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***Modality in English, French and Arabic Biomedical Discourse: A
Contrastive Study of Drug Information Leaflets***

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of Arts in Applied Language Studies

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ABSTRACT

The focus of this research is in the area of a very specific genre of discourse which is drug information leaflets. It seeks to examine how English, French and Arabic express deontic modality in drug information leaflets and why this device is used in such kind of documents.

Such a study is important in order to provide some insights into the characteristics of English, French and Arabic in denoting modality in drug information leaflets, and most importantly to arrive at a better understanding of the function of deontic modality in the genre of drug information leaflets. The research approach adopted in this dissertation includes a descriptive analysis of a sample of six (6) leaflets; each leaflet provides the same version in three languages: English, French and Arabic. The findings from this research provide evidence that each of the three highlighted languages has its own structures, styles and preferences in expressing deontic modality in drug information leaflets and that the use of deontic modality in these texts is intentionally meant to present information in a fuzzy and vague way.

The main conclusions drawn from this study are: despite the remarkable differences and preferences specific to each of the three languages, these languages tend to use expressions of deontic modality as a manipulating instrument to change the attitude of patients.

Consequently, drug manufacturers generally resort to the use of deontic modality in drug information leaflets to decline any kind of responsibility.

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Introduction

Statement of the Problem

Modality is an important linguistic function in biomedical communication, it could be expressed to mark any of the following: possibility, permission, probability, obligation, certainty and requirement. Drug information leaflets which are those sheets of papers that are included in medicine boxes and bottles and provide information about the purpose, the side effects, the dosage and the storage of the drug they describe represent a genre of biomedical discourse.

The purpose of the genre of drug information leaflets is to give useful pieces of information to drug takers on the amount, way, expected side effects and hoped positive outcome of using a particular medicine. These documents show a great tendency of using modals or devices expressing modality, notably what is known as deontic modality. Deontic modality is related to the necessity or possibility of performing acts or the intervention of some kind of human control over the event taking place.

In such kind of documents, communication is very important in order to get an optimal negotiation between patients and drug manufacturers. Drug leaflets are basically meant to state information in a clear and straightforward way, but the remarkable use of devices expressing deontic modality makes leaflets obscure and the information stated somehow vague and confusing for patients.

Our interest in this piece of research is particularly oriented towards the function or the purpose for which drug manufacturers use expressions of modality in drug information leaflets. How English, French and Arabic handle the concept of modality and how it is rendered in each language are going to reveal the purpose behind which drug manufacturers depend on the use of devices expressing deontic modality in drug information leaflets.

Aim of the Study

The overall aim of this piece of research is to examine how deontic modality is expressed or rendered in English, French and Arabic in the genre of drug information leaflets which leads to find out what is the main function of using modal devices in this genre.

The comparison between the three languages through the analysis of the leaflets is going to pave the way to some interesting insights into the specificities and preferences of each language under investigation as far as the use of modal expressions is concerned. The results obtained from the analysis, after discussion, will hopefully uncover the main purpose for which drug manufacturers constantly employ modal devices in drug information leaflets. The present piece of research has been carried out on a modest ground. So, further and more comprehensive studies are needed to confirm the results of this analysis as this would be of great benefit to students or people in our community who are interested in the translation of biomedical discourse, namely drug information leaflets, from and into one of the three languages at issue.

Statement of Research Questions

For the overall research aim to be achieved, some objectives are required; they are sorted out in the following questions:

- a) What are the characteristics and features of modal expressions specific to each language (English, French and Arabic) in drug information leaflets?
- b) Do English, French and Arabic intend to use modal devices in drug information leaflets for the same purpose?
- c) If so, what is the purpose of employing devices to express deontic modality in drug information leaflets and for which reason?

Methodology and Procedure

As far as research methods are concerned, the present piece of research constitutes a descriptive analysis of a corpus sample of six (6) drug information leaflets. These leaflets are specifically collected to include three versions of the same text representing the three highlighted languages of the study: English, French and Arabic. Devices which express deontic modality in each language in the leaflets and the purpose of their use are the main focus of the analysis.

Structure of the Dissertation

The present piece of research is divided into two major parts, a theoretical part and a practical one.

The theoretical part is concerned with a literature review of the concept of modality in discourse in general. Modality as a linguistic tool in discourse has been a point of great debate among linguists; the different definitions of modality, the way it is expressed in discourse, its types or classes, its overlap or interference with other linguistic forms and its contribution or linguistic function in discourse are to be dealt with in this part. The issue of modality is then more particularly discussed in terms of its role and importance in scientific discourse or communication, specifically in biomedical communication. It also sheds light on deontic modality which performs an indispensable linguistic function in biomedical texts in order to achieve specific purposes.

The practical part includes data analysis of a sample of six (6) drug information leaflets, which are considered to be a genre of biomedical discourse, specifically chosen on the basis of including the three languages: English, French and Arabic. These leaflets which are at our disposal are to be analysed for the purpose of unfolding how deontic modality is expressed or grammaticalized and which function is meant behind using it in such kind of documents. It must be kept in mind that the leaflets under issue are said to exactly provide the same information in each language; in other words, each leaflet is composed of three versions representing the three languages that are equivalent translations to a certain degree. The

analysis is spontaneously going to reveal whether there are similarities or differences in the way deontic modality in leaflets is rendered or handled in the three languages and whether the three languages lean on the use of devices expressing deontic modality for the same purpose.

Chapter One

Modality in Discourse

Introduction

This chapter provides a theoretical framework for the concept of modality in discourse. Modality is selected in this piece of research because it plays a given functional role and conveys specific meanings and nuances in discourse. It deals with the different terms, types, classes, expressions, definitions and the functions of modality in discourse as claimed by linguists. Chapter one brings more attention to one type of modality which is deontic modality being the centre of this investigation. Given that the literature review of the study is exclusively based on the English language, this chapter, for the interest of that study, makes use of some ways of rendering modality translated from English into French and Arabic. A brief overview of what has been found out about genre analysis is also provided in this chapter to signal the main features and characteristics of drug information leaflets which constitute a very specific genre of the biomedical discourse.

I.1. Modality in General Discourse: An Overview

For the purpose of the present study, the angle from which modality is going to be approached is based upon a discourse perspective. The concept of modality as such is

discussed on the ground of the literature available as far as the English language is concerned and then, a description of how it is rendered in French and Arabic is provided.

Modality in English and other languages has lately been the focus of interest of scholars from distinct disciplines and approaches. The study of modality within linguistics has witnessed a gradual shift from a monolithic, static conception to a more dynamic understanding of modality taking into account the relevance of linguistic and extralinguistic contextual factors in the production and interpretation of modal utterances in discourse (Bybee & Fleischman, 1995) or the creation of modal textual coherence (Lundquist, 1989). According to Bybee & Fleischman and Lundquist, a discourse-based approach to modality usually departs from the traditional, monolithic account of modality in a number of interesting aspects so as to incorporate what is known as the contextual contribution:

- Modality is characterized to convey the speaker's involvement in the propositional content of a given utterance.
- Modality can be said to be one of the main ramifications across the whole lexico-grammatical architecture of the language.
- Most of the meanings usually ascribed to individual modal verbs are in fact derived either from the verb's sentential environment or from some wider context of utterance.
- Modal meaning in discourse can be said to arise out of the interaction of two closely connected layers of meaning: one embracing the inherent linguistic meaning of the modal verb in conjunction with that of other neighbouring modal devices, and another concerned

with principles connected with politeness and face-saving strategies.

I.2. Definitions of Modality/ Classes of Modality

Modality is generally defined as the grammaticalization of speakers' attitudes and opinions. Scholars who dealt with modality have used a number of terms. Halliday (1970) distinguishes between modality and modulation. For him, the former is related to the speaker's assessment of the probability of what he is saying and the latter to the ideational level of what the speaker is saying.

The Oxford Concise Dictionary of Linguistics by P.H. Matthews (2005, p. 228) defines the term modality as "category covering either of a kind of speech act or the degree of certainty with which something is said."

Modality can generally be expressed to signal any of the following: possibility or the related concept of permission, probability or the related concept of obligation, certainty or the related concept of requirement (steel et al., 1981).

Lyons (1977) uses the terms 'epistemic' and 'deontic' modality. He uses 'epistemic' modality to refer to the type of knowledge the speaker has about what he is saying, and 'deontic' modality to refer to the speaker's views or stance towards what he is saying.

Huddleston (1984) makes the distinction between three types of modality: epistemic, deontic and dynamic. Epistemic modality has as its basis what the speaker knows about the world, deontic modality calls for an action to be taken, and dynamic modality indicates that an individual is capable of doing a particular action when the circumstances arise.

Meziani (1983) uses the terms ‘knowledge’ and ‘decision’ in reference to modality.

The extensive bulk of literature on modality shows a clear tendency among linguists to accept that semantic areas such as possibility, necessity and prediction (knowledge or epistemic modality) on the one hand, and permission, obligation and volition (deontic or root modality), on the other, constitute the domains of modality.

A non-concomitant view with the mainstream conception of modality was already advanced by Halliday (1970, p. 349) in the following terms:

“Modality ... is the speaker’s assessment of probability and predictability. It is external to the content, being part of the attitude taken up by the speaker.”

Lyons (1977, 1983, 1994), claims that the term ‘attitude’ has been expanded into that of ‘subjectivity’ understood as “subject/speaker’s involvement” so as to embrace both types of modality:

Subjectivity is a matter of speaker’s, or more generally, of the locutionary agent’s involvement of himself in the utterance. In the case of epistemic modality what is involved is his knowledge (or beliefs). In the case of deontic modality it is his will and authority that is involved. But in both cases it is the locutionary agent who is the source of the modality (Lyons, 1983, p. 111).

Therefore, it can be claimed that modality is concerned with the expression of the subject / speaker’s involvement towards the propositional content of an utterance, whether in the form of agency or subjectivity.

An interesting conclusion ensuing from the above definition is that modality need not, and should by no means, be exclusively restricted to modal auxiliary (or semi-auxiliary) verbs.

Mood and modality express the speaker's attitude or opinion regarding the contents of the sentence (Palmer, 1986) or "the proposition that the sentence expresses" (Lyons, 1977, p. 452). Palmer (1986) defines mood as realized by the verbal morphology, whereas modality appears as a linguistic feature generated by a variety of linguistic phenomena among which modal verbs play a special role, as Downing and Locke (1992) describe.

Quirk et al. (1985, p. 112), discussing modality, speak of "constraining factors of meaning" namely in terms of intrinsic and extrinsic modality. In other words, the meaning of some kind of intrinsic human control over events would signify 'permission', 'obligation' and 'volition' (deontic, according to Lyons, Palmer and Downing & Locke). On the other hand, where such intrinsic control is not involved, the meaning would indicate 'possibility', 'necessity', and 'prediction' (epistemic, using Lyons', Palmer's, and Downing & Locke's terminology).

I.3. Modal Verbs and Modality Expressions

Modality is a blurred concept that centers around the notions of possibility, necessity and permission. So, independently of what a modal expression is used for, a modal sentence expresses the propositional content of the whole sentence with respect to some contextual restrictions (Werner, 2006, p. 235).

Speaking of these contextual restrictions which essentially contribute to the overall modal

meaning, we need to give some exemplifications tabulated as follows to show their significant relevance:

Modal	Function	Examples
Can	<p>To show ability</p> <p>To suggest a possibility or give an option</p> <p>To ask for or to give permission</p> <p>To show impossibility</p>	<p>I can run 10miles.</p> <p>Students can pre-enroll in classes.</p> <p>Can you call me? You can leave now.</p> <p>It cannot be Jim standing there. He went away for the weekend.</p>
Could	<p>To show past ability</p> <p>To ask a polite question</p> <p>To show possibility</p> <p>To show impossibility</p> <p>To suggest a possibility/ opportunity or give an option</p>	<p>I could run 10miles when I was young.</p> <p>Could I call you?</p> <p>Why isn't Mary here? She could be busy.</p> <p>He could not be here at the party. He is out of town.</p> <p>He could try going this way.</p>

Might	To show possibility	The instructor might come to class late today.
May	To ask for or to give permission (formal) To show possibility	May I call you? The instructor may come to class late today.
Should	To show advisability To show obligation To show expectation	You should try the new restaurant downtown. I should renew my driver's license. You should receive my letter in two days.
Ought to	To show advisability To show obligation To show expectation	You ought to exercise regularly. I ought to register to vote. You ought to receive my letter in two days.

Had better	To show advisability	We had better leave. It is getting late.
Have to	To show necessity	Mike has to make up the class he missed.
	To show lack of necessity	I am glad that I do not have to cook tonight.
Must	To show probability or to make a logical assumption	Janice must be out this evening. She does not answer the telephone.
	To show necessity	I must call my parent tonight.
	To show prohibition	You must not cross the street on red light.
Will	To indicate future time	He will leave for the plane at 7 a.m.
	To make a promise or to show willingness	The federal government will provide assistance to the hurricane victims.
	To state a general truth	The new car they have developed will run on either gasoline or ethanol.
	To ask a polite question	Will you help me with these boxes?

Would	To ask a polite question	Would you help me with these boxes?
	To indicate a repeated action in the past	When I lived in L.A, I would go to the beach everyday.
	To indicate future time in the sentence that is in the past	Mark promised that he would help me with my math homework.
Would rather	To show a preference	I would rather go to summer school than graduate late.
Would like	To express a desire	I would like to go to medical school.

Table 1: Overview of Modal Verbs in English

(Langue, Janet and Ellen Langue, 1999, p. 121)

So, the discussion of the issue of modals is based on the varied pragmatic functions of modals used in varied contextual situations.

For instance, the modal ‘may’ could be used to mean giving permission as in: ‘you may express your point of view’. The same modal ‘may’ could be used to express a formal request: ‘May I comment on these ideas?’ It could also be used to mean a certain degree of certainty: ‘He may be at the library’.

Other functions of modals include: necessity, obligation, lack of necessity, expression of lost opportunity, and advice as the following examples show:

We must leave right now. (necessity)

All applicants must have a Ph.D. (necessity)

I don't have to attend tomorrow's meeting. (lack of necessity)

We had better work harder or we will flunk this course. (advisability)

He should have gone to the meeting yesterday. (lost opportunity)

Walton (1991, p. 367) rightly argues, "... the meanings that are ascribed to modal verbs multiply arbitrarily as more and more context is added, and any reference grammar aimed at recording these meanings will come to resemble a lexicon and still fail to cover them all."

The foregoing overview indicates that the view of modals as grammatical categories has got to be supplemented by their pragmatic functions in discourse.

Besides modal verbs, there exist other linguistic expressions of modality which might be referred to as modal expressions (Huddleston & Pullum, 2002) or stance markers (Biber, 1999). These include modal adjectives (possible, likely), modality adverbs (certainly, possibly, undoubtedly), other verbs (seem, appear, insist, require) and nouns (possibility, necessity, permission). Linguists have recently concentrated on surveying a more or less comprehensive sampling of modality expressions, just to name a few: adjectives, nouns, adverbs, lexical verbs, participles (alleged, demanded), articles (some/any), tense, aspect, particles (if), hedging expressions (she is a great scholar, I think), emphatic 'do', get-passives (he got elected class president), question tags (you liked the movie, didn't you?), ... and so forth.

This is to illustrate how varied and sophisticated the modality system in English is, thus fully endorsing Halliday's (1970, p. 331) statement that, "... there is no single place in the clause

where modality is located.”

Halliday (1970, p. 331) claims:

Nor do the different non-verbal forms of the same lexical item necessarily correspond with each other: ‘obviously’ is not the same as ‘it is obvious that’, ‘surely’ as ‘I am sure that’. But there are discernible groupings, and a clear distinction can be drawn between pairs which are felt to be equivalent, and thus reinforce each other (‘as concord’) when both are present, as in ‘perhaps he might have built it’, and those which are not equivalent and are thus cumulative in meaning, as in ‘certainly he might have built it’ (‘I insist that it is possible’ or ‘I grant that it is possible’).

A possible ensuing conclusion from the above statement is that modal meaning can be said to comprise a network of either reinforcing or cumulative modal devices affecting all the lexical and grammatical aspects of the language which is liable to the communicative requirements of the interlocutors in case of dialogic negotiation.

I.4. Modality and Hedges

A prominent concept that is floating around the field of modality is that of hedges. So, numerous definitions of hedges may be found varying a lot in their scope. The term hedge was first introduced into linguistics by Lakoff. Lakoff (1972, p. 195) focused mainly on the logical properties of words and phrases like ‘rather’, ‘largely’, ‘in a manner of speaking’, and their ability “to make things fuzzier or less fuzzy.” Since then, the concept of hedges has been widened and adopted in speech act theory (Brown & Levinson, 1987), oral discourse,

pragmalinguistics and academic discourse analysis (Hyland, 1995; Markkanen & Schroder, 1997). Brown & Levinson (1987) define hedging within the speech act theory and interpret it as a sign of politeness. Hyland (1995, p. 1) was mostly concerned with the use of hedges in academic discourse and considers hedges essential to scientific writing because of the fact that “hedges indicate interpretations and allow writers to convey their attitude to the truth of the statements they accompany, thereby presenting unproven claims with caution and softening categorical assertions.”

According to the Oxford Concise Dictionary of Linguistics (2005, p. 160) hedges are:

Any linguistic device by which a speaker avoids being compromised by a statement that turns out to be wrong, a request that is not acceptable, and so on. Thus, instead of saying ‘this argument is convincing’, one might use a hedge and say ‘as far as I can see this argument is convincing’; instead of simply giving an order ‘carry it into the kitchen!’, one might use an interrogative as hedge and say ‘could you perhaps carry it into the kitchen!’

The presented definitions clearly indicate the overlap between modality and hedging.

Consequently, a question of the kind of relationship between the two mentioned terms arises.

Markkanen & Schroder (1997, p. 4) suggest on that:

It seems possible to see the relationship between modality and hedges in two ways: either modality is the wider concept and includes hedges or the other way round; hedging is the umbrella term and modality a part of it.

Needless to say here, it proves that language phenomena do not exist in a vacuum and cannot

be examined in isolation but rather in connection with other related language items.

I.5. Deontic Modality

Modality, as shown earlier, has two main types: epistemic and deontic.

Deontic modality means more specifically that the speaker “intervenes in the speech event by laying obligations or giving permission” (Downing & Locke, 1992, p. 332), as in: ‘one must look into this matter in detail’, ‘shall we negotiate peace now?’ Or ‘this experiment should be repeated’. On the other hand, epistemic modality implies that the speaker “assesses the probability that the proposition is true in terms of the modal certainty, probability or possibility” (ibid.), as in: ‘it may be the case that results might change if certain conditions ...’, or ‘the concert must be over’.

The present study focuses or sheds light on deontic modality which can be regarded as “a form of participation of the speaker in the speech event” (Halliday, 1970, p. 335) and plays a significant role in the interpersonal process of negotiation of meaning.

Deontic modality pertains to the use of language to express desires, wants, commands, obligations, undertakings and permissions. It tends to share a great deal with performatives.

Palmer (1986, p. 58) says that “by uttering a modal, a speaker may actually give permission (may, can), and make a promise or threat (shall) or lay an obligation (must)”.

Since it is not possible to desire, give permission, promise, threaten, or lay obligation in the past, deontic modality, like performatives, is compatible only with non-past events (ibid.).

Three major subcategories of deontic modality are recognized here which are: permission, undertaking and obligation / necessity.

- **Permission:**

This subcategory of deontic modality is expressed, by means of the modals ‘may’ and ‘can’.

In English, deontic ‘may’ is more formal than ‘can’. The use of ‘can’ for permission is most frequent in speech, notably dialogues.

- **Undertaking:**

The modal auxiliary ‘shall’ is used to give an undertaking, for example, a promise, a guarantee, or a threat.

- **Obligation / Necessity:**

Deontic obligation/necessity can be expressed by using the modal auxiliary ‘must’.

Two other modal auxiliaries, ‘should’ and ‘ought to’ are exponents of a mild obligation in comparison with ‘must’ which conveys a strong obligation.

It is often noticed especially in instructional texts to use what is called the “you-centeredness” of the utterance which echoes the speakers’ attempts to get the addressee to do something. It is realized through indices of deontic modality, namely the auxiliary ‘must’ showing obligation which can also be indicated by the impersonal phrase ‘it is necessary’, the auxiliary ‘can’ is used impersonally in the passive voice to express permission, the imperative like ‘verify’, ‘insert’, and ‘slide’ expresses obligation, together with the nominalized form ‘by using’ which has the same function as the imperative but in an impersonal style (Werner,

2006, p. 250).

I.6. Modality in French

It is for the present study's interests not to go into detail about how the concept of modality as a system functions in French, but we are just interested in how the main features of modality in English are translated into French.

Modal verbs, also called modal auxiliaries or simply modals, are unconjugated English verbs which express the mood of a verb as mentioned earlier, such as ability, possibility, condition and necessity. With the exception of 'ought', modals are followed directly by the verb they modify (without 'to'). There are ten (10) common English modal verbs: can, could, may, might, ought to, must, shall, should, will and would. By contrast to English, French does not have or possess modal verbs, and so, translating them from English into French becomes a difficult task. The French equivalents of the modal verbs may be a conjugatable verb (like 'devoir', 'falloir' and 'pouvoir'), or a tense, mood, or adverb. Note that 'could' and 'would' can be used in the present and past with varied meanings, this is rendered in French in terms of different tenses (Lawless, 2009). To make this clearer, we shall give some examples of how modals are translated from English to French in the following table:

English	French
<p>Can</p> <p>I can help you.</p> <p>We can see it</p>	<p>Pouvoir (present tense)</p> <p>Je peux vous aider</p> <p>Nous pouvons le voir</p>
<p>Could (present)</p> <p>I could dance all night</p> <p>Could (past)</p> <p>He could read when he was three</p> <p>Last year, I could sleep until noon everyday</p>	<p>Pouvoir (conditional)</p> <p>Je pourrais danser pendant toute la nuit</p> <p>Pouvoir (imperfect)</p> <p>Il pouvait lire quand il avait trois ans</p> <p>L'année dernière, je pouvais dormir jusqu'à midi tous les jours</p>
<p>May, Might</p> <p>She may / might arrive at noon</p>	<p>Peut-être, pouvoir (conditional), se pouvoir</p> <p>Elle arrivera peut être à midi</p> <p>Elle pourrait arriver à midi</p> <p>Il se peut qu'elle arrive à midi</p>
<p>Must</p> <p>I must leave</p> <p>You must help me</p>	<p>Devoir (present)</p> <p>Je dois partir</p> <p>Vous devez m'aider</p>
<p>Shall, Will</p> <p>I shall / will help you</p> <p>He will arrive at noon</p>	<p>French future tense</p> <p>Je vous aiderai</p> <p>Il arrivera à midi</p>

<p>Should / Ought</p> <p>I should / ought to leave soon</p> <p>You should / ought to help me</p>	<p>Devoir (conditional)</p> <p>Je devrais partir bientôt</p> <p>Vous devriez m'aider</p>
<p>Would (present)</p> <p>We would like to leave</p> <p>I would help you if I were ready</p> <p>Would (past)</p> <p>He would always read when he was alone</p> <p>Last year, I would sleep until noon everyday</p>	<p>French conditional</p> <p>Nous voudrions partir</p> <p>Je vous aiderais si j'étais prêt</p> <p>French imperfect</p> <p>Il lisait toujours quand il était seul</p> <p>L'année dernière, je dormais jusqu'à midi tous les jours</p>
<p>Could have</p> <p>I could have helped you</p> <p>We could have eaten</p>	<p>Pouvoir (conditional perfect)</p> <p>J'aurais pu vous aider</p> <p>Nous aurions pu manger</p>
<p>May / Might have</p> <p>I may / might have done it</p>	<p>Peut-être, se pouvoir</p> <p>Je l'ai peut-être fait</p> <p>Il se peut que je l'aie fait</p>
<p>Must have</p> <p>You must have seen it</p> <p>He must have eaten</p>	<p>Devoir (present perfect)</p> <p>Vous avez du le voir</p> <p>Il a du manger</p>

<p>Shall / Will have</p> <p>I shall / will have eaten</p> <p>He will have arrived by noon</p>	<p>French future perfect</p> <p>J'aurai mangé</p> <p>Il sera arrivé pour midi</p>
<p>Should have</p> <p>You should have helped</p> <p>We should have eaten</p>	<p>Devoir (conditional perfect)</p> <p>Vous auriez du aider</p> <p>Nous aurions du manger</p>
<p>Would have</p> <p>I would have helped you</p> <p>He would have eaten it</p>	<p>French conditional perfect</p> <p>Je vous aurais aidé</p> <p>Il l'aurait mangé</p>

Table 2: Translation of the Main Modal Verbs from English into French

English modals may be followed by have + past participle to express perfect (completed) actions as in some of the examples in table 2. Translating this construction usually involves conjugating a French verb into a perfect tense / mood + infinitive.

I.7. Modality in Arabic

An attempt is made for the convenience of the present study as well to recognise the Arabic equivalents of the English modal auxiliaries which constitute a distinct and well established grammatical category.

Arab grammarians have not recognized modality as a grammatical category notwithstanding scattered references they made to the semantics of certain modal particles like (قد/qàd/) and

(ربما /rubhàmaa/). In fact, the very concept of modality does not figure in any of the standard grammars of Arabic to date (El-Hassan, 1990, p. 164). Therefore, we just need to look into ways and means of expressing modality in Arabic.

Arabic is shown to be capable of expressing a wide range of epistemic and deontic modes of modality in its own terms. In other words, modality in Arabic can be studied without reference to English, or any other language for that matter. What is important to establish here is whether modality in Arabic is a lexical or grammatical category. We need first to provide some examples translated from English into Arabic to confirm or disconfirm anything as far as modality in Arabic is concerned.

Consider the following examples:

English	Arabic
<p>You may come in</p> <p>He may borrow these books again if he wishes</p> <p>You can see her now</p>	<p>لك / بوسعك / بإمكانك / يمكنك أن تدخل</p> <p>له / بوسعه / بإمكانه / يمكنه أن يستعير هذه الكتب ثانية إن شاء</p> <p>لك / بوسعك / بإمكانك / يمكنك أن تراها الآن</p>
<p>You shall meet the president tonight</p> <p>You shall see the fire of hell</p> <p>And he shall be content</p>	<p>لسوف تقابل الرئيس هذه الليلة</p> <p>لترون الجحيم</p> <p>ولسوف يرضى</p>
<p>You must be more careful in the future</p> <p>He must take this medicine three times a day</p> <p>Be more careful in the future</p> <p>Take this medicine three times a day</p>	<p>عليك / يجب أن تكون أكثر حذرا في المستقبل</p> <p>عليه / يجب أن يتناول هذا الدواء ثلاث مرات في اليوم</p> <p>كن أكثر حذرا في المستقبل</p> <p>تناول هذا الدواء ثلاث مرات في اليوم</p>

You should / ought to return the book to the library	ينبغي أن تعيد الكتاب إلى المكتبة
He should / ought to call the doctor	ينبغي أن يستدعي الطبيب
I should / ought to resign	ينبغي أن أستقيل
The manager may be at home	يمكن / من الممكن / يحتمل / من المحتمل / ربما / قد يكون المدير في البيت
The manager must be at home	من المؤكد / لابد أن المدير في البيت
The manager must have been at home	لابد أن المدير كان في البيت
The Arabs must have settled here	لابد أن العرب أقاموا هنا

Table 3: Translation of the Main Modal Verbs from English into Arabic

Notice that it is rather difficult to find Arabic equivalents of ‘may’ and ‘can’ since Arabic seems to own a lot more expressions to convey the same meaning which brings out the issue of stylistic difference. It seems reasonable to translate ‘can’ in Arabic by using ‘بإمكانك’ or ‘للك’ which share the same semantic associations of ability and permission. Because ‘للك’ seems to be more formal than both ‘بإمكانك’ and ‘بوسعك’, it can then be used as the equivalent of ‘may’. From the translation in table 3, the equivalents of ‘must’ in Arabic are ‘يجب / على + pronoun’, whereas that of ‘should / ought to’ is ‘ينبغي’. The form ‘ينبغي’ in Arabic expresses the subject’s obligations or duty, just as much as ‘should / ought to’ does in English.

Taking an overall look at table 3 makes us say that there is a remarkable similarity between the grammatical structure of the English and the equivalent Arabic expressions. All the Arabic translations contain a modal constituent followed by a proposition, parallel to the

corresponding English constituents. The multiplicity of the Arabic forms is due to the fact that unlike English, Arabic does not seem to have grammaticalised modality; hence a variety of lexical items are used to express the meaning of a single English modal auxiliary. For that, it must not be assumed that all the paraphrases are exact synonyms since there is a need to know more about the context as pointed out by El-Hassan (1990, p. 152) despite the fact that they can stand as plausible renderings of the meaning of the English sentence.

The last example in table 3 showing the English expression ‘must + have + past participle’ is translated so as to find the Arabic equivalent as follows: ‘لابد أن + past tense’.

The Arabic form ‘ربما’ is probably the nearest equivalent of English ‘may’. Its use is subject to certain syntactic constraints:

it is normally followed by a verbal sentence introduced by a verb form, as in:

ربما يكون المدير في البيت

It can also be followed by a nominal sentence introduced by the complementizer ‘أن’ as in:

ربما أن المدير في البيت

The modal particle ‘قد’ can also be an equivalent of ‘may’ in certain conditions conveying a sense of uncertainty and is always followed by a verb form, as in:

قد يكون المدير في البيت

This introductory presentation is by no means complete but it proves at least that the various exponents of modality in Arabic can be governed by a grammatical rule. The examples cited above in table 3 show that modality in Arabic is expressed by a modal element (a verb or a

particle) followed by an embedded sentence usually introduced by ‘أن’, for example:

- عليك / يجب أن + S (S stands for the embedded sentence)
- ينبغي أن + S
- لك / يمكن أن + S
- لابد أن + S
- ربما أن + S

I.8. Modality in the Genre of Drug Information Leaflets

Drug information leaflets are considered to be a special type or genre of biomedical communication or discourse which makes it necessary for this study to consider some insights into the concept of genre from a discourse point of view.

I.8.1. A Brief Overview of Genre Analysis

Works on ESP started with some early studies on registers of a language (Halliday, Mc Intosh and Strevens, 1964). But it has soon shown the close connections between the intra and extra-linguistic levels with research on genre analysis (Swales, 1980, 1981, 1984 and 1986). Thus, the language used in the professions has moved from being characterized in terms of syntactic or lexical choices to characters of the textual presentation and formulaic requirements of the different contexts. More recently and as a further development of this trend, Swales (1990, p. 46) called for more attention to the communicative purpose of the communicative event. Bhatia (1993, p. 313) went further by insisting on taking the purpose

as the key characteristic feature of genre.

Therefore, genre analysis has become more a matter of extensive text-in-context inquiry than straightforward textual or transcriptal scrutiny (Askehave & Swales, 2001).

Discourse as genre extends the analysis beyond the textual product to incorporate context in a broader sense to account for not only the way the text is constructed, but also the way it is often interpreted, used and exploited in specific institutional or more narrowly professional contexts to achieve specific disciplinary roles (Bhatia, 2004, p. 20).

Devit (2004, p. 31) defines genre as a reciprocal dynamic within which individuals' actions construct and are constructed by recurring context of situation, context of culture, and context of genres. Whereas Devit focuses on the notion of context taking control of the individuals' actions in his definition of genre, Swales is rather concerned with the idea of switching mediums as an indispensable characteristic of genre. His attempt is to see genres no longer as single –and perhaps separable- communicative resources, but as forming complex networks of various kinds in which switching modes from speech to writing can –and often does- play a natural and significant part (Swales, 2004, p. 2).

Currently, genre if approached from a functional perspective as a kind of text is considered to be part of every human social activity, and the functions and extra-textual conventional characteristics of genres are taken into consideration.

Swales (1990, p. 58) defines genre as:

A class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the discourse community, and thereby constitute the rationale for the genre... In addition to purpose, exemplars of a genre exhibit various patterns of similarity in terms of structure, style, content and intended audience.

This definition provides a useful starting point. Communicative purpose is privileged as a criterion (Bhatia, 1993, p. 13; Swales, 1990, p. 58), at least for a functional approach to discourse, although other elements may be assigned more importance depending on the genre.

I saw it fit to mention the approaches adopted by critical linguistics and critical discourse analysis in relation to genre for the simple reason that they are compatible with that of Swales and Bhatia, putting more emphasis on the additional dimension of social situation or social activity. Kress's references to participants and to functions, purposes and meanings are related to the notion of 'communicative purpose' (Kress, 1989, p. 19).

Critical linguistics and critical discourse analysis scholars also refer to form, again in line with the common perception that genres are types or kinds of texts, with specific texts being the tokens of these types (Kress, 1989; Wodak, 2001, p. 66).

That is, genre is bound to what we may call the 'situational context', which in itself is embedded in the broader historical and socio-political context.

Kress (1989, p. 19) suggests that: "the characteristics features and structures of ... situations, the purposes of the participants ... all have their effects on the form of the texts which are

constructed in those situations”. Moreover, he points out that most social situations are conventionalized, to a certain extent, and that “the conventionalized forms of occasions lead to conventionalized forms of texts” (ibid.).

Fairclough (1992, p. 126) also suggests that genre is “a relatively stable set of conventions that is associated with, and partly enacts, a socially ratified type of activity”.

Thus, whereas we may not have access to the minds, intentions and purposes of the participants in a communicative event, and we may not be able to read off effects from texts, genres as event schemata are abstractions of how people use language conventionally, in order to achieve conventionally ratified (or even institutionalised) social purposes.

In terms of the methodology of genre identification, the link to specific conventional situations and what people are actually doing with discourse in these situations is in many cases valuable. Admittedly not all situations, or the language associated with them, are equally conventional (Fairclough, 1992, p. 70).

Most importantly, practically all mediated texts (written or broadcast) are less bound by a ‘context of situation’ including a specific setting (time, space) and specific participants. At the same time, by definition communication involves at least two parties and thus a discursive event (or its communicative purpose) is not realized until the consumption of the text. For instance, with written, recorded or mass media texts, it is not always possible even to know who is consuming the texts, let alone where, when and how!

I.8.2. Drug Information Leaflets as a Genre

Systemic theory considers how people use language to make meaning and how language is organized to enable meanings to be made. According to the theory, language is viewed as a pattern of interlocking systems, from the smallest unit (words or phrases) up to the largest (paragraph or longer piece of text) (Halliday, 1994, p. 10).

The interaction between text and context is the means by which the reader constructs meaning, so any model of text needs to take context into account. Two types of context are identified in this analysis, context of culture and context of situation (Halliday & Hasan, 1989). Context of culture refers to the knowledge, values and practices within society which impact upon language used in a text. This shapes the way the text is organized at the macro-level. At the highest level within context of culture is the genre, which considers the organization or structure of the overall text with respect to its specific purpose (Swales, 1990). Information leaflets about drug therapy may be regarded as a subset of the genre of healthcare materials. The comprehensibility of this information will be affected by expectations of what is considered to be conventional text structure for this particular type of genre (Berkenkotter & Huckin, 1995; Swales, 1990). The next context level, context of situation, is the environment in which the text is actually functioning (Halliday & Hasan, 1989).

The key situational aspects impact on the type of language used and three of these have consequences for language: what is being talked about (field), who is involved (tenor) and the role of language, including channel of communication (mode). Texts reflect these key

situational aspects, in that they deal with experience of the world, express interpersonal relations and they are “knitted together” so that they can be understood (Bhatia, 2004, p. 121).

In reading a drug information document, the expectations of a patient are likely to be something like: ‘knowledge is used to assist patients with information which will guide behaviour and help prevent any adverse events’. This leads to a further set of expectations about ways the information may be structured, the likely type of information and vocabulary that will be encountered and whether there will be instructions or simply suggestions expressed in the text.

Different types of text generally have a characteristic overall ‘generic’ structure consisting of a series of sections or “moves” which make sense for a particular audience in a given situation (Hasan, 1989, p. 83; Swales, 1990, p. 96; Paltridge, 1997, p. 21).

Written information about a drug might be expected to include identifiable segments of text which provide instructions about drug dosage, information regarding monitoring, as well as accounts of its potential benefits and side effects.

Conclusion

Along with the available information on the genre of drug information leaflets and their frequent use of devices expressing deontic modality all along the prominent sections, there should be a specific purpose in respect to the use of that structure in such documents as pointed out by Swales earlier. Much of the literature on modality (Coates, 1983; Perkins, 1983; Lyons, 1977; Palmer, 1986; Chafe & Nicholas, 1996) often assumes that the sole

function of modality expressions is to reveal the speaker / writer's state of mind or knowledge, to indicate that he is uncertain or tentative and is not committed to the truth value of the proposition. So, it is at the same time tempting and interesting to know whether or not the previous statement applies to the case or genre of drug information leaflets and this is what we will hopefully figure out in the next chapter.

Chapter Two

The Analysis of Modality in Drug Information Leaflets

Introduction

The biomedical discourse shows a great tendency of using devices to express modality which is generally considered to be a directive discourse. Our concern in this chapter is to unfold these devices which express specifically deontic modality in the particular genre of drug information leaflets and compare how English, French and Arabic handle this feature. A corpus of six (6) leaflets that include the three languages at issue is provided and analysed, so as to recognise how these documents use language for the purpose of setting obligations or taking control over the event taking place. We are interested in the way deontic modality is rendered in each language mentioned earlier in drug information leaflets. Whether they have the same basis of expressing deontic modality, whether they use the same or different devices throughout the leaflets, whether they employ the same techniques or means to reach the function behind such kind of texts, constitute the object of concern of the present chapter. The analysis of the leaflets basically includes depicting deontic modality in the following points: providing information on the way of taking the drug, providing information on the amount of taking the drug, ways of rendering side effects and ways of providing information about the storage of the drug. These highlighted points are intentionally selected for the purpose of representing all sorts of the instructional information found in every version of the leaflets

and which are said to convey meanings of deontic modality. Within these major categories, sections or extracts like drug interactions, contra-indications, warnings, dosage, precautions for use, mode of administration, action in case of overdose and special precaution for storage, usually found in leaflets, are included for a comprehensive analysis. Other sections like identification of the drug, pharmaceutical form and presentation, pharmaco-therapeutic class, indications for use or when the drug should be used, generally located at the very beginning of the leaflets, are not included in the analysis because they do not serve the interests of the present study due to the absence of the targeted element of deontic modality. It must be kept in mind, for the analysis of drug information leaflets, that the three versions representing the three languages in each leaflet contain exactly the same information.

II.1. Depicting Deontic Modality in Drug Information Leaflets

II.1.1. Modality in Providing Information on the Way of Taking the Drug

Drug interactions caused by taking more than one drug simultaneously can result in adverse effects. Each drug information leaflet mentions that the drug it describes cannot be taken together with certain other drugs. For example, one of the leaflets investigated shows drug interactions in the following way:

- The phrase ‘not recommended’ followed by the names of the medicines and then,
- The phrase ‘to take into consideration’ followed by the names of the medicines.

The French and Arabic versions show the equivalents of the English one respectively:

- ‘déconseillées’, ‘à prendre en compte’, and ‘النواهي’, ‘الاحد بعين الاعتبار’.

The use of such phrases does not make the statements strong at all though the situation requires strength in order to direct patients, the imperative could be used instead.

In another leaflet, the auxiliary ‘must’ expressing deontic obligation is used as the following: ‘All other treatment you are taking must be routinely reported to your doctor or pharmacist.’

The French equivalent used in the same leaflet is: ‘Il faut signaler systématiquement tout autre traitement en cours à votre médecin ou à votre pharmacien.’

The Arabic version is :

‘يجب دائما إعلام الطبيب أو الصيدلي بأي علاج آخر قيد الإجراء.’

‘faut’ and ‘يجب’ are two verbs in French and Arabic which are equivalents of the auxiliary ‘must’ in the leaflets.

Notice that in this case, the leaflet does not provide patients exactly which drugs that cannot by no means be taken together, but it is just mentioned that the doctor must be alerted if the patient is taking other drugs that could have dangerous interactions with the ones prescribed.

Other leaflets have used the following structures:

All the devices and expressions which indicate deontic modality in English, French and

Arabic in the examples mentioned here taken from the leaflets are underlined to highlight and signal this feature for the analysis.

- The English version:

Can you take this medicine with other medicines?

You should have informed your doctor ...

Special precautionary measures may be appropriate if you take ... do not take ... while taking ... as this can cause serious side effects.

- The French version:

Pouvez-vous prendre ce médicament avec d'autres médicaments?

Il faut informer votre médecin ... des précautions particulières peuvent être appropriées si vous prenez ... ça peut provoquer des effets indésirables.

- The Arabic version:

هل يمكن تناول هذا الدواء مع ادوية اخرى/

يجب اشعار الطبيب ... يلزم اتخاذ احتياطات خاصة اذا كنت تتناول ... عدم تناول ... في حالة تناول ... قد يتسبب هذا بظهور عوارض جانبية غير مستحبة.

Throughout the leaflets investigated, it is noticeable that the English versions seem to provide information in a more straightforward way to a certain degree than their French and Arabic counterparts. The use of the imperative in a lot of occasions in the English versions is faced by the use of the infinitive in French and some expressions, particles or noun phrases, be it in the declarative or the negative in Arabic.

The use of the auxiliary ‘can’ (or ‘may’) in English and its equivalents in French and Arabic (‘peuvent’ and ‘قد’) express deontic possibility and imply that it is not certain that serious side effects will occur when taking the two drugs simultaneously, merely there is a chance for their appearance. Thus, this seems to place the patient into a position of fake security, since the patient may think that if the drug only sometimes causes side effects, then he/she will not be the very person to experience side effects. The majority if not all drug information leaflets do not state explicitly what those drugs are that should not be taken together with a particular drug and only pass on this problem to the doctor as shown in the examples above.

In the section of contra-indications or when a drug should not be used, drug information leaflets indicate that patients must not take the medicine if they are allergic to an active ingredient. Here are some instances of this section:

- The English version:

This drug must not be used in the following cases:

- Allergy to ... or ... and ...
- Active ... and bleeding disorder ...

This drug must generally not be used, except if directed by your doctor, in case of treatment with ...

If in doubt it is essential to request the opinion of your doctor or pharmacist.

- The French version:

Ce médicament ne doit pas être utilisé dans les cas suivants:

- Allergie à ... ou ... et ...
- Ulcère ... et maladie hémorragique ...

Ce médicament ne doit généralement pas être utilisé, sauf avis contraire de votre médecin, en association avec ...

En cas de doute, il est indispensable de demander l'avis de votre médecin ou de votre pharmacien.

- The Arabic version:

لا يجوز استعمال هذا الدواء في الحالات التالية/

*حساسية اتجاه ... أو ... و ...

*قرحة في المعدة ... ومرض نزفي ...

بصورة عامة لا يجوز استعمال هذا الدواء ما لم يرى الطبيب خلاف ذلك بالاشتراك مع ...

في حال الشك لا بد من استشارة الطبيب أو الصيدلي.

Though the three versions state exactly the same information expressing deontic modality, they slightly show few differences in the way it is rendered or translated.. For instance, the negation of obligation expressed in English 'must not' is rendered as 'ne doit pas', so here the grammaticalisation in English using the auxiliary 'must' followed by 'not' for negation is simpler than its French counterpart being the particle 'ne' followed by the verb 'doit' and then followed by the particle 'pas'. The structure of the Arabic version expressing the negation of obligation is quite different from the two other versions in the sense that it is expressed right away from the beginning of the sentence, the particle 'لا' which expresses

prohibition followed by the verb 'يجوز'.

Although different somehow as far as the structure of each language is concerned, the three languages carry the same meaning or the objective is a directive message not to use the drug in certain cases. The double use of devices expressing modality and the conditional is quite remarkable in drug information leaflets. In the last examples, the conditional is used as follows:

'This drug must not ..., except if ...'

'If' expresses the conditional in English. The French version interestingly does not grammaticalise the concept of the conditional in the section of this leaflet, but it conveys the same message as the English version just by using: 'Ce médicament ne doit pas ..., sauf...'

'Sauf' here denotes exception as does 'except' in the English version.

In Arabic, the particle 'ما' is employed to fulfill the same function, which is the conditional, but the Arabic structure is much more complicated compared to English and French.

While the English and French versions use a clause that contains an adjective to express deontic necessity or some sort of deontic obligation, the Arabic version employs as an equivalent in this situation, the particle 'لا بد' which expresses obligation. Hence, it seems that Arabic states information more directly than English and French in some cases of this section in the leaflets under investigation since the use of the particle 'لا بد' has given strength to the statement made and it has approximately the same impact of the imperative.

Some texts display it in a straightforward manner, for example, one of the leaflets

indicates that: 'It must not be applied in case of oversensitivity to penicillin.' We can find in others a hedge which slightly modifies the information conveyed by the sentence as the following example shows:

- The English version:

Do not take this drug if:

- You are pregnant or breast-feeding.
- If you are allergic to any of the ingredients.

This drug should not be given to children. If any of the above apply to you, inform your doctor or pharmacist first and ask for their advice.

- The French version:

Ne pas prendre ce médicament:

- Si vous êtes enceinte ou si vous allaitez.
- Si vous êtes allergique à l'un des composants.

Ce médicament ne devra pas être administré à l'enfant. Si l'une des situations mentionnées ci-dessus s'applique à votre cas, informez votre médecin ou votre pharmacien en premier lieu et demandez leur avis.

- The Arabic version:

لا يجوز تناول هذا الدواء في الحالات التالية/

*الحمل أو الرضاعة.

*إذا كان المريض حساسا اتجاه مكونات الدواء.

لا يجوز إعطاء هذا الدواء للأطفال. إذا انطبقت إحدى الحالات المذكورة أعلاه عليكم يجب إشعار الطبيب أو الصيدلي أولاً و طلب نصيحته.

It is noticed that while in the English version the imperative is used, 'do not take', to express obligation, the structures of the French and Arabic equivalents are different being the infinitive 'ne pas prendre' in French and the particle plus the verb 'لا يجوز' in Arabic.

The use of the imperative in English here has made the statement powerful in comparison with French and Arabic. The use of the passive voice is so frequently observed in drug information leaflets by the three languages for the purpose of avoiding legal responsibility.

In this way, patients should avoid taking the drug only if they know that they are allergic to an ingredient, although any ingredient of the medicine can cause allergic reactions the patient is not warned about in a separate instruction.

'If you are allergic to any of the ingredients.'

'Si vous êtes allergique à l'un des composants.'

'إذا كان المريض حساسا اتجاه مكونات الدواء.'

'If' in English and its equivalents in French and Arabic 'si', 'إذا' seemingly express the conditional which is so frequently encountered in leaflets, but in fact, they are used as hedges in this situation to modify the information presented. Hence, drug information leaflets avert responsibility in case of patients who are allergic to an ingredient of the medicine but are not aware of their allergy in spite of the fact that they can experience severe allergic reactions.

Many drugs cannot be taken if the patient suffers from a certain illness, for example, liver problems or renal failure. It has been revealed through the analysis that some drug information leaflets do not mention the problems caused if the patient takes the drug when he/she has the illness mentioned in the leaflet. Some other leaflets do not indicate even that taking the drug in such circumstances can cause problems at all, but they direct the patients to the doctor saying that if they suffer from a given condition, they must consult the doctor before taking the drug. In this way, drug manufacturers transfer responsibility to the doctor. The doctor of course asks whether the patient suffers from an illness, but patients may not be aware of the importance of mentioning a certain condition because they do not know that if they suffer from an illness other than that the drug was prescribed for, then they might not take the medicine. Among some drug information leaflets where the illness, in case of which it is not indicated to take the drug, is not overtly mentioned, the use of the expression 'in case of' or 'in certain cases' has been noticed. In this case, the name of the disease is modified by the expression 'in certain cases'. Thus, some patients suffering from a particular disease, for instance, can use the drug while others cannot. Due to the modifying expression 'in certain cases', patients suffering from the diseases mentioned in the leaflet do not know whether or not they should take the drug.

Drug manufacturers are protected in those cases when patients suffering from any of the diseases mentioned in the leaflet develop some unexpected symptoms because they have told that the drug must not be used in certain cases of the disease.

II.1.2. Modality in Providing Information on the Amount of Taking the Drug

The drug information leaflets investigated here describe prescription drugs, i.e., they are drugs that you can only get by prescription. Here are some samples concerning the dosage taken from the leaflets analysed:

- The English version:

Dosage is 1 capsule a day. This dosage should not be exceeded. In all cases, follow your doctor's prescription exactly.

- The French version:

La posologie est de 1 gélule par jour. Cette posologie ne doit pas être dépassée. Dans tous les cas, se conformer strictement à l'ordonnance de votre médecin.

- The Arabic version:

المقدار هو كبسولة واحدة في اليوم لا يجوز تخطي هذا المقدار. في جميع الأحوال يجب التقيد تقيدا صارما بوصفة الطبيب.

The use of the modal 'should not' in English, the verb 'ne doit pas' in French and the particle-verb 'لا يجوز' in Arabic express deontic obligation on the part of the patient not to exceed the dosage indicated in the leaflet. It is stated after that the patient has to follow the doctor's prescription exactly. Notice here once again that the use of the imperative is remarkably frequent in English ('follow') whereas French and Arabic tend not to employ the imperative that much which shows that not only each language has its own system and structures, but it has its own features and preferences that may differ from one situation to

another.

In this situation, French has a tendency to use the infinitive ('se conformer') which clearly makes the statement less strong than that of the English version. Arabic, in turn, tends to constantly use the verb 'يجب' to express obligation which is the literal equivalent of 'must' in English, but it sounds also less forceful than the imperative used in English despite the fact that the three versions are said to convey the same message.

The dosage of the drug is determined by the doctor, nevertheless, drug information leaflets still display a usual dosage which is often followed by the sentence: 'follow your doctor's prescription exactly' or 'the doctor can prescribe a different dosage.'

Drug information leaflets use this sentence as a safeguard to avert responsibility in case of an overdose. Overdose can lead to serious side effects, but by entitling the doctor to prescribe a different dosage (by the use of the modal auxiliaries 'can' or 'may' in English, the verb 'peut' in French and the particle 'قد' in Arabic), they don't indicate the upper limit of the dosage.

Thus, patients who are damaged by a drug overdose cannot find any basis concerning dosage in these drug information leaflets. If the doctor prescribes a dosage different from the usual dosage in the leaflet and the patient develops any adverse symptoms, then drug manufacturers can avert responsibility to the doctor.

II.1.3. Modality in Ways of Rendering Side Effects

Each drug information leaflet indicates that the drug can cause certain undesired

effects called side effects.

Let us take some extracts from the section of side effects in the leaflets at hand:

The extracts cited below are selected and grouped in three examples showing the possible different ways of stating side effects. After the examples, some observations, interpretations and discussions are provided.

- **Example 1:**

- The English version:

Like all active substances, this drug can, in some people, induce more or less unpleasant effects: you must discontinue your treatment immediately and inform your doctor in the following cases:

- Allergic reactions such as skin rash, ...

Inform your doctor if you have abdominal pain, ...

Do not hesitate to ask the advice of your doctor or pharmacist and report any unpleasant or adverse effect that would not be mentioned in this leaflet.

- The French version:

Comme tout produit actif, ce médicament peut chez certaines personnes entrainer des effets plus ou moins gênants : il faut immédiatement arrêter votre traitement et avertir votre médecin dans les cas suivants :

- Réactions allergiques de type éruption cutanée, ...

Avertir votre médecin en cas de douleurs abdominales, ...

Ne pas hésiter à demander l'avis de votre médecin ou de votre pharmacien et à signaler tout effet non souhaité et gênant qui ne serait pas mentionné dans cette notice.

- The Arabic version:

مثل كل مستحضر فعال قد ينتج عن هذا الدواء لدى بعض الأشخاص تأثيرات مزعجة بعض الشيء/

يجب على الفور إيقاف العلاج و إشعار الطبيب في الحالات التالية/

*ردود الفعل التحسسية من نوع الطفح الجلدي ...

يجب إشعار الطبيب في حال وجود آلام في البطن ...

لا تتردد في استشارة الطبيب أو الصيدلي و إعلامه بكل تأثير غير مرغوب و مزعج غير مذكور في هذه النشرة.

- **Example2 :**

- The English version:

Like any medicine, this product may in certain persons, give rise to varying degrees of unpleasant effects. These effects are infrequent and mild:

- Digestive, gastric or intestinal disturbances ...

If you experience muscle pain, ...

Contact your doctor immediately because, in rare cases, muscular problems can be very serious. Report to your doctor or pharmacist any undesirable or unpleasant effect not mentioned in this leaflet.

- The French version:

Comme tout produit actif, ce médicament peut, chez certaines personnes, entraîner des effets plus ou moins gênants :

Ces effets sont peu fréquents et bénins :

- Troubles digestifs, gastriques ou intestinaux ...

Si vous ressentez des douleurs musculaires, ...

Contactez immédiatement votre médecin, car les problèmes musculaires peuvent être graves dans de rares cas.

Signalez à votre médecin ou à votre pharmacien tout effet non souhaité et gênant qui ne serait pas mentionné dans cette notice.

- The Arabic version:

مثل كل مستحضر فعال قد ينجم عن تناول هذا الدواء لدى بعض الأشخاص ردود فعل مزعجة نوعا ما/

هذه التأثيرات نادرة وقليلة الخطورة/

*اضطرابات هضمية معدية أو معوية ...

إذا شعرت بوجع في العضلات ...

يجب الاتصال فورا بالطبيب لان المشاكل العضلية في حالات نادرة قد تكون خطيرة.

يجب إشعار الطبيب أو الصيدلي بكل تأثير غير مرغوب ومزعج غير مذكور في هذه النشرة.

- **Example3:**

- The English version:

All medicines may cause some undesirable effects. If any undesirable effects occur, they are

likely to be mild and temporary. However, some effects may be serious and require medical attention. The following side effects have been commonly reported: dizziness, ...

If you think you are developing such a reaction or get short of breath, stop taking this drug and seek immediate medical attention.

If you notice any other undesirable effects, you should inform your doctor or pharmacist and ask for their advice.

- The French version:

Tous les médicaments peuvent provoquer des effets indésirables. Si des effets indésirables surviennent, il est probable qu'ils soient légers et passagers. Cependant, certains effets peuvent être sérieux et nécessiter une surveillance médicale.

Les effets indésirables suivants ont été rapportés fréquemment : sensation de vertige, ...

Si vous pensez que vous développez une telle réaction ou si vous êtes essoufflé, arrêtez de prendre ce médicament et avertissez immédiatement votre médecin.

Si vous notez n'importe quel autre effet indésirable, vous devez le signaler à votre médecin ou à votre pharmacien et leur demander conseil.

- The Arabic version:

قد تتسبب جميع الأدوية بظهور عوارض جانبية غير مستحبة. في حال ظهور هكذا عوارض من الأرجح أن تكون خفيفة و مؤقتة. لكن قد تكون بعض الظواهر خطيرة و تتطلب عناية طبية.

لقد تم الإبلاغ عن العوارض الجانبية التالية/ دوار ...

إذا كنت تشعر أنك تعاني من هكذا ردود فعل أو إن كنت تشعر بقصور في التنفس عليك وقف تناول هذا الدواء و استشارة

إذا لاحظت ظهور أي عوارض جانبية غير مستحبة أخرى عليك إعلام الطبيب أو الصيدلي.

What can be noticed from these extracts is that the English versions seem more direct to some degrees than the French and Arabic ones in that almost all the cases show the use of the imperative 'inform', 'do not hesitate', 'contact', 'report', 'stop' and 'seek' for the purpose of directing and guiding the patient. The auxiliaries 'must' and 'should' are also employed with the pronoun 'you' addressing the patient directly to leave an impact on him.

In the French versions, the verb 'faut' (the impersonal verb 'falloir' conjugated in the present) and the infinitive 'avertir', 'ne pas hésiter' are used as equivalents to the imperative used in English, but it is clear here that it is absolutely an acceptable translation, the only difference is that the imperative encountered frequently in the English versions has given the message more strength.

Nevertheless, just two out of the six leaflets in this section have employed the imperative in association with the conjunction 'si' which expresses the conditional: 'contactez', 'signalez', 'arrêtez' and 'avertissez'. In such a situation, the use of the imperative has a stronger impact on the reader in comparison with the infinitive or the indicative.

The Arabic versions stick so often to use the verb 'يجب' expressing obligation:

'يجب الاتصال ...', 'يجب إشعار ...', 'يجب على الفور ...'

It means that in such a genre, Arabic has a preference to use the verb 'يجب' followed by an embedded noun phrase as a translation for the imperative frequently used in English making

the information stated in a weak and less forceful manner.

There is just one leaflet of the six taken for the study which shows the use of the particle 'عليك' (from example 3) to express obligation as a kind of an order because the element "ك", the equivalent of 'you' in English, has made the patient involved in the event taking place. Among all the leaflets investigated, the imperative is used only once in the section of side effects: 'لا تتردد' (example 1) which shows once again that Arabic barely employs the imperative and constantly switches different structures and formulas in drug information leaflets.

Modality is used to predict the chances of occurrence for a certain side effect. Most drug information leaflets use the modal verbs 'can' or 'may' in English, the verb 'pouvoir' (conjugated in the present tense 'peut' or 'peuvent') and the particle 'قد' in Arabic to inform the patient that it is possible that a certain side effect appears. The English texts mainly use an auxiliary expressing possibility together with an adverb of frequency: 'rarely', or 'sometimes', the expression: 'in rare cases' or an adjective: 'infrequent', 'mild' and 'temporary'.

The French texts usually use the verb 'pouvoir' (the equivalent of the modal auxiliary 'can' in English) to express possibility together with the expression: 'dans de rares cas' or an adjective: 'peu fréquents', 'bénins', 'légers' and 'passagers'.

The Arabic texts also tend to use systematically the particle 'قد' to express possibility together with the expression: 'في حالات نادرة' or an adjective: 'نادرة', 'قليلة الخطورة', 'خفيفة' and 'مؤقتة' as

shown in examples 2 and 3.

The concept of *double modality* is introduced to refer to this technique manifested to express that the likelihood of a certain side effect occurring is extremely low.

Double modality is applied to calm the patient, implying that it is not likely that they will experience these side effects, but drug manufacturers still mention these side effects in drug information leaflets to protect themselves if these side effects appear in patients.

On the other hand, a list of side effects, which can sometimes in certain persons occur, may frighten some of the patients.

Almost every drug information leaflet mentions that other side effects can occur besides the ones enumerated in the leaflet. For instance, ‘tell your doctor or pharmacist if you or your child develops any of these problems or if you have any other unexpected or unusual symptoms while taking this drug’. This sentence suggests that, although in rare cases, the drug can practically have any side effects of which patients are not aware. By including this sentence, drug manufacturers decline to take responsibility and refuse to state explicitly the possible consequences of taking the drug. In this way, they prevent any legal action taken against them by patients who have been damaged by the drug.

II.1.4. Modality in Ways of Providing Information about the Storage of the Drug

The following are extracts from the leaflets in the section of the storage:

- The English versions:

- This drug must be kept in a dry place in a temperature less than 25°C.
- Do not exceed the expiry date clearly printed on the outer package.

Store below 25°C.

- Do not exceed the expiry date indicated on the external packaging.

Store below 25°C.

- Keep all medicines out of the reach and sight of children. This drug should be stored in a dry place, below 30°C. Do not leave it near a radiator, on a window sill or in a humid place. You will see an expiry date on the carton and on the blister. Do not remove the tablets from the blister pack until you are ready to take the medicine.

- The French versions:

- Ce médicament doit être conservé dans un endroit sec en-dessous de 25°C.
- Ne pas dépasser la date limite d'utilisation figurant sur le conditionnement extérieur.

Conserver à une température inférieure à 25°C.

- Ne pas dépasser la date limite d'utilisation figurant sur le conditionnement extérieur.

A conserver à une température inférieure à 25°C.

- Maintenir tous vos médicaments hors de portée et de vue des enfants. Ces comprimés doivent être conservés à l'abri de l'humidité, à une température inférieure à 30°C.

Vous ne devez pas les laisser à proximité d'un radiateur, sur l'appui d'une fenêtre ou

dans un endroit humide. Une date de péremption figure sur l'étui et sur la plaquette thermoformée. Ne pas utiliser les comprimés au-delà de cette date.

Sortir les médicaments de la plaquette thermoformée uniquement lorsque vous vous apprêtez à prendre le médicament.

- The Arabic versions:

*يجب أن يحفظ هذا الدواء في مكان جاف درجة حرارته اقل من 25 درجة مئوية.

*لا يجوز تخطي التاريخ الأقصى للاستعمال المذكور على العبوة.

يحفظ في حرارة أدنى من 25 درجة مئوية.

*يجب حفظ جميع الأدوية بعيدا عن متناول الأطفال و يجب حفظ هذا الدواء في منأى من الرطوبة في مكان تقل حرارته

عن 30 درجة مئوية ولا يجوز تركه بالقرب من مشع حراري أو على متكأ النافذة أو في مكان فيه رطوبة.

تاريخ الصلاحية مذكور على العبوة و على الشريحة المشكلة حراريا. لا تستخدم الحبات بعد انقضاء تاريخ الصلاحية.

تخرج الحبات من الشريحة المشكلة حراريا فقط عند الاستعداد لتناولها.

The last rhetorical step in each drug information leaflet is instructions concerning the storage of the drug. The leaflets express this function with a modal verb denoting obligation or prohibition ('must', 'should'), or with the imperative ('do not exceed', 'store', 'keep', 'do not leave', 'do not use', 'do not remove') in English.

In parallel, the French versions show the use of the verb 'doit' and the infinitive instead of the imperative for the same function ('ne pas dépasser', 'conserver', 'à conserver', 'maintenir', 'ne pas utiliser', 'sortir').

The Arabic versions, in turn, show the frequent use of the verb 'يجب' denoting obligation, 'لا يجوز' for prohibition and the verbs 'لا تستخدم', 'تخرج' are put in the passive voice to fulfill the same function of directing the patient.

The imperative, noticeably frequent in the English versions, expresses deontic proposition and for many linguists, it is neither stronger nor weaker and neither less or more polite than a modal verb expressing obligation. Here, the drug information leaflet clearly instructs the patient on how to store the medicine. The majority of texts in English use the same devices to formulate instructions concerning the storage of the medicine, but some of the texts sometimes use a modal verb that is weaker than the imperative (such as 'must' and 'should'). By using the modal verb 'should' (as it is also the case for the verb 'devoir' in French and 'يجب' in Arabic), the speaker does not exclude the possibility that the event described by the verb will not occur, thus drug manufacturers do not take responsibility whether or not the patient follows the instructions.

Moreover, in some cases, the English texts apply the modal verb expressing future "will" to express this function, while neither French nor Arabic show the use of such a feature.

For example: It will be used before the expiry date. Your medicine will be kept below 30°C away from light. The solution will be stored below 25°C and used within 24 hours.

The modal verb expressing future predicts that the event will occur and the patient will follow the instructions. The modal verb 'will' does not concern the speakers' opinion or attitude, but it is completely hearer-oriented, thus it is the patients' responsibility to keep the instructions.

‘Will’ does not, however, express the commitment, force and authority needed for patients to follow the instructions as clearly as a modal denoting obligation or the imperative. The use of the modal verb ‘will’ rather expresses a habit that patients in their interests usually comply with the instructions provided by the leaflets, therefore, it is presupposed that patients will keep the instructions. None of the texts in French and Arabic have used such a feature in the leaflets under investigation. On the other hand, the use of the imperative in drug information leaflets, sometimes encountered in the French and Arabic versions and mainly found in the English ones, does not contain an element of presupposition, but it simply tells the patient what to do and what not to do, so expressing a caring attitude towards patients.

Conclusion

The following conclusions can be drawn from the investigation:

English, French and Arabic resort to the use of devices expressing deontic modality to a large extent in drug information leaflets. The three languages, as shown in the analysis of the leaflets, use different modality expressions since each language has got its own system and structures. This goes even beyond that in the sense that each language of the three has its own preferences changing from a genre to another and from a given situation to another, so the way devices expressing modality are rendered or translated from and into each one of the languages is by far not systematic. Whereas English usually tends to use modal verbs to express deontic modality in drug information leaflets, French and Arabic tend to employ

lexical verbs or a kind of particles denoting deontic modality especially Arabic which is a very rich language as there are plenty of structures and expressions that are used in the Arabic versions of the leaflets.

Examples in the three languages are found in the versions of the leaflets under investigation where more than one device is applied within the same structure, a technique which is called: *double modality*.

With a few exceptions, the English versions in the drug information leaflets tend to provide information in a more straightforward way due to the frequent use of the imperative, whereas the French and Arabic texts investigated in the present study seem to tone down and obscure information to a larger extent than their English counterparts.

The main function of modal devices in the genre of drug information leaflets is to change the truth conditions concerning the information provided by these texts through avoiding explicitness and intentionally presenting vague information. The three languages in the leaflets resort to deontic modality either to change the patients' attitude to the drug they are taking (for instance, to calm or scare the patient) or to decline responsibility by refusing to state explicitly the possible consequences of taking a particular drug.

General Conclusion

This dissertation is an investigation into the implications of the use of devices expressing deontic modality in drug information leaflets which provide the same version in three languages: English, French and Arabic. A lot of differences about how each language expresses deontic modality have been detected throughout the analysis of the leaflets in that different expressions, structures, modes and styles have been employed in the three languages. The comparison of these devices across the leaflets makes the act of detecting modality expressions, structures and nuances specific to each language a lot easier: English seems to be more direct than the other two languages due to its standing preference for the imperative and the use of modals; French primarily depends on conjugating verbs in different tenses and moods in the same context and Arabic shows a great variety of using different verbs and modal particles for the same matter. Although different, English, French and Arabic tend to use modal expressions to convey the same message or for the same purpose. The investigation shows that contrary to what was expected, drug manufacturers resort to the use of deontic modality expressions to present information in a vague and obscure way for the purpose of avoiding any kind of responsibility. Finally, it is perhaps in order to claim that the theoretical and practical implications of this initial study are significant, we need to call for further research into this extremely interesting subject.

BIBLIOGRAPHY

- Berkenkotter, C. & Huckin, T.N. (1995). *Genre Knowledge in Disciplinary Communication: Cognition / Culture / Power*. New York: Lawrence Erlbaum.
- Bhatia, V. (1993). *Analysing Genre: Language Use in Professional Settings*. London: Longman.
- Bhatia, V. (2004). *Worlds of Written Discourse: A Genre-based View*. London: Continuum.
- Biber, D. , Johansson, S. , Leech, G. , Conrad, S. , Finnegan, E. (1999). *Longman Grammar of Spoken and Written English*. London: Longman.
- Brown, P. & Levinson, S.C. (1987). *Politeness: Some Universals in Language Usage*. Cambridge: Cambridge University Press.
- Bybee, J. & Fleischman, S. (1995). "Modality in Grammar and Discourse" in J. Bybee & S. Fleischman (eds.). *Modality in Grammar and Discourse*. pp. 1-14. Amsterdam: John Benjamins.
- Devitt, A.J. (2004). *Writing Genres*. Carbondale: Southern Illinois University Press.
- Coates, J. (1983). *The Semantics of Modal Auxiliaries*. London: Croom Helm.
- Downing, A. & Locke, P. (1992). *A university Course in English Grammar*. Hemel Hempstead: Phonix ELT.
- El-Hassan, S. (1990). "Expressing Modality in English and Standard Arabic" (Presented Paper, J. King Saudi Univ, 1990). Vol 2, Arts (2), pp. 149-166.
- Fairclough, N. (1992). *Discourse and Social Change*. Cambridge: Polity Press.
- Halliday, M.A.K. (1970). "Functional Diversity in Language as Seen from a Consideration of Modality and Mood in English" *Foundations of Language*, 6. pp. 322-361.

- Halliday, M.A.K. (1994). *An Introduction to Functional Grammar (2nd ed.)*. London: Edward Arnold.
- Halliday, M.A.K. & Hasan. R. (1989). *Language, Context and Text: Aspects of Language in a Social-Semiotic Perspective*. Oxford: Oxford University Press.
- Hasan, R. (1989). *Language, Linguistics and Verbal Art*. Oxford: Oxford University Press.
- Huddleston, R. (1984). *Introduction to the Grammar of English*. Cambridge: Cambridge University Press.
- Huddleston, R. & Pullum, G.K. (2002). *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Hyland, K. (1995). "The Author in the Text: Hedging in Scientific Writing". Electronic Documents. *Hongkong Papers in Linguistics and Language Teaching*. Vol 18. N 1015.
- Kress, G. (1989). *Linguistic Processes in Sociocultural Practice (2nd ed.)*. Oxford: Oxford University Press.
- Lakoff, G. (1972). "Hedges: A Study in Meaning Criteria and the Logic of Fuzzy Concepts". *Chicago Linguistic Society Papers*, vol 8, pp. 183-228.
- Lange, J. , E. (1999). *Writing Clearly: An Editing Guide*. Massachusetts: Heinle & Heinle.
- Lawless, L.K. (2009). How to Translate Modal Verbs in French. *French Language Guide*, 38. Retrieved April 28, 2010, from: <http://www.french.about.com/library/verb/bl-modals.html>
- Lundquist, L. (1989). *Modality and Text Consideration*. Amsterdam: John Benjamins.
- Lyons, J. (1977). *Semantics*. Cambridge: Cambridge University Press.
- Lyons, J. (1983). "Deixis and Modality". *Sophia Linguistica* 12, pp. 77-117.
- Markkanen, R. & Schroder, H. (1997). *Hedging: A Challenge for Pragmatics and Discourse Analysis*.

- Mathews, P.H. (2005). *Oxford Concise Dictionary of Linguistics*. Oxford: Oxford University Press.
- Meziani, A. (1983). "Modality in English". *IRAL*. Vol xxi/4, pp. 267-282.
- Palmer, F.R. (1979). *Modality and the English Modals*. London: Longman.
- Palmer, F.R. (1986). *Mood and Modality*. Cambridge: Cambridge University Press.
- Palmer, F.R. (1993). *Mood and Modality*. Cambridge: Cambridge University Press.
- Palmer, F.R. (2001). *Mood and Modality*. Cambridge: Cambridge University Press.
- Paltridge, B. (1997). *Genre, Frames and Writing in Research Settings*. Amsterdam: John Benjamins.
- Perkins, M. (1983). *Modal Expressions in English*. London: Frances Pinter.
- Quirk, R. , Greenbaum, S. , Leech, G. , Svartvik, J. (1985). *A Comprehensive Grammar of the English language*. New York: Longman.
- Simpson, P. (1990). "Modality in Literary-Critical Discourse". In W.Nash (ed.). *The Writing Scholar: Studies in Academic Discourse*. pp. 63-94. Newbury Park: Sage Publications.
- Steel, S. , Akmajian, A. , Demers, R. , Jelinek, E. , Kitagawa, C. , Clerk, R. , Wasow, T. (1981). *An Encyclopedia of AUX: a Study in Cross Linguistic Equivalence*. Cambridge: MIT Press.
- Swales, J. (1990). *Genre Analysis: English in Academic and Research Settings*. Cambridge: Cambridge University Press.
- Swales, J. (2001). "Genre Identification and Communicative Purpose: a Problem and a Possible Solution". *English for Specific Purposes*, 22/2. pp.195-212.
- Swales, J. (2004). *Research Genres: Explorations and Applications*. Cambridge: Cambridge University Press.

Walton, A. (1991). "Modality and the Modals in Traditional Grammars of English". In G.Leither (ed.). *English Traditional Grammars: An International Perspective*. Amsterdam: John Benjamins.

Werner, T. (2006). "Future and Non-future Modal Sentences". *Natural Language Semantics*, 14. pp. 235-255.

Wodak, R. (2001). "The Discourse Historical Approach". In R.Wodak & M.Meyer (eds.). *Methods of Critical Discourse Analysis*. pp. 63-94. London: Sage.

ملخص

(The term 'deontic modality' is translated into Arabic as 'الموقفية')

إن مركز اهتمام هذا البحث يتمحور حول دراسة مختلف تعابير الموقفية المستعملة في اللغة الانجليزية و الفرنسية و العربية و هذا في نمط معين من المقالات ألا و هو النشرات الدوائية و محاولة معرفة سبب توظيف هذه التعابير في هذا النوع من الوثائق. إن أهمية هذه الدراسة تتجسد في إدراك بعض الخصائص و الميزات تخص تعابير الموقفية لكل من اللغة الانجليزية و الفرنسية و العربية و تتمثل بشكل اكبر في التوصل إلى فهم أفضل لوظيفة الموقفية في نمط النشرات الدوائية. يعتمد هذا البحث أساسا على أسلوب تحليلي وصفي لعينة تتضمن سنة (6) نشرات دوائية كل نشرة تحوي نفس النسخة في اللغات الثلاثة/ الانجليزية و الفرنسية و العربية. تشير نتائج هذا البحث المتواضع إلى أن تعابير الموقفية في النشرات تختلف بدرجات متفاوتة باختلاف و تنوع التركيبات و الأساليب و الميول الخاصة بكل لغة من اللغات المدرجة في هذه الدراسة و أن استعمال الموقفية في نصوص النشرات يستهدف تقديم المعلومات بصورة عامة و بطريقة مربكة و مشوشة و غامضة. يمكن استخلاص الاستنتاجات التالية من هذا البحث/ بالرغم من الاختلافات و التفصيلات الملاحظة في كل لغة من اللغات المذكورة أعلاه إلا أن هذه اللغات توظف تعابير الموقفية كوسيلة مراوغة للتأثير على أو تغيير موقف المرضى. لذلك فإن مصنعي الدواء يلجئون إلى استعمال الموقفية في النشرات الدوائية عموما بهدف تجنب أو رفض أي نوع من المسؤولية اتجاه المرضى.

Résumé

Le centre d'intérêt de cette recherche répond à l'examen de comment et pourquoi la notion de la modalité (connue comme 'deontic modality' en Anglais) est rendue en langue Anglaise, Française et Arabe dans les notices de médicaments. Une telle étude contrastive autour d'un genre très particulier de discours permet d'apercevoir les caractéristiques et les propriétés de chaque langue traitée par cette investigation, de temps plus, elle permet de révéler et à bien comprendre la fonction de l'application de la modalité ('deontic modality') dans les notices. La méthode adoptée par cette recherche est basée sur une analyse descriptive d'un échantillon de six notices contenant des versions en Anglais, Français et Arabe. A l'issue de l'analyse, les résultats indiquent que chacune des trois langues mentionnées ci-dessus possède ses propres structures, styles et préférences à dénoter la modalité ('deontic modality') et que cette dernière est apparemment employée dans les notices pour présenter les informations d'une manière vague, confuse et obscure. En conclusion, malgré les différences remarquées entre les trois langues ci-inclus, chaque langue utilise les expressions de la modalité dans les notices afin de manipuler et changer l'attitude des patients. Par conséquent, les fabricants des médicaments ont généralement recours à l'usage de la modalité ('deontic modality') dans les notices dans le but de renoncer à ou décliner la moindre responsabilité.