Max Perutz and the Secret of Life

Georgina Ferry
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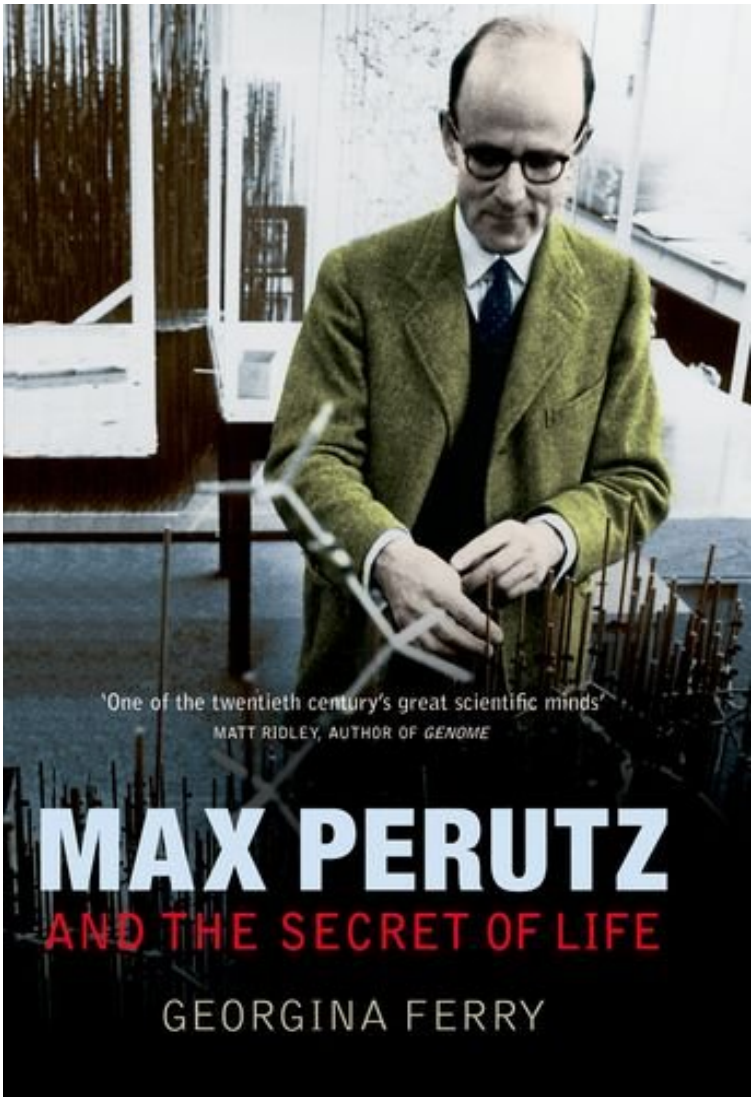

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Georgina Ferry : Max Perutz and the Secret of Life before purchasing it in order to gage whether or not it would be worth my time, and all praised Max Perutz and the Secret of Life:

14 of 14 people found the following review helpful. A Determined Researcher, A Brilliant OrganizerBy Rob HardyMax Perutz used to say that he was famous, but that few people knew what it was he was famous for. His name may not resonate with household familiarity, but he was a Nobel laureate for his work on the structure of hemoglobin and was enormously influential in organizing other scientists working in what was then a new field of molecular biology. He died in 2002, working up until his last days, and although he was an accomplished writer, he didn't get around to writing an autobiography because he consciously decided that his time was best spent researching instead.

Now there is a fine biography that will help readers appreciate what he was famous for, _Max Perutz and the Secret of Life_ (Cold Spring Harbor Laboratory Press) by Georgina Ferry. Ferry is one of our best science writers, and this admiring but unfawning biography not only tells the story of its protagonist, but also illustrates how science gets done as a cooperative and competitive enterprise.When he was 22 in 1936, Perutz and his family left his native Austria, but in Cambridge during the war he was arrested and shipped with Nazis to Canada merely because of his national origin. His work resumed upon his release and oath of allegiance to the King. It was ever after would based on x-ray crystallography, a field drawing from mathematics, chemistry, biology, and physics. The crystals Perutz used were not geologic samples, but crystallized versions of proteins, and he latched on to hemoglobin because it really was involved in the secrets of life; it was known that it carried oxygen throughout the body (he called it the "molecular lung"), but no one knew how it did so. Over decades of research he showed not only the structure, but how it flexed and turned in order to take on oxygen or give it off. Perutz was not the sort of brilliant scientist who had flashes of eureka moments. He got to his lab and worked hard until answers came. His answers were often wrong, shot down by others, and it is perhaps because he understood the nature of scientific research as a group endeavor that Perutz was brilliant in organizing others. He established the research unit in which Watson and Crick found DNA's structure, and as chairman of the Laboratory for Molecular Biology, he fostered an environment that on its own has produced more Nobel prizes than many developed countries.Perutz had more than his share of foibles. He had a passion for climbing mountains and skiing that could eclipse his interest in research or even in his family. Nonetheless, he was sickly most of his life, and had a peculiar diet that required him to eat bananas that had ripened to black. He had a nave belief that scientific reasoning would overcome the flaws within politics and religion. His life as Ferry tells it, however, is full of wonderful lessons, like the one that a good brain is a boon, but hard work and perseverance are what make success. Another one is that scientific researchers work best in a chaotic environment with only partial controls upon it. Another one is that the best way to understand any physical object is to understand its internal structure. And finally, a maxim that was one of Perutz's favorites, "In science, truth always wins." Perutz left a legacy of his own research, and more importantly of effective organization of scientific teams, that will continue to foster the scientific victories he knew were coming.3 of 3 people found the following review helpful. A wonderful lifeBy Michael T KennedyThis is a lovely biography of a wonderful man. This review does not show an purchase tag because I was loaned this book by a man who was one of Max's students. His life teaches us why science, pure science not the rent seeking behavior on exhibit at the East Anglia University, can provide a satisfying career, whether or not one is recognized with public rewards. Max Perutz grew up the somewhat sickly son of a Jewish textile manufacturing family. They were quite secularized and like many Jews of the time and place, were slow to recognize the danger of the Nazis. Still, by some good luck, Max ended up in England where, to his great delight, he eventually became a British subject. His parents escaped with the clothes on their backs and his life was burdened for some years by his beautiful mother who could not get over her misfortune. His father, once a wealthy man, adapted well and eventually became independent in rather menial jobs. Max and his wife Gisela, A Christian German whose family lived in Switzerland, lived a very frugal life for years and his position at Cambridge was rather unstable right to the point that he won a Nobel Prize. In spite of all these handicaps, he lived an idyllic life of research and intellectual challenge, loyally supported at home by a patient and modest wife.The time was one of those periods in history when great things are happening every month and it is only in retrospect that one realizes what a citadel of learning this was. Max, who insisted that all members of the Laboratory of Molecular Biology use each others first names, founded the discipline of molecular biology. From his lab came Watson and Crick, Fred Sanger who discovered the restriction enzymes that led to everything that happened, and five other Nobel Prize winners. The author is an excellent science writer who does a good job with explanations that may be difficult for those with no science background. In fact, little science knowledge is necessary to appreciate this wonderful man's life and work. This is an excellent book.

Few scientists have thought more deeply about the nature of their calling and its impact on humanity than Max Perutz (1914-2002). Born in Vienna, Jewish by descent, lapsed Catholic by religion, he came to Cambridge in 1936 to join the lab of the legendary Communist thinker J.D. Bernal. There he began to explore the structures of the molecules that hold the secret of life. In 1940, he was interned and deported to Canada as an enemy alien, only to be brought back and set to work on a bizarre top secret war project. In 1947, he founded the small research group in which Francis Crick and James Watson discovered the structure of DNA: under his leadership it grew to become the world-famous Laboratory for Molecular Biology. Max himself explored the protein hemoglobin and his work, which won him a Nobel Prize in 1962, launched a new era of medicine, heralding today's astonishing advances in the genetic basis of disease. Max Perutz's story, wonderfully told by Georgina Ferry, brims with life. It has the zest of an adventure novel and is full of extraordinary characters. Max was demanding, passionate and driven but also humorous, compassionate and loving. Small in stature, he became a fearless mountain climber; drawing on his own experience as a refugee, he argued fearlessly for human rights; he could be ruthless but had a talent for friendship. An articulate and engaging advocate of science, he found new problems to engage his imagination until weeks before he died aged 88.

Perutz made a wise choice when he chose to invite Georgina Ferry to write his life. The result is an engaging, beautifully written book deserving a place on the shelf of everyone who likes to read about science and scientists. Ferry takes Perutz s career through to the end of his life with his work on the amyloid associated with Alzheimer s disease. Whether dealing with personal matters or explaining the science, Ferry handles the subject matter with ease and clarity. As the official biographer, Ferry has handled Perutz s mix of vanity and self-deprecation, vicious critique and devoted admiration, diplomatically, reporting not judging. Medical History --Medical HistoryA biographer, it seems to me, walks a fine line: he or she needs to be truthful, enthusiastic and selective without suppressing, inventing or distorting the individual whose life is under scrutiny. He or she must allow his or her readers to feel, as well as to understand, the passions, foibles and idiosyncrasies that made his or her subject a person while dealing with family members and intimates who might object to a biography on the grounds that it s nobody s business. On all counts, Ferry s beautifully written book meets and passes the test with flying colors... In telling the story of this admirable man and exceptional scientist, Ferry has succeeded in making her subject live again for the reader. Nature Medicine --NatureFerry does a superb job of using the correspondence, archival sources, interviews, and other traditional tools of biography writing...Teachers of undergraduates will treasure [this book] for the rich coverage of the birth of molecular biology and the circumstances that made it possible. The Quarterly of Biology --The Quarterly of BiologyAbout the AuthorGeorgina Ferry is a former staff editor on New Scientist, and contributor to Radio 4's Science Now. Her books include the acclaimed biography Dorothy Hodgkin: A Life (1998); The Common Thread (2002), with Sir John Sulston) and A Computer Called LEO (2003). She lives in Oxford.