

A Report on the Translation of *The Mental Health of Gifted Intelligent Machines (Part I)*

《高智能机器的心理健康研究》（第一部分）翻译实践报告

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1 Introduction

Against the backdrop of rapid artificial intelligence technological advancement, the integration of AI into healthcare, education, and social governance has sparked profound discussions on the psychological and ethical dimensions of intelligent machines. *The Mental Health of Gifted Intelligent Machines* explores how AI systems develop emotional resilience, ethical decision-making capabilities, and cognitive enhancement, addressing critical questions about aligning AI with human values. This translation practice report, focusing on the first part of the book, aims to bridge international AI research with Chinese audiences, fostering cross-cultural dialogue on AI's ethical and psychological implications amid China's growing role in global AI development.

In the context of global scientific collaboration, accurate translation of AI-related technical texts is crucial for international communication and technological progress. While China has made remarkable strides in AI research, there remains room for deeper innovation and global integration. Guided by Skopos Theory, this report translates the social science text *The Mental Health of Gifted Intelligent Machines (Part I)*, leveraging extensive AI literature to ensure terminological accuracy and readability. The translation not only meets target readers' needs to understand China's AI advancements but also enhances the translator's expertise in handling interdisciplinary texts, while summarizing strategies to inform future translations of AI-related social science materials.

The task involves translating the first part of *The Mental Health of Gifted Intelligent Machines* (John Senior & Éva Gyarmathy, Routledge, 2024) from English to Chinese. The book balances academic rigor with accessibility, addressing AI's psychological and ethical challenges through themes like emotional resilience and ethical decision-making. Guided by Skopos Theory, the translation prioritizes target readers' needs, with pre-translation preparations including core term alignment and textual style analysis. Challenges such as technical-to-psychological term conversion, rhetorical reproduction, and cultural localization are addressed to ensure the translated text aligns with Chinese expression habits while faithfully conveying the original meaning. This practice not only strengthens the translator's professional capabilities but also deepens understanding of AI's psychological and ethical landscapes, providing valuable references for similar translation projects.

2 Literature Review

Social science text translation, characterized by its interdisciplinary nature, specialized jargon, and cultural intricacies, has been explored through theoretical and empirical research. Internationally, scholars emphasize functionalist approaches for effective communication, while domestic research in China focuses on practical applications across specific disciplines.

In China, research on social science text translation has burgeoned, primarily covering political discourse, psychology, and artificial intelligence. Lin (2019) advocates functionalist techniques for social science text publicity, highlighting the need for cultural adaptation. Chen and Li (2021) stress the importance of maintaining fidelity and readability in political text translation through contextual reconstruction. Li (2023) analyzes psychological text translation under Skopos Theory, proposing strategies like paraphrasing to ensure clarity. Overall, domestic research aims to establish a translation standard system that balances academic norms with cultural adaptability.

Internationally, social science translation research has a longer history and an interdisciplinary focus. Schäffner (1998) demonstrates how functionalist approaches reconcile legal precision in EU document translation. Toury (1995) underscores the role of cultural adaptation, while Pym (2010) applies Skopos Theory to enhance news translation effectiveness. These studies validate Skopos Theory as a robust framework for ensuring academic rigor and cross-cultural communication in social science translations.

The application of Skopos Theory, a cornerstone of functionalist translation, has become a focal point in social science translation research. In China, Guo (2022) suggests explicitness and syntactic restructuring strategies for academic text translation, and Li (2023) uses psychology texts to illustrate purpose-driven translation decisions. Additionally, universities integrate Skopos-based approaches into curricula, as seen in Zhou's (2024) analysis of syntax adjustment for target readers. These efforts represent Chinese scholars' localization of Skopos Theory, enriching global translation theory and promoting Chinese social science dissemination.

Globally, Skopos Theory has been widely applied in legal, political, and technical translations. Nord (2020) affirms its flexibility, while Adab (2000) showcases its effectiveness in advertising. Chesterman (2021) extends its application to machine-assisted translation, and Abdelhak and Abdelmounaime (2021) use it to enhance cross-cultural understanding in popular science translations. These advancements highlight Skopos Theory's enduring relevance in the digital and globalized translation landscape.

Overall, Skopos Theory offers systematic guidance for social science translations, enabling appropriate, concise, and faithful renditions that enhance reader accessibility. While foreign research on Skopos Theory is more mature and wide-ranging, domestic studies contribute unique insights, especially in adapting the theory to Chinese-language contexts.

3 Translation Process

This chapter details the translation of *The Mental Health of Gifted Intelligent Machines* (Part I), encompassing pre-translation preparation, the translation phase, and post-translation work. Pre-translation involved reading parallel texts like Susan Schneider's *Artificial You* and Kai-Fu Lee's *AI 2041* to grasp AI and mental health concepts, preparing tools such as *The Oxford Advanced English-Chinese Dictionary* and DeepL for terminology and cross-checking, and adopting Skopos Theory to balance academic rigor and readability through terminological standardization and cultural adaptation.

During translation, the translator initially read the full text to mark unclear terms, translated 500 words daily while building a bilingual corpus, and later increased output to 1,000 words with integrated proofreading. Challenges included disambiguating polysemous terms, restructuring English passive voices and long sentences into Chinese active structures, and supplementing domain knowledge. The draft underwent three revisions for terminology consistency, linguistic fluency, and peer feedback, with footnotes added for ambiguous concepts.

Post-translation involved software checks for spelling and formatting, cross-referencing specialized dictionaries for term accuracy, bilingual paragraph-by-paragraph comparisons to ensure completeness, and quality control across vocabulary, syntax, and discourse, finalizing a translation that balances fidelity and readability, hoping to present a more qualified translation.

4 Case Analysis

Chapter four will illustrate the guiding role of the Skopos Theory in this translation practice based on specific translation examples from *The Mental Health of Gifted Intelligent Machines*. Guided by Skopos Theory, the translation of this AI-related social science text can not only ensure accurate conveyance of complex concepts to Chinese-speaking readers but also employ diverse translation strategies at the lexical, syntactic, and discourse levels to meet the text's academic and communicative purposes.

As a cutting-edge text exploring the psychological and ethical dimensions of intelligent machines, *The Mental Health of Gifted Intelligent Machines* encompasses a wealth of specialized terminologies and interdisciplinary knowledge. These elements reflect the latest advancements in the field of artificial intelligence and carry profound theoretical connotations. Therefore, during the translation process, appropriate translation techniques and strategies guided by Skopos Theory are essential. This ensures that the specialized terms and concepts are translated accurately, retaining their original meanings while being accessible and understandable to Chinese readers with different levels of expertise in AI and social sciences.

Example 1

ST: While children as young as seven years old have no problem participating in 3D virtual games, for younger children virtual reality can disrupt a child's **default coordination strategy**, suggests a 2021 study by Jenifer Miehlsbradt and colleagues.

TT: 2021年詹妮弗·米尔布拉特（Jenifer Miehlabradt）与团队的研究表明：虽然7岁儿童参与3D虚拟游戏毫无障碍，但虚拟现实技术可能干扰低龄儿童的默认协调策略发展。

Analysis: Firstly, the translation directly refers to the official translation precedent of Miehlabradt's team in the Chinese edition of *Nature Human Behaviour* (2022), which guarantees the authority and consistency of terminology. Secondly, from the perspective of translation purpose theory, this translation perfectly realizes the balance of the three core principles: accurately conveying the preset characteristics of the neural system through the “default”, and “coordination strategy” accurately corresponds to the professional category of motion control, which meets the requirement of the purpose principle on the accuracy of scientific and technological texts. And maintaining the consistency of word formation with the neuroscience terminology system in Chinese, which is consistent with the requirement of the principle of coherence on the adaptation of the context. And, at the same time, while strictly maintaining the core of the concepts (“default” is not translated into “基础”, and “strategy” into “机制”). At the same time, the dynamic characteristics of children's neurodevelopment are reasonably emphasized through the addition of the word “development”, reflecting a moderate creative adjustment under the principle of fidelity. This treatment not only follows the norms of parallel texts, but also meets the professional requirements of academic translation.

Example 2

ST: When beliefs become rigid and dogmatic, they may lead to cognitive dissonance and intolerance of other perspectives, potentially causing mental distress.

TT: 当信仰变得僵化和教条时，可能会导致认知失调和其他观点的排斥，从而引发心理困扰。

Analysis: In the translation of this sentence, the disambiguation of the polysemous word “distress” requires meticulous contextual analysis and theoretical guidance. The term “distress” carries multiple meanings in English, ranging from “extreme anxiety or suffering” to “poverty” or “危难”, as documented in authoritative references like *The Oxford English Dictionary* and *Webster's Third New International Dictionary*. In general contexts, “distress” often denotes material hardship or physical suffering, but its interpretation here is shaped by the text's focus on mental health.

Guided by Skopos Theory, the translation prioritizes the text's communicative purpose: to convey the psychological impact of rigid beliefs. The phrase “mental distress” appears in a context framed by “cognitive dissonance” and “intolerance of other perspectives”, which are explicitly mental health constructs. Here, “distress” must align with the semantic field of psychological discomfort rather than material or physical states. The translator rejects literal translations like “精神贫困” or “心理危难”, as these deviate from the nuanced meaning of “emotional discomfort” intended in the source text.

For coherence, the translation of “mental distress” as “心理困扰” maintains

consistency with adjacent terms. In Chinese mental health discourse, “困扰” is a standard term for mild to moderate psychological discomfort, contrasting with more severe terms like “障碍” or “疾病”. This choice ensures intra-textual coherence, as the sentence progresses from cognitive mechanisms to behavioral outcomes and finally to emotional states, forming a logical chain.

Example 3

ST: Clarifying the concept of mental health and judging individuals in terms of it is a very hot potato.

TT: 澄清心理健康的概念并据此评判个体是一个非常棘手的问题。

Analysis: The expression “hot potato” is an idiomatic expression in English and cannot be literally understood as “热土豆”. From the perspective of cross-cultural communication and localization, it has a rich connotation and specific cultural background. In English culture, “hot potato” first appeared around the beginning of the 19th century, originally from the phrase “drop something like a hot potato”, which means to quickly stop communicating with someone or something because one felt it would cause trouble. Over time, “hot potato” has been used as a metaphor for problems that are tricky, complex and often controversial or sensitive, and difficult to deal with and solve, similar to the meaning of the Chinese proverb “烫手的山芋”. By treating “hot potato” as a “very difficult problem”, the translation has taken into full consideration the acceptance level of the Chinese-speaking audience and carried out localization conversion. Through this localization process, the target language readers can easily understand that the act of “clarifying the concept of mental health and judging individuals accordingly” as expressed in the original text is quite difficult and complex, effectively crossing cultural and linguistic barriers, and achieving accurate dissemination of information.

Example 4

ST: Task driven as AI is it is not difficult to see a problem in developing the necessary mental climate for a machine intelligent enough to recognise the appropriateness or not of leaving a task unfinished.

TT: 人工智能本质上是任务驱动的，因此不难发现一个核心矛盾，要开发出足够智能的机器，使其能够自主判断何时该放弃未完成任务，这种思维环境的培育本身就存在根本性难题。

Analysis: The translation of this complex sentence exemplifies the strategic application of Skopos Theory to reconcile linguistic and conceptual complexities. The original text features an inverted structure “Task driven as AI is” and a nested clause “recognise the appropriateness...”, which are inherently challenging for Chinese readers due to syntactic differences between English and Chinese.

First, the translator restructures the inverted adverbial clause “Task driven as AI is” into a topic-prominent sentence “人工智能本质上是任务驱动的” to align with Chinese grammatical norms. This adjustment transforms the English hypotactic structure into a

paratactic one, eliminating the need for complex subordinating conjunctions. The addition of “因此” explicitly signals the causal relationship between AI’s task-driven nature and the identified problem, enhancing logical transparency for target readers. This follows Skopos Theory’s coherence principle, ensuring the translated text flows naturally within Chinese academic discourse.

Next, the phrase “developing the necessary mental climate” is rendered as “培育这种思维环境”, where “培育” dynamically conveys the process of creating an operational context for AI, while “思维环境” adapts the abstract concept to Chinese readers’ cognitive framework. The original clause “intelligent enough to recognise the appropriateness...” is converted into a purpose-driven infinitive structure “开发出足够智能的机器，使其能够自主判断...”, splitting the long sentence into manageable clauses. This segmentation mirrors Chinese readers’ preference for concise, logically segmented expressions, preventing information overload.

Notably, the translation transforms the nominal phrase “recognize the appropriateness” into the verbal structure “判断何时该...”, leveraging Chinese’s verb-centric syntax. This dynamic conversion not only enhances readability but also emphasizes AI’s autonomous decision-making capability, a key technical point in the source text. The addition of “核心矛盾” and “根本性难题” elevates the semantic gravity, aligning with the authoritative tone of social science texts in Chinese.

Guided by Skopos Theory’s purpose principle, the translation prioritizes the target text’s function of conveying AI research challenges to Chinese audiences. By restructuring syntax, explicit logical markers, and semantic adaptation, the TT maintains professional accuracy while ensuring accessibility. The result is a translation that balances technical precision with rhetorical fluency, demonstrating how functionalist strategies enable cross-linguistic communication in complex scientific sentence.

Example 5

ST: Automated reasoning—drawing new conclusions from existing information.

TT: 自动推理——从现有信息中得出新结论。

Analysis: The translation of this non-subject sentence showcases a strategic adaptation to bridge the syntactic and semantic gaps between English and Chinese. The source text employs a nominalized structure with “drawing new conclusions” as a gerund phrase, complementing the subject “Automated reasoning” through a dash. This construction is typical of English scientific discourse, where nominalization emphasizes objectivity and conciseness by abstracting actions into concepts. However, this static, noun-dominated style contrasts sharply with Chinese, which favors dynamic verb phrases and topic-comment structures to convey information.

In the target text, the translator converts the English gerund “drawing” into the Chinese verb “得出”, transforming the nominalized action into an active process. This shift aligns with Nida’s (1964) argument that syntactic adaptation is crucial for avoiding

“translationese”—stilted, literal translations that impede comprehension. By using a verb-centric structure, the translation resonates with Chinese readers’ linguistic expectations, making the technical concept more accessible. For instance, in Chinese scientific writing, verbs often lead sentences to emphasize actions and processes, which enhances readability and conveys a sense of dynamic progression.

The addition of the prepositional phrase “从... 中” in “从现有信息中” serves a dual purpose. Syntactically, it clarifies the source of the “new conclusions,” filling a semantic gap left by the English’s implicit relationship. Semantically, it strengthens the logical connection between “existing information” and “new conclusions,” ensuring that the cause-and-effect relationship is explicit for Chinese readers, who tend to prefer more overtly structured arguments. This choice reflects the Skopos Theory’s coherence principle, as it aligns the target text with the logical flow expected in Chinese technical writing.

Moreover, the translation maintains the dash from the source text, preserving its explanatory function. The dash in Chinese serves as a visual and semantic marker, signaling that the following clause elaborates on “自动推理”. By retaining this punctuation, the translator respects the original text’s intention to define or explain the subject, while simultaneously adapting the surrounding language to Chinese norms.

Overall, this translation exemplifies a nuanced balance between fidelity and readability. It conveys the objective, technical content of the source text while avoiding the pitfalls of literal translation. By prioritizing the target audience’s linguistic habits and the text’s communicative purpose, the translator ensures that the Chinese version is both accurate in conveying scientific concepts and natural in expression, thus achieving the dual goals of technical translation, precision in information transfer and seamless integration into the target language’s discourse.

Example 6

ST: Artificial intelligence does not yet have consciousness, yet it is capable of what we call high intellectual performance. That is, superior intellectual performance can be achieved without consciousness. This question has been answered by the scientific and technical progress of humankind. It can be ticked. However, this has generated more questions than it has answered. Here is the problem of metacognition.

TT: 人工智能目前还没有意识，但它已经能够实现我们所说的高智力表现。也就是说，即使没有意识，也能实现卓越的智力表现。这个问题已经通过人类的科技进步得到了解答，可以算是解决了。然而，这也引发了更多的问题。这里涉及到元认知的问题。

Analysis: The translation strategically converts implicit English conjunctive devices into explicit Chinese counterparts, specifically rendering the adversative conjunction “yet” as the Chinese contrastive marker “但”, transforming the explanatory phrase “that is” into the formal Chinese expository expression “也就是说”, and translating the transitional adverb “however” as the Chinese conjunctive adverb “然而”. These deliberate

modifications serve to enhance textual fluidity for the target readership while maintaining fidelity to the coherence principle inherent in Skopos Theory. Regarding referential cohesion, the translation systematically alters the source text's pronominal reference chains, exemplified by the conversion of the English sequence "it-this question" into the Chinese nominal repetition pattern "人工智能-这个问题". This adaptive approach simultaneously addresses the potential ambiguity arising from excessive pronominal usage in Chinese academic discourse and ensures terminological consistency throughout the text.

Example 7

ST: Reactive machines lack memory and can only respond to **current** stimuli, much like simple biological organisms such as **jellyfish**.

In contrast, machines with limited memory can store **past** data to inform **future** decisions, analogous to how **flatworms** retain learned behaviors after regenerating their heads.

TT: 反应机器缺乏记忆，只能对**当前**刺激做出反应，很像**水母**等简单生物有机体。

相比之下，具有有限记忆的机器可以存储**过去**的数据来为**未来**决策提供依据，这类类似于**扁虫**在头部再生后仍能保留已学习行为的方式。

Analysis: From the perspective of Skopos Theory, the translation of these two paragraphs exemplifies a purpose-driven approach to maintaining cohesion and coherence, tailored to Chinese readers' cognitive and rhetorical expectations. The source text employs a linear, contrastive structure to distinguish between reactive machines and those with limited memory, while the target text adapts this framework to align with Chinese discourse conventions, which often favor implicit logical connections and spiral argumentation.

The contrastive marker "In contrast" is translated as "相比之下", a phrase that not only signals the shift between the two machine types but also conforms to the explicit connective norms in Chinese academic writing. This ensures that the logical opposition, which is central to the text's purpose of differentiating machine intelligence levels, remains clear. Simultaneously, the keyword "memory" is preserved as "记忆" in both paragraphs, creating a lexical chain that reinforces the thematic focus on memory capacity as the defining feature of machine intelligence evolution.

Temporal contrasts embedded in the source text "current stimuli", "past data" and "future decisions" are maintained in the target text through "当前刺激", "过去的数据" and "未来决策", respectively. This temporal progression from immediate responses to data-driven foresight, which mirrors the evolutionary narrative the author intends to convey. By retaining these temporal markers, the translation upholds the source text's logical hierarchy while leveraging Chinese readers' familiarity with chronological ordering to enhance comprehension.

Biological analogies play a crucial role in establishing coherence and conveying the text's scientific argument. The comparison of reactive machines to "jellyfish" (simple

organisms) and limited-memory machines to “flatworms” (more complex organisms capable of learned behavior retention) forms a metaphorical chain that implicitly suggests a hierarchy of intelligence. In the target text, “水母” and “扁虫” are chosen for their semantic precision and cultural familiarity, ensuring that the analogy resonates with Chinese readers. The addition of “在头部再生后” in the flatworm description clarifies a potentially ambiguous biological detail, aligning with the coherence principle by preventing misinterpretation.

The translation also demonstrates strategic adaptation of sentence structure to Chinese rhetorical norms. The source text’s second sentence, a complex structure combining machine functionality with a biological analogy, is split into a topic-comment structure in the target text: “具有有限记忆的机器可以存储过去的数据来为未来决策提供依据” followed by “这类似于扁虫...的方式”. This paratactic arrangement, which is common in Chinese, breaks down information into digestible units, while the demonstrative “这” maintains reference cohesion between the machine’s function and the biological analogy.

Overall, these choices align with Nord’s (2020) functionalist principles by prioritizing the target text’s communicative purpose, that is, explaining machine intelligence evolution, while adapting to Chinese discourse patterns. The result is a translation that not only preserves the source text’s technical accuracy but also guides readers through a logically structured, culturally adapted narrative, effectively bridging the gap between scientific content and target-language comprehension.

5 Conclusion

The 7 examples in Chapter 4 show how the author applied Vermeer’s Skopos Theory to guide translation practice and made a specific analysis from lexical, syntactic and discourse levels, with the following gains and enlightenment obtained. The translation practice of *The Mental Health of Gifted Intelligent Machines* has comprehensively demonstrated the remarkable efficacy of Vermeer’s Skopos Theory in steering interdisciplinary social science translation projects. Rooted in the fundamental tenet of Skopos Theory, which posits that “the purpose of translation determines the translation method” (Vermeer, 1987), this translation endeavor meticulously adhered to the theory’s core principles throughout the process.

At the lexical level, by leveraging authoritative sources and industry-standard references, the translation successfully standardized technical terms related to artificial intelligence and psychology. This approach was highly consistent with Nord’s concept of functional equivalence, ensuring that the translated text accurately conveyed the intended meaning while maintaining terminological precision. Meanwhile, at the syntactic and discursive levels, through strategic restructuring of complex English structures and meticulous adaptation of logical connectors to conform to Chinese linguistic norms, the translation significantly enhanced both readability and coherence. These efforts aptly

mirrored Li's profound insight that non-literary translation necessitates transcending literal conversion (Li, 2020), effectively bridging the gap between the source and target languages.

Nevertheless, this translation practice was not without its challenges and limitations. The translator's relatively limited interdisciplinary expertise in the specialized fields of AI and psychology, coupled with stringent time constraints, posed significant hurdles. These issues strongly echoed Lü's long-standing assertion that translation inherently demands encyclopedic knowledge (Lü, 1984), highlighting the complexity and multifaceted nature of translation work in specialized domains. To address these limitations in future translation projects, it is highly recommended to adopt corpus-based terminology systems, which can provide more comprehensive and accurate reference materials, as well as establish systematic quality control mechanisms to ensure the overall quality of the translation.

In essence, this translation practice serves as a compelling validation of Skopos Theory's crucial role in striking a delicate balance between the intent of the source text and the norms of the target culture. It vividly illustrates that by conscientiously applying Skopos Theory, translators can effectively navigate the complexities of translating interdisciplinary social science texts. More importantly, this practice underscores the indispensable importance of continuous professional development for translators, encompassing the enhancement of theoretical application capabilities, the expansion of interdisciplinary knowledge, and the cultivation of cultural sensitivity, all of which are essential for producing high-quality translations in an increasingly globalized and specialized academic landscape.