In the Name of God

University of Isfahan
Faculty of Foreign Languages
Department of English Language

M.A. Thesis

Epistemic modality in English and Persian academic writing: a cross-linguistic study of the effect of genre on the notion of transfer

Supervisor:
Dr. Manoochehr Tavangar

Advisor:
Dr. Abbas Eslami Rasekh

By:
Motahareh Sameri

October 2012

کلیه حقوق مادی مترتب بر نتایج مطالعات، ابتکارات
و نوآوری های ناشی از تحقیق موضوع این پایان نامه
متعلق به دانشگاه اصفهان است.

دانشگاه اصفهان

دانشکده‌ی زبان‌های خارجی

گروه انگلیسی

پایان نامه‌ی کارشناسی ارشد رشته‌ی آموزش زبان انگلیسی

خانم مطهره سامری تحت عنوان

وجهیت معرفتی در متون دانشگاهی فارسی و انگلیسی: بررسی بین زبانی تاثیر گونه بر مفهوم انتقال

در تاریخ .....توسط هیات داوران زیر بررسی و با درجه‌ی..... به تصویب نهایی رسید.

۱. **استاد/استادان راهنمای پایان نامه دکتر ..... با مرتبه‌ی علمی ..... امضا**

۲. **استاد/استادان مشاور پایان نامه دکتر..... با مرتبه‌ی علمی ..... امضا**

۳. **استاد/استادان داور داخل گروه دکتر..... با مرتبه‌ی علمی ..... امضا**

۴. **استاد/استادان داور خارج از گروه دکتر..... با مرتبه‌ی علمی ..... امضا**

امضای مدیر گروه

Abstract

The field of academic writing has undergone a major shift of attention from objectivity to subjectivity. The subjectivity of academic discourse thus highlights the importance of the use of epistemic modality in that epistemic modality, according to one of its conceptualizations, is conceived of as the expression of a speaker's subjective attitude towards the propositional content of an utterance. Accordingly, given the commonality between academic discourse and the notion of epistemic modality, it goes without saying that academic discourse lends itself to the study of epistemic modality, as a chief exponent of injecting personal attitudes into discourse. However, different languages provide their speakers with different linguistic devices for the expression of modality, and are informed by different norms of epistemic modality exploitation. Moreover, disciplinary variations have been revealed to exert a considerable influence upon the rhetorical aspects of academic discourse. Accordingly, to investigate the joint effect of linguistic and disciplinary variations upon epistemic modality use, the present study drew upon the discussion section of 240 research articles published in English and Persian across hard (chemistry and physics) and soft (philosophy and applied linguistics) disciplines. Furthermore, non-native speakers' corpus (English research articles published in English by Persian speakers) was taken into account to examine whether any transfer takes place form Persian to English. The results of the present study indicate that the number of modalised utterances is highest in the English corpus and lowest in Persian with the non-native speakers' corpus somewhere in between. With regard to disciplinary variation, in the English and learners' corpora under investigation, hard sciences use epistemic modality less frequently than their soft counterparts. In the Persian corpus, likewise, soft sciences are modalised more frequently than their hard counterparts but the difference between them is revealed to be statistically insignificant. Moreover, another key finding of the present study is that hard sciences use certainty markers more

frequently than possibility and probability markers to modalise their utterances, while soft sciences are characterized by the use of probability and possibility markers rather than certainty markers.
Keywords: modality, epistemic modality, genre, transfer

Table of Content

Title **Page**

Chapter One: Introduction

1.1. Statement of the Problem…….....1

1.2. Significance of the Study……...……...10

1.3. Research Questions……...…….....……...12

1.4. Definition of Key Terms…….……...…...12

1.4.1. Modality…….....12

1.4.2. Epistemic Modality...…….....13

1.4.3. Genre …….…….....13

1.4.4. Transfer…….…….....14

Chapter Two: Review of Literature

2.1. Overview……...15

2.2. Definition of Modality.……..……...…….…….....16

2.3. Extension of the Scope of Modality …..…….…….....22

2.4. Mood and Modality……..…….24

2.5. Evidentiality…….…….25

2.6. Classification of Modality…. ……...28

2.6.1. Dynamic Modality…….…….29

2.6.2. Deontic Modality…….....32

2.6.3. Epistemic Modality……36

2.7. Alternative Views……..39

2.7.1. Subjective and Objective Modality……39

Title **Page**

2.7. 2. Agent-oriented and Speaker-oriented Modality……...……42
2.8. Expression of Modality……..……..…....43
2.8.1. Expression of Modality in English…….45
2.8.2. Expression of Modality in Persian…….……....56
2.9. Modality and Other Categories…..……....70
2.9.1. Modality and Tense……70
2.9.2. Modality and Negation…….……....73

Chapter Three: Methodology

3.1. Overview……...…….……...…….77
3.2. Research Design…….……...78
3.3. Corpus…….…...……...……...…..……80
3.4. Procedure…… …….……...……..…86
3.5. Criteria for the Selection of Epistemic Modal Markers……89
3.6. Data Analysis…….……...…92

Chapter Four: Data Analysis and Results

4.1. Overview…….…….94
4.2. Introduction…….…..……...95
4.3. Findings of the Study……..95

Title **Page**

Chapter Five: Discussion, Conclusion and Implication
5.1. Overview……120
5.2. Restatements of the Problem…….…….....121
5.3. Discussion of the Findings…….……...…..122
5.3.1. Discussion of the Findings of Linguistic Variation……..……122
5.3. 2 Discussion of the Findings of Disciplinary Variation……..……129
5.3.3. Discussions of the Findings of the Qualitative Analysis…….….141
5.3.3.1. Can……141
5.3.3.2. May and Might……..…146
5.3.3.3. Could…….……147
5.3.3.4. Would……150
5.3.3.5. Will……...153
5.3.3.6. Must……...156
5.3.2.7. Should……157
5.3.3.8. Tævanestæn……...159
5.4. Discussion of Other Findings of the Study…….164
5.5. Functions of Epistemic Modal Markers in Academic Discourse……..….....175
5.5.1. Hedging……...…….…….……..…..176
5.5.2. Boosting ……...188
5.5.3. Creating Stance ….…….……..191
5.6. Implications of the Study ……...……...…….194
5.7. Limitations of the Study……...195

Title **Page**

5.8. Suggestions for Further Research…….……..196

References……198

List of Tables

Title **Page**

Table 2.1. Perkins' (1983) Classification of Modal Expressions……..……51
Table 2.2. Nuyts' (2001) Classification of Epistemic Modal Expressions……....55
Table 2.3. A Synopsis of Modal Expressions in Persian……..…..……69
Table 3.1. The Sampling Process Involved in Building the Corpus……..…70
Table 3. 2. Number of Words in English and Persian Research Articles across Different Disciplines…….....….80
Table 4. 1. Total Linguistic Devices Used to Express Epistemic Modality…….….90
Table 4. 2. Relative Frequency of Linguistic Devices Used to Express Epistemic Modality per 1000 Words..…….……...90
Table 4. 3. A Summary of the Total Linguistic Devices Used to Express Epistemic Modality per 1000 Words…….92
Table 4. 4. Frequencies of Modal Markers in Persian Articles from Soft Disciplines..…93
Table 4. 5. Frequencies of Modal Markers in Persian Articles from Hard Disciplines….94
Table 4. 6. Frequencies of Modal Markers in English Articles from Soft Disciplines.....95
Table 4. 7. Frequencies of Modal Markers in English Articles from Hard Disciplines....96
Table 4. 8. Frequencies of Modal Markers in the English Articles of Non-native Speakers from Soft Disciplines…….……97
Table 4. 9. Frequencies of Modal Markers in English Articles of Non-native Speakers from Hard Discipline……...……..98

Title **Page**

Table 4. 10. Chi-square Values Resulting from Comparing Modal Markers across Disciplines and Languages…….…….100

Table 4. 11. Raw Frequency of the Total Linguistic Devices Used to Express Epistemic Modality……...……101

Table 4. 12. Total Linguistic Devices Used to Express Epistemic Modality per 1000 Words……...……102

Table 4.13. Chi-square Values of Certainty, Probability, and Possibility Markers across Persian and English Soft and Hard Disciplines……...……103

List of Figures

Title **Page**

Figure 2.1. The Schematic Representation of Willet's (1988, p. 5) Types of Evidential……..…….27

Figure 2.2. Taleghani's (2008) Morphosyntactic Classification of Persian Modal Verbs……..……63

Figure 2.3. Taleghani's (2008) Semantic Categorization of Persian Modal Verbs..…….64

Figure 5.1. The Degree of Possibility English Modal Auxiliaries Express……..…...124

Figure 5.2. Continuum of Academic Knowledge……..……..128

Figure 5.3. Nuyts's Classification of the Meanings Expressed by Epistemic Modality……...……..…128

Chapter One
Introduction

1.1. Statement of the Problem

The inception of the semantic and conceptual notion of modality dates back to at least the time of Aristotle, and constitutes one of the actively pursued branches of modal logic. In this connection, Perkins (1983, p. 1) asserts that "modality has been the object of continual scrutiny and reformulation since at least the time of Aristotle." Accordingly, given the large and growing body of literature on modality, it is claimed that it "has come of age" (Hoey, 2005, p. 1298) and that it enjoys a status comparable to that of tense and aspect (Nuyts, 2001). The above argumentation lends us support to argue that modality is such an elusive and fuzzy concept that it continues to remain a moot point for linguists and philosophers. With regard to the elusiveness of the notion at issue, Narrog (2005) maintains that perhaps no category in linguistics has ever been the subject of divergent definition and interpretation as modality. By the same token, Hoey (2005), attempting to

present a comprehensive review of modality studies, refers to Bolinger's (1977, p. 554) notion of "endless flow of terminology" and argues that this proliferation of terminology is brilliantly realized in the literature on modality too. Bearing the elusiveness and fuzziness of the conceptual domain of modality in mind, it is not surprising to find that it has witnessed a surge of interest since its inception and has been investigated from different perspectives (Coates, 1983; Halliday, 2002; Lyons, 1977; Narrog, 2005; Nyuts, 2001; Palmer, 1986; Perkins, 1983, to name just a few). In point of fact, modality is such an elusive concept that, since its inception, there has been a wide range of approaches to its definition. Accordingly, a number of criteria including subjectivity (Bybee et. al., 1994; Lyons, 1977; Palmer, 1986), factuality (Palmer, 2001; Papafragou, 2000), and nonpropositionality (Fillmore, 1968) have been put forward to map out the scope of modality and find out what exactly constitutes this phenomenon. Among scholarly examples equating modality with subjectivity is Lyons (1977, p. 495), who construes modality as "the speaker's opinion or attitude towards the proposition that the sentence expresses or the situation that the proposition describes". Along the same line, Palmer (1986, p. 16) conceives of modality as "the grammaticalization of the speakers' (subjective) attitude and opinion". On the other hand, Fillmore (1986), in advancing his argument on the notion of proposition, touches upon the concept of modality in passing and defines it as everything which is outside of, and complementary to, the propositional content of the sentence. Finally, Papafragou (2000, p. 3), from the vantage point of non-factuality, envisages modality as linguistic expressions which allow us "to talk (and modal concepts allow us to think) about states of affairs which are not present in the current situation and may never occur in the actual world". These provisional definitions are abstract and crude, so, we will give them more substance by expounding them further in the following chapter.

Our perception of modality is further clouded by regarding the way it is classified. In modal logic, modality is confined to the expression of possibility and necessity

(Nuyts, 2006). However, when linguists adopted the conceptual notion of modality and introduced it into linguistics, "the neatness and comfortable order imposed by traditional analysis of modal logic was replaced by often muddled and sometimes confusing explanations" (Maynard, 1993, p. 37). Put differently, modality was rooted in logic, but when it entered the realm of linguistics, it departed from its origin in some fundamental ways in the sense that linguists found that the possibility/necessity dichotomy is an untenable distinction and that all the meanings expressed by modality do not necessarily fall into the two putative, distinct and well-defined categories of necessity and possibility. Accordingly, at this stage, different groups of linguists parted company and conflicts of opinions began to emerge. Some argued that, in its linguistic conception, modality falls into three broad categories and, accordingly, adopted a three-fold distinction in the modal system of languages: epistemic, deontic and dynamic modality (Perkins, 1983; Huddlstone & Pullum, 2002). Other scholars such as Coates (1983) and Papafragou (2000), on the other hand, preferred a dichotomous distinction between epistemic and non-epistemic or root modality. However, some other scholars, including Lyons (1977), invoked a rather different dichotomous distinction and classified modality into subjective and objective types. The way these two classifications pan out is that epistemic, deontic, and dynamic modality types admit of both subjective and objective readings. However, among the divergent classifications proposed in an attempt to tease modality out, one can find that a common thread running through all of them is that modality falls into two broad categories; namely, epistemic and deontic. The meaning expressed by epistemic modality runs the whole gamut of possibility, necessity, probability, inference, certainty, etc. Deontic modality, on the other hand, conveys obligation, duty, permission, requirement, right, etc. According to Papafragou (1998, p. 2), dynamic modality is related to "cases where circumstances in the real world make possible or necessary the actualization of a state of affairs". However, it did not take a long time for linguists to find that

“most of the modals are used in both senses and are not themselves either epistemic or deontic” (Palmer, 1990, p. 8) and realized the fact that the modal meanings are “merged”, “culturally stereotyped”, and “continually graded” (Coates, 1983, p. 13). Consequently, this provided Papafragou (2000) with the impetus to recourse to the notion of context to account for the different and blended meanings encoded by modals in different contexts.

Even a cursory glance at the literature on modality reveals that, apart from the elusiveness of the notion of modality and the complexity of its classification, there is no general consensus among scholars with regard to the linguistic expression of the notion in question. In point of fact, modality, as a semantic category, is textualised linguistically through a wide range of devices. However, it seems to be the case that modality is sometimes ill-conceived and merely simplified to modal auxiliaries and verbal representations which constitute an overtly narrow treatment of modality. Based on a more mature and prevalent conception, modality is encoded grammatically, lexically, and even paralinguistically (Palmer, 1986). Expressing modality paralinguistically is a matter of controversy. This means that some linguists recognize the use of paralinguistic features for the expression of modality, while others challenge this view and don’t take it into account. With regard to the grammatical realization of modality, Palmer (1986) proposes that it can be grammatically realized by means of mood, and most commonly through modal auxiliaries, as well as clitics or particles. He suggests that many of the features related to modality cannot be only grammatically marked; they are also lexically marked. He puts forth two reasons why the lexical expression of modality cannot be discarded entirely. First, many lexical modals are in “close semantic relationship with modal grammatical forms.” Secondly, “lexical forms are used by the speaker to report the modal being used by another, and the use of modal forms in subordinate clauses depends on the choice of lexical items in the main clause” (Palmer, 1986, p. 33).

What complicates matters even further is the fact that different languages provide their speakers with different devises whereby modality is encoded. This means that modality, in some languages (such as Latin and Greek), is mainly expressed through mood, while in some other languages mood is eliminated from the inflectional system of the language and the mood system is typically analytical rather than inflectional (Huddlestone & Pullum, 2002). The same appears to hold true for English, one of the two languages under investigation in the present study. With respect to the linguistic codification of modality, Nuyts (2001, p. 384) argues that epistemic modality, which happens to be the main focus of the present study, is realized through the following categories in English:

1) Modal adverbs

2) Modal adjectives

3) Mental state predicates

4) Modal auxiliaries

However, studies attempting to address this phenomenon in Persian (Bateni, 1969; Natel Khanlari, 1987; Shariat, 1992) have regrettably not been deeply theory-informed. As a corollary of this, different studies appeared with the aim of shedding light on the issue of modality in Persian. Rahimian (1999), for example, took issue with traditional Persian grammarians on account of their categorizing modality syntactically, and distinguished modality, as a semantic category, from mood, a grammatical category in Persian. In a relevant study, Tavangar and Amouzadeh (2009) delved deeper into the notion of modality in Persian and proposed that the entire gamut of expressions through which modality is encoded in Persian can be subsumed under the rubric of four different categories:

1) Modal adverbs

2) Modal lexical verbs

3) Modal auxiliary verbs

4) Mental state predicates

Considering the limitations within which the present study is conducted, the scope of modality is restricted to the epistemic type and that of modality markers to lexical and grammatical expressions. Grammatically, modality is confined to modal auxiliaries; lexically, it is restricted to modal lexical verbs, modal adverbs and modal adjectives. With respect to Persian, modality is confined to the four categories proposed by Tavangar and Amouzadeh (2009).

Aside from the elusiveness and complexity of modality in terms of its definition, classification, and linguistic codification, the concept is also a thorny area for second language learners to acquire and thus brings about some complexity in the EFL context. In this regard, Bald (1988) maintains that modals are among the most difficult domains in second language teaching and learning. Likewise, Quirk et. al. (1985, p. 220) state that "the use of modal verbs is one of the most problematic areas of English grammar." This can be attributed to the fact that each modal has several contextual, socio-cultural and pragmatic meanings (Chen, 2010; Cook, 1978; Palmer, 2001). As discussed by Chen (2010, p. 32), "multiple semantic meanings and pragmatic interpretations further add another layer of difficulty for L2 learners." Comparably, Palmer (1990) regards the multifunctionality and complex semantic attributes of modals as the principal source of difficulty for second language learners. This is in line with Papafragou's (2002) argument that "it is commonly the case that, in English, a single modal is capable of conveying both root and epistemic modal meaning." She goes on to argue that "the same phenomenon seems to have a robust cross-linguistic presence" (p.4). Put more precisely, there is no one–to-one relationship between the form and meaning of the modals.

Apart from the multifunctionality of modality, Bybee and Fleischman (1995, p. 3) argue that the difficulty second language learners encounter in learning modality