

"Imagine gazing up at the night sky, a tapestry of stars stretching across the inky blackness," said Anuj Misra, who leads the new Max Planck Institute for the History of Science (MPIWG) Research Group "Astral Sciences in Trans-Regional Asia" (ASTRA), at the group's launch in October 2024. He then asked: "Have you ever wondered about the stories these celestial bodies have told, the cultures they have shaped, and the civilizations they have inspired?"

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Of course I have, many will answer Misra. Indeed, in her welcome address, MPIWG Director Dagmar Schäfer recalled how, growing up as a child in West Germany in a place known for its dark skies, she learned how to navigate by the stars and the moon but also how, upon arriving in Beijing in 1989, that particular knowledge was inadequate.



02 Introduction by Research Group Leader Anuj Misra at the ASTRA opening reception. Source: Sandra Prengel, 2024.



01 Welcome speech by Dagmar Schäfer at ASTRA people relied on the cardinal opening reception, Source: Sandra Prengel, 2024.

directions of north, south, east, and west rather than local landmarks or celestial bodies. For Schäfer, it was a realization of how people in various parts of the world orient themselves differently according to the heavens as well as the ways in which such differences in spatial understandings manifest themselves in how various cultures have integrated the observation of heavens into their understanding.

# **Investigating the History of Astral Knowledge in Asian Discourses**

The Research Group ASTRA is devoted exactly to studying how different cultures in Asia have engaged with heavenly knowledge across time and space. Taking a novel approach and focusing on creative transformations and cross-cultural movements, ASTRA adopts a trans-regional perspective and delves into the rich and interconnected history of Asian astral sciences through three key thematic domains: Transmission, Translocation, and Transcreation. These interrelated and often overlapping domains explore the dynamic ways in which astral knowledge was communicated, transported, and integrated across Asia throughout history.



03 Research Group Leader Anuj Misra during his keynote speech at the MPIWG Research Group "Astral Sciences in Trans-Regional Asia" (ASTRA) launch event. Source: Sandra Prengel, 2024. ASTRA logo in the background by Anuj Misra, 2024.

## Transmission: Bridging the Intellectual Gap

In the domain of *Transmission*, researchers in the group investigate how astral knowledge was communicated between diverse Asian cultures throughout history. Serving as an intellectual conduit to transport this knowledge, linguistic structures, logical frameworks, artistic expressions, and technical skills were crucial to this communication. Consider, for example, the linguistic choices astronomers made to convey their knowledge. When the seventeenth- manuscript posters. Source: Sandra Prengel, 2024.



century Hindu astronomer Nityānanda first encountered the Ptolemaic equant point—an imaginary point about which the center of a planet's epicycle uniformly moves—he called it the abhicāra-kendra, a "center of magic." By studying such linguistic elements, researchers arrive at a more nuanced understanding of how Asian societies conceptualized the heavens, developed celestial models, and applied their knowledge of the night sky.

## **Translocation: Crossing Borders, Spanning Time**



05 Astral board game manuscript posters. Source: Sandra Prengel, 2024.

The second thematic domain Translocation explores the journeys, the physical and temporal movements, of astral knowledge across the Asian continent. Researchers in the group examine how this knowledge migrated between different locations, across geographical boundaries, and even transcended temporal ones. For instance, by tracing the circulation of woodblock imprints in Imperial China of the second millennia CE, we uncover not only the physical movement of the imprinting objects and the geographical spread of mechanical reproductions, but also the fascinating changes in printing techniques and societal aspirations over time. Indeed, through our explorations, we uncover the often-hidden roads, the changing physical mediums, and the existing institutional networks that enabled these journeys.

# **Transcreation: Making the Foreign Familiar**

Under the thematic domain Transcreation, the group's researchers examine how various Asian cultures made the foreign familiar, how they made sense of migrated knowledge in new cultural landscapes across Asia. Exploring the assimilation of astral knowledge as an ever-evolving conversation between preservation and adaptation, as a revision of and engagement with external ideas within their own cultural context, the research group uncovers new ways of understanding the creative mechanisms that have sustained the transformation of astral sciences in Asia. Think, for example, of how Islamicate astronomical ideas made it into the realm of Sanskrit medieval discourse, how they were assimilated through a complex process and the interplay of language, culture, and identity. Within this new realm, in turn, heavenly knowledge reshaped Sanskrit astral knowledge in early modern India.



06 ASTRA research group thematic domain posters: "Transmission," "Translocation," "Transcreation." Source: Sandra Prengel, 2024.

### **Research Projects and Working Groups**

Exploring such phenomena through the thematic domains of *Transmission, Translocation*, and *Transcreation*, ASTRA hosts various research projects and several working groups. One example is Postdoctoral Scholar Jacob Schmidt-Madsen's research project "Rolling the Planets, Moving the Heavens," which brings a cultural analysis to examine three nineteenth-century Sanskrit encyclopedic game texts that have never before been published or translated to explore how living traditions of play have been codified as knowledge and brought into conversation with the astral sciences.

In collaboration with associates and external partners, ASTRA members are also involved in working groups that examine the performance of astral knowledge as well as the preservation of several invaluable manuscript collections across the world. These manuscripts shed light on how heavenly science has traversed history, transcending regional and cultural limitations at all times.

Through these three thematic domains, the ASTRA research group offers new avenues of inquiry into the study of the heavens. In doing so, it aims to gain a deeper understanding of the creative mechanisms that have sustained astral sciences across the vast terrain of Asia. And the next time you walk out the door and gaze upon the night sky, perhaps you will also consider how the stars, the planets, and the moons have shaped our lives, our cultures, and our social relations for millennia.

#### ABOUT THE AUTHOR

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