

appropriately and nurturing sustainably”, modern animal welfare discourses place greater emphasis on “minimizing pain, optimizing management, and ensuring sustainable use” (Wu et al., 2024; Zhao et al., 2025). Research shows that improving husbandry practices, controlling appropriate harvesting timing, and implementing stress-reducing procedures can partially mitigate deer stress responses (Wu et al., 2024). Nevertheless, cultural attitudes toward the medicinal use of animal products vary widely, and in some countries the public or media associate animal-based medicines with “cruelty” or “unnecessariness” (Suh et al., 2019). As a result, deer antler becomes not only a medical and cultural topic but also an ethical flashpoint in international communication.

Beyond animal ethics, cultural differences also constitute major sensitive zones in the dissemination of shenrong culture. Western audiences, lacking experiential grounding for concepts such as “tonifying”, “deficiency”, or Yin–Yang, may misinterpret them as mystical, unscientific, or superstitious; by contrast, TCM views these concepts as “functional diagnostic language” derived from long-term clinical experience and systematic theorization (Jia et al., 2009; Zhang et al., 2024). Moreover, in the Chinese context, shenrong often holds symbolic and socio-cultural significance-appearing in practices such as festive gifting, longevity blessings, and postpartum nourishment-yet these dimensions are frequently weakened or omitted in international communication, resulting in fragmented and decontextualized cultural representation (Potenza et al., 2022). For compound formulas combining ginseng, deer antler, and other medicinal materials (e.g., KGC-HJ3), cross-cultural communication introduces additional layers of complexity, including safety perceptions, synergistic mechanisms, and the interpretive challenge of multi-herb formulations (Lee et al., 2018; Suh et al., 2019). Translators must navigate these cultural differences and ethical sensitivities with precision, maintaining cultural depth, ensuring ethical coherence, and facilitating cross-cultural intelligibility. Any inappropriate narrative strategy may amplify cultural misunderstandings or trigger public controversy.

3 A Translation Ethics Framework for International Communication

3.1 Ethics of cultural representation: preserving cultural meaning and traditional values without distortion

In the international dissemination of shenrong culture, the core concern of cultural representation ethics is to ensure that translation faithfully conveys the meaning structures of the source culture and the traditional knowledge systems embedded within them. As an important symbol rooted in East Asian medical culture, shenrong embodies not only medicinal efficacy but also a broader worldview concerning life cultivation, health preservation, classical bencao narratives, and philosophical understandings of the human–nature relationship (Chen, 2023; Kadier et al., 2025). TCM is fundamentally built upon unique epistemological categories-such as Yin–Yang, qi, and the Five Elements-which serve both as medical concepts and as carriers of cultural identity and symbolic meaning (Min et al., 2024; Kadier et al., 2025). If translation of shenrong is guided solely by the consumption logic of the target market or the dominant biomedical discourse, without regard for the historical and philosophical contexts behind these concepts, it risks producing a “flattened” cultural representation. In such cases, the tri-layered structure of culture-medical theory-symbolism may be reduced to a single product-oriented narrative or commercial sign (Ding and Zheng, 2024). Thus, cultural representation ethics stresses that translation should not become a process of cultural dilution but rather a practice of protecting cross-cultural knowledge and extending cultural meaning.

At the same time, cultural representation ethics requires translators to maintain high precision and interpretive responsibility when dealing with terminology, classical cultural references, and traditional medical expressions. Concepts such as “tonifying qi”, “warming and strengthening”, and “harmonizing Yin and Yang” have clearly defined theoretical positions within the TCM framework, yet they lack direct equivalents in Western biomedical discourse. Literal rendering or replacing them with single functional terms often diminishes their historical and philosophical depth (Zhang and Dong, 2020; Chen, 2023). Studies show that unannotated literal translations of TCM terminology (e.g., formula names, symbolic metaphors) can lead to misunderstanding and cultural identity loss, whereas the appropriate use of annotations and strategies of foreignization/domestication helps construct a dynamic balance between intelligibility and cultural fidelity (Ding and Zheng, 2024; Min et al., 2024). Therefore, cultural representation ethics can be summarized as requiring both intelligibility and non-attenuation: on one hand,