fang diese Perspektiven und die Wahrnehmung von Werten kulturell und historisch unterschiedlich geprägt sind. Andererseits bezeugen die Beiträge einmal mehr die erschreckende Tatsache, die sich wie ein Ostinato durch den Sammelband zieht, dass sowohl vor als auch lange nach dem Nürnberger Code die Rechte von Versuchspersonen politischen, ideologischen oder auch Karrierezielen untergeordnet wurden, und zwar in einem Ausmass, das vielen Zeitgenossen heute nicht bekannt ist. In dieser Hinsicht möchte man dem Sammelband gern mehr als die Funktion zubilligen, die Roelcke und Maio hervorheben: Einige Beiträge mögen dem Anspruch der Herausgeber gerecht werden, der Simplifizierung komplizierter historischer Zusammenhänge fundierte historische Analysen entgegenzusetzen. Die Aufsätze des Sammelbandes sind sicher hilfreich für ein besseres Verständnis heutiger Normen und Regulationsversuche bezüglich der Forschung am Menschen. Darüber hinausgehend möchte man dem Buch aber auch noch deutlicher eine präventive Seite zusprechen: Wenn heutige Ärzte, Forscher und Ethiker die Grausamkeit menschenrechtsverletzender Experimente aus der Perspektive der historischen Akteure wahrnehmen, werden sie hoffentlich für die zugrundeliegenden Mechanismen sensibilisiert und können heutige Missbräuche früher erkennen und zu verhindern helfen.

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Siebert, Harald: **Die grosse kosmologische Kontroverse**. Rekonstruktionsversuche anhand des *Itinerarium exstaticum* von Athanasius Kircher SJ (1602–1680). Stuttgart, Franz Steiner Verlag, 2006. 383 S. Ill. (Boethius, 55). € 76.–. ISBN 3-515-08731-1.

In the history of sciences hardly a figure corresponds more to the ideal of the omniscient scholar than the Jesuit Athanasius Kircher: “The last man who knew everything” is the subtitle of a collection of essays which appeared in 2004. His immensely powerful imagination allowed him not only to know what one could know by means of experience and reason, but also to shed light into darkness. Kircher focussed information from rather disparate fields and formed bold syntheses that moved along the borders of what the Catholic Church was prepared to accept. Being, to say the very least, a controversial figure in his own lifetime, a change of views regarding aims and standards of science and research severely damaged Kircher’s reputation in the centuries to follow. It is only recently that steps have been taken to thoroughly reveal the enormous and disparate oeuvre from a perspective of the history of philosophy or the history of sciences.

To this, Harald Siebert, who is a historian of science in Berlin, has made no small contribution in a number of articles. With a voluminous study on Kircher’s astronomic or rather cosmological principal work, the *Itinerarium exstaticum* (1656, 1660, 1671), Siebert now presents a work that concentrates on the Jesuit’s controversial attempt to consolidate in the ongoing dispute about world systems the geocentric system, which the church’s scientific authorities favoured in the form of one of the Tychonic systems.

Siebert begins with a concise account of the editorial history and relates how the book offended some all too eager advocates of traditional cosmological views in- and outside the Societas Iesu. For Kircher not only provoked the followers of the over-

come geocentric astronomy but also Copernicans such as Otto von Guericke. He maintained the traditional geostatic position, yet, just as his brother member Riccioli, did not merely defend the *status quo* against innovations. Rather, his defence of the earth's immobile position was progressive: it took the wind out of the Copernicans' sails, by not only granting the cosmos's enormous extension which was necessary due to the imperceptible parallax of the fixed stars, but also by even anticipating the – at that point unmeasured – parallax. It turned out to be necessary to dissolve the sphere of fixed stars, which had been maintained by Kepler, Riccioli and others against Bruno, and to assume the existence of freely moving fixed stars that circled around one another. That what could have brought the experimental proof for the earth's annual revolution could then be interpreted as measurement of the stars' proper movement. Siebert has illustrated this argument of Kircher's in detail, in the context of numerous, mostly unknown and rare texts. Chapters 2 and 3 show to what extent Kircher was prepared to make concessions to the newly found cosmological reasonings and they also elucidate that his innovative ideas, with which he tried to outdo the Copernicans' challenges, served the defence of the earth's immobile position in the end.

Chapter 4, which is, in fact, a second principal part of the study, concentrates on the history of the search for the parallax of fixed stars, which reaches back to Digges' treatise on the supernova of 1572 and caused numerous experiments in the 17th century, none of them, however, yielding convincing results. Siebert shows that Kircher's views of moving stars combined observations of solar systems, to which Schyrl de Rheita had drawn attention in 1645, with interpretations of "new stars", which become visible once they emerge of the depths of the extended zone of the fixed stars. Such ideas had been developed since 1572 and especially after 1604, and were a commonly held opinion of Jesuit astronomers. Kircher, as a scholar less intent on a subject-specific solution than for example Riccioli, devised a cosmos in which different solar systems existed and in which no actual centre could exist due to its immeasurable size. However, it was also a cosmos in which only the earth lay motionless. Thus, from a scientific point of view, the result of the ecstatic journey seems paradoxical: the dissolution of the universe's boundaries is done, in order to let the heliocentric universe appear as superfluous and an implausible alternative to that of a geostatic one. Even the presumably fixed stars are in movement in Kircher's world, so as to preserve the static position of an earth of vanishingly minuscule size.

Siebert masters the difficult task of smoothly combining detailed historical research and reflection; his study, displaying great scholarship, enhances knowledge to a great extent as well on Kircher himself, as on 17th century astronomy. Furthermore, the study shows that history of science can fulfil its task of revising the perspective of the historical victors and of grasping forms of knowledge in their multitude only if scientific and philological competences are combined.

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