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The Theater of Nature: Jean Bodin and Renaissance Science. By Ann Blair. Princeton, N.J.: Princeton University Press, 1997. Pp. xiv + 382. \$45.00.

Long-winded laments to the effect that the accumulated knowledge of a given period had become so complex as to be nearly impossible to organize or to comprehend can be found long before the beginning of the early modern era. Still, the problem of the multiplicity of beings received fresh relevance at the hands of the scholastics. By the time of Bacon, Leibniz, and Newton it had become one of the chief problems of philosophical speculation. Standing at the threshold of the modern discussion of this issue, Nicolaus Cusanus sought to embrace the multiplicity of individual beings by means of their common convergence in the divine infinite. Even in the sixteenth century, in the ponder the problem, and laments over the bewildering immensity of existent things could still be heard. This rage for order probably is based in the first instance upon the need to present traditional learning, along with newly recognized natural phenomena, in a systematic manner, within the scope of the pages of a printed book, and to render that knowledge accessible to readers. Many continental scholars, whose horizon was gradually expanding beyond the boundaries of Europe, were to contribute to this effort.

Ann Blair seeks to depict this quest for an organization of knowledge by examining a work published by Jean Bodin late in his life, in 1596. In his *Universae naturae theatrum* (or "theater of all nature") Bodin sought to sketch a new "conception" of nature and of natural philosophy. Of fundamental importance for him was a unification of the results obtained by direct observation and empirical investigation with the traditional body of natural philosophy. His innumerable observations, however, cannot yet be regarded as scientific facts in a Baconian sense, since what they are is a collection of disconnected details or "commonplaces," usually assembled without regard for standards of proof, evidence, description, or prevailing taxonomies. In Bodin's *Theatrum* nature has not yet become natural history; it remains natural philosophy. Nature was still encompassed within the transcendent dignity of a salvation history directed by God. But even as Bodin differs from Aristotle by resorting, in his explanation of the origins and interrelations of things, to their connectedness with God and by denying the eternity of the cosmos, his assemblage of facts remains in large part indebted to scholastic-Aristotelian doctrines (p. 117).

What makes Bodin's investigation of nature in the Theatrum fundamentally new is his establishment of previously unrecognized causal connections. In order to explain natural phenomena Bodin uses a combination of different models, some literary, some scholastic, to convince his readers. When discussing the global distribution of heat, he draws upon Sigismund von Herberstein's account of Moscow (Sigismund von Herberstein, Rerum moscoviticarum commentarij [Basel, 1556]). A fire in Moscow in 1525 had been mentioned by Herberstein as a proof of the extreme weather conditions in Russia. Using his customary "method of commonplaces" Bodin extracted from this report what he regarded as the essential details, but no more. He interprets Herberstein's report as a proof of the fact that summer temperatures in areas outside the tropics are higher than those in the tropics themselves. He adds some additional, independent explanatory material as well, noting, for example, that the atmosphere outside of the tropics is heavier because of the "vapors, rains, and rivers that abound beyond the tropical regions" (p. 73). It is apparent that Bodin's understanding of what constitutes an experiment is thus far from modern. Nevertheless his Theatrum takes its place with other Renaissance natural philosophies in exhibiting a growing interest in investigating "matters of fact" and in empirical methods. Admittedly Bodin still does not differentiate qualitatively between observations derived from secondary sources and those obtained through direct observations and tests. In general, however, he is receptive (or "susceptible") to the experimental approach. His intellectual openness and curiosity are shown clearly by his inclusion of subjects that had previously been deemed unworthy of discussion by natural philosophy.

In his use of dialectic, dichotomy, and the dialog form, Bodin employed categories and criteria that made the *Theatrum* accessible to a broad scientific readership. The book has its place, too, in the continuing modern discussion of the organization of knowledge. This is clear from the fact that its claim of investigating the connections of nature hinges primarily upon its portrayal of these connections. Around 1600, however, the representative order of things was no longer being discussed solely within a "republic of letters." It seems to a certain degree one-sided, therefore, when the problems of natural phenomena are presented exclusively as problems among books. One example may suffice for this broad context of the discussions characteristic of natural

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philosophy. Since the fifteenth century Europe had been virtually inundated with a variety of genealogical tables supposedly explaining the interrelations between dynasties and peoples. The representation of these relationships in family trees or pedigrees is, however, only partially the result of an established, written tradition. Often there was a given social and legal order of the members of a family or of a state before this was treated, in a second step, in books. Certainly books were capable of a very high degree of complexity in bringing order to things, but books should not be regarded as a theoretical, reflective level, standing over against a level of worldly phenomena and of living beings—as a kind of closed front, or medium, ready to receive them. Ann Blair is thoroughly cognizant of this problem when she describes the book as a physical medium. In so doing, she is observing a premise once insisted upon by Joseph S. Onga premise frequently neglected, however-that the printed text in its complexity should be distinguished from the spoken word. All formal schemes of organization not found within the pages of the book, like genealogical diagrams or the theater, should be viewed as the concrete space of knowledge, as a collecting point for scholars, and not only as metaphors (pp. 153-79).

In her study, Ann Blair demonstrates the variety of source materials and categories to be found in Bodin's thought. Precisely by limiting herself to a single work she succeeds in revealing the enormous complexity of the discussions of natural philosophy. Bodin played a significant role in these discussions, despite the fact that he always lived outside Europe's intellectual centers. Ann Blair's investigation can therefore also be read as a portrayal of the scientific discussion of nature around 1600, with a much more intense problem focus than previous works on the subject.

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