

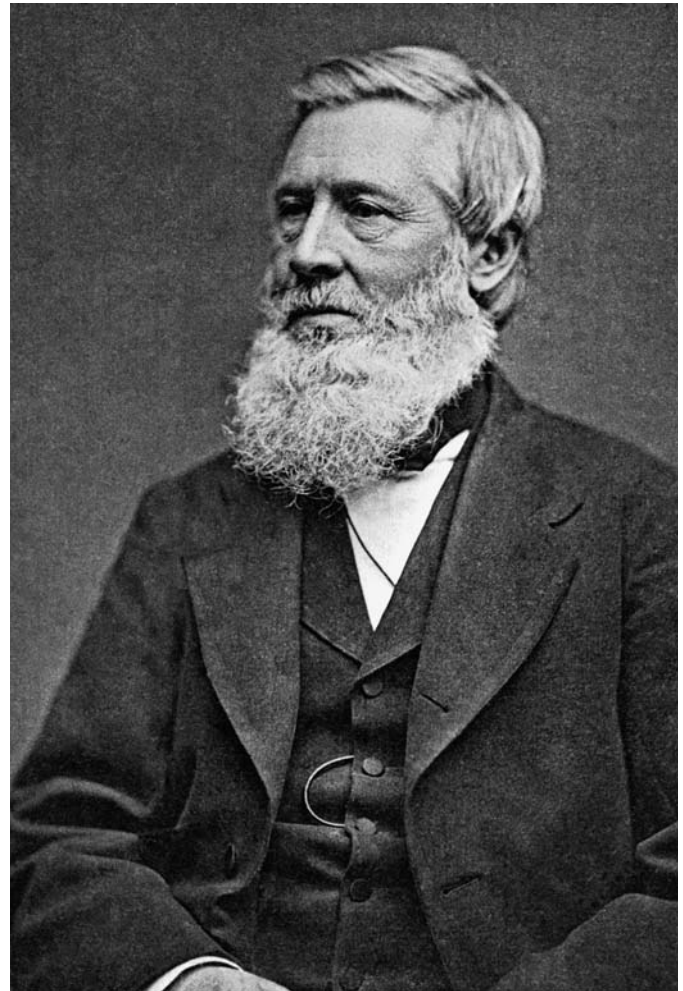
From the Archives

In 1860, zoologist-geologist Louis Agassiz and botanist Asa Gray, both members of the Harvard faculty, took part in a debate held at the American Academy of Arts and Sciences on the recently published *Origin of Species*. While Agassiz staunchly maintained his belief in the divine creation of individual species, Gray defended Darwin's hypothesis on their variability. Among Agassiz's allies in the exchange was Harvard philosopher Francis Bowen, emphasizing the importance of interdisciplinary analysis even at this stage in the Academy's history. In response to remarks by Bowen, Gray presented the following rebuttal, as recorded by the Academy Secretary on April 10, 1860:

As to the charge that the hypothesis in question repudiated design or purpose in nature and the whole doctrine of final causes, Professor Gray urged: – 1. That to maintain that a theory of the derivation of one species or sort of animal from another through secondary causes and natural agencies negated design, seemed to concede that whatever in nature is accomplished through secondary causes is so much removed from the sphere of design, or that only that which is supernatural can be regarded or shown to be design; – which no theist can admit. 2. That the establishment of this particular theory by scientific evidence would leave the doctrines of final cause, utility, special design, or whatever other teleological view, just where they were before its promulgation, in all fundamental respects; that no new kind of difficulty comes in with this theory, i.e. none with which the philosophical naturalist is not already familiar. It is merely the old problem as to how persistence of type and morphological conformity are to be reconciled with special design, (with the advantage of offering the only scientific, though hypothetical, solution of the question,) along with the wider philosophical questions, as to what is the relation between orderly natural events and intelligent efficient cause, or Divine agency. In respect to which, we have only to adopt Professor Bowen's own philosophy of causation, – viz. "that the natural no less than the supernatural, the continuance no less than the creation of existence, the origin of an individual as well as the origin of a species or a genus, can be explained only by the direct action of an intelligent cause," – and all special difficulty in harmonizing a theory of the derivation of species with the doctrine of final causes will vanish.

(Reprinted from the *Proceedings of the American Academy of Arts and Sciences*, volume 4, 1857 – 1860)

For more information on these debates, see *Asa Gray: American Botanist, Friend of Darwin* (Johns Hopkins University Press, 1988) by Academy Fellow A. Hunter Dupree. ■



Asa Gray

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