

## Lecture 39

# Horticultural and Botanical Illustration

The use of plant illustration as a means of artistic expression has an ancient tradition that dates to Neolithic cave paintings. Plant illustration has been carried out for two purposes: as a means of expression, and as a means to identify the plant. Because plant material is so fragile and ephemeral, the picturing of plants has become an essential part of botanical and horticultural descriptions, although taxonomists still depend on dried specimens with written information that constitutes an herbarium sheet. Pictures of plants have been essential for the physician, pharmacist, botanical scientist, plant collector, gardener as well as the designer of applied arts and amateur enthusiast of natural history (Saunders 1995). Language alone is insufficient to convey exactly what a plant looks like, any more that language can be used to describe what a person looks like. Before the advent of photography, botanical artists were an integral part of expeditions for documentation purposes.

In this illustrated lecture, we discuss the uses of plant illustration for identification, analysis, and classification. The methods of plant illustration are a specialized field unto itself and its development has changed throughout history as technological means of depicting plants have changed. Various methods have been used throughout history to illustrate plants including the use of sculptural forms (bas relief and 3 dimensional forms), mosaics, drawing, painting including oil and watercolor, woodcuts, engraving, various impression techniques, and finally photography.

There are many ways to illustrate plants. Some drawings are so simplified and stylized that they become distortions. Furthermore many of the early illustrations of plants used for early herbals were merely copies that soon became so removed from the real image that they no longer served their intended purpose, that of identification. It was only when the botanical illustrators went back to the original specimen that botanical illustration reached the true art form. The perpetual question was whether the artist should draw the plant, warts and all, or strive for the elusive perfect idealized plant. In a sense, the artistic illustration developed into a new way to look at plants emphasizing the variation and imperfection.

Because of their complexity, many plants are extremely difficult to draw precisely and thus botanical illustration has become a specialized art form. Detail and accuracy of an illustration is often circumscribed by technical factors: the expertise of the artist, restrictions on the fineness of the line required, the palette of pigments available to the colorist, and the quality of the specimen.

Horticultural and botanical illustrations have served different purposes. These include the illustration of herbals (books on plants for medicinal purposes); illustration of plants for botanical treatises; **florilegia** (flower books) and pattern books (illustrations of plants for decorative value; widespread in the 17th century and now widely used as prints for decoration); horticultural uses (catalogues and patents); and field guides.

Various techniques have been used to substitute for the skill of the artist. This includes the use of the dried specimen itself, the use of carbon, various embossing techniques (nature prints), and finally photography. One of the ironies of photography was that it turned out to be extremely useful for exploring the heretofore invisible detail of plants (cell structure, tissues, even molecular structure) but proved difficult if not impossible to replace botanical draughtsmanship for precise identification. This resulted from the enormous detail found in plants combined with the difficulties of focus.

### References

Saunders, G. 1995. *Picturing Plants: An Analytical History of Botanical Illustration*. Univ. of California Press, Berkeley.