

**Ronald Fisher and eugenics:**

**Statistics, evolution and genetics in the quest for permanent civilization**

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**PhD Dissertation**

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Ronald A. Fisher (1890-1962) is one of the most prestigious scientists in the history of statistics and genetics. And it could not be different. He contributed to several areas of knowledge, including mathematical formulations. He is also considered one of the main architects of the neo-Darwinian synthesis - an intellectual movement that was able to reunite two rival currents scientists, to wit, the Mendelian saltationists and the gradualist Darwinists, within one same theoretical-conceptual scope. At the beginning of the twentieth century, this conflict between the two currents seemed unsolvable.

However, a school of thought denominated eugenics was already engaged in this subject many years before the first article by Fisher. Throughout publications, meetings and conferences, saltationists and gradualists shared pages and tribunes in defense of the 'improvement of the human race.' It was within this context that the young eugenicist Fisher graduated at Cambridge. He was - before any intricate theoretical development or prestige - a great adept, defender and formulator of eugenics.

At the roots of Fisher's intellectual motivations, such as the development of population statistics and genetics, was his concern with the phenomenon he termed 'differential fertility'. To him, the high reproductive rates of genetically unfit humans for life in society were the main cause of the problems that humankind faced at that time - and would also be the reason for the decline of civilizations throughout history. The fittest needed higher rates of reproduction, and to Fisher, reversing these indexes was vital to the maintenance of civilization.

**Keywords**

History of science; Eugenics; Ronald Fisher; Differential fertilization

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