

together present somewhat the appearance of an animal's face; and the upper portion of the corolla is prolonged backwards into a tube-like "spur." No flower can be more irregular; but there is a singular variety of this plant, termed *Peloria*, in which the corolla is strictly symmetrical, consisting of a conical tube, narrowed in front, elongated behind into five equal spurs, and containing five stamens of equal length, instead of the two unequal pairs of the didynamous *Linaria*. These and the like appearances show that there is in nature a capacity for, and tendency to, such changes as the doctrine of metamorphosis asserts.

Göthe's *Metamorphosis of Plants* was published 1790: and his system was the result of his own independent course of thought. The view which it involved was not, however, absolutely new, though it had never before been unfolded in so distinct and persuasive a manner. Linnæus considered the leaves, calyx, corolla, stamens, each as evolved in succession from the other; and spoke of it as *prolepsis* or *anticipation*,⁶ when the leaves changed accidentally into bractæ, these into a calyx, this into a corolla, the corolla into stamens, or these into the pistil. And Caspar Wolf apprehended in a more general manner the same principle. "In the whole plant," says he,⁷ "we see nothing but leaves and stalk;" and in order to prove what is the situation of the leaves in all their later forms, he adduces the cotyledons as the first leaves.

Göthe was led to his system on this subject by his general views of nature. He saw, he says,⁷ that a whole life of talent and labor was requisite to enable any one to arrange the infinitely copious organic forms of a single kingdom of nature. "Yet I felt," he adds, "that for me there must be another way, analogous to the rest of my habits. The appearance of the changes, round and round, of organic creatures had taken strong hold on my mind. Imagination and Nature appeared to me to vie with each other which could go on most boldly yet most consistently." His observation of nature, directed by such a thought, led him to the doctrine of the metamorphosis.

In a later republication of his work (*Zur Morphologie*, 1817,) he gives a very agreeable account of the various circumstances which affected the reception and progress of his doctrine. Willdenow⁸ quoted

⁶ Sprengel, *Bot.* ii. 302. *Amæn. Acad.* vi. 324, 365.

⁷ *Nov. Con. Ac. Petrop.* xii. 403, xiii. 478.

⁸ *Zur Morph.* i. 30.

⁹ *Zur Morph.* i. 121.