replace the existing legislations and systems (Constitution of UAE)

The nominal form of the verb واجب (wajaba, must/it is incumbent on): واجب (wājib, duty/obligation) occurred (67) times in the corpus. A closer look at the KWIC in parallel concordance lines, the meaning of واجب (wājib) carries a modal meaning of obligation when it collocates with the preposition على (‘alā ((31 cases). It was translated into two nouns: ‘duty’ (63), 56 of which collocate left with the verb ‘to be’ or the modal verb ‘shall’ and collocate right with ‘incumbent upon’. The other seven instances are denoting obligation when they collocate with the adjective مقدس

(muqadas, sacred). The noun واجب (wājib) has also been translated into the noun ‘obligation’ (4). For illustration, refer to the following examples:

11. العمل واجب على كل مواطن، تفتضيه الكرامة و يستوجبه الخير العام.

Work is the duty of every citizen, is required by personal dignity and is dictated by the public good. (Constitution of Bahrain)

12. احترام النظام الاساسي ل الدولة و القوانين و الاوامر الصادرة من السلطات العامة تنفيذًا لها و مراعاة النظام العام و احترام الآداب العامة واجب على جميع سكان السلطنة.

Observing public order, and respecting public morals is a duty incumbent upon all residents of the Sultanate (Constitution of Oman)

13. اداء الضرائب و الرسوم و التكاليف العامة واجب وفقا للقانون.

Payment of taxes, fees and public costs shall be a duty in accordance with the law (Constitution of Syria)

14. التعليم الاساسي حق ل الطفل و واجب على الاسرة و الدولة.

Fundamental instruction [enseignement] is a right of the child and an obligation of the family and of the State. (Constitution of Morocco)

It collocates with the adjective ‘sacred’ as in واجب مقدس (wājib muqadas, sacred duty) (see concordance lines in figure 1 below) when it occurs in the context of national duty, for example:

الدفاع عن الوطن واجب مقدس

Defense of the country is a sacred duty

الدفاع عن الوطن واجب مقدس

Compulsory military service shall be sacred duty

**Figure 1: Parallel concordance lines of the noun واجب wājib ‘duty’ with the collocate مقدس muqadas ‘sacred’**

The screenshot shows the Sketch Engine interface. At the top, there is a search bar with the query 'واجب' and a filter for 'Leeds Parallel Corpus of Arabic-English Constitutions - Arabic'. Below the search bar, there is a table of concordance results. The table has two columns: 'Leeds Parallel Corpus of Arabic-English Constitutions, Arabic' and 'Leeds Parallel Corpus of Arabic-English Constitutions, English'. The results are listed in rows, each with a file number, Arabic text, and English text. The Arabic text is in a light blue background, and the English text is in a light yellow background. The results show various instances of the word 'واجب' (wājib) used in different contexts, often followed by the word 'مقدس' (muqadas) or 'مقدسات' (muqadasat), which translates to 'duty' and 'sacred' respectively in English.

When واجب wājib (duty/obligation) forms part of an idafa<sup>19</sup> construct, it does not carry a deontic modal of obligation as in this example:

15. الثروات الطبيعية و المنشآت و المؤسسات و المرافق العامة هي ملكية عامة ، تتولى الدولة استئثارها و الاشراف على ادارتها لصالح مجموع الشعب ، و واجب المواطنين حمايتها .

Natural resources, facilities, institutions and public utilities shall be publicly owned, and the State shall invest and oversee their management for the benefit of all people, and the citizens’ duty is to protect them. (Constitution of Syria)

### 8.1. Translation of deontic modals of prohibition

The most frequent deontic modal of prohibition لا يجوز lā yajūz, may not/it is not allowed), the direct equivalent of which in English is either ‘shall not’ or ‘may not’ has been translated into many different ways (see table 6 below) but the top three categories are the negated proposition initiated by ‘no’/ ‘none’ plus (‘shall’, ‘may’, or ‘can’); ‘shall not’, ‘shall only be’ and ‘shall be prohibited’. It has also been translated to less frequent modal verbs and expressions such as ‘cannot’, ‘it is not permissible’, ‘may only be’, ‘neither ... nor’ ‘may/shall ...’, ‘under no circumstances may ...’, ‘can only’, ‘it is forbidden’, ‘it is not allowed’, ‘it is impermissible’, and very

<sup>19</sup> “Arabic distinguishes simple idafa constructions which are similar to the simple ‘s’-possessive structures in English such as جامعة ليدز / the University of Leeds where the head noun (the annexation-head) (Dickins 2013: 59) جامعة is / University and the modifier (annexe) (Watson 1993: 173) ليدز / Leeds, and compound idafa constructions, involving recursion, such as طلاب جامعة ليدز / the students of the University of Leeds” (El-Farahaty, 2017: online) (For more information on this structure, refer to Ryding 2005)

rarely ‘must not’ which, according to Bázlik & Ambrus (cf. Krapivkina 2017: 310), is the same equivalent of ‘shall not’.

**Table 6. Translation of the modal expressions of prohibition in the PEC**

Arabic Word	Romanised Form	Freq.	n/m	PEC	Freq.	n/m
لا يجوز	lā yajūz	470	1.930	no...shall, no/none...may, no...can may not shall not, shall only be, shall be prohibited cannot it is not permissible may only be neither ... nor may/shall ... under no circumstances may ... can only it is forbidden it is not allowed it is impermissible must not	161 145 91 23 17 11 7 5 5 2 1 1 1	245.17 214.16 134.40 33.97 25.10 16.24 10.33 7.38 7.38 2.95 1.47 1.47 1.47
لا يمكن	lā yumkin	66	271.06	no... shall/ may , no ... Can, no... is admissible may not cannot may only, shall only, can only, only ... can shall not not translation	16 15 13 13 7 2	23.63 22.15 19.200 19.200 10.33 2.95
يحظر	yahzur	49	201.24	shall be (prohibited, forbidden, shall not, no... shall, is prohibited, forbidden shall not may not, no ... may no... shall	25 18 3 2 1	36.92 26.58 4.43 2.95 1.47
يمنع	yamna <sup>c</sup>	11	45.17	may (prohibit), may not shall (prohibit) it is forbidden	6 3 2	8.86 4.43 2.95
لا يمنع	la yamna <sup>c</sup>	4	16.43	no ... shall no ... may	3 1	4.43 1.47
يجب الا	yajib allā	2	8.21	shall not	2	2.95
لا يحق	lā yahiq	6	24.64	shall not may not, no ... may no... shall	3 2 1	4.43 2.95 1.47
<b>Total</b>		<b>608</b>			<b>608</b>	<b>2,552</b>

Examples of this category are given below:

16. لا يجوز أثناء دور الانعقاد اتخاذ اجراءات جزائية نحو اي عضو من اعضاء المجلس او القاء القبض عليه اذا اقترف جرما جزائيا الا باذن المجلس ما خلا حالة التلبس بالجريمة ( الجرم المشهود) .

No Chamber member may be prosecuted or arrested, during the session, for committing a crime, unless authorised by the Chamber, except in case he is caught in the act (Constitution of Lebanon)

17. لا يجوز الغاء او تعديل اي حكم وارد ب هذه الوثيقة الا بحكم اخر صادر عن المجلس الوطني الانتقالي المؤقت و بأغلبية ثلثي اعضاء المجلس .

No cancellation or amendment shall be made to any provision contained herein save with another provision issued by the Interim Transitional National Council (Constitution of Libya)

18. و لا يجوز لعضو مجلس الشعب ان يمنح تأييد ه الا لمرشح واحد .

and no member of the assembly might support more than one candidate (Constitution of Syria)

19. لا يجوز اللجوء الى حل الجمعية الوطنية من جديد طيلة الاثني عشر ( 12 ) شهرا التي تلي هذه الانتخابات .

A new dissolution cannot proceed during the twelve (12) months following these elections. (Constitution of Mauritania)

Translation of لا يجوز (lā yajūz, may not/it is not allowed) in the above examples vary; in 16 and 17 it is a conditional prohibition, i.e. “the prohibition to perform only in specific circumstances” (Matulewska 2010: 83), but it is translated into a negative proposition plus the modal verb (‘may’ in example 16 and ‘shall’ in example 17) plus the passive. In example 19, it is translated into ‘cannot’ which functions to instruct through law “what cannot take place” (Trosborg 1997: 48). Example 17 is translated into a negative proposition plus the modal verb “might”, a modal verb that is not common in the PEC, it just occurred few times in the “Constitution of Syria”.

The lexical verb of strong prohibition يحظر (yaḥẓur, forbids/ prohibits/prevents) is translated in different ways throughout the corpus: positive ‘shall’ collocated with the lexical verbs of prohibition ‘shall be prohibited’, and ‘shall be forbidden’, ‘shall not’ or negative command ‘no... shall’, as well as other less frequent forms such as the declarative ‘is prohibited’, ‘it is not permissible’, ‘may not’ and ‘no... may’. Examples of these include:

20. اولاً، يحظر كل كيان او نهج يتبنى العنصرية او الارهاب او التكفير او التطهير الطائفي او يحرض او يمهد او يمهّد او يروج او يبزر له ، و بخاصة البعث الصدامي في العراق و رموزه و تحت اي مسمى.

First: Any entity or program that adopts, incites, facilitates, glorifies, promotes, or justifies racism or terrorism or accusations of being an infidel (takfir) or ethnic cleansing, especially the Saddamist Ba’ath in Iraq and its symbols, under any name whatsoever, shall be prohibited (Constitution of Iraq)

21. المادة 34: المتهم بريء حتى تثبت ادانته في محاكمة قانونية تؤمن له فيها الضمانات الضرورية لممارسة حق الدفاع . و يحظر ايداء المتهم جسمانيا او معنويا.

Article 34 The accused is innocent until proved guilty in a Court of Law which shall guarantee him the necessary sureties to exercise his right of defense. The accused shall not be bodily or mentally injured (Constitution of Kuwait)

22. و يحظر على اي فرد او هيئة او جهة او جماعة انشاء تشكيلات او فرق او تنظيمات عسكرية او شبه عسكرية .

No individual, organisation, entity, or group shall be allowed to create military or quasi-military squadrons, groups or organisations (Constitution of Egypt)

23. يحظر الرق و الاتجار بالرقيق جميع اشكاله. و لا يجوز استرقاق احد او اخضاعه للسخرة .

Slavery and slave trade in every form is prohibited. No person shall be held in slavery or servitude (Constitution of Sudan)

24. يحظر النص في القوانين على تحصين اي قرار او عمل اداري من رقابة القضاء .

Laws may not contain any provisions that provide immunity to any administrative decision or action or against judicial review (Constitution of Palestine)

The examples given above show the use of strong prohibition in Arabic in cases where the topics deal with the judiciary, slavery, terrorism but the translation itself varies where ‘shall’ was used in most of the cases but in few cases ‘may not’ was also used. Although it is used to account for prohibition (Biel 2014), it is not as strong as the use of ‘shall not’ which is used as an equivalent of the same verb in the rest of the examples discussing similar topics. ‘May not’ can also be ambiguous “in spite of the fact that the positive form of ‘may’ has a different meaning from ‘must’ and ‘shall’, the negative form is the same. The negative form is used to express prohibition, something that is forbidden, and that is why this form should normally be avoided. Therefore may+not is used in the sense of limiting the rights or the powers of a provision” (O’Shea 2015: online).

يمنع (yamna<sup>c</sup>, prohibits/forbids/prevents) or the passive form, as well as its negative form لا يمنع (lā yamna<sup>c</sup>, does not forbid/ prohibit/ prevent) are the second frequent positive modal of prohibition (15). The three forms have been translated into ‘may + prohibit/be forbidden’, ‘shall + prohibit/be forbidden’, and ‘it is forbidden’ ‘no... shall’, and no ... may’. Examples 26 and 27 have the same modal verb of prohibition in the passive form, but they are translated differently into ‘may not’ (26) and into the declarative passive structure (it is forbidden) (27).

25. يمنع القانون الاحتكار و المنافسة غير النزيهة .

The law shall prohibit monopoly and unfair competition practices (Constitution of Algeria)

26. يمنع الجمع بين عضوية الحكومة و عضوية مجلس نواب الشعب .

Membership of the government and of the Assembly of the People’s Representatives may not be combine. (Constitution of Tunisia)

27. يمنع الاضرار في ميادين الدفاع و الامن الوطنيين.

It is forbidden in the domains of Defense and of National Security (Constitution of Mauritania)

### 9. Deontic modals in the monolingual corpus

The classification of modals is based on Biel’s (2014) analysis of the EN Acquis (regulations and directives). However, more modals such as ‘will’, ‘will not’, have been searched in this corpus and have been added in the table below (this corpus also included more instances of ‘shall’). It occurred 4,825 times in the corpus (with a probability score<sup>20</sup> of 7, 126.44 per million) in both positive, (4,054) to convey obligation, and negative forms (642), ‘shall’ plus negative (129), to convey prohibition. ‘Must’ is the third most frequent obligation modal (1,697/ 2,506.43 per million) in both the positive (1,625) and its negative form (72). ‘Might’ (50/ 37.84 per million) occurs mostly in its positive form (48) and (2) instances only in the negative form, while ‘Should’ occurs (133/ 196.438 per million) in the positive form only.

One can also notice that there is a wide gap between the frequencies of some items in the two corpora, but the difference between the observed frequency and their expected values<sup>21</sup> can be compared using Loglikelihood (LL)<sup>22</sup> statistical test as shown in Table 7 below.

**Table 7. The deontic modals of obligation in PEC and MEC**

Modal	PEC N: 243,486	MEC N: 677,056	LL	P.
shall	4,919	4,825	2510.77	0.000
must	204	1,697	289.32	0.000
is to/are to	44	562	146.81	0.000
should	112	133	41.78	0.000
have/has the right to	241	95	299.19	0.000
is/are entitled to	23	49	1.07	0.300
ought to	1	31	12.81	0.000
need to	3	23	3.51	0.061
have to/has to	7	7	3.51	0.061
<b>Total</b>	<b>635</b>	<b>2597</b>	<b>81.88</b>	<b>0.000</b>

<sup>20</sup> The probability score or expected value is attained by normalising the observed values (the actual occurrence of the hits) of two different sets of numbers. By normalising the output counts, we can see how probable that X would occur in any text irrespective of the data size. The formula for calculating normalised counts is as follows: (number of occurrences of the hit/length of text) x 1m).

<sup>21</sup> See the footnote above.

<sup>22</sup> Loglikelihood statistical test is used to spot the most significant items in the two corpora regardless of their unequal size. In other words, it can show how significant the result is.

In the above table, the greater the difference between the frequencies and the expected values, the less likely it is due to chance. Therefore, one can notice that most significant modals in both corpora are ‘shall’, ‘has/have the right to’, and ‘must’ respectively. The modal “shall” occurs 130 times only as a direct equivalent to the Arabic obligation verbs, but overall it occurred more than it does in the MEC, when it was a translation of constitutive verbs (see section 7, Discussion of modal frequency in the Arabic Corpus).

The same applies to the modal verb ‘must’ which occurs 204 times in PEC and 1,625 times in MEC. The Arabic Corpus uses more constitutive verbs than the verb *يجب* (yajib, must) denoting procedural obligation. This confirms what Biel (2014: 343) found about the avoidance of *musi* ‘must’ in the Polish law. According to Biel (ibid.), this may be “due to its very strong imposition of obligation, which may be perceived as too emotional and personal, and hence less impartial”. An example of the constitutive verbs is the imperfect verb *يكون* (is) that has been translated into “must”.

It proved hard to compare the deontic modals of prohibition in the translated PEC (refer to table 6 above) to their counterparts in the non-translated MEC (table 8 below) due to the wide variety of modals and phrases used in the PEC, most of which were found by manual parallel search in the concordance lines. What can be concluded from this comparison is that ‘shall plus negative’ and ‘may plus negative’ are the top frequent prohibition modals used in the PEC and in the MEC despite the difference in corpora size. Also other prohibition modals such as ‘must not’ happened only once in the PEC compared to 72 times in the MEC in spite of the plain language guidance on using ‘must not’ as a negation of ‘must’ and ‘shall not’ as a negation of ‘shall’.

The PEC has used many structures and phrases to express what can happen or not under certain circumstances/conditions using words such as ‘only’ with the positive modal (only ... can; can ... only; shall ... only; may ... only). Other phrases and verbs in the passive form denoting strong prohibition have been used, such as (under no circumstances; is prohibited/forbidden). Likewise, more diverse modal verbs and semi-modals have been over-represented in the PEC but they were not necessarily equally represented in the MEC.

**Table 8. Modals of prohibition in PEC and MEC**

Modal	PEC N: 243,486	MEC N: 677,056	LL	P.
shall not	244	586	3.62	0.057
no ... shall	62	130	3.23	0.072
may not	221	158	170.01	0.000
no ... may	62	48	43.69	0.000
must not	8	72	13.50	0.000
cannot	63	71	25.91	0.000
should not	4	16	0.45	0.501
might not	3	2	2.48	0.115
<b>Total</b>	<b>667</b>	<b>1083</b>	<b>113.33</b>	<b>0.000</b>

In Table 8, the p-value<sup>23</sup> that is close to (0) shows that the difference is more statistically significant; while the values closer to (1) indicate that the difference is due

<sup>23</sup> The probability that the observed values are not the result of chance.

to chance. Accordingly, ‘might not’, ‘no... shall’, ‘shall not’ and ‘should not’ are less significant than ‘may not’, ‘no... may’, ‘must not’ and ‘cannot’ in the PEC and MEC.

## 10. Conclusion

In this paper, deontic modality of obligation in *The Leeds Annotated Parallel Corpus of Arabic-English Constitutions* (PEC) and in *The Monolingual Corpus of English Constitutions* (MEC) have been discussed. Regarding the first research question, the paper introduced a detailed classification of the deontic modality of obligation and prohibition in the corpus of Arabic constitutions. This classification can be used in the analysis of modal expressions in other legislative documents and international documents. It could also be used to compare between the list of modal expressions used in classical Islamic documents and modern legal documents the analysis showed that the deontic modal expressions of obligation and prohibition are varied and are expressed through lexical verbs, adjectives, nouns, prepositions, particles, and phrasemes.

Translation of these expressions from Arabic into English, as raised in the second research question, follow the source text variations and it does not necessarily strictly follow the conventions of deontic modality of obligation in English. Variety in translating Arabic obligation modals into English confirms similar findings on research done on Italian-English and English-Thai legislative translation, Seracini (2015) and Sathachai and Kenny (2019), respectively.

Lexical verbs frequently express deontic modality of obligation in the imperfect tense in the Arabic Corpus, and these are translated mostly into ‘shall’ in the PEC. In legal drafting, consistency of the grammatical structures is paramount for maintaining clarity of legal texts. However, in spite of the frequent use of imperfect verbs, the legal drafter departs from the use of the imperfect verb to express obligation by the past form of the verb *وجب* (*wajaba*, must) (40) which carries no mood. The analysis revealed that the deontic modal verbs of obligation *ينبغي* (*yanbaghi*, should) seldom occurred in the whole corpus. This may be attributed to its weaker imposition of obligation. Other phrasemes such as *من الواجب* (*min al-wājib*, it is obligatory) did not occur in the Arabic Corpus at all. Legal drafters have used indeterminate adjectives such as *لازم* (*lāzim*, necessary), the use which conveys legal indeterminacy and leaves the legal texts open and negotiable for legal manoeuvres and legal assessment. Adjectives and nouns denoting obligation were translated into a variety of ways, ‘should’ and passive verb, ‘required’, among other phrasemes. Whereas these expressions carry a modal meaning of obligation (e.g. when the noun collocates with the preposition *على* (*‘alā*, on) or with the adjective *مقدس* (*muqadas*, sacred) translations of most of these terms convey the same meaning of uncertainty and vagueness expressed in the source text.

The strong direct negative form of the verb *يجب* (*yajib*, must) did not occur in the Arabic Corpus. It is often replaced by *لا يجوز* (*lā yajūz*, may not/it is not allowed), one of the most frequent modals of prohibition which denotes more than one meaning, forcible prohibition and lack of permissibility. Deontic modal verb of obligation *يجب* (*yajib*, must) was translated into English as ‘shall and ‘must’, the latter was used to denote forcible procedural obligation where the former is used in abstract general obligation. Translation of prohibition in the PEC was varied using a wide range of ‘shall’ in negative structures and almost no mention of ‘must not’. Lexical verbs ex-

pressing strong prohibition such as يحظر (yahẓur, forbids/ prohibits/prevents) were translated into strong prohibition in English but in some cases into ‘may not’ which conveys weaker prohibition.

In comparing the frequency of the modal expressions in the PEC and MEC, to answer the third question, we found that ‘shall’ is a most common modal verb in the drafting of monolingual constitutions and an equivalent of constitutive verbs in the Arabic Corpus despite the difference in the size of both corpora. This can be attributed to TL impact, exaggeration of TL features, i.e. translators are known to opt for more formal variants. Translation of deontic modals of prohibition varies in the PEC in comparison to the MEC, but both have used the most common modals of prohibition: ‘shall not’, ‘may not’ and ‘no ... shall’. ‘Must not’ was represented in the MEC and almost not existent in the PEC.

In spite of the variation of the modal auxiliaries in Arabic, and the variation of their translation into English, the common modals used in the MEC have been used in most of the cases. However, there was some variation in translating the same modal in Arabic (into English). This variation may be context-dependent, but also depends on the Constitution under discussion and the style used in each Constitution (something beyond the scope of this study)

By the publication of this corpus and this research, we hope this analysis would be helpful for translators and drafters alike. The qualitative analysis of both the Arabic Corpus and the parallel translations showed that many articles (topics) have recurred in almost all the constitutions, some of them used the same wording. Nevertheless, the translation of these articles varied from one Constitution to another due to lack of one general unified guidelines and lack of coordination between governments and translators. The current study has only focused on the translation of deontic modals of obligation and prohibition due to the limited capacity in this paper; a possible future endeavour will be to analyse the deontic modals of permission. Another possible useful study will be investigating the deontic modals of obligation and permission from English into Arabic. It would also be useful to compare the modal expressions and their translation in the current and older versions of the constitutions.

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