

Book Review: Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation

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Dr. Amal Alaboud *

Abstract

Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation offers an in-depth exploration of the ethical, legal, and societal implications of machine translation (MT) technologies. This book review explores the discussions presented in the book and presents an analysis of the challenges and considerations that accompany the use of MT in various contexts. The review acknowledges the book's strengths in addressing essential issues like authorship, data privacy, bias, and the ecological footprint of MT technologies while also pointing to areas where further elaboration could enhance understanding. Personal reflections on the book's content highlight its timely relevance in the era of advanced generative AI and emphasize the necessity of ethical and responsible usage of MT. The review praises the structured approach of the book, which aids in the thorough understanding of complex topics, making it a valuable resource for professionals and scholars in the field. It also underscores the book's contribution to fostering a responsible approach to MT and its importance for anyone involved in the development, implementation, or study of MT technologies.

Keywords: Machine translation, Ethics, Bias, Responsible use

مراجعة كتاب "نحو ترجمة آليّة مسؤولة: الاعتبارات الأخلاقية والقانونية في الترجمة الآليّة"
د. أمل سلطان العبود

المستخلص

تقدم "نحو ترجمة آليّة مسؤولة: الاعتبارات الأخلاقية والقانونية في الترجمة الآليّة" استكشافاً متعمقاً للأثار الأخلاقية والقانونية والمجتمعية لتقنيات الترجمة الآليّة (MT). تستكشف مراجعة الكتاب هذه المناقشات المقدمة في الكتاب وتقدم تحليلاً للتحديات والاعتبارات التي تصاحب استخدام الترجمة الآليّة في سياقات مختلفة. تعترف المراجعة بنقاط قوة الكتاب في معالجة القضايا الأساسية مثل التأليف، وخصوصية البيانات، والتحيز، والبصمة البيئية لتقنيات الترجمة الآليّة مع الإشارة أيضاً إلى المجالات التي يمكن لمزيد من التفصيل فيها تعزيز الفهم. تسلط الأفكار الشخصية حول محتوى الكتاب الضوء على أهميته في الوقت المناسب في عصر الذكاء الاصطناعي التوليدي المتقدم وتؤكد على ضرورة الاستخدام الأخلاقي والمسؤول للترجمة الآليّة. تشيد المراجعة بالنهج المنظم للكتاب، والذي يساعد في الفهم الشامل للموضوعات المعقدة، مما يجعله مصدراً قيماً للمهنيين والباحثين في هذا المجال. كما أنه يؤكد على مساهمة الكتاب في تعزيز النهج المسؤول نحو الترجمة الآليّة وأهميته لأي شخص مشارك في تطوير تقنيات الترجمة الآليّة أو تنفيذها أو دراستها.

الكلمات المفتاحية: الترجمة الآليّة، أخلاقيات المهنة، التحيز، الاستخدام المسؤول

♦ Taif University - E-mail: asaboud@tu.edu.sa

Dr. Amal Alaboud is an assistant professor of Translation Studies in the Foreign Languages Department at Taif University, Saudi Arabia. She received her MA from Salford University and her PhD in Translation Studies from SUNY at Binghamton. Her main research areas are translation theory and discourse analysis.

Machine translation (MT) has shown a significant improvement in quality, primarily due to developments in artificial intelligence (AI) and computational linguistics in recent years (Wang et al., 2022). Translation outputs produced by neural machine translation (NMT) systems through deep learning algorithms are now much more accurate and contextually relevant than they have ever been, closely mimicking the nuances of human language (Läubli et al., 2020).

Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation is a useful and timely contribution to the scholarly conversation surrounding the emerging capabilities of generative AI and MT. With a clear focus on the complex relationship between technological advancements and the ethical, legal, and social implications that accompany them, the book's primary strength lies in the comprehensive exploration of the multifaceted issues related to MT, including authorship, data rights, bias, and the ecological footprint of AI technologies. It addresses areas often overlooked in the excitement surrounding AI's capabilities, such as the nuanced understanding of copyright issues and the ethical use of machine-generated translations (Federici et al., 2023). Through structured and detailed examination, Moniz and Parra Escartín (2023) provide readers with an understanding of the current landscape and the foresight needed to guide future developments responsibly. On the other hand, while the book excels in its thorough analysis and discussion, it could further benefit from including more diverse case studies and real-world applications to illustrate the practical implications of these ethical and legal considerations. Additionally, clearer guidelines or suggestions for MT practitioners could make the book more applicable and useful for the reader.

The book is divided into three main sections. The first chapters in each section set the groundwork for comprehending the pertinent issues in MT. The chapters that follow gradually go deeper into many aspects of MT ethics, including post-editing, authorship, data rights, licensing, and the effects of MT technologies on the environment. Among the essential themes covered in the book are the philosophical underpinnings and ethical considerations in the practice of MT, copyright issues, authorship, and data rights in the context of MT, the ethics of post-editing in MT, the implications of MT from the users' viewpoint, the broader societal effects of MT, and the ethical and privacy issues related to using speech in MT. The structure of the book makes each chapter serve as a building block that provides readers with the necessary background and context to grasp the nature of responsible MT. This approach not only

facilitates a deeper understanding of each aspect but also illustrates the interconnectedness of ethical, legal, and societal considerations in the development and use of MT technologies.

While I was navigating the book, I found several insightful aspects that enriched my understanding, alongside certain areas where further clarity or development could be useful. To begin with, I believe the book's comprehensive analysis of the ethical, legal, and societal dimensions of MT is its most helpful aspect. It provides a thorough overview of the current state of MT technology, discussing potential biases, privacy concerns, and the ecological impact in depth. The discussions on authorship and the rights of machine-generated content were particularly enlightening as they offer a nuanced perspective on the challenges posed by AI in creative industries. These sections demonstrate the complexities of intellectual property in the age of machine learning and make them invaluable for readers seeking to understand the legal landscape of MT. However, some sections of the book, particularly those dealing with technical descriptions of MT processes, could be clearer for readers without a background in computational linguistics. While the book aims to be comprehensive, more straightforward explanations or summaries of these technical aspects could make it more accessible to a broader audience. Additionally, the chapters on the ecological impact of MT, while informative, could benefit from more detailed case studies or examples that demonstrate the real-world implications of these environmental concerns. Lastly, a weakness in the book's argumentation is the occasional lack of practical solutions or actionable recommendations following the critique of current practices in MT. While the book excels at highlighting problems and raising awareness, it could provide more in-depth guidance on implementing ethical and legal considerations in MT practice. This addition would make the book not just a critique but also a roadmap for ethical MT development and application.

From reading *Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation*, I gained a profound understanding of the delicate balance between technological advancement and ethical responsibility in the realm of MT as the book skillfully presents the challenges that arise when machines are tasked with interpreting and translating human language and highlights the potential for misinterpretation and the loss of subtle communicative nuances. One of the key learnings for me was the importance of considering the ethical and legal ramifications of MT, including issues of data privacy, authorship, and the potential for bias in translation algorithms.

Moreover, the discussion on the ecological footprint of MT systems was particularly eye-opening as it offered a fresh perspective on the environmental impact of these technologies that I had not fully considered before. This learning has significantly influenced my perspective on the use and development of MT tools. It has also instilled a sense of responsibility to advocate for and participate in the development of ethical guidelines and best practices in the field. In my work, this newfound understanding will guide me to prioritize ethical considerations in the adoption and implementation of MT technologies to ensure that they are used in a manner that respects privacy, intellectual property, and environmental sustainability.

The primary audience for this book includes academics, researchers, and professionals in the fields of computational linguistics, MT, and AI ethics. Additionally, legal scholars and policymakers engaged with technology regulation would find this book particularly insightful. The secondary audience comprises students in higher education studying language technology, AI, or legal studies related to intellectual property and technology law. The book's in-depth yet accessible analysis can equip these audiences with the knowledge to critically assess the development and use of MT technologies and foster a responsible approach to addressing the challenges and opportunities presented by AI and MT. The book makes a significant contribution to the field of translation and interpretation by bridging the gap between the technical aspects of MT and the ethical, legal, and societal considerations that must guide its use. It advances knowledge in the field by providing a comprehensive analysis of the multifaceted challenges and considerations associated with MT technologies. In terms of practice, the book enriches the practitioners' toolkit as it offers a nuanced perspective on how MT can be used responsibly and effectively in diverse contexts. It sheds light on the potential biases inherent in translation tools and the importance of ensuring that these technologies do not perpetuate stereotypes or exclude certain groups (Ullmann, 2022). This awareness can transform how practitioners approach communication and language barriers, leading to more inclusive and equitable translation and interpretation practices. In addition, from a research standpoint, the book opens new avenues for inquiry by highlighting under-explored areas, such as the ecological footprint of MT and the legal intricacies of copyright in the age of AI. By addressing these topics, the book encourages scholars and practitioners to consider the broader implications of technology use in facilitation, prompting further investigation into sustainable and ethical practices.

For readers looking to grasp the core arguments and insights of the book, I believe the following chapters are critical for understanding its main arguments as they cover the ethical, legal, and practical considerations that must inform the responsible use of MT. Chapter 2 (*Prolegomenon to Contemporary Ethics of Machine Translation*) lays out the foundational ethical considerations of MT, discussing the historical and philosophical perspectives that shape current practices. This chapter is critical for understanding the book's main arguments as it sets the stage for the ethical debates and considerations that follow in later chapters. Chapter 4 (*Licensing and Usage Rights of Language Data in Machine Translation*) addresses copyright and licensing issues that are paramount for anyone involved in MT. Understanding these legal frameworks is essential for grasping the broader implications of MT on intellectual property rights. Chapter 6 (*The Ethics of Machine Translation Post-editing in the Translation Ecosystem*) explores the ethical dimensions of post-editing in MT, highlighting the roles and responsibilities of human translators in the MT process, which is crucial for comprehending the human-machine interaction in translation work and the ethical considerations this entails (Béchara et al., 2021). Chapter 9 (*Gender and Age Bias in Commercial Machine Translation*) is pivotal for understanding the limitations and ethical challenges of current MT technologies. It underscores the importance of addressing and mitigating bias to ensure fair and accurate translation outputs. Lastly, Chapter 11 (*Treating Speech as Personally Identifiable Information and Its Impact in Machine Translation*) addresses the privacy and security implications of using speech in MT, a topic of increasing relevance in the digital age essential to understand the privacy concerns associated with speech data and the potential for its misuse (Curzon et al., 2021).

In conclusion, reading *Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation* has been an enlightening and thought-provoking experience. It unpacks the complexities of MT and provides a balanced view of its potential benefits and the ethical, legal, and societal challenges it poses. The authors' comprehensive analysis, coupled with real-world examples and theoretical discussions, makes for a compelling narrative that captures the reader's attention from start to finish. The book's detailed exploration of issues such as authorship, copyright, bias, and the ecological impact of MT technologies is particularly commendable. It encourages readers to think critically about the rapid advancements in MT and their broader implications. Moreover, its structured approach, with each chapter building on the last, facilitates a deep and nuanced understanding of the subject matter.

The main reason someone should read this book is to gain a comprehensive understanding of the ethical and legal considerations essential for responsible MT practice. It is a valuable resource for anyone involved in the field of MT, from developers and researchers to legal scholars and policymakers. The insights provided in the book are crucial for guiding the responsible development and use of MT technologies in a manner that is ethically sound and legally compliant. However, those looking for a light read, or a superficial overview of MT may find the book's depth and detailed analysis challenging. It demands the reader's engagement and willingness to delve into complex ethical and legal discussions, which may not appeal to everyone.

Overall, *Towards Responsible Machine Translation: Ethical and Legal Considerations in Machine Translation* is a useful resource for understanding the multifaceted nature of MT in today's digital age (Rivera-Trigueros, 2022). It stands as a testament to the importance of ethical and legal considerations in the development and application of AI technologies (Mäntymäki et al., 2022), making it a must-read for those committed to advancing the field responsibly.

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