## Early 19th century Animal and Plant Breeders' views on Variation, Degeneration and Teleology

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## Abstract

Much of the discussion of late 18th and early 19th century views on variation and degeneration has centred on the often opposing ideas of naturalists on the subject, e.g. Linnaeus and Buffon. This was, however, also the period in which methodical breeding techniques based on mass selection came to the fore. My discussion will focus on the conceptual frameworks that both drove and developed in response to these revolutionary changes in agricultural practices. I will in particular focus on the views of the animal breeders Robert Bakewell and John Sebright, and the plant breeders Jean-Baptiste Van Mons and Thomas Andrew Knight. I will attempt to answer, based on these sources, what degeneration meant to early 19th century western European breeders. Specifically, I will cover how they believed degeneration was related to capacity for variation and how variation was itself thought related to external environmental stability and change, and the adaptable capabilities of organisms. I will discuss how breeders manipulated the heredity and environment of their stock in order to control variation and better shape organisms to human purposes, and also what limits, both real and imagined, this control and manipulation was restricted by. In this manner I hope to establish what understanding breeders had, in attempting to shape organisms to human ends, of the teleological aspects of their practices. I will conclude by asking how these breeders' conceptions of variation, degeneration and teleology influenced and were influenced by those of contemporary naturalists.

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