Book review (Kitap İncelemesi)

Adolfo M. García. (2019). *The neurocognition of translation and interpreting*, 268 p., John Benjamins Publishing Company, ISBN 978 90 272 6235 6.

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Abstract

The Neurocognition of Translation and Interpreting by Adolfo M. García was published in 2019 by John Benjamins Publishing Company. Mainly intended for researchers interested in cognitive translation and interpreting studies (TIS), the book aims to adopt a "neural-based approach" to TIS along with the decades-long discussions and findings pertaining to cognitive TIS, or "non-neural approach" as termed in the book, which can be classified into the category of process-oriented research in the renowned map of translation studies by James Holmes. The book complies eight chapters presenting comprehensive discussions on the theoretical foundations of TIS, neurocognition, translation and interpreting (T&I) in the brain on the one hand, and the interaction of TIS with neurocognition, neurolinguistics, neurology, and neuroscience on the other. The elaborate and clear presentation and description of information enriched by the inclusion of findings of salient studies and a variety of sources in related fields make the book a rich reference source for both experts in the field and a broader community wishing to read up on neurocognitive research and TIS. Hence, *The Neurocognition of Translation and Interpreting* makes a huge contribution for TIS scholars to explore the physiological and neurological basis for T&I phenomena, not as exterior observers, but as interior quests on the way of deciphering hidden codes of the "the black box" of the translating and interpreting brain. With the tremendous data covered, García makes it so clear that TIS today should be concerned with neurocognition and neuroscience to get a full grasp of the interaction between mind&brain and T&I, co-stars of a translating and interpreting human brain, which presumably deserves to get more attention in this rapidly changing, digitalizing, and technologizing world of the 21st century. This call for attention lies behind the strong motive for revisiting *The Neurocognition of Translation and Interpreting* in this book review.

Keywords: Cognitive approaches, neurocognition, neurolinguistics, neuroscience, interlingual reformulation, translation and interpreting, translation and interpreting studies.

Introduction

In his seminal paper titled "The Name and Nature of Translation Studies", which aims at discussing the naming, scope and (potential) communication channels of translation studies as an emerging discipline in its own right, James S. Holmes (1972) delineates translation studies into two distinct sub-fields as "pure" and "applied". On the pure side comes the theoretical and descriptive translation studies, which in close cooperation with each other contribute to the conceptual and intellectual development of the discipline. The pure translation studies further provides the applied branch with the theoretical and empirical data it seeks for. In his magnum opus classification of the scope of translation studies, Holmes (2004, p. 177)[2], pointing out "the process or act of translation itself" as a focus of inquiry per se, situates process-oriented translation within descriptive translation studies. This sub-branch is supposed to deal with the process of the translation phenomena, thereby exploring what happens in the "black box" of the translator's [and interpreter's] mind and this necessitates a thorough enquiry of the neural connections taking place in the

Kitap incelemesi (Book review)
Sisteme yüklenme tarihi (Submitted on): 24.04.2025
Kabul tarihi (Accepted for publication on): 05.05.2025

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[2] "The Name and Nature of Translation Studies" was originally written in 1972 and published in the edited book titled *Translation Studies Reader* in 2000. The 2004 edition of the book was published in the Taylor &Francis e-Library. This edition is used as a reference source in this study.

brain, which in the words of I.A. Richards is "the most complex type of event yet produced in the evolution of the cosmos" (as cited in Holmes, 2004, p. 177).

In line with this process-oriented perspective, TIS has commonly been in connection with a number of disciplines like linguistics, psychology, and cognitive studies, and a plethora of research has emerged (and has been compiled in significant editions, e.g. Alvstad et. al., 2011; Ferreira & Schwieter, 2015; Schwieter & Ferreira, 2017; Lacruz & Jääskeläinen, 2018) to unravel what is going on in the minds of translators and interpreters in the process of T&I. Yet, as is stated by Fabio Alves in the foreword of *The Neurocognition of Translation and Interpreting* (2019, p. XI)

> the most prominent approaches in cognitive translation and interpreting studies should be considered as non-neural. In other words, these approaches seldom draw on brain-informed data and rely predominantly on linguistic and behavioral results. The majority of these approaches have built extensively on an empirical orientation heavily influenced by the information-processing paradigm.

It would not be wrong to state that, with this groundbreaking book, Adolfo M. García makes a significant stride on the way to embracing a neurocognitive approach to TIS moving discussions of decades of research one step forward and opening the door for T&I processes in the brain. Hence, *The Neurocognition of Translation and Interpreting* makes a huge contribution for TIS scholars to understand the physiological and neurological basis for T&I phenomena, not as exterior observers, rather as interior quests to decipher the hidden codes of the "the black box" of the translating and interpreting brain.

Analysis and evaluation

The Neurocognition of Translation and Interpreting was published in 2019 as the 147th volume of TIS enlisted in the Benjamins Translation Library[3]. A quick look at the previous studies of the author reveals important insights concerning the rationale and outset of the book. García's main research area is the neuroscience of language, and he has published or co-authored an immense number of studies on language, cognition, neuroscience and TIS along with bilingualism. He is the Director of the Cognitive Neuroscience Center in the University of San Andrés (Argentina), Senior Atlantic Fellow at the Global Brain Health Institute of the University of California (San Francisco), and Associate Researcher at the University of Santiago (Chile)[4].

The book starts with an "acknowledgement" part, followed by the "foreword" by Fabio Alves, a separate section of "notes on previous work", and the introduction part entitled "translation, interpreting, and the brain behind it all", respectively. García pens a total of eight chapters in this work, the first three of which deal with the theoretical foundations of TIS, neurocognition, and T&I in the brain, and the following chapters are allocated for a comprehensive discussion of prominent topics dwelling on the interaction of TIS and neurocognition, neurolinguistics, neurology, and neuroscience.

[3] Both hardcopy (with the ISBN m978 90 272 0339 7) and e-book versions of the book are available (with the ISBN 978 90 272 6235 6).

[4] The information is retrieved from https://adolfogarcia.com.ar/bio/.

This book sets out a number of interconnected aims which can be briefly summarized as follows:

- presenting neurocognitive research on interlingual reformulation (IR), i.e. any instance of verbal and written transfer experienced by bilinguals which may encompass different modalities, as compared with cognitive approaches,
- accumulating the methodological channels utilized in literature,
- explicating prominent notions of neurology, the neural basis of language, and the neurocognitive aspects pertinent to bilingualism with the focus of scrutinizing key constraints that may impact a thorough understanding of IR,
- inquiring evidence on overriding topics for TIS from a neuropsychological, neuroscientific, and behavioral perspective,
- shedding light on the present and future of TIS specifically from the scope of neurocognition and further implications in this regard.

To that end, the author, first and foremost, intends to reach "aspiring and professional researchers" interested in cognitive approaches to T&I. Yet, he asserts that the diverse array of studies covered also make the book a rich and useful reference source not only for the "broader [T&I] community" embracing scholars, translator and interpreter candidates, and T&I professionals but also for scholars of bilingualism and neurolinguistics (García, 2019, p. 5). García attempts to catch a wide variety of target audience and states that readers do not necessarily need prior information is to grasp the content. Accordingly, his clear and subtle but also artful tone of voice engages the reader, and to-the-point examples and descriptions help readers follow intricate discussions with ease.

As mentioned earlier, IR constitutes the focus point of the research, and chapters of the book attempt to surround this central topic from different angles. In that respect, Chapter 1 serves as an introduction to the territory of cognitive TIS presenting a background literature and pioneering studies ranging from the early studies originated in formal linguistics to the more recent brain-based research on IR. Chapter 2 meets readers with a compile of the methodological tools and applications researchers have used to explore neurocognitive aspects of IR (e.g. experiment and stimulus design, behavioral measures, lesion models, EEG, fMRI, invasive techniques, etc.). Chapter 3, aiming especially to the novice readers as a prolegomena to the translating and interpreting brain, explicates the basics of cognitive neuroscience and neurolinguistics including an analysis of the macro and microanatomical level of neurological notions, the neural basis of linguistic components with a view to sublexical, lexical, morphosyntactic, semantic, and pragmatic mechanisms as well as bilingualism[5]. Chapter 4 addresses disorders of IR from the scope of major translation neuropathologies in bilinguals with brain-lesions, that is compulsive translation, inability to translate, paradoxical translation behavior, and translation lacking comprehension. Chapter 5 shifts the focus to directionality and discusses why backward and forward translation differ based on evidence from studies addressing the interaction of the directions with cortical and subcortical regions' hemispheric connectivity, and electrophysiological modulations. Chapter 6 focuses on an exploration of how different

[5] This chapter was translated into Turkish by the author of this book review and published in *Abant Journal of Translation and Interpreting Studies* in 2023 [García, A. M. (2023). BÖLÜM 3 Çeviren Beyne Giriş: Sözlü ve Yazılı Çeviriyi Gerçekleştiren Beyin (N. M. Uysal, Trans.). *Abant Çevribilim Dergisi*, *1*(1), 77-102].

units of IR are employed in neurocognitive resources in a comparative manner (words, cognates, concrete items vis-à-vis sentences, non-cognates, and abstract items, respectively). Chapter 7 deals with interpreting and neuroanatomical and neurofunctional changes in the cortical and subcortical regions resulting from the formal development of interpreting skills. Lastly, Chapter 8 provides readers with a critical evaluation of the status quo of the (neuro)cognitive TIS dwelling on the strengths, weaknesses, major concerns, constraints, and future directions of the field and proposes that neurocognitive research on IR may serve as the key component on the way to the development of TIS in the 21st century.

Conclusion

The process-oriented TIS, as part of the descriptive branch of the map of Holmes, has been investigated from a myriad of angles, and cognitive approaches have always been the center of the discussions to illuminate the sacred nature of how T&I is processed in the human brain. In this vein, the author prefers to use the term "non-neural approaches" to refer to this accumulated number of research and data obtained through various models and methods. Starting with the rationalist linguistic models in the 1960s, the rationalization of T&I has been addressed from different lenses for decades including cognitive modeling based on an observational trend, utilization of think aloud protocols (TAP) with the aim of obtaining subjects' description of what they experience, introduction of corpus-based studies revealing accumulated data of translated texts, observation of T&I procedures through quantitative approaches like ear-voice spans, psycholinguistic paradigms, keylogging experiments, eye-tracking studies, and executive-function assessments. The author argues the time has come for moving to a "neural approach" to explore translating and interpreting mind/brain with the support of neurological evidence, thereby elucidating the "neurocognition of translation and interpreting", and neuroscience has a pivotal role in the configuration of the contemporary TIS (García, 2019, pp. 13-32).

Today, six years after the publication of *The Neurocognition of Translation and Interpreting*, with all the technological developments drastically affecting most of the professions and industries around the globe in the last decade -and T&I (profession) is no exception at all-, maybe it is *high time*[6] that we shift our focus to the "neurocognitive activities" in the "forlorn attic" of neurocognition of TIS (García, 2019, p. 1) to have a better understanding of what makes us different from artificial intelligence and machines, that is to say uniqueness of the human brain. In a nutshell, this book serves as a comprehensive reference material for those who wish to embark on a journey of the translating and interpreting brain.

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[6] Emphasis added.

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