

Semantic Difficulties Faced by Students in China in Understanding Arabic Customs Terms

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Abstract

To achieve the two objectives mentioned in the introduction, quantitative research methods were used in the advancement of research. A quiz was distributed to 60 students at two universities in northern China. However, Group B completed the quiz, which may increase the uncertainty of our result. We suggested the analysis using data collected from Group A that students accomplish the quiz within a limited time in their classes under the supervision of the author to obtain 30 samples. As for the quiz, it was composed of 10 Arabic customs terms, which were randomly selected from 30 Arabic customs terms in the glossary of the textbook. The overall result indicated that the average error rate for ten questions was about 50%, which means that every respondent had at least four questions on comprehension biases for Arabic customs terms through Chinese concepts. Furthermore, we adopted proper lexical and terminological semantics to examine the relationships between students' answers and correct answers to find semantic difficulties. Meanwhile, we attempted to analyze the factors that influence students to have such problems. In this light, our study provides a model of learning of a subject terminology. And our study sheds on numerous semantic difficulties which would offer a steady stream of motivation for us to do a series of semantic studies in the future.

Keywords: Semantic Difficulties, Arabic Customs Terms, Chinese Undergraduates, Lexical Semantics, Terminological Semantics.

Introduction

The tremendous growth of international trade in the twentieth and twenty-first century necessitated regulation on both a national and international level, affecting international customs cooperation (Surangkana & Prem, 2019). "The Second Belt and Road Forum for International Cooperation" pointed out that China customs has cooperated with the countries along "The Belt and Road" in inspection and quarantine, which was listed in the performance of the forum (Wang & Liu, 2019). At the same time, the forum pointed out that the total amount of retail import and export commodities has reached 20.3 billion U.S. dollars, which should be thanks to the cross-border e-commerce management platform controlled by China Customs (Wang & Liu, 2019). In such circumstances, we acknowledge that customs play an important role in the international economic and business activities of "The Belt and Road". Customs is the authority or agency of a country that collects customs duties and controls the movement of goods to and from a country, including animals, transport, personal effects, and dangerous goods (Text of the Revised Kyoto Convention, 2008). Generally, customs has long been seen as the fiscal agent that collects customs duties and other taxes on imports and exports. In recent decades, the view of customs functions has expanded considerably and now covers three fundamental problems in the world: taxation, security, and trade facilitation (Kormych, 2018). Simultaneously, in order to solve such common problems that are worrying countries around the world, international organizations have been established. For example, the World Customs Organization (WCO) as the Customs Co-operation Council (CCC) is an independent intergovernmental body whose mission is to improve the effectiveness and efficiency of customs administration worldwide (Discover the WCO, n.d.). While in Arab countries, for instance, the Gulf Cooperation Council (GCC) has constructed a common customs law for GCC states, which is convenient for internal members as well as for external countries that can deal freely with any state of the GCC (Common Customs Law of the GCC States, 2003).

As stated above, customs cooperation, whether among nations or among international organizations, is committed to reaching relatively uniform rules to improve the efficiency of international trade. Moreover, we can observe that customs procedures occur in complex contexts requiring effective communication (Juan & Maria, 2019). Customs terms we will study run in every corner of the customs procedure, representing the most basic linguistic unit and professional terminology unit. They appear in the Arabic economic and business terminological glossary from the textbook, "Arabic Applied Texts in Economy and Business" (Yang, 2014) (hereinafter referred to as "the textbook"), for undergraduates in the third grade of Arabic major who will become business workers dealing with customs in the future in China.

However, the process of learning the textbook was not smooth for undergraduates in the third grade of Arabic major in China (Ma et al., 2022). This is primarily due to students focusing on Arabic linguistic knowledge rather than economic and business knowledge (Huang, 2015), or even customs-related professional knowledge, during their first two years of university. For one thing, the "Test for Arabic Majors-4" in China is held at the end of the second semester of students' sophomore year, which assesses their ability to use various basic skills and their mastery of grammatical structures and word usage (A'La Boyu Zhuanye Siji Kaoshi Dagang (Cao'an), 2014). For another, customs terms appearing in the Arabic economic and business terminological glossary convey interdisciplinary factors, like cross-language distress (between Chinese language and Arabic language) and interdisciplinary knowledge (customs basic theories, and Arabic grammatical structures). Some of the knowledge, in particular, goes

beyond their previous learning, which inevitably causes semantic difficulties for them when learning customs terms.

A. The Scope of The Study

We select customs terms from the most common teaching material for students in Arabic majors in China, "Arabic Applied Texts in Economy and Business", composed by Jianrong Yang. Because in the publication notes, the University of International Business and Economics Press states that the press has compiled a set of applied texts in foreign languages in conjunction with advanced lecturers from some key universities in order to meet the needs of undergraduate students majoring in foreign languages in colleges and universities in China. The press thinks this series of textbooks has high-quality content to help students learn applied texts. because the editors not only have rich experience in language teaching, but also have practical experience in business activities (Yang, 2014). Meanwhile, in the preface of the textbook, Yang mentions that the edition is based on the author's work experience in Arab countries, as well as existing economic and trade application documents in his hands. At the same time, the goal of editing such a textbook is to fill the gap in Arabic-compound talent in China-Arab economic and business exchanges. The textbook includes a glossary, translation, and applied texts, while Arabic customs terms are the subject with the most proportion, about 39%, in the glossary. In order to accurately identify them, we have identified them by dictionary: A'la Boyu Hanyu Cidian (-, 2008); and online dictionaries: مجمع مصطلحات الجمرک (مجمع مصطلحات الجمرک) (customs terminology complex), n.d.) and المعنى (Almaany, n.d.), thus there are about 30 customs terms.

B. Research Questions:

The present study aims to answer the following two questions:

1. What kinds of semantic difficulties faced by students in understanding Arabic customs terms?
2. What factors influence students to have semantic difficulties?

C. Research Objectives:

Based on the above-mentioned research questions, the study seeks to realize the following objectives:

1. To highlight the semantic difficulties that students face when trying to understand Arabic customs terms;
2. To explore the factors influencing students who have semantic difficulties.

Literature Review

In this section, we provide a critical review of the literature available on topics that are related to the topic of the present study. Basically, the meaning of Arabic customs terms needs to be defined, but the current studies have only identified Arabic economic and business terms (Ma, et al., 2022). Because our research object, Arabic customs terms, comes from Arabic economic and business terms, we can work with Arabic economic and business terms and then narrow down the scope. More specifically, Arabic economic and business terms have been identified as "compound words as well as multi-word expressions that in economic and business contexts (Vasuchenko, 2011) are given specific concepts based on the Arabic language" (Ma et al., 2022). In such research situations, we can attempt to provide a specific definition of Arabic customs terms based on Arabic economic and business terms. However,

current studies indicate very little literature about the terminological formation of customs. Juan and María (2019) highlighted how terminology rules may aid in the improvement of communications in highly specialized situations and the reduction of ambiguity while understanding regulatory documents (Juan & Maria, 2019). While this paper was limited to analyzing terms in Colombia's customs regulations, their analysis was not generalizable to Arabic customs terms. After all, Spanish and Arabic have very different terminological formations in terms of linguistic composition. Despite this, we can use their theory to try to define Arabic customs terms: they are a small subject in the textbook of Arabic economic and business terms (Yang, 2014), carrying the specialized communication required for customs procedures (Juan & Mara, 2019), mainly working in Arab countries or China, and based on the Arabic language.

In modern studies, few studies are directly related to customs terms. In order to identify their features, we can only begin with a broader scope, customs studies, by reading the language usage of customs terms in the articles to explore the features. The current research indicates the directions of customs studies in customs legislation, customs policy, and customs functions. In particular, Kormych (2018) used the changes in customs functions to study two relatively new tasks of security and trade facilitation and discussed two basic modern instruments to implement such tasks. In his study, a fact in legislation that needed attention was that some developing countries simply mechanically transfer international customs laws, but they cannot resolve the issue of proper quality of administration that is arousing in the customs of their own countries (Kormych, 2018). Additionally, Surangkana and Prem (2019) investigated aspects of international customs cooperation, identifying that a prerequisite characteristic of cooperation was dependent on each country's level of economic development and identifying a trend that was the multiplication of directions and forms of non-regional cooperation of associations and blocs in the development of integration processes. Moreover, Juan and María (2019) proposed customs regulation texts have an influence on how customs terminology is perceived and applied. In this light, misusing such specialized terms often occurs in international trade, which would lead to misinterpretation in several related areas, involving trade agreements, non-tariff barrier policies, and physical distribution logistics. Besides, many regulatory frameworks, national rules, and regional agreements aim at harmonizing local and international customs processes. According to Zhou (2015), every term in WCO comes from the international conventions and actual customs business signed between countries, and the content in the book "Glossary of International Customs Terms" is very rigorous. Therefore, we believe the features of customs terminology are precise, regulatory, and rigorous.

When attempting to review customs terms in semantics, it is hard to find any related references. In this light, we can only seek a broader scope, semantic studies with economic and business terminology in foreign languages, to support our study. More specifically, Ma et. al (2022) have studied semantic challenges caused by abbreviations of Arabic economic and business terms. They proposed three semantic challenges faced by students:

1. it was difficult for students to distinguish similar abbreviations under the same semantic classifications with one semantic knowledge ontology, which had subtle semantic differences;
2. relative antonyms for students were a notable issue in handling semantic relations;
3. the cross-cultural semantic challenge was an invisible challenge penetrating abbreviation learning (Ma et. al., 2022, p.130).

However, the abbreviations can only represent one form of Arabic economic and business terms, so their research on a subject is limited. Other business linguistic terms, like English

international trade terms has combined with cognitive semantics by Luo (2020). She investigated the methods of effective understanding of English Incoterms and their semantic generation mechanisms from the perspective of cognitive linguistics. She found that the construction of terminological meaning was influenced by many factors, like contexts, and was a dynamic process. Furthermore, Shirinova (2020) has identified the theories of semantic and structural properties in the banking and financial terminology in the Uzbek language. One of the accomplishments of this work was that the author classified phrases in the banking and finance industries using semantic features.

Although some relevant research was shown in semantic studies with business languages, Brannen, Piekkari, et al (2014) believed language to be the center of international business operations but that it has not been adequately described or conceptualized as a major component in the area of international business. In this regard, our study would like to fill the gap and attempt to build a connection between a subject in Arabic economic and business terms, Arabic customs terms, and semantics in Arabic for business purposes. If the connection will be built, and then semantic difficulties faced by students in learning Arabic for business purposes can be solved, the gap would be filled and influenced their future relevant work dealing with processing of customs procedures.

Methodology

Our research adopts a quantitative method, using a quiz to collect 60 samples among undergraduates in Northern China, and using simple mathematical statistics to figure out semantic difficulties. The specific processes are as follows:

A. Data Collection Instrument

A quiz was conducted to collect data on the semantic difficulties faced by students in understanding Arabic customs terms. 10 Chinese concepts were randomly selected from 30 corresponded Arabic customs terms to compose the quiz, including Chinese and Arabic two languages. The purposes of the quiz are to test students' abilities on understanding Arabic customs terms. The terms have verified, so every question had only one precise answer and no ambiguity in semantics. Thus, students' answers would be corrected with the right answers. Through collecting mistakes made by students, we can finally find students' difficulties faced by students.

B. Research Populations and Procedure

In northern China, a dozen universities open the Arabic major. However, only 3 universities use the textbook as a material in ABP in the Arabic major due to the curriculum reform in 2018 (-, School of Foreign Language, n.d.; -, Fang'an et al., 2017; Xueyuan, n.d.). The number of using the textbook is approximately 80 students, which are unevenly distributed in three universities: Jilin International Studies University, University of International Business and Economics, and Xibei Minzu University (-, School of Foreign Language, n.d; Fang'an, 2017; Xueyuan, n.d.). In this perspective, the number of participants cannot be evenly selected at three universities. However, three universities are located in different cities, and we finally choose two universities that are more interpersonally convenient for the author due to COVID-19, time constraints, and cost-effectiveness.

Xibei Minzu University and Jilin International Studies University are selected to participate in our research procedure. Because the total number of students in these has reached about 75% of the total number of students in the three universities. In order to ensure the integrity

of our experimental procedures and results, we invite all students from the third grade at two universities in Northern China—30 students at Xibei Minzu University and 30 students at Jilin International Studies University—to participate in our experiments, where the total number of students is roughly 60 male and female students (Fang'an, 2017; Xueyuan, n.d.).

To obtain the 30 responses that our research needs and to ensure the reliability of an investigation, we collect data through 2 different instruments but using the same quiz. Group A is for all 30 students from the third grade in the Arabic major, Xibei Minzu University, to take part in the investigation. They have adopted the test and the questionnaire by means of the paper within the limited 50 minutes in the class. Otherwise stated, the author has a chance to attend the class and personally supervise the entire research process. Hence, 30 students will follow the examination regulations, where they are forbidden from using dictionaries or searching online. Once they complete both, their tests and questionnaires are delivered right away. By contrast, at the same time, the same set of tests and questionnaire will be distributed to all 30 students with the same backgrounds at Jilin International Studies University, Group B. Unfortunately, due to COVID-19 and time constraints, the author is unable to supervise those students' progress in the research. Thus, other data is collected online within one week. They are asked to answer the tests and questionnaires on computers or mobile phones after their classes. Although the online test is convenient for the researcher and respondents, it will inevitably make students susceptible to cheating and transition to open-book exams (Singh, 2018). In this regard, this part of the data has uncertain and inauthenticity. Our analysis would suggest using the data from Group A to obtain the most accurate test results.

C. Theoretical Framework

In order to find semantic difficulties, we adopted a comprehensive theoretical framework to analyze the data. We choose the suitable semantic theories for comparative analysis in the table below based on the association between students' replies and right answers:

Table 1

Theoretical Framework Adopted in Analysis

Types of semantic theories	Basic theories	Analysis aspects
Lexical semantics:	(1) Lexical Semantic Relations (Zapata, 2008)	Examining the relations that exist between students answers and correct answers. It includes but is not limited to antonymy and semantic ambiguity.
	(2) Componential Analysis (Ottenheimer & Judith, 2013, p. 20)	Analyzing the components and semantic features of an Arabic customs term reflecting in its concept. In this light, it will run through our analysis of all terms and concepts, but will not be explained separately.
	(3) Frame Semantics (Fillmore, 1977)	Analyzing the semantic core under the same background framework.
The Theoretical Foundations of Terminological Semantics	(4) Specific Semantic Triangle (Wang & Zhang, 2009, p.6)	We adopted two levels of SST to examine the relations between terms' concepts and their denominations: the first level was reflected in the relationship between specialties and concepts; the second level was the relationships between concepts and terms. The purpose of using this theory is to check whether the concept is correctly reflected by the Arabic customs terms' denominations filled in by students.
	(5) Classifications of Terminological Semantics Based on the Semantic Web of Knowledge Ontology (Wang & Zhang, 2009, p.8; Ma, et al., 2022)	It can identify some ambiguous semantic relationships that do not have a direct association in semantic word formation, but under same procedure of customs background.

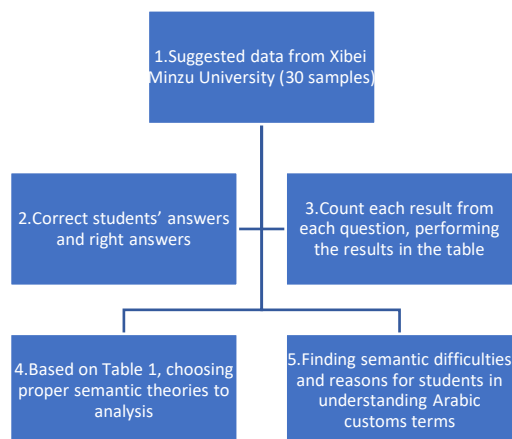
D. Data Analysis Procedure

Figure 2 The Procedure of Data Analysis

The data analysis would adopt 30 samples completing within 20 minutes in class, which was suggested from Xibei Minzu University. And their quizzes would be submitted in class right away. To find semantic difficulties caused by Arabic customs terms, we would correct students' and answers and right answers, and then count each result from each question, performing the results in the table. In this regard, we can result how many frequently errors made by students in the quiz. Through collecting high frequent errors, we would choose proper semantic theories to comparatively analyze the errors and correct answers, which are based on the analysis aspects of theories in Table 1. To examining factors that influence students to have such difficulties, we can give potential details in the process of data analysis.

Results and Discussions

The quiz was composed of 10 Chinese concepts to test students' abilities to understand Arabic customs terms. These questions appear in the form of fill-in-the-blank exercises, which require undergraduates to answer the corresponding Arabic full denomination of customs terms. Due to space constraints, we only examine questions with an error rate of more than 50%, followed by common mistakes made by students in those questions. At the same time, we also focus on questions that are most blanked by students. The details would be given in the following:

Table 2

The Frequency of Errors made by Students

No. ques tion	The correct answers	THE FREQUENCY OF ERRORS		The percentage of errors (%)
		Wrong answers (times)	Blank (times)	
1	(Customs Clearance) التخليص الجمركي	20	6	86.6%
2	(Customs Procedure) الإجراء الجمركي	3	4	23.3%
3	(Trade Claims) التعويض في التجارة	15	6	70%
4	(Open Account) الحساب المفتوح	5	3	26.7%
5	(Tax Break) إعفاء ضريبي	3	3	20%
6	(Free trade Agreement) اتفاقية منطقة التجارة الحرة	8	6	46.6%
7	(Processing Trade) التجارة التحويلية	19	5	80%
8	المستودع الجمركي (Bonded Storage Warehouse Bonded)	5	4	30%
9	رسوم التسليم المدفوعة (Delivered Duty Paid)	12	3	50%
10	واجب التسليم دون دفع الأجر (Delivered Duty Unpaid)	11	5	53.3%
Average error rate for ten questions		48.65%		

Note: The total frequency was 30 times, representing 30 students.

Table 2 shows the frequency of errors made by students, including counting wrong answers, blanks, and percentage of errors in each question. The overall result from the table indicates that the average error rate for ten questions is about 50%. It means that every respondent has at least four questions on comprehension biases for Arabic customs terms through Chinese concepts. Due to space constraints, the errors per question are over 50%, which will be analyzed. The questions with an error rate of more than 50% from high to low were question 1 (86.6%), question 7 (80%), question 3 (70%), question 10 (53.3%), and question 9 (50%). In this light, we can see that question 1 is the highest, at 86.6%, where wrong answers were made by students 20 times, while blanks were 6 times, followed by question 7, where those wrong answers were 19 times, and blanks were 5 times. By contrast, the two questions with a higher accuracy rate are question 5 and question 2. The percentage of errors for question 5 is at the proportion of twenty, which means the least wrong answers and blanks made by students, followed by question 2, at 23.3%. Otherwise stated, the three questions with the highest blank frequency are question1, question3, and question 6, all at 6 times. From the table, we think the first semantic difficulty is that the concept does not correspond to the term's denomination, whether mistakes or blanks are not correctly reflected by students' answers. According to the Specific Semantic Triangle (Wang & Zhang, 2009, p.6) (in Table (4)), the relation between terms and concepts is the process of terminologicalization. In particular, "Terminologicalization is a synchronous process, with a semantic information

impairment or appreciation." While the connotation of a concept is a more comprehensive reflection of the conceptual categories and the objective essential features. The term "to concept" is an accusative relationship, i.e., the term refers to the concept, according to the inverse of the semantic triangle. In this regard, the essence of terminological semantics cannot catch by students, that is used to refer to the concept. Furthermore, the second semantic difficulty may be shown in two language transformation, since some students have written the Chinese denomination of customs terms as their answers, which were forbidden to appear in the quiz. Such situations, we think, on the one hand, are caused by disturbances caused by cross-language comprehension; on the other hand, students may lack the name reserve corresponding to Arabic language. The other details will be shown in the following:

A. The Discussion of Question 1

Question 1: the stem was: “进出口或转运货物出入一国关境时，依照各项法律法规和规定应当履行的手续” (Zhonghua Renmin GongheGuo Haiguanfa, 2019) (translated into English: “Customs clearance is the act of taking goods through the customs authority to facilitate the movement of cargo into a country (import) and outside the country (export)” (What is Customs Clearance?, n.d.).) ----the corresponding Arabic customs term was التخليص الجمركي (清关) (Customs Clearance). While in the Arabic concept is explained in the Saudi Customs: “هو إجراء إداري مطلوب للسماح بدخول أو خروج سلع معينة من وإلى الدول المختلفة، ويجب أن يتم ذلك بواسطة وسيط جمركي معتمد، ويشمل ذلك الكشف عن المعلومات المتعلقة بالشحنة المستوردة أو المصدرة وكذلك (Saudi Customs, 2017). الأطراف المشاركة في العملية”

One reason for the highest frequency of errors in Question 1 was that some participants wrote completely unrelated answers; another reason was that more than half of the mistakes were written in the term Tariff (الرسوم الجمركية). The Chinese concept of Tariff was: “关税是指一国海关根据该国法律规定，对通过其关境的引进出口货物征收的一种税收” (Du, 2001) (translated into English: “A tariff is a tax imposed by one country on the goods and services imported from another country” (Kenton, 2021).) (In terms of Arabic concept: الرسوم الجمركية هي ضرائب تفرضها الدول على السلع المستوردة من الخارج أو المصدرة إليه، وتدفع أثناء عبور هذه "" السلع الحدود ولوجها التراب الجمركي الخاضع للضريبة أو خروجها منه (Reuters, 2016).

In this regard, we can compare the two concepts of Arabic customs terms. In the customs business, both Customs Clearance and Tariff were used in import and export programs. Instead, the differences between them were that the former described a customs operation or an act, while the latter emphasized the advanced tax arising from the process. However, the relationship between them in customs procedure was that “Tariff, along with the other assessments such as national sales, local taxes, and in some instances customs fees, is collected at the time of customs clearance in the foreign port” (Tariffs and Import Fees, 2016). So, if a customer would like to buy an imported product, it must go through the process of customs clearance first, then a service for the account holder to pay tariffs and taxes after customs clearance on behalf of the recipient. Finally, the price, including tariffs and taxes, can be sold to a customer.

According to semantic analysis, these two terms do not have direct association in semantic terminological formation. Thus, we choose the terminological semantic theory in Table 1(5) to analyze their connections, so that we can find semantic difficulties faced by students. If we put customs into "Classifications of Terminological Semantics Based on the Semantic Web of Knowledge Ontology", as a core of knowledge ontology (Wang & Zhang, 2009; Ma, et al., 2022), customs clearance was one of the branches in the semantic net, while the tariff was a fork in the procedure of customs clearance. This shows that students cannot deal well with

such a relationship reflected by a group of terms that do not have direct association in semantic formation. In this light, the third difficulty lay in precisely capturing relationships that had some semantic relevance in one semantic net.

B. The Discussion of Question 7

The stem of Question 7 was “是指经营企业进口全部或者部分原辅材料、零部件、元器件、包装物料（以下简称料件），经加工或装配后，将制成品复出口的经营活动，包括进料加工、来料加工” (Jiagong Maoyi, n.d.) (Translated into English: “Processing trade refers to the business activity of importing all or part of the raw and auxiliary materials, parts and components, accessories, and packaging materials from abroad in bond, and re-exporting the finished products after processing or assembly by enterprises within the mainland” (HKTDC Research, 2018).) –Corresponding to the Arabic customs term was التجارة التحويلية (Processing Trade) (加工贸易). While in Arabic concept:

تشير التجارة التحويلية إلى النشاط التجاري المتمثل في استيراد كل أو جزء من المواد الخام والمساعدة والأجزاء والمكونات والملحقات ومواد التعبئة والتغليف من الخارج في السندات، وإعادة تصدير المنتجات النهائية بعد المعالجة أو التجميع من قبل الشركات داخل البر الرئيسي.

However, the common answer was التجارة التعويضية (Compensation Trade) (补偿贸易) by two-thirds of students who made a mistake. The Chinese concept was “是指买方在信贷的基础上，从国外厂商进口机器、设备、技术，以及某些原材料，约定在一定期限内，用产品或劳务等偿还的一种贸易方式” (Guo, 2001). (Translated into English: It refers to a trade method in which the buyer imports machinery, equipment, technology, and certain raw materials from foreign manufacturers on the basis of credit, and agrees to repay with products or services within a certain period of time.) (In terms of Arabic concept: طريقة تجارية لسداد المنتجات أو الخدمات على أساس الائتمان للمشتري في ضمن المدة المتفق عليها التي تستورد الآلات والمعدات والتكنولوجيا وبعض المواد الخام من الشركات المصنعة الأجنبية).

Specifically, both belong to the forms of special international trade, which are new forms of trade that have progressively developed since the 1970s (Zhou W., 2006). From another angle, they are two of the different forms of visible trade. In China, compensation trade is often combined with processing trade, called the "Three-plus-one" trading-mix (custom manufacturing based on samples using materials and parts supplied by an outside source) (Yao, 2016). Although they have no obvious semantic relation, they share one basic frame to be defined. Therefore, one common frame requires different senses to adapt to the empirical application. As stated by Fillmore (1977), in frame semantics (in Table 1 (3)), "it takes the view that a word's meaning depends on its conceptual underpinnings, knowledge of which is necessary for its appropriate use". Moreover, this term has Chinese characteristics, which requires students to have a significant special background in China customs and international trade. As a result, we believe that the students mainly experienced a comprehensive challenge for the semantic core inside the same background framework, maybe due to a lack of conceptual terminological foundations.

C. The Discussion of Question 3

The stem of question 3 was: “进出口交易中，因一方违反契约规定，直接或间接造成另一方有所损失，受损害的一方向违约方提出赔偿要求，以弥补所受之损” (Guoji Maoyi Suopei Ni Zhende Dongma?, 2019) (Translated into English: “in the import transaction, one party in violation of the provisions of the contract, the other party has been directly or indirectly caused the loss of the injured party in breach direction of a claim for compensation to make up for the damage they suffered”)--- Corresponding to Arabic customs term was

في معاملة الاستيراد، كان (国际贸易补偿). While in Arabic definition: “أحد الطرفين ينتهك أحكام العقد، وتسبب الطرف الآخر بشكل مباشر أو غير مباشر في خسارة الطرف المتضرر في خرق (Trade Claims) التعويض في التجارة (Habiba.D., 2018).” توجيه مطالبة بالتعويض بالتعويض عن الضرر الذي لحق به

Analyzing the reasons of errors in Question 3, except for the blanks caused by some students, one word in part of this term التعويض was filled by students. The second case was deserved to attention, since this word in Arabic has different semantic contents in different fields. For instance, in psychology it means “compensation”:

التعويض هو إحدى الآليات الدفاعية التي تحدث عنها عالم النفس الشهير فرويد للمحافظة على التوازن النفسي للشخص بصفة مؤقتة وحمايته والتقليل من التوتر لديه، وتم تطويرها من خلال عالم النفس أدار مؤسس علم النفس الفردي الذي اعتبر التعويض من مفاهيمه الرئيسية ويعني أنه عندما يجد الفرد نفسه غير قادر على النجاح في مجال معين يقوم بالبحث في مجال آخر ليحقق به النجاح والشعور بالرضا (نمر، 2022).

It can explain into English: “In psychology, compensation is a strategy whereby one covers up, consciously or unconsciously, weaknesses, frustrations, desires, or feelings of inadequacy or incompetence in one life area through the gratification or (drive towards) excellence in another area” (Sam, 2018).

Although both of them use the same Arabic word as a term in different fields, they represent different semantic content in Chinese and English: the former is the psychological compensation (补偿); the latter one is the money claim (赔偿). In this regard, only one word “التعويض” could not become a complete term, because it would create semantic ambiguity (Table 1(1)), particularly for without context to singly use.

D. The Discussion of Question 9 and Question 10

By reviewing the wrong questions, we found that the frequency of errors was similar for the two questions because the students filled in the answers in reverse for the two questions. In this light, through analyzing semantic relations (in Table 1 (1)), we can discover the reasons that cause errors by students.

The stem of question 9: “指出口商在进出口双方指定的目的地办理完进口清关的手续后，再将货物交给进口商” (Wang Y. , 2019). (Explanation into English: “Delivered duty paid is a delivery agreement whereby the seller assumes all of the responsibility, risk, and costs associated with transporting goods until the buyer receives or transfers them at the destination port” (Banton, 2022).) While in Arabic: “تسليم البضاعة، التي تخضع لمعاملة البيع، إلى النقل الآتية لتسليمها في نقطة بركة متفق عليها بين أطراف المعاملة، في دولة الوجهة “المشتري، دون تفريغها من وسائل (customs terminology complex) مجمع مصطلحات الجمرک) “بعد دفع رسوم الجمرک ورسوم الاستيراد من قبل البائع (Delivered Duty Paid) رسوم التسليم المدفوعة----- (n.d.).

By contrast, the stem of question 10: “表示卖方负责将货物安全地运至指定目的地，支付所有运输费用，并承担运输过程中的一切风险” (Weiwanshui Jiaohuo(DDU), 2021)). (Explanation into English: “Delivered Duty Unpaid is an old international trade term indicating that the seller is responsible for the safe delivery of goods to a named destination, paying all transportation expenses, and assuming all risks during transport (Segal, 2021).) While in Arabic:

باستخدام هذا المصطلح يكون البائع قد وفى بالتزاماته مع تسليمه البضاعة إلى المشتري في نقطة تسليم في دولة الوجهة التي اتفق عليها طرفا الصفقة، دون أن يشمل ذلك سداد الرسوم الجمركية و/أو الضريبة، وكذلك رسوم التفريغ من وسائل النقل في بيت المشتري. يتحمل المشتري على حسابه مسؤولية الحصول في سلطة الجمارك على إجازة البضاعة المستوردة. يمكن استخدام هذا المصطلح في كافة وسائل النقل (مجمع مصطلحات الجمرک (customs terminology complex), n.d.).

Based on the above, we can compare them to find our fourth semantic difficulty. In the

world of shipping, delivered duty unpaid simply indicates that the buyer is responsible for any customs charges, tariffs, or taxes levied by the destination country. All of these must be paid before customs will release the package when it arrives. Delivered duty paid, on the other hand, signifies that it is the shipper's obligation to pay any customs charges, tariffs, and/or taxes necessary to transport the goods to the destination country. As a result, two terms are "complementary or contradictory antonyms" (pairs of words where one member has a specific semantic property that the other member does not (cf. Lyons, 1977, cited in Zapata, 2008)). In particular, DDU must be paid before customs will release the package when it arrives, while DDP is not needed. Therefore, the last difficulty is that students cannot identify precisely the semantic relation performing in "complementary or contradictory antonyms".

Conclusions and Contributions

To achieve the two objectives mentioned in the introduction, quantitative research methods were used in the advancement of research. A quiz was distributed to 60 students at two universities in northern China. However, Group B completed the quiz, which may increase the uncertainty of our result. We suggested the analysis using data collected from Group A that students accomplish the quiz within a limited time in their classes under the supervision of the author to obtain 30 samples. As for the quiz, it was composed of 10 Arabic customs terms, which were randomly selected from 30 Arabic customs terms in the glossary of the textbook. The overall result indicated that the average error rate for ten questions was about 50%, which means that every respondent had at least four questions on comprehension biases for Arabic customs terms through Chinese concepts. Furthermore, we adopted proper lexical and terminological semantics to examine the relationships between students' answers and correct answers to find semantic difficulties. Meanwhile, we attempted to analyze the factors that influence students to have such problems. The followings will review our major findings and list our contributions and limitations.

A. Major Findings

Each research question is restated before discussing its findings. We have adopted a comprehensive semantic framework to analyze semantic difficulties caused by students, including lexical semantics (semantic relations, frame semantics, component analysis, etc.) and terminological semantics (Specific Semantic Triangle, Classifications of Terminological Semantics Based on the Semantic Web of Knowledge Ontology). The overall results indicated that all respondents had faced general 6 semantic difficulties in understanding Arabic customs terms to varying degrees.

1. What kinds of semantic difficulties faced by students in understanding Arabic customs terms?

a. the semantic difficulty may be performed in the concept does not correspond to the term's denomination, whether mistakes or blanks are not correctly reflected by students' answers; b. the semantic difficulty may be shown in cross-language semantic understanding, especially for two language transformation between Arabic and Chinese; c. the third difficulty lay in precisely capturing relationships that had some semantic relevance in one semantic net, in question 1; d. the semantic difficulty may be displayed in students mainly experienced a comprehensive challenge for the semantic core inside the same background framework, in question 7; e. only one word "التعويض" could not become a complete term, because it would create semantic ambiguity, in question 3; f. the last difficulty is that students cannot identify

precisely the semantic relation performing in “complementary or contradictory antonyms”, in question 9 and 10.

2. What factors influence students to have semantic difficulties?

a. students may lack relevant knowledge reverse in customs terms. This was reflected in the overall result and every analysis. For example, since students may lack the name reserve corresponding to Arabic language, cross-language comprehensive difficulty was caused. Moreover, students may be unfamiliar with the procedure of customs, so that having some related terms under same framework cannot be identified by students. b. students cannot realize the features of Arabic customs terms, involving precise, regulatory, and rigorous. Thereby, one word as an answer can cause semantic ambiguity, especially for a term performing in two or more meanings in different fields.

B. Limitations and Contributions

This study has contributed to the literature in three significant ways. Firstly, the contribution of the study gives an example displaying the interdisciplinary research, especially for the combination of Arabic language and customs, Arabic language and Chinese language, as well as the combination of semantics and terminology. Also, our study provides a model of learning of a subject terminology. Next, this study sheds on numerous semantic difficulties which would offer a clear guide for both students and instructors in the Arabic major. And this study would provide the valuable factors that cause semantic difficulties in understanding AEBT. For instance, students cannot realize the features of Arabic customs terms, involving precise, regulatory, and rigorous, so students need to be aware of the features for future study.

This study has its own limitations like any other studies. First, the present study is limited to identify the limited semantic difficulties in the investigation, due to the various angles in analysis of the questions. Secondly, this study mainly focusses on finding semantic difficulties and their influenced factors, it is inevitably to ignore theoretical exploration in semantics. Furthermore, this study cannot give the solutions for those semantic difficulties, due to the research objectives setting and space constraints.

Appendix A Quiz on Semantic Difficulties

No. question	Concept of Arabic customs terms	Answering denominations of Arabic customs terms (in Arabic language)
1	进出口或转运货物出入一国关境时，依照各项法律法规和规定应当履行的手续	
2	海关程序是与特定海关目的地相关的一组管理和操作	
3	进出口交易中，因一方违反契约规定，直接或间接造成另一方有所损失，受损害的一方向违约方提出赔偿要求，以弥补所受之损	

4	货物直接发给买方，无需金融机构的调解，买方承诺稍后向卖方付款，风险由卖方承担。	
5	裁定权对人，财产，收入或交易施加的强制性付款义务的减少或消除	
6	两个或多个国家之间的协议，各国就影响商品和服务贸易的某些义务以及对投资者和知识产权的保护等主题达成一致。	
7	经营企业进口全部或者部分原辅材料、零部件、元器件、包装物料（以下简称料件），经加工或装配后，将制成品复出口的经营活动，包括进料加工、来料加工	
8	经海关许可并受其监管的仓库，海关允许进口商在缴纳关税前和解除海关监管前存放货物。	
9	指出口商在进出口双方指定的目的地办理完进口清关的手续后，再将货物交给进口商	
10	表示卖方负责将货物安全地运至指定目的地，支付所有运输费用，并承担运输过程中的一切风险	

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