Gospel elsewhere "resonates" with Parthian magi and Syrian themes, van Kooten seeks to bolster his claim that "historical conditions of the Augustan era" (i.e., historical traveling magi during Herod's time) shaped Matthew's text (p. 630).

Finally, the New Testament scholar Annette Merz offers cautionary words for those who seek to integrate astronomical data into "Jesus research" (p. 463). The written sources about Jesus, suggests Merz, are not merely statements of historical fact and are not merely literary fiction. They contain "refracted memory" (p. 467); their intertextuality is rich (p. 483). Those seeking to fix the architectural details of Noah's ark or the astronomical phenomenon of the Star of Bethlehem often fundamentally misunderstand the genres of the texts under consideration.

The editors of *The Star of Bethlehem and the Magi* laud the "interdisciplinary debate" (p. 651) initiated by the Groningen conference. Yet I wish that more of these essays would have talked to each other so that the methodological assumptions of the various disciplines could have been more sharply juxtaposed.

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Maurice Clavelin. *Galilée, cosmologie et science du mouvement, suivi de Regards sur l'empirisme au XXe siècle*. 392 pp., index. Paris: CNRS Editions, 2016. €25 (cloth).

Galilée, cosmologie et science du mouvement, suivi de Regards sur l'empirisme au XXe siècle, written in French, is a collection of essays by Maurice Clavelin covering the period from 1984 to 2016. It has two distinct parts: the first five chapters present insight into "Galilée, cosmologie et science du mouvement" (pp. 1–184), while the next four constitute some "Regards sur l'empirisme au XXe siècle" (pp. 185–385). Three chapters reproduce already published texts: "Quine contre Carnap: La polémique sur l'analyticité et sa portée" (Ch. 9; 1984), "L'histoire des sciences devant la sociologie des sciences" (Ch. 5; 1993), and "Galilée astronome philosophe" (Ch. 1; 2001). The first part of "Le projet physique cartésien et la science nouvelle" (Ch. 4) was presented in 2006. The other papers are "Aux origines de la science moderne: Le débat Koyré–Duhem, hier et aujourd'hui" (Ch. 2); "La géométrisation galiléenne du mouvement des graves" (Ch. 3); "La première épistémologie empiriste de Bertrand Russell" (Ch. 6, the first chapter in the second part of the book); "Une lecture du *Tractatus Logico-philosophicus*" (Ch. 7); and "Au coeur du positivisme viennois" (Ch. 8).

Despite the composite nature of the book, it reflects the difficulty of presenting a unified, historical, and philosophical perspective on science. All the essays have a specialized character and are related to the understanding of the nature of modern science. From the historical point of view, this understanding is based on a direct analysis of the work of Galileo (Chs. 1 and 3) and on a comparison between the most relevant interpretations of modern physics (Chs. 2 and 4). The analysis of Galileo's work continues Clavelin's earlier studies (*La philosophie naturelle de Galilée* [Albin Michel, 1968, 1996] and *Galilée copernicien* [Albin Michel, 2004]). He seeks here to fill out his views on the cosmology and the kinematics of Galileo: his idea is that Galileo gave to astronomy the epistemological role previously played by philosophy and that the new scientific cosmology involved an epistemological break with the past and determined a deep discontinuity.

This view is also related to the reconsideration of the debate between Pierre Duhem and Alexandre Koyré on the origins of modern science, the most important problem Clavelin addresses in the book and one on which I believe there is something to say. Clavelin seeks to reject the idea of a continuous development from medieval to modern science and the more recent perspectives of Adriano Carugo, Alistair

C. Crombie, and William A. Wallace on the historical continuity of premodern and modern science. He follows Koyré's idea of discontinuity but cannot accept Koyré's view of Galileo's substitution of Platonism for Aristotelianism at the deep philosophical structure: Clavelin claims that the discontinuity was realized only at the cosmological level, not at a philosophical level. He introduces a Heidegger-like neologism, *ontocosmologie*, to indicate the constraints imposed by the ancient Aristotelian cosmology on general ontology and kinematics.

It seems that Clavelin does not believe at all that the introduction of atomism could serve as a philosophical background on the basis of which, for Galileo (and, before him, for Giordano Bruno), it is possible to give a physical foundation to the new Copernican cosmology. The new Euclidean geometrization of motion is physically admissible, and not a mere idealization, only on the basis of the laws of motion of atoms in the vacuum space.

The debate regarding the continuity or discontinuity of modern science with previous science is likely to continue forever if one does not consider in detail all the various factors of continuity and discontinuity. Duhem, at variance with Clavelin's view, was right in outlining a continuity at the level of the mathematization of the physical variables of motion (quantification of motion variables, continuation of violent motion, motion as a stable process, use of the Euclidean theory of proportions as already stated within the so-called impetus theory), which already started within the new physics of the fourteenth century; however, there was discontinuity in the transition to Copernican cosmology (which used almost the same Ptolemaic mathematization of the motion of the planets) and to the atomistic philosophy, as well as in the experimental "method."

Clavelin seems to underestimate, with both Duhem and Koyré (e.g., see pp. 52–53), the experimental dimension of the new modern physics. Continuation or conservation of motion in a vacuum was not an idealization; when a vacuum was experimentally produced, atomistic philosophy received a new foundation.

Clavelin's underestimation of the first gnoseology of experimental action involved in modern science has to be related to some kind of "sympathy" with the twentieth-century philosophies analyzed in the second part of the book: these philosophies indeed have been developing from an image of modern science as based in large part on a theoretical dimension realized by logical and mathematical models that have to be verified later.

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Erika Dyck; Larry Stewart (Editors). *The Uses of Humans in Experiment: Perspectives from the Seventeenth to the Twentieth Century.* (Clio Medica: Perspectives in Medical Humanities, 95.) xii + 297 pp., illus., tables, graphs, index. Leiden/Boston: Brill Rodopi, 2016. €115 (cloth).

The Uses of Humans in Experiment revolves, as its title suggests, around the theme of human experimentation. It is not the first time this subject has been covered by an edited volume. Ten years or so ago, the history of human experimentation was quite popular, when three related volumes were published in a short period: Jordan Goodman, Anthony McElligott, and Lara Marks's *Useful Bodies* (Johns Hopkins, 2003), Volker Roelcke and Giovanni Maio's *Twentieth Century Ethics of Human Subjects Research* (Steiner, 2004), and Wolfgang Uwe Eckart's *Man, Medicine, and the State* (Steiner, 2006). These largely focused, however, on the "dark side" of human experimentation in the twentieth century: on the Nazi concentration camp experiments and the often dangerous (and secret) state experiments on humans during the