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Recensioni

Per Pippin Aspaas, László Kontler, *Maximilian Hell (1720–92) and the Ends of Jesuit Science in Enlightenment Europe*, Brill, Leiden 2020 (*Jesuit Studies*, 27), X-477 pp.

In this superb and trailblazing book, Per Pippin Aspaas and László Kontler deftly place the Jesuit astronomer Maximilian Hell (1720–1792) at the interface of several domains of knowledge that are rarely treated in conjunction. Who was Maximilian Hell? Starting off as the scion of a family of mining engineers in Upper-Hungarian Baňská Štiavnica/Schemnitz, in today's Slovakia, Hell traversed the Habsburg Empire as a Jesuit educator before garnering international fame as astronomer and head of the university observatory of the imperial metropolis Vienna.

Maximilian Hell and the Ends of Jesuit Science in Enlightenment Europe, co-written by authors from Norway and Hungary, is the product of what it describes, a trans-regional *commercium litterarium* that straddles many frontiers to successfully reintegrate the various dimensions of Hell's scientific persona: While Hell's stature as a clerical scientist who served as a liaison between the Jesuit and the meta-confessional Republics of Letters figures prominently in the book, the authors also meticulously chart his identity as a *Hungarus*, a patriotic citizen of the multilingual kingdom of Hungary who combined civic urban pride with an artisanal pedigree of mining experts and municipal bailiffs. Hell's *Hungarus*-allegiance shaped the chief result of his pre-historical and linguistic expertise, the Finno-Ugrian kinship theory of the Magyar language that debunked the mythical Scythian ancestry of the Hungarian nobility.

Kontler and Aspaas masterfully recover the significance of the Jesuits' vast Austrian province as a key site for the circulation of knowledge. An engine of social advancement for talented commoners, the Jesuit order also acted as an inter-regional and multilingual switchboard for the Monarchy, as its novices and professors went through assignments in many different places within the Habsburg realms, while Jesuit educators also swapped the subjects they taught. Deeply enmeshed in the travails of Empire, the Jesuit order became a major brain trust for the pursuit of Enlightenment under Maria Theresa, as the authors e.g. show with reference to Hell's Jesuit mentor Joseph Franz: Franz, founder of the Vienna Oriental Academy, was also responsible for the standardizing of the Monarchy's weights and measurements. This Enlightenment was a practical project to chart the heavens and to survey the Habsburg territories, as well as to extirpate false beliefs in the Catholic world. It was in this context that clerical institutions found their sales pitch: Acting as bastions of learning and catalysts of Enlightenment, their work was directed against superstition and untrammelled freethinking alike.

It is in this context that Maximilian Hell's Newtonianism hit its full stride, but it was not the only Catholic conceptual resource geared to preserving ecclesiastical learning in an enlightened Empire. It is instructive to look at how it interacted with another of these strands, namely Wolffianism: For Wolffians, revelation remained the key prerequisite of supreme knowledge, whereas Catholic Newtonians devised a pious empiricism that evinced the intelligent cosmic design of a benevolent creator, a universe whose purpose and final aim remained inscrutable to men. Thereby, they pursued two aims: Eager to curb speculation in religious matters, they also sought to buttress the position of clerical science. Both projects misfired. By celebrating the significance of God as creator of the laws of the universe, Jesuit scientists effectively severed the knowledge of God from the knowledge of nature: Midwifing secularized natural science, Jesuit scientists cut the ground from under their own feet.

Aspaas and Kontler rediscover the distribution battles that accompanied this process. Hell enjoyed great success with his Venus Transit observations in Norway, conducted in 1769 at Vardø on the Barents Sea, as well as with his calculation of the solar parallax which, after Kepler's third law, permitted to measure the planetary distances of the solar system. When the suppression of the Jesuit order hit in 1773, Hell was clutching for straws. He sought to capitalize on his old network of kindred spirits and versatile ex-Jesuit naturalists, but Hell's attempt to found an Academy of Sciences at Vienna explicitly devoted to the exact sciences and sharply dissociated from theology and metaphysics quickly fizzled out. Kontler and Aspaas display a fine eye for infrastructural change: Soon after the Jesuit institutions disappeared, the Freemasons volunteered to fill the gap. Masonic research and training lodges supplanted the Jesuit order as surrogate academies and garlanded their work with anti-Jesuit propaganda. Ignaz von Born, the geologist, eminent Freemason, and satirist, who had lauded Hell still in the early 1770s, in 1783 lampooned the ex-Jesuit in a spoof call for subscriptions for an alleged forthcoming work by Hell entitled *Telescopum Christiano-Hellianum*. Born portrayed Hell as a bigoted obscurantist who had ascended from astronomical matters even higher to purely divine subjects. If we remember Hell's anxiety to separate the exact sciences from all kinds of speculation in his Academy proposal, this must be rated as a successful piece of character assassination. Born's message was clear: Jesuit science was depleted of its prestige, scientists in a clerical garb no longer wielded the moral authority of nature; by tarnishing them as metaphysicians one floor above the skies, Born ousted these scientists from their home base

and claimed it for secular naturalists like himself who also fashioned themselves as only legitimate practitioners of Enlightenment.

Kontler's and Aspaas's study is also an extremely rewarding read when it comes to the history of scientific voyages of exploration in the eighteenth century and their clerical ingredient. Read in this key, it reveals inter-marginal and interlocking scenes of self-enhancement that connect the fringes of Enlightenment Europe: Hell, who promoted the prestige of Habsburg Catholic science and placed it on the map of learning, was recruited by the court of Copenhagen to observe the Venus Transit 1769 in what seems a parallel attempt by the kingdom of Denmark-Norway to boost its prestige. While Maria Theresia's botanist of choice, Nikolaus Jacquin, whose trajectory from pipsqueak to pundit is traced in Marianne Klemun's and Helga Hühnel's fine recent book *Ein Naturforscher (er)findet sich* (2017) took 102 pairs of shoes on his expedition to the Caribbean to display his status, what the Jesuit astronomers Hell and his assistant Sajnovics carried with them was a portable altar table for holding mass. Hell and Sajnovics had asked pope Clement XIII to waive their duty to wear the cassock and to relieve them from Catholic dietary requirements when entering the Danish-Norwegian kingdom, which officially banned monks and friars from its realms, making clerics' entry into those lands an offence punishable by death.

The inter-imperial dimensions of the voyage are brought out with particular finesse. As omnivore polymaths, Hell and Sajnovics left no stone unturned: They studied the receding sea level and its impact on fishery, the luminescence of the ocean ("milky seas") during the polar night, the aurora borealis and the oceanic fauna, with Sajnovics's collection of hermit crabs being gobbled up by the mice of Vardø. Yet equally importantly, Sajnovics and Hell reflected on diversity management in a multilingual and multi-religious composite polity that was very similar to the one they came from: They liaised with Knud Leem, professor at the Trondheim *Seminarium Lapponicum*, and one of the gems of the book is the glimpse it provides of the politics of confessional uniformity in Denmark-Norway, impelling the Sámi who pastured their herds on Norwegian territory in the summer to provide attendance certificates by the priests of the Swedish region they spent the winter in, so as to make them eligible to communion in Norway. En route, Hell's and Sajnovics's transactions with the Sámi established a direct link between the Danube basin and the polar circle: Among the many exciting dimensions of the book, its exploration of the Finno-Ugrian kinship theory stands out as a particularly fertile line of enquiry.

The Finno-Ugrian kinship theory caused a stir among the Hungarian society of ranks because it sapped the venerable Hun or Scythian origins of the Hungarians, and thereby subverted a noble republic of privileged aristocrats that was under heavy attack during the Maria Theresian reforms. While the linguistic side of Sajnovics's work has been brilliantly studied by Zsuzsa Vladoar, the authors plausibly argue that Adam Franz Kollar, Hell's erstwhile Jesuit co-novice, court librarian, and critic of Hungarian noble and ecclesiastical privileges, and Gérard van Swieten lurked behind this 'discovery'. They beautifully show the Hungarian refractions of the Enlightenment history of mankind used in response to the kinship theory: Linguistic similarities are discarded as superficial characteristics that pale when compared to customs which, however, are invoked in a peculiar manner by the Hungarian defenders of the Hun pedigree, namely not as malleable traits that change in a sequence of stages, but as eternal features of the nation. The authors also innovatively recover the internal rift within the Jesuit Republic of Letters by drawing attention to the conflict between Hell and György Pray, the Jesuit historian. Pray promoted a historical-palaeographical and philological mode of enquiry, while Hell wished to colonize the study of history with his – free-wheeling – deductive style of enquiry ("stringent formal logic and proofs") and burnished his credentials to that effect: The *certitudo* to which the mathematician had access was superior to that of the historian – don't mess with me, Hell says to Pray, "unless" you wish to make an enemy of me, «the mathematician and thus the fiercest of critics» (p. 249).

What is the conceptual purchase of the book? Kontler and Aspaas raise the question to what extent scientific 'capital', i.e. prestige accumulated in one domain of knowledge was convertible across space (Vienna-Norway-Hungary) and time (pre- and post-suppression, before and after 1773), asking what made its value plummet, turning it into junk bonds, maybe even into a toxic liability. What does the book tell us about the Enlightenment? To my mind the authors may even be too timid in this respect, they conceal the magnitude of their achievement: With a Wallersteinian turn of phrase, Aspaas and Kontler place Hell at the «semi-periphery» of the Enlightenment. But this obscures more than it reveals, reproducing the conceit of Nineteenth-century authors who structured their secular project of modernity around science and Enlightenment by retroactively excluding Catholic practitioners from both. The prerequisite for Enlightenment to unfold institutionally in the Habsburg realms was Maria Theresia's bid to consolidate her Empire while making it competitive in the field

of great power rivalry. Kontler and Aspaas masterfully show how these imperatives began to veer and ricochet, setting all agents of Maria Theresia's project on unforeseeable trajectories that transcended and in some cases even destroyed their conditions of emergence: Jesuit Newtonianism that severed the knowledge of nature from the knowledge of god is one case in point. The 'ends' of Jesuit science whose plurality features prominently in the title of the book encapsulate the limits and moments of closure the process faced, but they also denote its multiple aims and objectives. Combining Kontler's and Aspaas's study with Johann Gottfried Herder's insight from his 1769 *Journal of my Travels*, one might conclude that Enlightenment was an open-ended process, one prone to superseding itself – it was a means, not an end, and once being reduced to the latter, it ceased to be Enlightenment.

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