TURKISH STUDIES IN TECHNICAL TRANSLATION

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CONTENTS

CHAPTER III

CHAPTER IV

FOREWORD

Translation is a unique practice in terms of its function and use as well as the cognitive and technical mechanisms underlying it. Translation Studies (TS) explores the scientific depths of the practices and processes of translation which has become a deeper well with the background, knowledge and skills accumulated over time enriched with the technological developments of our era materialized with the products of machine-aided translation and translation tools (e.g. memories, online aids and corpora software).

The editor of the collection Prof. Mine Yazıcı, a pioneering scholar in the field of technological aspects of TS and translator training, brought together the special assets in her portfolio, best of her doctoral students, with their contributions based on their academic and practical expertise in our field. Having said that, the current collection titled **Turkish Studies in Technical Translation** brings together fundamental aspects of the technological phase of TS at plural levels ranging from technical translation, machine translation, quality assessment, corpora studies in four chapters.

The articles of the collection, written by TS scholars and researchers in Turkey, reach you in English/ the lingua franca of academia displaying the authors' and the editor's intention of introducing the recent developments in the technical/ domain-based practice in the field of translation in our country to the rest of the world. Now, I will try to give you an overview of the theoretical (research-based) and practical foci of the chapters of the book along with the background on the contributors.

Chapter one by İnönü Korkmaz titled «Introducing Information Technologies in Technical Translation» discusses the historical development of technological applications and the use of information technologies in technical translation practices especially after the

common use of internet as of 1980s. New communication technologies, advanced human-computer interactive systems, digital communication and data compression techniques (in short, machine translation) met the increasing demands of the translation industry with the help of electronic translation memories, corpora, translation engines, terminology, localization and desktop publishing tools. The chapter exemplifies the current applications of information technologies in technical translation as well as discussing the contribution of such practices to the theoretical studies in the field.

Chapter two by Mine Yazıcı titled «Terminology Formation and Translation Procedures in Turkish» examines the demand the terminology formation processes as a result of the rapid dissemination of knowledge in the global era where millions of new terms enter the terminological pool. The author undertakes an analysis of Turkish word and terminology formation processes in an attempt of offering fundamental categories of formation. The examples of the chapter are comprised of the following categories: nouns or adjectives deriving from verbs; verbs or nouns deriving from nouns(denominals), or adjectives can be enlisted as follows; nouns from the prepositions of place; words from binomials; onomatopoetic verbs; words or collocations deriving from compound adjectives or nouns; neologisms; metaphors or metonymies. The chapter discusses the history of Turkish scientific language and terminology formation granting the fact that each language has the capacity to form its own technical terminology as part of the dynamics of natural languages to be studied ideally cooperatively by translation professionals, terminologists, lexicographers, terminographers, linguists, translators and experts of information technologies.

Chapter three by Sevda Pekcoşkun Güner titled «Integrating Corpora into Terminology Courses» integrates the author›s expertise in corpora studies with the translator training curricula. Corpora and corpus tools have already been used in foreign lan-

guage teaching and applied linguistic practices (e.g. computational linguistics) and were adapted to Translation Studies as of 1990s on the basis of the theoretical approaches of descriptive translation studies and corpora translation studies as a sub-field of the field. The statistical frames offered by corpora studies contribute to the determining of translation patterns linguistically. This is an opportunity for translation tutors and students at the academic institutions of translation and interpreting training.

The chapter offers ways of integrating corpora and corpus analysis tools with terminology-related courses in translation departments while discussing if corpora and corpus tools can be taken as a new and effective methodology in specialized fields (e.g. medicine, engineering, law). The contribution of Pekcoşkun Güner to corpora studies in Turkish-English language pair is on that initiates a path for us taking after the pioneering scholar of our field in this respect, Mona Baker, who first introduced possible ways of integrating corpora studies into translation practice and translation studies (see esp. Baker 1995 "Corpora in Translation Studies: An Overview and suggestions for Future Research" in Target 7 (2), 223-243 and Baker 1996 The Corpus-based translation studies: The challenges that lie ahead" in **Terminology, LSP and Translation** (ed. Somers, Harold), John Benjamins, 175-186).

Edip Serdar Güner, the author of the next chapter, contributes to the collection with his work titled "Automatic Term Extraction for Technical Translation" where he discusses the role and function of online machine translation systems as well as their contribution to the volume and quality of source and target texts in technical translation practices. This is far beyond using a system based on a machine at the syntactic level which is bigger problem in less studied and machine-converted languages. The chapter follows Formal Concept Analysis as its method of determining lexical similarities in translation products in four online machine

translation systems. The applicability of the method in Turkish-English language pair is tested and the visualization method is used to integrate the system into translator training by means of concept lattices of Formal Concept Analysis. Offered method is entirely based on technology and might contribute immensely to the developing of the translation skills of translation trainees.

Having thus introduced the chapters, I would like to touch upon the importance of background expert knowledge and terminology in technical domains in specialized translation activities. The quality of the products of translation lies in front of us as the number one critical and indispensable issue of the industry, which requires scholarly interest and problematizing on our part as scholars of the field. Then, my final remarks on the extent of objectivity in translation quality assessment might as well come from Julianne House, a pioneering scholar in the field who denotes at the importance of the subjective element in translation evaluation no matter what the technology and objective criteria might bring by saying: "In the last analysis, then, translation evaluation –despite the attempt in my model to objectify the process by providing a set of categories- must consequently also be characterized by a necessarily subjective element, because human beings are here important variables. It seems unlikely therefore that translation quality assessment can ever be completely objectified in the manner of the results of natural science objects…" (**Translation Quality Assessment: Past and Present** Routledge 2015: 34)

I sincerely believe that the current collection will set a benchmark in the field of translation publication for the future ones in terms of its touch upon the theory, practice and training of technical translation with respect to the use of technology in the field at all levels from tools to machine-based production.

Prof. Dr. Alev BULUT

EDITOR'S NOTE

The number of publications in the field of technical translation is not enough to fill the gap in the field of translator training. It may be for this reason that technical translation courses do not appear even in the schedules of translator training courses in higher education. They are generally taught under the coverage of specific field knowledge and translation. However, the underlying reason in the foundation of the departments of Translation Studies in Turkey, as well as its acknowledgement by the academic environment was to improve and develop translation skills, especially in the field of scientific and technical translation. In fact, today, developing competence in the field of technical translation is one of the greatest demands of both academia and those in the applied field, due to the expectation of societies towards keeping up with technological advances. On the other hand, what differs translation studies from the departments of linguistics, philology and second language teaching programs is, in fact, technical translation. In other words, we can claim technical translation is one of the discerning features of the field of translation studies. It will flourish and develop its autonomy as long as it demarcates its borders from other disciplines. At this point, doctoral theses have a great share in shaping the subfields of TS, however, their impact is limited since most of them generally deal with translator training, or literary translation. Besides, they are only open to scholars. In fact, the dissertations dealing with technical translations have contributed to fill the gap in the subfield of technical translation.

Bearing these concerns in mind, I have decided to cooperate with three scholars holding office in different universities of Turkey. Two of the authors have received PhD degrees from Istanbul

University in the field of technical translation, and the third author held PhD degree from the field of computational linguistics. Luckily, I have supervised the two PhD theses of the authors and our scholarly relation during the course of dissertation developed into academic cooperation as colleagues. In fact, it is this cooperation during the course of doctoral studies that we come together and seize the chance to publish a book on technical translation. That is to say, our relation between us as supervisor and PhD student has developed into a fruitful scholarly cooperation, which we hope to pioneer publications in the field of technical translation and draw attention to the lack of technical translation courses in Translator Training programs. In short, it is this cooperation during the course of doctoral studies that has brought us together.

After these introductory remarks, it would be helpful to give brief information about the contents of this book. The book consists of four parts. The chapters follow a logical sequence extending from the introduction of the field of information technologies in technical translation to the issue of quality assessment in technical translation. Accordingly, they are arranged according to their contents as follows:

TURKISH STUDIES IN TECHNICAL TRANSLATION

The first chapter of this book, entitled "Introducing Information Technologies in Technical Translation", deals with the historical development of information technologies in the field of translation and its applications starting from the early machine translations up to the new trends dealing with the integration of artificial intelligences with the translation practices. Along the process of applying information technologies into translation practices, we have witnessed significant milestones such as the building term banks, creating terminology management systems and corpora usage in the practical field of translation. Emphasizing the place of technical translation in the translation market, this chapter specifically draws attention onto the application of different information technologies in technical translation.

The second chapter titled "Terminology Formation and Translation Procedures in Turkish" deals with the stages involved in creating scientific jargon and terminology in the labyrinth of history of

science as well as with the mechanisms operating in terminology formation as different from word formation in the course of time. Accordingly, it is not only a theoretical account of terminology formation, but also a historical account of linguistic and terminological problems in practice, especially in transition from Arabic script to Latin Script by the proclamation of Script Reform in 1928.

In Chapter 3 titled "Integrating Corpora into Terminology Courses", Sevda Pekcoşkun Güner focuses on the use of corpora and corpus analysis tools within the scope of terminology-related courses at Translation Studies departments. She argues that both translation tutors and trainees could benefit from the use of corpus-based approaches in gaining terminological, contextual and conceptual knowledge about specialized fields. These approaches may also contribute the students to render more acceptable and functional target texts especially in technical fields.

In chapter 4 titled "Automatic Term Extraction Using Machine Translations", the author uses Formal Concept Analysis method to determine the lexical similarities in the translations of a source language expression retrieved from four different machine translation systems and uses these similarities in automatic term extraction. As a visualization method proven to have the capacity of increasing the persistence of learning, Formal Concept Analysis is integrated into translator training via using concept lattices which are the visual outputs.

In conclusion we hope this book dealing with different aspects technical translation will serve not only as a textbook, but also as a reference book addressing to those interested in technical translation, which will widen their horizons in dealing with terminological problems they encounter during the course of translation.

On this occasion I would like to inform my special thanks to Prof. Dr. Alev Bulut, a colleague, for her support as the originator in the publication of our book.

Prof. Dr. Mine YAZICI