

History of Science 903/911
Translation in early modern science
 Spring 2023
 1:20–3:15 pm W
 984 Memorial Library

Florence Hsia
 4123 Mosse Humanities Building
 3:15 pm–5:15 pm W & by appt.
 262-3971
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Robin Rider
 990 Memorial Library
 1:00 pm–2:00 pm M & by appt.
 262-2809 (forwards to mobile)
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SUMMARY

Drawing on the rich resources of rare books and manuscripts held in UW–Madison's Special Collections, this seminar explores the movement of scientific concepts and practices between languages, cultures, social contexts (lay/elite, classroom/marketplace), and modes of communication (tacit/explicit, text/image) in the course of the sixteenth, seventeenth, and eighteenth centuries. Readings will represent a range of disciplinary perspectives. The writing requirement for this seminar will be tailored to students' particular needs in their respective programs of study.

By taking this course, students will gain familiarity with current scholarly trends in history of science, print culture, material culture, and archives; expand their analytical and interpretive skills; strengthen their oral and written communication skills; and gain experience working with a variety of print and manuscript materials held in Special Collections.

This is a three-credit course. The credit standard for this course is met by an expectation of at least 135 hours of student engagement with the course learning activities (at least 45 hours per credit), which include regularly scheduled seminar meeting times, reading, writing, and other student work as described in the syllabus.

REQUIREMENTS

- (a) Take turns leading discussion of assigned readings (the number of these will depend on the number of seminar participants). A 1-page critique/reaction should accompany your discussion.
- (b) Take turns identifying and presenting a primary source exemplifying that week's readings; preferably the source will be one for which Special Collections holds a copy (logistical details to follow).
- (c) Present a preliminary prospectus & bibliography to the seminar on **Apr 12**; please choose a primary or secondary source related to your research to share with the class in advance of your prospectus & bibliography presentation.
- (d) Make a formal presentation on **Apr 19** or **May 3** (details to follow).
- (e) Complete 15–20 pages of prose writing in connection with this course, ideally a research paper which relates to the themes of this course, analyzes two or more primary sources, and makes use of some conceptual and/or methodological insight gained through the readings. Such a paper may involve comparison of early modern materials with materials from your own period of interest. Other possibilities include a critical discussion of some historiographical issue in the secondary literature; two or more book reviews (situating the book with respect to existing scholarship and critiquing the author's use of source material); or a bibliographic survey in preparation for a prelim field. Please meet with us as early as you can in the semester to discuss how you propose to fulfill the writing requirement.
- (f) Grading will be based on class participation (~25%), in-class presentations (~25%), and your written work (~50%). All of your written work is due on **Wednesday, May 10** at 5:00 pm.

SCHEDULE

*Most readings are available via the library catalog. Those marked with asterisks are posted on the [Canvas course site](#).

Jan 25 introductions

Feb 1 approaches

- Gordin, Michael D. "Introduction: Hegemonic languages and science." *Isis* 108, no. 3 (2017): 606–11.
- Pollock, Sheldon I. "The languages of science in early modern India." In *Forms of knowledge in early modern Asia: Explorations in the intellectual history of India and Tibet, 1500–1800*, edited by Sheldon I. Pollock, 19–48. Durham N.C.: Duke University Press, 2011.
- Damrosch, David. "Scriptworlds: writing systems and the formation of world literature." *Modern language quarterly* 68, no. 2 (2007): 195–219.
- Montgomery, Scott L. "Mobilities of science: The era of translation into Arabic." *Isis* 109, no. 2 (2018): 313–19.
- *Burke, Peter. *Languages and communities in early modern Europe*. Cambridge, UK; New York: Cambridge University Press, 2004, chap. 1: "'Speak, that I may see thee': the discovery of language in early modern Europe."
- Schäfer, Dagmar. "Thinking in many tongues: Language(s) and late imperial China's science." *Isis* 108, no. 3 (2017): 621–28.

Feb 8 translating experience

- Schotte, Margaret E. *Sailing school: Navigating science and skill, 1550–1800*. Baltimore: Johns Hopkins University Press, 2019, chap. 1: "From the water to the writing book: Amsterdam, ca. 1600."
- Alexander, Amir. "Lunar maps and coastal outlines: Thomas Hariot's mapping of the moon." *Studies in history and philosophy of science Part A* 29, no. 3 (1998): 345–68.
- Doherty, Meghan C. *Engraving accuracy in early modern England: Visual communication and the Royal Society*. Amsterdam: Amsterdam University Press, 2022, chap. 2: "'A new visible world': Developing a visual vocabulary for the microscopic."
- Pugliano, Valentina. "Ulisse Aldrovandi's color sensibility: Natural history, language and the lay color practices of Renaissance virtuosi." In *Early modern color worlds*, edited by Tawrin Baker, Sven Dupré, Sachiko Kusukawa, and Karin Leonhard, 70–108. Leiden; Boston: Brill, 2015.
- Hsia, Florence. "Table talk." In *Premodern experience of the natural world in translation*, edited by Katja Krause, Maria Auxent, and Dror Weil, 341–61. New York: Routledge, 2022.

Feb 15 remediation

- Kusukawa, Sachiko. "Ad vivum images and knowledge of nature in early modern Europe." In *Ad vivum?: Visual materials and the vocabulary of life-likeness in Europe before 1800*, edited by Thomas Balfe, Joanna Woodall, and Claus Zittel, 89–121. Leiden; Boston: Brill, 2019. [When you search for the title in the Library Catalog, omit the question mark.]
- *Bleichmar, Daniela. "Translation, mobility, and mediation: The case of the *Codex Mendoza*." In *Sites of mediation: connected histories of places, processes, and objects in Europe and beyond, 1450–1650*, edited by Susanna Burghartz, Lucas Burkart, and Christine Göttler, 240–69. Leiden; Boston: Brill, 2016.
- Billings, Timothy. "Jesuit fish in Chinese nets: Athanasius Kircher and the translation of the Nestorian tablet." *Representations* 87, no. 1 (2004): 1–42.
- Doherty, Meghan C. *Engraving accuracy in early modern England: Visual communication and the Royal Society*. Amsterdam: Amsterdam University Press, 2022, chap. 3: "'Nearly resembling the live birds': collecting and collating for the reformation of natural history."
- Rider, Robin E. "Equations as unruly objects." *Nuncius* 35, no. 3 (2020): 471–505.

Feb 22 **paratexts**

- *Chang, Ku-ming Kevin, Anthony Grafton, and Glenn W. Most. "Introduction." In *Impagination - layout and materiality of writing and publication: interdisciplinary approaches from East and West*, edited by Ku-ming Kevin Chang, Anthony Grafton, and Glenn W. Most, 1–20. Berlin: Walter de Gruyter GmbH, 2021.
- Schmitt, Stéphane. "Epigraphs as parts of text in natural history books in the eighteenth century: between intertextuality and the architecture of the book." In *Pieces and parts in scientific texts*, edited by Florence Bretelle-Establet and Stéphane Schmitt, 269–95. Cham, Switzerland: Springer, 2018.
- Weaver, William. "The verse divisions of the New Testament and the literary culture of the Reformation." *Reformation* 16, no. 1 (2011): 161–77.
- Hanson, Marta, and Gianna Pomata. "Medicinal formulas and experiential knowledge in the seventeenth-century epistemic exchange between China and Europe." *Isis* 108, no. 1 (2017): 1–25.
- Frumer, Yulia. "Before words: reading western astronomical texts in early nineteenth-century Japan." *Annals of science* 73, no. 2 (2016): 170–94.

Mar 1 **thick translation**

- Margócsy, Dániel. "From Vesalius through Ivins to Latour: imitation, emulation and exactly repeatable pictorial statements in the *Fabrica*." *Word & image* 35, no. 3 (2019): 315–33.
- Plescia, Iolanda. "'Now brought before you in English habit': An early modern translation of Galileo into English." In *Translating early modern science*, edited by Sietske Fransen, Niall Hodson, and Karl A.E. Enenkel, 286–307. Leiden: Brill, 2017.
- Rankin, Alisha. "New World drugs and the archive of practice: Translating Nicolás Monardes in early modern Europe." *Osiris* 37 (2022): 67–88.
- Bigelow, Allison Margaret. *Mining language: Racial thinking, indigenous knowledge, and colonial metallurgy in the early modern Iberian world*. Williamsburg, VA: Omohundro Institute of Early American History & Culture, 2021, introduction & chap. 9, "Color and *casta* in the Andean silver industry."

Mar 8 **translating tools**

- Fleming, Juliet. "Dictionary English and the female tongue." In *Enclosure acts: sexuality, property, and culture in early modern England*, edited by Richard Burt, and John Michael Archer, 290–325. Ithaca: Cornell University Press, 1994.
- Dippold, Steffi. "The Wampanoag Word: John Eliot's *Indian grammar*, the vernacular rebellion, and the elegancies of native speech." *Early American literature* 48, no. 3 (2013): 543–75.
- Winterbottom, Anna. *Hybrid knowledge in the early East India Company world*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan, 2016, chap. 2: "Linguistic landscapes: Early English studies of Malay and the EIC in maritime Southeast Asia."
- Nappi, Carla. "Full. empty. stop. go.: translating miscellany in early modern China." In *Early modern cultures of translation*, edited by Karen Newman and Jane Tylus, 206–20, 319–24. Philadelphia; [Washington, D.C.]: University of Pennsylvania Press; Folger Shakespeare Library, 2015.

Mar 15 **spring break**

Mar 22 **individual meetings**

Mar 29 **polyglots**

- Bistué, Belén. *Collaborative translation and multi-version texts in early modern Europe*. Farnham: Ashgate, 2013, introduction & chap. 3: "Unthinkable texts."
- Pimentel, Juan, and Isabel Soler. "Painting naked truth: The *Colóquios* of Garcia da Orta (1563)." *Journal of early modern history* 18, no. 1–2 (2014): 101–120.

- *Miller, Peter N. "Making the Paris Polyglot Bible: humanism and orientalism in the early seventeenth century." In *Die europäische Gelehrtenrepublik im Zeitalter des Konfessionalismus / The European Republic of Letters in the age of confessionalism*, edited by Herbert Jaumann, 59–85. Wiesbaden: Harrassowitz Verlag, 2001.
- Ghobrial, John-Paul A. "The life and hard times of Solomon Negri: an Arabic teacher in early modern Europe." In *The teaching and learning of Arabic in early modern Europe*, edited by Jan Loop, Alastair Hamilton, and Charles Burnett, 310–32. Leiden; Boston: Brill, 2017.

Apr 5 vernaculars

- Weil, Dror. "The fourteenth-century transformation in China's reception of Arabo-Persian astronomy." In *Knowledge in translation: global patterns of scientific exchange, 1000-1800 CE*, edited by Patrick Manning and Abigail Owen, 262–74. Pittsburgh, Pa.: University of Pittsburgh Press, 2018.
- Crowther, Kathleen, Ashley Nicole McCray, Leila McNeill, Amy Rodgers, and Blair Stein. "The book everybody read: vernacular translations of Sacrobosco's *Sphere* in the sixteenth century." *Journal for the history of astronomy* 46, no. 1 (2015): 4–28.
- Cooper, Alix. "Latin words, vernacular worlds: language, nature, and the 'indigenous' in early modern Europe." *East Asian science, technology and medicine* 26 (2007): 17–39.
- Varlık, Nükhet. "Between local and universal: translating knowledge in early modern Ottoman plague treatises." In *Knowledge in translation: global patterns of scientific exchange, 1000–1800 CE*, edited by Patrick Manning and Abigail Owen, 177–90. Pittsburgh, Pa.: University of Pittsburgh Press, 2018.
- *Jami, Catherine. "Imperial science written in Manchu in early Qing China: does it matter?" In *Looking at it from Asia: the processes that shaped the sources of history of science*, edited by Florence Bretelle-Estabet, 371–91. Dordrecht; New York: Springer, 2010.

Apr 12 prospectus & bibliography due

Apr 19 presentations

Apr 26 Professor Lorraine Daston (readings TBA) – Curti Lectures April 26–28

May 3 presentations

May 10 **final written work due at 5:00 pm**