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The Art and Science of Perceiving and Theorizing – Visual and Conceptual Learning in Goethe's Morphological Works

Goethe's work ranges from comparative anatomical studies of various animal types, plants, to a reinvestigation of prismatic colour-phenomena. The morphological approach pops up in diverse loci of the huge Goethe corpus, with various referents, descriptions, definitions; metamorphosed into essays, books, or just short marginalia and reflections. It intertwines with various research programs, yet maintains its unique (by definition) approach studying conformities [Übereinstimmungen] and deviations [Abweichungen]. Goethe asserted that "morphology should include the theory of form, formation, and transformation of organic natures". In the period where historicity took new significance in many fields of research Goethe proposed a theory connecting the static, structural, and stable with the dynamic and changing. Form is static, formation and transformation presuppose the temporal: are they not in need of a similar theory? Goethe's morphology, connecting his research on plants, colours, and science, and even the scientist, historian, philosopher, thinker was one attempt to claim a territory in the intellectual playground of the period. Just as many others, he forged alliances, worked with colleagues and disciplines, established a journal. And noted, composed, published. His method offered a peculiar approach to observation and theory-construction, one might venture to say that a general model of scientific model-building, incorporating a theory of scientific language and changes thereof, and even a theory of observation exemplified by domain-specific applications tailored to optimize epistemic effort. The central ["consummating"] concepts of his method ["two of Nature's activating forces"] are polarity and "Steigerung", probably best conveyed as progression/enhancement/evolution.

Key feature of this method is the connection of the structural/linguistic aspect of scientific research with the observational. Morphology instructs theory formation as well as the discovery process, concept-formation on the one hand and visual learning on the other.

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