S-100 – Renaissance Cosmology and Its Literary Forms: Mediating between Local Experience and Global Perspectives

History of Astronomy

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Abstract:

This panel addresses the literary forms of Renaissance cosmology seen as a means to link local experience and global perspectives. In an age when commercial and colonial expansion reshaped European culture and enlarged its horizons towards a global perspective, cosmology emerged as the disciplinary field capable of mirroring such a shift. For instance, reports on oceanic streams collected from all over the globe alongside observations of the phenomenon of the Mediterranean tides the constituted the two poles (global and local, respectively) that secured an empirical basis for Galileo Galilei’s speculations on the effects of terrestrial motion on water in the Fourth Day of his literary masterpiece, the “Dialogo sopra i due massimi sistemi del mondo” (1632).

Cosmology in connection with cosmography reflected the widened realm of experience at a theoretical level, bringing together cosmographical acquisitions (geographical and anthropological), novel astronomical options (ranging from Copernican heliocentrism to Brunian infinitism) and ethico-theological concerns (about Creation, natural order and the place of humankind). A rich variety of literary genres—particularly dialogical form and poetry as typical means of scientific dissemination during the Renaissance—established theoretical and emotional links between the particular and the universal, as well as between the local and the global.

Dialogical form as a literary genre was characteristic to the Renaissance. From Alberti and Erasmus through the Venetian ‘poligrafi’ up to the seventeenth-century scholars, it was used to address scientific, philosophical and ethical themes. This literary form was apt to disseminate knowledge, present its acquisition as a process and point out the collective endeavor underlying it. It was also used to cast doubt onto acquired truths while proposing an approach to science based on the humanistic values of amiability, solidarity and free exchange. Moreover, in an age of ferocious wars of religion and societal control, the dialogue permitted an author to distance himself from his theses and possibly escape censorship.

The exploration of the possibilities opened up by a closer connection between cosmological knowledge and literary expression during the Renaissance also included poetic experimentation. Poetry helped mediate between broad theories and everyday life, as well as reflected the ethical and emotional dimensions of science. In particular, poetry could communicate the expectations and worries surrounding epistemic shifts, such as the Copernican turn in astronomy. For example, in philosophical dialogues and Lucretius-inspired verses, Giordano Bruno brought together the pedagogical and
emancipatory potential of both poetry and cosmology, e.g. in "De l’infinito universto et mondi" (1584), "Eroici furori" (1585) and "De immenso et innumerabilibus" (1591).

The intertwining of cosmology, mathematics, astronomy and the natural philosphy with poetry, literature, humanistic erudition and philology is a distinctive feature of the scientific culture of the Renaissance. The communications of this panel offer reflections on the relationship between cosmology and literature and the ways in which literature could act as a tool to mediate between local experience and global perspectives during the Renaissance.

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