

Annotating the System of Nature:

Carl Linnaeus (1707-1778) and the Uses of Writing Technologies

Isabelle Charmantier, Staffan Müller-Wille

Abstract

Early modern naturalists were faced with what has been termed the 'first bio-information crisis.' A key figure in resolving this crisis was the Swedish naturalist Carl Linnaeus (1707-1778), who in 1751 introduced "trivial names" which provided a universal and stable index of plant and animal species. Our Wellcome Trust funded research project studies the ways in which Linnaeus assembled, filed, and cross-referenced information about plants and their medicinal virtues. It is a well-known fact that Linnaeus was one of the first to write about a "natural system" of plants and to suggest that plants of the same "natural order" share similar pharmaceutical properties. His manuscripts, held at the Linnean Society (London) and various institutions in Sweden, provide an excellent opportunity to understand how information processing practices determine such ideas. They document how Linnaeus experimented with a variety of paper-based information technologies, juggling between the need to bring observations into a fixed order for purposes of information retrieval, and the need to keep that order flexible for purposes of comparison and integration of new information. One way out of this dilemma was to keep information on particular subjects on separate sheets, which could be added to and reshuffled. Another was to use preliminary print publications as templates for collecting additions and amendments. Late in his career, in the mid-1760s, Linnaeus came up with what in hindsight seems to be the perfect solution: index cards. Hence Linnaeus's "natural system" emerged not out of direct observation of nature, but out of his day-to-day work of revising and rearranging what he and others had written earlier. The long and tortuous route that led Linnaeus towards his innovations reveals a number of interesting issues relating to the history of scientific publication and authorship.