THE GENOME WAR: HOW CRAIG VENTER TRIED TO CAPTURE THE CODE OF LIFE AND SAVE THE WORLD


ON CHARLES DARWIN’S BIRTHDAY — FEBRUARY 12 — in 2001, two groups of scientists announced simultaneously that the human genome sequence had been completed. The public consortium, involving teams from six countries, published its results in Nature and made them immediately available on the Internet. Craig Venter’s company, Celera Genomics, published its paper in Science.

Those announcements, although premature (only two rough drafts were available, accompanied by some preliminary analyses), marked one of the few uncontroversial moments in the quest for the human genome sequence. Almost everything else, from the ownership of the results to the molecular and statistical methods used, was the subject of sharp conflict. The title of this book, The Genome War, is only partly exaggerated. No casualties were reported, but all the psychological ingredients of a war were present and are documented in the book. The subtitle is a joke, I hope.

The Genome War has something in common with Les Liaisons Dangereuses. In Laclos’s novel, the apparent goal of the characters — to seduce a human being — is little more than a pretext for a cruel game of power. Two centuries later the pretext has become grander — the goal no longer centers on a single person, but on the DNA of the species — but the game is no less cruel. Through 26 dense chapters, Shreeve displays for us the intricate game of personalities and ambitions that ultimately led to the completion of the Human Genome Project.

Great stories need great characters. Shreeve chose Craig Venter, and in this choice lies the appeal of the book as well as its main limitation. Venter, or at least the Venter whom Shreeve describes, is the herald of glamour, efficiency, and free enterprise. He enters the book onboard his yacht, and from that moment on, any scientist with “home-cut hair” who wears “whatever old sweater and slacks first presented themselves to him on waking up” has a hard time. Big projects, big money, big rewards for the investors; everything related to Venter is formidable, never mind that certain pages of the book are too much reminiscent, for my taste, of Lifestyles of the Rich and Famous. On the other hand, to offer a suitable stage for such a character, Shreeve continuously has to create dramatic situations. Often he does so by reporting private conversations and very personal thoughts, which in many cases he cannot have learned from the horse’s mouth. As a result, the readers simply do not understand what cocktail of fiction and nonfiction they actually have in their hands. More important, crucial aspects of the story and other key figures — notably John Sulston, the head of genome sequencing at Britain’s Sanger Institute — are left in the shadows. I doubt that the average reader will realize how important it has been to ensure that the human DNA sequence remains freely available to all (despite and against Venter’s wishes). Far too few words are spent to explain that Celera could put together its results only by using the data produced and made available to all by the public consortium.

In brief, this is not the most balanced or rigorous book on the Human Genome Project. However, some of its pages are worth reading. I liked this image of the Cold Spring Harbor Laboratory: “In the hallways and stairwells hang photographs of the original apostles of the new science: Delbrück himself, Salvador Luria, Crick and Watson, Barbara McClintock, Jacques Monod, Alfred Hershey . . . forever young and cocksure, their eyes bright from the birth of ideas that will take their older, grayer selves to Stockholm.”

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