Journal of Audiovisual Translation

Translating Knowledge(s) Across Time and Space: Audiovisual Translation of "Traditional Chinese Medicine and Culture" Open Course (a Case Study)

Yuan Zou ✉
University of Surrey, Centre for Translation Studies

Piotr Blumczynski ✉
Queen's University Belfast, Centre for Translation and Interpreting

Citation: Zou, Y., & Blumczynski, P. Translating Knowledge(s) Across Time and Space: Audiovisual Translation of "Traditional Chinese Medicine and Culture" Open Course (a Case Study). *Journal of Audiovisual Translation*, *8*(2), 1–22. https://doi.org/10.47476/jat.v8i2.2025.368

Editor(s): D. Chiaro & L. Rossato

Received: November 21, 2024

Published: December 15, 2025

Abstract

The audiovisual translation (AVT) of online courses plays a crucial role in the rapidly evolving global education landscape. This means that Massive Open Online Courses become massive translation sites, in which complex linguistic, cultural, and epistemological challenges are negotiated. Taking a cue from the EPISTRAN international research project, this article takes a close look at a hugely popular MOOC devoted to Traditional Chinese Medicine and Culture to identify both challenges as well as elements of good practice. One of the key findings is that integrating a translational perspective early into the design process, rather than viewing translation as an extra linguistic layer added at the end, helps minimise conceptual mismatches, maximise participant engagement, and encourage constant revision and updating of knowledge. MOOCs offered by world-renowned educational institutions to a broad range of multilingual and multicultural audiences powerfully showcase translation in its knowledge-making role.

Key words: Audiovisual Translation, Interepistemic Translation, Epistemology, MOOC, knowledge-making, Traditional Chinese Medicine, translational perspective, challenges and good practices.

✉ y.zou@surrey.ac.uk, https://orcid.org/0000-0001-8774-9978
✉ p.blumczynski@qub.ac.uk, https://orcid.org/0000-0002-5522-4146

1. Translating Knowledge: Key Issues and Concepts

What does it mean to translate knowledge(s)? Why does knowledge need translation? What happens to knowledge when it is translated – not just from one language to another, but between epistemological traditions (including the various sources of knowledge and different ways of knowing)? How does the translation of knowledge(s) fit into the complex picture of power dynamics between various political, educational, and social structures? These and similar questions have been increasingly coming to the fore in the last decade, in line with a growing interest in "the intimate connection between translation and the mediation of knowledge" (Baker, 2018, p. 8). Regardless of the angle from which this entangled relationship is approached – that is, whether one is interested primarily in the translational aspects of epistemology, or in the epistemological aspects of translation – the landscape stretching along and across these two main axes is vast, so we would like to begin by staking out our main areas of focus in this article, along with some underlying assumptions and working definitions.

Our most fundamental assumption is that knowledge is both emergent and situated, and that its complex, multidimensional nature underlies the concept of epistemic paradigms, systems, and traditions. In her editorial to a special issue of *Alif*, devoted specifically to "Translation and the Production of Knowledge(s)", Mona Baker notes that "knowledge is 'produced' rather than 'discovered', and that translation is a core mechanism for the production and circulation of all forms of knowledge" (2018, p. 8). While we broadly share this position, we also see the need to nuance it further. In particular, we feel that the rhetoric of production, with its implicit emphasis on product rather than process (cf. Blumczynski, 2021), is rather ill-suited to discussions of knowledge and translation. "Produced" knowledge – especially if its "production" and "circulation" involve "mechanisms" – invites a mechanistic view in which knowledge risks becoming reified and detached from those who "produce" it, from their aims and intentions, suppositions and limitations. To counter potential misconceptions and promote a more organic view – as befits the living organisms that we are – we propose to think, speak, and write about knowledge as something that emerges, grows, and develops in a specific linguistic, cultural, intellectual, social, political, religious, geographical, and historical context. The difference may seem small, but it is vital; to give a concrete example, "translation as knowledge-making" (Schögler, 2018, pp. 65–68) captures our perspective more adequately than "translation as knowledge-production". So do accounts of translation in which knowledge is shared, taken, imposed, inflected, and generally reckoned with as a force, rather than merely "circulated" as property.

This attention to vocabulary and discursive convention is not due to stylistic pettiness or academic purism; rather, it comes from our keen awareness of the power of a linguistic worldview, "a language-entrenched interpretation of reality" that is "clearly subjective and anthropocentric but also intersubjective (social)" and that "unites people in a given social environment, creates a community of thoughts, feelings and values" (Bartmiński, 2009, p. 23; cf. Głaz, 2022). This includes thoughts, feelings, and values related to knowledge itself, as well as the means and conditions of its

dissemination. Indeed, different ways of knowing – from scientific to humanistic to indigenous knowledge(s) – are conventionally encoded in their characteristic modes of discourse that promote and reinforce particular worldviews. As Karen Bennett argues (2024), drawing on evidence from linguistics, the dominant scientific worldview in the West "was effectively constructed between the seventeenth and nineteenth centuries through a series of linguistic transformations that crystallised processes into things through nominalization and rendered them autonomous to the observer through the development of impersonal verb structures" (Bennett, 2024, p. 2). Meanwhile, humanistic texts tend to privilege "a discourse that is value-laden, person-oriented, aesthetically aware and culturally embedded (…), while the informal knowledge of the global south tend to be much more embodied, performative, multimodal and oral" (p. 2).

As the discussion of our case study will demonstrate, successful and ethical translation needs to navigate not only obvious linguistic and cultural differences, but also negotiate higher-level tensions between epistemic discourses and knowledges. This plurality is significant: highlighted in the titles of some key publications (e.g. Baker, 2018; Bennett, 2024, Vidal Claramonte, 2025), it urges an ethical response that includes epistemic humility, respect, and the active pursuit of cognitive and epistemological justice. Boaventura de Sousa Santos encourages us to think in terms of "ecology of knowledges", founded on the conviction that "different types of knowledge are incomplete in different ways and that raising the consciousness of such reciprocal incompleteness … will be a precondition for achieving cognitive justice" (2016, p. 213). His call for "intercultural translation" between "the knowledges and cultures of the global North (Eurocentric, Western-centric) and [those of] the global South, the east included" (Santos, 2018, p. 34) is echoed by Douglas Robinson's (2017) notion of "interepistemic translation" between different knowledge systems. Both are mobilised in the international EPISTRAN[1] project whose initial main foci were: (a) "the transactions occurring between Western science (the hegemonic knowledge of the globalised world) and its various Others: in particular, humanistic learning"; (b) "the indigenous knowledges of the global south, which are not taken seriously as 'knowledge' at all and are systematically occluded in the name of 'progress'"; and (c) "the various premodern knowledges which were downgraded to myth or superstition following the Scientific Revolution" (Bennett, 2024; cf. Bennett & Neves, 2024). Much of our theoretical and conceptual framework finds parallels in – and draws inspiration from – the various epistemological and methodological approaches tested and advanced within EPISTRAN; in fact, all three of its initial strands outlined above are directly relevant to our case study that examines an online course on traditional Chinese medicine and culture offered in English to audiences worldwide.

Against this meshwork of concepts, convictions, and commitments, it should be clear that we embrace a broadly semiotic view of translation as a process of meaning-making that occurs across time, space, and various abstract dimensions (such as those outlined above). It is undeniable that "[t]ranslation, in its conventional interlingual form, has been present in the transmission and

[1] https://www.epistran.org./

development of knowledge since the earliest times" (Bennett & Neves, 2024, p. 1); likewise, it is evident that "it has expanded its remit beyond its traditional domain to become a major interpretive and operative tool at the centre of a whole new transdisciplinary research paradigm" (p. 1). This recognition is spreading rapidly, "with historians and philosophers of science now acknowledging that translations exist at the very roots of their disciplines" (Sumillera et al., 2020, p. 1) and a similar awareness of key translational concerns being articulated in the history and historiography of science, medicine, and technology (Elshakry & Nappi, 2016). If "[s]cience cannot avoid translation, not even when written in the universal language of mathematics" (Dupré, 2018, p. 303), neither can medicine – especially one that is explicitly termed both "traditional" and "Chinese".

It is against this background that we situate the aims of the present article. In theoretical terms, we want to demonstrate that complex translational challenges – such as those involved in communicating specialised knowledge through time and across different linguistic and cultural contexts – can be better understood from an inter-epistemic perspective (of the kind advocated within EPISTRAN). Just as importantly, we are keen to apply these theoretical insights to a highly popular MOOC to identify areas in which translational challenges may be expected, as well as to highlight elements of good practice that could be emulated elsewhere. If we accept that knowledge "is not disinterested or impersonal but situated" (Cheung, 2012, p. 156) in ways we signalled above, a main challenge faced by translation is to devise "methods to make 'situated knowledges' (…) meaningful to those situated differently" (p. 160). In response to this challenge, Martha Cheung has advocated her own approach, modelled on the Chinese martial arts of 推手 ("tuishou"), "pushing hands" (Cheung, 2012; cf. Robinson, 2016). Both in martial arts (literally) and in translation (figuratively), those who practice pushing hands "develop balance, sensitivity to the energy, intention and movements of the other, quick reflex, and the capacity to relax under pressure" (Cheung, 2012, p. 161). This reality of the constant negotiation of balance and force, of multi-aspectual translational engagement, will regularly reappear in our discussion of selected examples of knowledge translation across time and space, presented in the following pages. However, before we consider those specific translational acts and effects, we must first outline the complex technological, cultural, and geopolitical contexts in which they occur, with special reference to audiovisual translation.

2. AVT of MOOCs in a Global Context

2.1. Context

Audiovisual Translation (AVT) has become a vital component of global communication and knowledge dissemination, evolving significantly in tandem with technological advancements. We are surrounded by audiovisual reality, from Subscription Video on Demand (SVoD) for TV and tablets to video calls on smartphones and laptops (Massidda, 2022, p. 22). AVT plays a key role in communication, which includes the multimodal translation of verbal and visual components (Remael,

2010, p. 14) through the use of subtitles, dubbing, voice-over, and audio description. However, AVT also presents a range of challenges, as translators must navigate tight time constraints and multimodal content (text, image, sound) without altering the visual elements. This requires striking a balance between presenting the appropriate amount of carefully selected information on the screen without compromising the quality and nuances of the content. Advancements in machine translation (MT), artificial intelligence (AI), and automated subtitling tools have enabled faster translation processes and a wider reach but have also raised concerns about quality and ethics, particularly in sensitive fields such as medicine, healthcare, and education. It is this last context that we will now turn our attention to.

In audiovisual education, Massive Open Online Courses (MOOCs) have become a transformative force, providing access to courses from leading universities worldwide without the barriers imposed by location or time zone differences. Defined by their massive reach, open enrolment, and fully online format, MOOCs democratise education by allowing everyone with internet access to participate in university-level courses, thus becoming channels for the processes of knowledge translation and transmission on a massive scale. Platforms like Coursera, edX, FutureLearn, udacity, and many others have led this global movement, offering courses in a broad spectrum of fields, including information and communication technologies, language learning, business, engineering, social sciences, arts and humanities, health, and so on (Perifanou & Economides, 2022, p. 114). It is estimated that between 2012 and 2020, the number of registered MOOC learners grew from 2 to 180 million (and that number excludes China) (Perifanou & Economides, 2022, p. 105). MOOC platforms are, without doubt, massive translation sites.

The development of MOOCs in China has progressed rapidly since their emergence in 2001, with a major boost in 2013, often referred to as "the year of the Chinese MOOC" (Chai & Yang, 2014). Platforms like XuetangX and iCourse, launched by leading universities such as Tsinghua University and Shanghai Jiao Tong University, have played a vital role in offering training to local and global audiences. In addition to efforts from universities, the Chinese government has also been pushing for the development of online courses. The Chinese Ministry of Education has been launching initiatives to identify and promote "premium quality courses" since 2018, starting with the reviewing and awarding of 490 MOOCs as national premium quality, with this number expected to reach 3,000 by 2020 (Xinhua[2], 2019). The global COVID-19 pandemic further accelerated the importance of MOOCs as a flexible learning tool. It has been reported in a video conference on China's higher education institutions (HEIs) held by MOE[3] that only the first quarter of 2020 witnessed a surge of 5,000 MOOCs and 180,000 other kinds of online courses in China. These statistics demonstrate that both the Chinese government and the Chinese population have recognised the importance of online teaching and have adopted it. MOOCs are not only educational tools, but also platforms for disseminating

[2] http://www.xinhuanet.com/politics/2019-07/11/c_1124737132.htm

[3] http://en.moe.gov.cn/news/press_releases/202004/t20200420_444988.html

knowledge – and, therefore, broad epistemic stances. With the development of globalisation and the internationalisation of higher education, MOOCs could become tools of digital democracy and diplomacy (Bukhtoyarov, 2016), decentralising and balancing the global power relationship of knowledge by increasing the "soft power of higher education" (Li, 2018) of a country in the Global South. Overall, MOOCs contribute to learning at both the individual and national levels, spanning primary to higher education, and from the workplace to lifelong learning (de Waard et al., 2016). MOOCs have the potential to improve student equity and social inclusion, especially during pandemics and conflicts, but they also carry a unique set of risks and challenges, which we will now consider.

2.2. Risks, Challenges, and Research Gaps

Despite their undeniable advantages, MOOCs also face some challenges, including low completion rates and criticism over course quality and learning outcomes. According to Zheng et al. (2018, pp. 22–23), MOOCs: (1) are not capable of creating a humanistic environment like a university campus does, nor of nurturing humanistic qualities; (2) are unable to meet the needs of all students across the world; (3) are not entirely free or fully open because some platforms charge for course completion certificates and are subject to some enrolment restrictions.

Meanwhile, AVT of MOOCs presents unique challenges due to the knowledge-intensive nature of the content. Unlike entertainment media, MOOCs are designed to transfer specialised knowledge across time and space: this involves linguistic and cultural transfer, as well as cognitive and epistemic mediation, to make specific and often situated knowledge accessible to learners from diverse backgrounds. As Braun (2016) notes, audience interpretation is shaped by their prior knowledge and cultural context. The question of how instructors and translators can help bridge the gap between knowledge and beliefs from different time periods and spaces remains. Currently, the majority of AVT for MOOCs uses subtitles. As Díaz Cintas and Remael (2007) point out, subtitling is subject to temporal and spatial limitations, which requires subtitlers to condense, adapt, or omit information. This is potentially problematic for MOOCs, where the translation of technical terms, academic jargon, and culturally specific references may require fuller explanation and greater detail. Koskinen (2011, p. 59) calls for "local explanations of diverse case studies under specific contexts", a call still largely unmet in Chinese AVT research.

To date, AVT research in China has largely centred around TV and film, with limited attention given to educational contexts, such as MOOCs. Theoretical discussions often focus on the application of Western theories to Chinese films, and the mediation of culturally specific content. One of the primary challenges in AVT for MOOCs is the late-stage integration of subtitling, where translation is often treated as an afterthought, resulting in poor-quality subtitles that undermine the educational experience. Subtitles are typically created in the final stages of course development, which limits the time available for quality control and the necessary cultural and linguistic adaptation. These issues

underscore the importance of integrating AVT early in MOOC production to ensure high-quality translations that effectively convey knowledge across time and space. Another challenge arises specifically in the context of Chinese-English subtitling. As Wang (2015) highlights, characters in Chinese can function independently or combine with other characters to convey meaning. Sentences in Chinese may lack explicit markers of tense, subject, or logical connectors, which are typically required in English. These features of the Chinese writing system further complicate the translation process.

Additionally, many Chinese subtitlers translate into their second language, which can compromise the quality of the translation (Hu, 2014). Gambier and Jin (2018) highlight the absence of macro-level discussions on the social impact of AVT, which is critical when addressing global access to education and knowledge dissemination. The lack of empirical research, professional training or standardised practices hinders the development of high-quality AVT research and practices in educational settings. Currently, there is a scarcity of literature on AVT in the Chinese context that examines knowledge translation in global education and reflects on the epistemic challenges inherent in this process.

3. Case Study

The case study considered here focuses on the translation of a MOOC titled "Traditional Chinese Medicine and Chinese Culture" (TCMCC), offered by Shanghai Jiao Tong University (SJTU), one of the top-ranking universities globally[4]. Launched in 2013, this MOOC was one of the pioneering initiatives in Chinese academia to provide accessible online education on Traditional Chinese Medicine (TCM). The course, designed and taught by Dr. Chongsheng Peng, an experienced TCM practitioner and researcher, introduces learners to the key theories and practices of TCM. Dr. Peng's international experience enables him to teach the course in both Chinese and English, thereby reaching a global audience through the provision of English subtitles and English class recordings. By introducing the key concepts of TCM, the MOOC aims to help learners understand the benefits of TCM for people's health and well-being, and to appreciate the value and contribution of TCM to Chinese culture and cultures worldwide.

The MOOC, currently available on platforms including CNMOOC, Treenity, ewant, and Coursera, is based in different countries and regions and has attracted thousands of students both in China and internationally (see Table 1). An important feature of the course is its emphasis on cultural and historical context, which enriches the learning experience and underlines the deep-rooted significance of TCM within the Chinese culture and beyond.

4 ranked #45 in QS World University Rankings 2025 https://www.topuniversities.com/universities/shanghai-jiao-tong-university.

The significance of translating this course lies in bridging the gap between TCM and Western audiences. By making the rich cultural and philosophical foundations of TCM accessible to non-Chinese speakers, the course plays an essential role in fostering cross-cultural understanding and promoting the value of TCM as part of the global health landscape. This speaks directly to the central concerns of EPISTRAN mentioned earlier.

Table 1

TCM MOOC on Various Platforms

Platform	Base	Language	Target Audience	Learning Approach	Number of Students Enrolled
CNMOOC	Shanghai	Simplified Chinese	Chinese students, especially from SJTU	Blended learning (online and offline), flipped classroom	Around 200 per semester (Chinese)
		English	International students	online learning and face-to-face summer camp	Around 20 per semester (English)
Treenity	Shanghai	Simplified Chinese	Chinese students in 390 universities	Online asynchronous learning, live seminars	221,722 students from 465 universities (22 academic terms)[5]
ewant	Taiwan	Simplified Chinese	University students in Taiwan	Online asynchronous learning, “free to pick and learn”	N/A
Coursera	U.S.	Simplified Chinese with English subtitles	Global learners	Online asynchronous learning	19,771reviews: 4.3/5 stars (124 evaluations)[6]

[5] https://coursehome.zhihuishu.com/courseHome/1000006015#review
[6] https://www.coursera.org/learn/zhong-yi-yao-wen-hua

3.1. Course Content Overview

TCMCC covers the essential theories and practices of TCM, introducing learners to key concepts such as "yin-yang" (a system of complementary opposites) and "wuxing" (the five elements or five phases, namely wood, fire, earth, metal, and water), as well as the distinctive philosophical foundations of TCM. It also includes practical components, such as discussions on acupuncture, tai-chi, and Chinese "materia medica". The overarching aim is to provide learners with a holistic understanding of TCM's cultural origins, its contributions to global culture, and its application in healthcare and well-being. Additionally, the course emphasises critical thinking skills, encouraging students to analyse TCM's historical significance and its place in the global North-South interface.

Although the basic content remains the same, overviews of the course vary across the four platforms – CNMOOC, Treenity, ewant, and Coursera – each tailored to their specific audiences (see more details in the links). The **CNMOOC** Chinese version[7] serves as the most comprehensive as it covers detailed academic insights, cultural background, and the contributions of TCM to both Chinese and world cultures. It emphasises fostering a sense of historical responsibility, national pride, and critical thinking skills. This version aims to instil a well-rounded perspective on TCM, suited to the needs of local Chinese students.

The **Treenity** overview[8] is much shorter and more concise. It provides a summarised description, highlighting accessibility for beginners. No prior knowledge of TCM is required, and the main focus is on promoting health care methods. The aim is to attract a large number of learners by making the course content more approachable. By November 2024, 221,722 students from 512 universities had enrolled in this course. Over 465 universities recognise the credits offered by this MOOC (see footnote 8).

The **ewant** platform[9] splits the course into two parts and offers an even more simplified version compared to CNMOOC and Treenity. The overview mentions only the essential principles of TCM, omitting much of the cultural and historical elaboration found in CNMOOC. Ewant promotes a flexible, on-demand learning style, catering to students in Taiwan who may prefer a less formal and more flexible and interest-driven approach as its courses are generally not part of compulsory study programmes. This is further reflected in the platform's casual tone, exemplified by phrases such as "pick and learn" and "let's have fun".[10]

[7] 180.76.151.202:7010/portal/course/3276/16149.mooc

[8] https://coursehome.zhihuishu.com/courseHome/1000006015#onlineCourse

[9] https://www.ewant.org/admin/tool/mooccourse/mnetcourseinfo.php?hostid=13&id=5327

[10] https://www.ewant.org/admin/tool/mooccourse/mnetcourseinfo.php?hostid=13&id=5327 .

The **Coursera** version[11], targeting international audiences, takes a different approach from the platforms discussed so far. It starts by referencing well-known symbols of Chinese culture, like Confucianism and acupuncture, to establish a connection with learners unfamiliar with TCM. The overview then raises intriguing questions about TCM's place in the modern world, such as why this ancient practice remains relevant today. Unlike the Chinese platforms, Coursera's overview avoids emphasising national pride and instead focuses on the analytical exploration of TCM within a global cultural context, making it more suitable for international learners.

These differences illustrate how the MOOC's teaching team adapted course content across platforms to suit the different needs and epistemic perspectives of learners. CNMOOC and Treenity cater primarily to Chinese-speaking audiences with varying levels of content depth, whereas ewant provides a more flexible, self-paced option. Meanwhile, Coursera's content is strategically tailored to appeal to global learners who are learning about traditional medicine in the modern world.

3.2. Challenges of Translating TCM Knowledge

Understanding TCM requires multi-disciplinary knowledge, which may include medicine, culture, history, Chinese studies, philosophy, education, translation, and other disciplines. "Living translation of Chinese medicine unfolds as a discursive, embodied, social, moral, political, and economic engagement that extends the texts, the classroom conversations, and the embodied learning" (Pritzker, 2014, p. 17). Translating TCM from Chinese to English must overcome multiple barriers, from philosophical and conceptual contexts to language and culture, which impact the understanding of knowledge in TCM, including diagnostic and treatment methods, as well as values and beliefs. Additionally, translating TCM involves the usual technical difficulties, such as temporal and spatial constraints in subtitling and accessibility issues in MOOC platforms. All these aspects can influence the reception of translated knowledge.

3.2.1. Philosophical Differences

The translation of TCM from Chinese to English faces significant challenges due to the differences in philosophical context between Chinese and Western medical traditions. The philosophical context encompasses the worldview or belief system that underpins and guides our understanding of existence, health, science, and the universe as a whole. TCM is rooted in a holistic worldview, where health is viewed as resulting from a dynamic balance of the body, mind, and environment. This emphasis on holism, harmony, and balance contrasts with the often-perceived isolationist and reductionist approach of Western biomedicine, which tends to view health as the absence of disease

[11] https://www.coursera.org/learn/zhong-yi-yao-wen-hua/.

and focuses primarily on individual issues within biological systems for study and treatment (Lock & Nguyen, 2010). For example, pulse diagnosis in TCM involves understanding subtle changes in the pulse as reflections of the body's overall state of harmony (Hsu, 2010). This empirical approach is different from the quantitative and standardised measurements typical of Western diagnostics. This gap affects how TCM is perceived in the West, where audiences may see TCM's knowledge, beliefs and values as mystical or unscientific.

Projects in Strand B of EPISTRAN (Bennett, 2024), which address inter-epistemic translation, offer a valuable lens for understanding these challenges. This strand addresses the interaction between different knowledge systems and explores how healthcare outcomes are influenced by traditional belief systems. Translating TCM requires bridging the epistemic gap between fundamentally different worldviews. A clear example of these philosophical and epistemic challenges is the translation of the idea of 天人合一 ("tian ren he yi") in the course, rendered as "human and heaven were the one" (see example below). This concept originates from Zhuangzi, a Taoist philosopher, and reflects a worldview deeply embedded in Chinese culture. The concept of 天人合一 is prevalent in this cultural context and is an important element of Confucianism (see *Five Classics*) and Buddhism (see Sosa, 2015).

Example of 天人合一 (tian ren he yi): "Human and heaven were the one"[12]

> The core ideas of Taoism (Chapter 3.3.2)
> On the harmony in human and nature, society, ecology, it was summarized as "Human and the heaven were the one" in On Mountain and Wood, *Zhuang Zi*.
> That signified that human and nature were a whole, in which human's idea and action accorded with the heaven, or that human returned to simplicity and nature.

However, the current translation in the MOOC as "human and heaven were the one", in addition to some grammatical awkwardness, does not adequately capture this nuanced sense. The word "heaven" in English often connotes a spiritual or religious afterlife, which differs from the relevant meanings of 天 ("tian") in Chinese. 天 can mean nature, destiny, or the overarching principles that govern the universe. It highlights a balanced relationship between human beings and their environment. Therefore, translating 天人合一 as "heaven" may mislead the audience by implying a spiritual context that aligns with Western religious beliefs, which is not accurate in TCM.

Moreover, the interpretation of 天人合一 has evolved over time, reflecting changes in the understanding of this concept. In Chinese history, despite its seemingly simple four-character

[12] Extract from Chapter 3.3.2. of Traditional Chinese Medicine and Culture. https://cnmooc.org/study/initplay/891607.mooc

structure, 天人合一 has been interpreted in various ways depending on philosophical and cultural considerations. For instance, Qian Mu (1991), an influential scholar of Chinese studies, interpreted 天 ("tian") as 天命 ("tian ming"), which roughly translates as "destiny" or the dynamic principle governing the operation of everything in the universe. For Qian, 天人合一 signifies the interconnectedness of life and destiny, where life and the greater cosmic order are integrated rather than distinct. Another renowned scholar, Ji Xianlin (1993), interpreted 天 (tian) as "nature" and 人 ("ren") as "humanity," which suggests that, 天人合一 represents the intrinsic connection between nature and human beings, a view readily applicable in the context of TCM. Unlike the translation provided in the MOOC, which introduces ambiguity by referring to "heaven", Ji's interpretation makes it clear that the concept refers to achieving harmony with the natural world rather than a spiritual union with heaven. This is one of the clearest examples of inter-epistemic translation, where the selection of a specific expression carries significant philosophical and religious implications.

When translating 天人合一, both Qian and Ji consider the philosophical differences between East and West (despite the problematic use of such broad, homogenising labels). In his classic work, Qian (1991) argues that Western beliefs separate the present life and destiny into life and the afterlife. For him, they are not separate but interconnected, dynamically integrated and mutually influential: destiny is not fixed, and life and destiny can be seen as intertwined. Additionally, Ji agrees with Qian and argues that Eastern thinking is generally synthetic, while Western thinking is often analytical (1993). The differences in synthesis and analysis may reflect the relationship between "tian" and "ren" – being apart or together, which may also relate to another major distinction between collectivism and individualism as underlying principles of social organisation (Zou, 2023). In the case of this MOOC, an improved translation may need to consider these challenges and adopt an approach that bridges the epistemic gap between different knowledge systems. Perhaps a phrase such as "unity of humanity and nature" might better convey the intended meaning.

3.2.2. Conceptual Mismatches

A conceptual mismatch may occur when specific terms or ideas lack equivalents in the target culture. This is another core challenge in translating TCM, which is based on concepts that are unique to Chinese culture and have no direct equivalents in Western medicine. Notions such as 气 ("Qi", vital essence, vital energy or life force), 阴阳 ("yin-yang", commonly understood as a dynamic framework of interdependent opposites, reflecting distinctions such as between darkness and light, female and male, materiality and spirituality, etc.) and 五行 ("wuxing", five elements or five phases, i.e. wood,

fire, earth, metal and water) are good examples (see module 3 and 4 in Coursera[13]). In the context of TCM, these meanings relate to physical, mental, and emotional health and well-being.

Interestingly, English translations have undergone some modifications over time. For example, a 2018 documentary filmed in Hollywood was titled *Qi*[14] (the pinyin of 气). In this documentary, "Qi" was transliterated rather than translated as, for example, "vital essence" or "life force" (Needham, 1974, p. 26). To some extent, the translation of 气 ("Qi") has been altered by exposure and interaction with Western concepts of matter (i.e., air, gas, and breath), which have given Qi a scientific meaning and familiarised it (St André, 2023, p. 16). The translation of 五行 ("wuxing") has also evolved over time to reflect the changing understanding of the concept among English speakers (St André, 2023, p. 26). "Wuxing" refers to five dynamic processes in TCM and Chinese cosmology: Wood (木, "mu"), Fire (火, "huo"), Earth (土, "tu"), Metal (金, "jin"), and Water (水, "shui"). It partially maps onto the four elements – Earth, Air, Fire, and Water – of ancient Greek philosophy, which were seen as fixed building blocks of matter (Macauley, 2010). However, "wuxing" are dynamic and interacting forces rather than static and unchanging entities. Over time, the translation shifted to "Five Phases" (Unschuld, 1984, p. 58) to better convey these processes as stages of constant movement and transformation. This evolving understanding also aligns with the 易经 (Yi Jing, *Book of Changes*), which uses trigrams and hexagrams to symbolise the natural, cyclical patterns of change in the universe (Wen, 2003, pp. 581–583). The two examples of "Qi" and "wuxing" demonstrate how knowledge can be recognised and validated through translation, and how the translation of knowledge can change over time under the influence of interaction between cultures.

Both philosophical differences and conceptual mismatches present epistemological barriers due to the differences in the underlying theories of knowledge, including how knowledge is generated, validated, and recognised as reliable. These differences impact fundamental distinctions in matters related to diagnosis and treatment across different cultural or medical paradigms. For instance, pulse and tongue examination (a process of TCM diagnosis such as 望闻问切, "wang wen wen qie"), acupuncture, and herbal remedies are common practices in TCM, while standardised measures and diagnostics are broadly relied on in the Western medicine across the Global North.

3.2.3. Linguistic and Cultural Diversity

Translating TCM from Chinese to English involves significant challenges related to language and culture. One such major issue is the considerable fluidity and ambiguity of ancient Chinese texts.

[13] https://www.coursera.org/learn/zhong-yi-yao-wen-hua
[14] https://www.qi-thedocumentary.com/

Seminal TCM texts cited in this MOOC, such as the "Huangdi Neijing", are written in Classical Chinese, which lacks modern punctuation, is highly condensed and sometimes ambiguous, relying heavily on cultural references and metaphors that may puzzle modern readers. For example, the term 脾 ("pí") in TCM refers to the spleen, but not in the same anatomical sense as in Western medicine. In TCM, the term "spleen" encompasses functions related to digestion, transformation of food into "Qi", and managing the flow of bodily fluids (Maciocia, 2015, pp. 143–151).

In addition to language, "cultural diversity presents translators with a world of challenges" (Díaz Cintas & Remael, 2007, p. 200). Cultural references are often linked to a region's geography, history, society, and culture (Nedergaard-Larsen, 1993, p. 211). Due to the strong embedding of TCM in Chinese history and culture, many of its elements lack direct equivalents in Western conceptual systems, creating "referential vacuums" (Rabadán, 1991, p. 164). Translators face the decision whether to omit these references or try to explain them, with strategies ranging from loan words, literal translation, explicitation, substitution, transposition, lexical recreation, compensation, to omission and addition (Díaz Cintas & Remael, 2007, p. 191). Needless to say, each of these strategies may have significant epistemic implications.

3.2.4. Technical Challenges: Temporal and Spatial Constraints in AVT

Technical challenges include the typical temporal and spatial constraints of AVT. This MOOC has embedded English subtitles that fit within the limits of a screen and that require adherence to conventions that ensure readability. On the one hand, Ivarsson and Carroll's "Code of Good Subtitling Practice" (1998) and Karamitrouglou's "Set of Subtitling Standards" (1998) propose guidelines that restrict subtitles to one or two lines, with character limits varying by language (Díaz Cintas & Remael, 2007). For example, English subtitles are usually limited to 35–40 characters per line, whereas Chinese subtitles are typically 14–16 characters per line (Díaz Cintas & Remael, 2007, p. 85). On the other hand, subtitles face the temporal constraints that need to be synchronised with spoken dialogue to maintain a smooth viewing experience. A duration of one to six seconds is recommended for each subtitle; shorter exposure times make reading difficult, while longer exposure risks redundancy (Díaz Cintas & Remael, 2007, p. 89). These constraints often necessitate strategies such as condensation and omission to convey meaning within these limits. The need to balance concise translation with the accurate representation of complex TCM concepts makes subtitling complicated, especially in educational contexts where viewers are also processing other visual elements, such as lecture slides, adding further complexity to the subtitling process.

Summing up, the challenges involved in the AVT of TCM are not only – or even primarily – linguistic but are deeply rooted in the philosophical, conceptual, and cultural differences between Chinese and Western medical and epistemological traditions. As Pritzker (2014, p. 60) points out:

> I think you don't understand it necessarily with your head, as you understand it with your gut. You understand it with your intuition. I think that's almost—that's why it's hard, because that intuition is based on, you know, the culture behind it (…) and just those characters [in Chinese medicine]—they're just poetic on their own (…) it's a different way of communicating and writing—it's just a different concept. It's a different nature.

This reflection captures the key difficulty involved in translating TCM material for non-Chinese audiences. The most significant meanings often lie behind, between, and beyond words, hidden in the poetic depths of the Chinese language and intertwined with its epistemic tradition: holistic, embodied, appealing not exclusively to what could be called "the head" but also "the gut". The only way to navigate these profound epistemological differences is to recognise them for what they are and cope with them on these complex epistemic terms. In the following section, we discuss some successful examples of inter-epistemic translation and identify elements of good practice.

3.3. Good Practices

3.3.1. Adapting TCM for Specific Audiences

Strand A (Science and Humanities) of EPISTRAN examines the translational processes involved in popularising science and how science is reformulated into education (Bennett, 2024, p. 7). This MOOC is a good example of how traditional knowledge, involved in the highly specialised content of TCM, has been adapted to engage a broader audience across multiple platforms.

In the section on course content overview, we discussed how this MOOC adapts its teaching content to various audiences. We have also indicated (see Table 1) how the MOOC has been adapted to specific languages, which involves different types of AVT. The translation processes employed by various platforms are different. For example, the course on Coursera was offered in Chinese, i.e. the instructor speaks Chinese, and the English version is provided with hard subtitles embedded in the video. The soft subtitle option is also available in Chinese, allowing audiences to choose whether to turn it on or off (see Figure 1), enabling them to learn and compare terms and expressions in both English and Chinese.

Figure 1

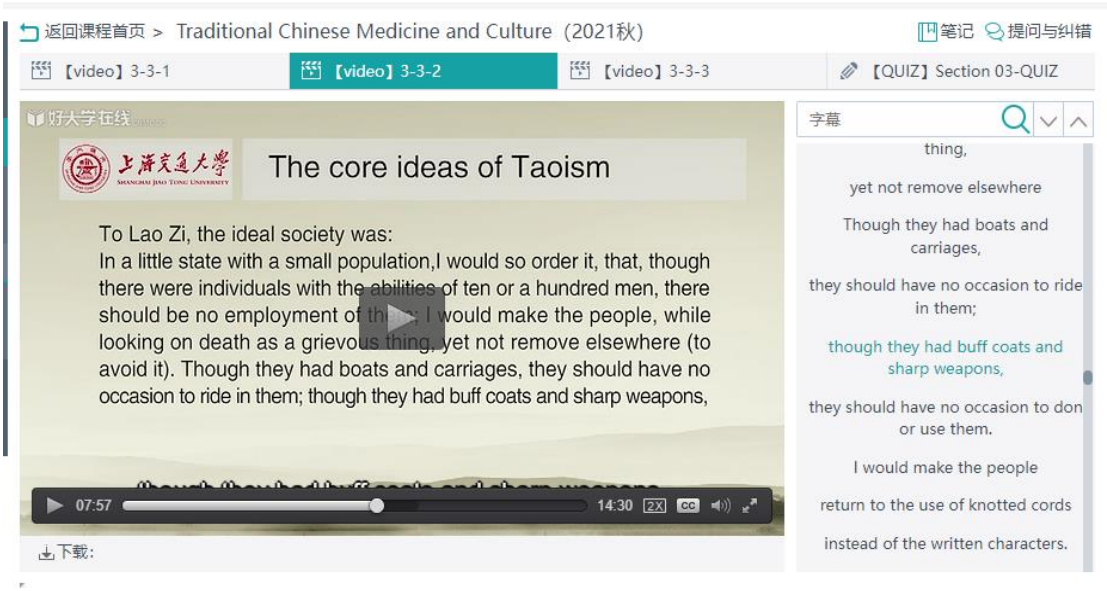
Subtitles of the MOOC On Coursera[15]

In CNMOOC for international students, the course was translated into English, including the slides, teaching materials, and transcriptions (see Figure 2), before the course was recorded. The instructor then reviewed the translation and taught the course in English, with English captions and subtitles. This made the course successful, as the translation occurred at an early stage of internalising this MOOC. In this case, translation was not merely an afterthought but was embedded in the course design and delivery process. In the translated course, the instructor employs several strategies, including reframing complex ideas, adapting the style of traditional Chinese to make it easier to understand in modern English, and utilising simplified paratexts to facilitate better comprehension. They also added tai-chi and acupuncture practices in the teaching activities, as these are likely more familiar to international students.

[15] https://www.coursera.org/learn/zhong-yi-yao-wen-hua.

Figure 2

Screenshot of Video 3-3-2



They customised their teaching approach for international students to a Westernised, non-hierarchical style of delivery. As the screenshot (Figure 3) shows, rather than the one-directional teaching and learning in a traditional classroom, students and the instructor sit next to each other at a table, an arrangement more conducive to open discussion and the exchange of opinions. During a discussion about herbal medicine, the instructor also employed multi-modal and multi-sensory teaching methods by allowing students to observe and taste the herbs, thereby fostering a deeper understanding of their appearance, smell, flavour, and function. This kind of teaching practice could be one of the reasons behind the success of this MOOC, as its stakeholders are aware of the epistemic challenges in translating and teaching TCM and are willing to make changes in the classroom.

Figure 3

Screenshot of Introduction of Zang-fu in TCM, video 2-5-1 in English

3.3.2. Updating Knowledge and Engaging with Learners

Since the launch of this MOOC in 2013, the teaching team has been updating the course, adding new reading materials, slides from face-to-face classes and seminars, webinars, and new videos and assignments, to keep the content in line with current societal and global trends. For example, this course closely monitors breaking news in this field, such as updates on Tu Youyou, the first Nobel Prize winner in medicine from China, who discovered artemisinin (also known as 青蒿素, "qinghaosu") and dihydroartemisinin. Both her discoveries have saved millions of lives and have stopped others from contracting malaria. Apart from the newly added content on Tu Youyou, there are also recent updates related to the impact of COVID-19 and the applications of TCM throughout the pandemic.

In addition to its merits of up-to-date teaching content, another key feature of this MOOC is its interaction with the learners. Previous research has shown that a lack of interaction is a common shortcoming of MOOCs (Liu, 2015, pp. 27–28; Zhang, 2018, p. 89). In this case, however, the teaching team is dedicated to engaging students both at home and abroad. Although it is mostly online and asynchronous, the teaching team manages to offer in-person lectures, flipped classrooms, synchronous online Q&A sessions, an in-person summer camp and an online discussion forum. Considerable effort is invested in making the course as interactive as possible. For example, the Treenity platform displays pop-up questions on the screen during videos, allowing students to interact with peers and instructors in the forum. As a result, the total number of interactions has reached a staggering figure of 2,155,766, including 249,303 in the current semester (November 2024). In discussions, the designated contributors are typically not members of the teaching team. Instead, they are facilitators who put students' opinions first and encourage student-to-student communication in the learning environment to enhance learners' skills, including problem-solving and communication.

4. Conclusion

This article has focused on both the theoretical complexity and practical challenges of translating specialised knowledge across time and space, drawing on a case study of a highly popular Chinese MOOC devoted to TCM, offered to a global international audience through AVT. We have sought to demonstrate that knowledge emerges, grows, and develops in a specific linguistic, cultural, intellectual, social, political, religious, geographical, and historical context, all of which make it inherently situated. Consequently, translating educational content – especially when it is epistemologically and culturally complex – calls for keen epistemic awareness and strategically informed practice. This case study has allowed us to highlight some philosophical differences, conceptual mismatches, linguistic and cultural diversity, and technical issues that often complicate a successful translation of knowledge for international learners. In strategic terms, we suggest that integrating a translational perspective early into the design process – rather than adding translation

at the end – may help mitigate many of these challenges. Meanwhile, we have identified several elements of good translational and pedagogical practice that may be emulated elsewhere, such as reframing complex ideas, employing paratextual aids, engaging learners in interactive learning, and ensuring that content is continually updated to reflect the growth of knowledge. As AVT and MOOCs continue to expand globally, these insights emphasise the need for ongoing innovation in translation to reach diverse audiences, creating a bridge that connects knowledge(s) across time and space and fosters a truly global exchange of ideas and practices.

References

Baker, M. (2018). Editorial: Translation and the production of knowledge(s). *Alif: Journal of Comparative Poetics*, *38,* 8–10. http://www.jstor.org/stable/26496367

Bartmiński, J. (2009). *Aspects of cognitive ethnolinguistics* (Ed. Jorg Zinken, Trans. Adam Głaz). Equinox.

Bennett, K. (2024). Epistemic translation: Towards an ecology of knowledges. *Perspectives*, https://doi.org/10.1080/0907676X.2023.2294123

Bennett, K., & Neves, M. (2024). (Inter-)epistemic translation: A new paradigm? *Translation Matters, 6*(1), 1–9. https://doi.org/10.21747/21844585/tm6_1int

Blumczynski, P. (2021). Processualizing process in cognitive translation and interpreting studies: A philosophical intervention. In S. L. Halverson & Á. Marín García (Eds.), *Contesting epistemologies in cognitive translation and interpreting studies* (pp. 32–50). Routledge. https://doi.org/10.4324/9781003125792-4

Braun, S. (2016). The importance of being relevant: A cognitive-pragmatic framework for conceptualising audiovisual translation. *Target. International Journal of Translation Studies, 28*(2), 302–313.

Bukhtoyarov, M. S. (2016). Soft power of massive open online courses: New age of digital diplomacy. Journal of Siberian Federal University. *Humanities & Social Sciences*, 7, 1631–1636. https://doi.org/10.17516/1997-1370-2016-9-7-1631-1636

Carroll, M., & Ivarsson J. (1998). *Subtitling*. TransEdit.

Chai, Y., & Yang, L. S. (2014). A literature review of MOOC. *Proceedings of 3rd International Conference on Science and Social Research* (ICSSR 2014). Atlantis Press.

Cheung, M. P. Y. (2012). The mediated nature of knowledge and the pushing-hands approach to research on translation history. *Translation Studies, 5*(2), 156–171. https://doi.org/10.1080/14781700.2012.663599

de Waard, I., Anckaert, M., Vandewaetere, B., & Demeulenaere, K. (2016). *Increasing lifelong learning skills for upper-secondary students by combining CLIL and MOOC with teachers as guides on the side* [Conference presentation]. 11th European conference on technology enhanced learning, Lyon, France.

Díaz Cintas, J., & Remael A. (2007). *Audiovisual translation: Subtitling*. Routledge.

Dupré, S. (2018). Introduction: Science and practices of translation. *Isis: A Journal of the History of Science Society*, *109*(2), 302–307. https://doi.org/10.1086/698234

Elshakry, M., & Nappi, C. (2016). Translations. In B. Lightman (Ed.), *A companion to the history of science* (pp. 372–386). Wiley-Blackwell. https://doi.org/10.1002/9781118620762.ch26

Gambier, Y., & Jin, H. (2018). Audiovisual translation in China: A dialogue between Yves Gambier and Haina Jin. *Journal of Audiovisual Translation, 1*(1), 26–39.

Głaz, A. (2022). *Linguistic worldviews: Approaches and applications*. Routledge.

Hsu, E. (2010). *Pulse diagnosis in early Chinese medicine: The telling touch*. Cambridge University Press.

Hu, K. (2014). Competition and collaboration: Chinese video websites, subtitle groups, state regulation and market. *International Journal of Cultural Studies, 17*(5), 437–451.

Ji, X. 季羡林. (1993). 天人合一新解 [A novel understanding in the Unity of human and heaven]. *传统文化与现代化 1*. https://www.aisixiang.com/data/23861.html

Karamitrouglou, F. (1998). A proposed set of subtitling standards in Europe. *Translation Journal, 2*(2), 1–15.

Koskinen, K. (2011). Institutional translation. In Y. Gambier & L. van Doorslaer (Eds.), *Handbook of translation studies: Volume 2* (pp. 54–60). John Benjamins Publishing Company. https://doi.org/10.1075/hts.2.ins1

Li, J. (2018). *Conceptualizing soft power of higher education: Perspectives on rethinking and reforming education*. Springer. https://doi.org/10.1007/978-981-13-0641-9

Liu, Yu 刘宇. (2015). 冲击下国家精品视频公开课的 SWOT 分析 [A SWOT analysis for the national premium open courses under the impact of MOOC], *中国远程教育*, (4), 26–31.

Lock, M., & Nguyen, V.-K. (2010). *An anthropology of biomedicine*. Wiley-Blackwell.

Maciocia, G. (2015). *The foundations of Chinese medicine: A comprehensive text*. Elsevier Health Sciences.

Macauley, D. (2010). *Elemental philosophy: Earth, air, fire, and water as environmental ideas*. SUNY Press. https://doi.org/10.1515/9781438432465

Massidda, S. (2022). The symbiotic match of AVT & Tech industry state-of-the-art and way forward. *Rhesis. International Journal of Linguistics, Philology and Literature*, *13*(1), 21–35.

Nedergaard-Larsen, B. (1993). Culture-bound problems in subtitling. *Perspectives: Studies in Translation Theory and Practice, 1*(2), 207–240. https://doi.org/10.1080/0907676X.1993.9961214

Needham, J. (1974). *Science and civilisation in China* (Vol. 5). Cambridge University Press.

Perifanou, M., & Economides, A. A. (2022). The landscape of MOOC platforms worldwide. *International Review of Research in Open and Distributed Learning*, *23*(3), 104–133.

Pritzker, S. (2014). *Living translation: Language and the search for resonance in U.S. Chinese Medicine*. Berghahn Books.

Qian, M. (1991). 中国文化对人类未来可有的贡献 [The contribution of Chinese culture to humanities]. In Liu Mengxi 刘梦溪 (Eds.), *中国文化*, *8*(4), 93–96.

Rabadán, R. (1991). *Equivalencia y traducción: Problemática de la equivalencia translémica inglés-español* [Equivalence and translation: Issues with translemic equivalence from English to Spanish]. Universidad de León.

Remael, A. (2010). Audiovisual translation. *Handbook of Translation Studies*, *1*, 12–17.

Robinson, D. (2017) *Translationality: Essays in the translational-medical humanities*. Routledge.

Robinson, D. (Ed.) (2016). *The pushing-hands of translation and its theory*: *In memoriam Martha Cheung, 1953–2013*. Routledge.

Santos, B. S. (2016). *Epistemologies of the South: Justice against epistemicide*. Routledge.

Santos, B. S. (2018). *The end of the cognitive empire: The coming of age of epistemologies of the south*. Duke University Press.

Schögler, R. Y., (2018). Translation in the social sciences and humanities: Circulating and canonizing knowledge. *Alif: Journal of Comparative Poetics*, *38*, 62–90. http://www.jstor.org/stable/26496370

Sosa, E. (2015). Confucius on knowledge. *Dao, 14*(3), 325–330.

St André, J. (2023). *Conceptualising China through translation*. Manchester University Press.

Sumillera, R. G., Surman, J., & Kühn, K. (2020). Introduction. In R. G. Sumillera, J. Surman, & K. Kühn (Eds.), *Translation in knowledge, knowledge in translation* (pp. 1–14). John Benjamins. https://doi.org/10.1075/btl.154

Unschuld, P. U. (1984). *Medicine in China: A history of ideas*. University of California Press.

Vidal Claramonte, M. C. Á. (2025). *Translating indigenous knowledges: Toward a sensuous translation.* Routledge.

Wang, D. (2015). Subtitling from a Chinese perspective. In S. Bruti, E. Perego (Eds.) *Subtitling today: Shapes and their meanings* (pp. 203–220). Cambridge Scholar Publishing.

Wen, X. (2003). Hexagram pictures and early Yi schools reconsidering the book of changes in light of excavated Yi texts. *Monumenta serica*, *51*(1), 571–604. https://doi.org/10.1080/02549948.2003.11731403

Xinhua. (2019). China tops world in open online courses. http://en.moe.gov.cn/news/media_highlights/201904/t20190410_377313.html

Zheng, Q., Li Ch., & Burgos D., (2018). *The development of MOOCs in China*. Springer Singapore. https://doi.org/10.1007/978-981-10-6586-6

Zhang, Z. 张志伟. (2018). 互联网时代下高等教育教学改革——网络公开课的建设与推广 [Teaching reform of higher education in the internet age: Construction and promotion of online open courses]. *教育教学论坛*, (11), 89–90.

Zou, Y. (2023). *Translating knowledge: A study on the audiovisual translation of Chinese open courses for international audiences* [Doctoral dissertation]. Queen's University of Belfast.