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Geniuses at Work

By TOM LeCLAIR

MEASURING THE WORLD

By Daniel Kehlmann. Translated by Carol Brown Janeway.

259 pp. Pantheon Books. $23.

What a wonderful country Germany must be. “Measuring the World,” which resembles nothing more American than a pint-size novel by Thomas Pynchon, displaced J. K. Rowling and Dan Brown from the top of the German best-seller lists. Like the young Pynchon and the novel’s subjects — the early 19th-century German scientists Alexander von Humboldt and Carl Gauss — Daniel Kehlmann is something of a prodigy. At 31, he has written a collection of essays and five other books of fiction. “Measuring the World” is his first work to be translated into English.

Halfway through the novel, Kehlmann lists among some famous measurers Mason and Dixon. Like Pynchon’s novel about them, “Measuring the World” is a buddy book, but with a difference. The novel opens with the scientists’ meeting in 1828 (when Humboldt is 59 and Gauss is 51) and then flashes back to their independent lives told chronologically in alternating chapters. Humboldt leaves Prussia, lowers himself into volcanoes, explores the Amazon and scales the highest peak in South America to take his physical measurements. Gauss stays home in Göttingen, thinks his way into exotic mathematical realms and imagines space as curved. Two-thirds into the book, Kehlmann is back up to 1828. He narrates four chapters about his characters together in Berlin and then again physically separates them, though they are much on each other’s minds until the end of their lives and the novel. Gauss believed parallel lines meet. Think of Kehlmann’s method as a parallax by which we can lucidly observe alternate forms of measuring the world, including his own fictional form.

The Humboldt chapters — with their physical dangers, odd flora, and cameos by notables like Goethe and Jefferson — supply much of the narrative excitement. Portraying a stay-at-home mathematician’s mind is more challenging, but Kehlmann provides just enough geometry and physics to represent Gauss’s inventive rigor and odd foresight without losing barely numerate readers. By treating the two men together, Kehlmann not only contrasts the inductive and deductive, the experimental and the imaginative, but also shows how these methods are connected to very different though occasionally similar sensibilities. Humboldt is ecstatic when his mother dies, allowing him to leave Prussia. Gauss’s mother lives with him for the last 22 years of her life. Swashbuckling adventurer Humboldt seems asexual. Pure mathematician Gauss is obsessed with women. His troubles with two wives and sets of children rival Humboldt’s problems with colonials and natives. Humboldt is eternally optimistic about social progress. Gauss looks at the stars and

sees entropy.

Although Humboldt and Gauss were extremely ambitious and highly serious, Kehlmann often presents them humorously. Gauss's physical complaints and atrocious manners are continually amusing. Humboldt's resistance to women and unwitting insults to others are equally funny. The scientists' dialogues with lesser intelligences — and even with each other — often sound like the non sequiturs in "Waiting for Godot." Kehlmann gives ample credit to his characters' discoveries — they were two of the most renowned scientists of their time — but his treatment humanizes their authoritarian public personas. Kehlmann includes Gauss's confusion about statistics and his attraction to spiritualism, and he suggests that Humboldt may have exaggerated several of his exploits. With these not-so-distant mirror characters, Kehlmann usefully reminds us that our own universal geniuses and vaunted measurements of the world will be superseded — and will look comic to people in the next century.

Kehlmann is a little self-conscious about playing with history and authority. He has Humboldt complain about "novels that wandered off into lying fables because the author tied his fake inventions to the names of real historical personages." "Disgusting," agrees Gauss. An admirer of magic realism, Kehlmann takes some liberties with biography. His portrait of Gauss's son Eugen as a dunderhead, for example, departs from the facts, perhaps to create a parallel with Humboldt's faithful — but incurious — sidekick, Aimé Bonpland. Kehlmann also leaves out another of Humboldt's companions, Carlos Montúfar, perhaps for the double structure of scientist and follower. Since Humboldt and Bonpland see what appears to be a U.F.O., readers who go to the biographies shouldn't be surprised at considerable dissonance between characters and "personages."

More problematic than "lying fables" is this novel's slim size. While one might not want Pynchon's "Mason & Dixon" to be a page longer than its 773, "Measuring the World" can't calibrate with much robustness or precision two lengthy and rich lives in its 259 pages. The personal histories and published works of Kehlmann's subjects were extremely messy. "Measuring the World" is elegant and measured in design and expression. "The map is not the territory," the semanticist Korzybski reminded us. The novel is like one of Humboldt's maps or Gauss's formulas, the work of a probable prodigy but not prodigious, large-minded but not as large as its materials required.

There are younger American novelists whom Kehlmann resembles: Neal Stephenson in his "Baroque Cycle" of historical fictions, Richard Powers in his several novels about scientists. What distinguishes Kehlmann are quickness of pace and lightness of touch. He has said he admires "The Simpsons." If Humboldt and Gauss are occasionally cartoonish, they are the creations of a very smart, deft artist. And one who demonstrates in his final chapters that he can measure the woes of failing bodies and flailing minds, no small achievement for a man of 31.

Tom LeClair's fourth novel, "The Liquidators," was published this summer. He teaches at the University of Cincinnati.

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