Botanical networks in the 18th and early 19th century: A sociological investigation

BOTANY HAS BEEN PRACTICED since the Antiquity and botanic gardens developed from the middle of the 16th century. But the professional botanists appeared only in the early 19th century, their social emergence being the result of a long process that stretched over the whole “age of academies”, i.e. roughly between 1700 and 1830. The purpose of our presentation will be to examine this process, or in other words the place of botanists in an emerging scientific field that we call the “Republic of science”. This analysis will be centered on the personal and scientific links between the major botanists of the period. We will also examine a set of related topics like the autonomy of botany as a discipline or the formation and social status of botanists.

Our first task will be to select a representative sample of the major botanists of this period. Considering all the botanists who are registered in the Dictionary of Scientific Biography or were members of at least two of the six majors academies of the period (Paris, London, Berlin, St-Petersburg, Stockholm, Bologna), we will thus get a group of 182 scientists, including 81 specialized botanists and 55 other naturalists who had botany as their main field of investigation.

Our network analysis will be based on the biographical datas registered in the Dictionary of Scientific Biography as well as in the databank compiled by Saur AG. Four major types of relationships will be investigated:

- The relations between teachers and students.
- The relations of patronage (between patrons and “protégés”).
- The intellectual influences.
- The various forms of effective scientific collaborations.

Through a systematic study of these different kinds of links, we will get a broad picture of the emerging community of botanists in the age of academies. Among other results, we hope to determine where the main centres of research developed, who were the best connected scientists of the time, and what kind of shifts did eventually happen between the major institutions (universities, gardens) from 1700 to 1830.