
Treviranus' Biology: Degeneration and the Boundaries of Life

Joan Steigerwald*¹

¹York University – 4700 Keele Street, Toronto, Canada M3J 1P3, Canada

Abstract

Session: Degeneration: Rethinking Teleological Conceptions of Living Organisms

(Staffan Müller-Wille, Joan Steigerwald and Tarquin Holmes)

In the latter eighteenth century the term degeneration became common in natural history discourses. The term marked the effects of the material world on organic forms, but also the capacities of living forms to respond variously to alterations in their physical living conditions. Evidence of the extent of degeneration through experiments with the transplantation and cultivation of plants and animals also acted as evidence for variable conditions of reproduction, making epigenesis a new problematic. Degeneration thus complicated teleological conceptions of the propagation and generation of life, by involving it in the material and contingent. In the years around 1800, it also obfuscated attempts to define a new science of life by demarcating living from lifeless nature. Treviranus' *Biology* is marked by these tensions. He drew a boundary around living beings through their excitability, their receptivity and responsiveness to stimulus; yet he acknowledged that boundary as porous and distributed, with life continually under threat of dissolution into its surrounding environment. He also demarcated living beings through their capacities for assimilation, generation and propagation; yet his study focused upon the contingencies of these processes, upon degeneration, death and extinction, as necessary to regeneration. As new investigations traced the continuities between chemical, electrical and organic phenomena, experiments meant to aid in exploring the bounds of life established only the artifice of such boundaries.

*Speaker