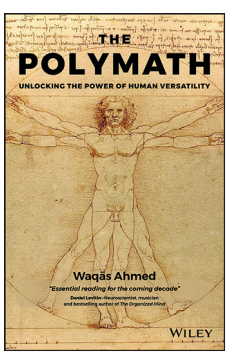
of the female body, Gleeson dips into pat statements that seem at odds with the rest of her writing. For example, in *Twelve Stories*, we are told that, in discussions of the ethics of abortion, "women are reduced to the physical to make it easier to disregard them". While it's true that, as Simone de Beauvoir noted, misogynist binaries associate woman with "matter" (in contrast to masculine "form"), surely the issue is that no one is "reduced to the physical": the physical is what we all are, and the real fiction is that men are any less embodied than women. The problem for women is that, because femaleness is stigmatised, we have been compelled to disavow our own flesh in order to claim humanity. The fact of a male body is perceived as neutral, because maleness is synonymous with humanity (as in the generic term "man"); the fact of a female one is shameful because femaleness is perceived as a complex, deviant condition. By writing so resolutely on the body, from within the body, Gleeson refuses shame. *Constellations*' name comes from the metal implants that repaired her hip joint: she has come to think of them as "artificial stars, glistening beneath the skin", and it's an apt title for a book that shines with intelligence and life.

Sarah Ditum
@sarahditum

In pursuit of polymathy



The Polymath: Unlocking the Power of Human Versatility
Waqās Ahmed
John Wiley & Sons, 2019
pp 336, £18·99
ISBN 9781119508489

Medicine, despite its penchant for specialism, has always been responsive to polymathy. In ancient Egypt, Imhotep—most famous as the architect of the Step Pyramid—was also a physician, worshipped as the god of medicine and linked with the ancient Greek god of medicine, Asclepius, mentioned in the Hippocratic oath. Imhotep was the real "Father of Medicine", wrote William Osler in the 19th century, as quoted by Waqās Ahmed in *The Polymath: Unlocking the Power of Human Versatility*. Other notable historical examples are Avicenna (Ibn Sina), the Persian physician from the 11th-century Islamic golden age, who wrote on astronomy, geography, mathematics, physics, and philosophy, as well as works of poetry, and Leonardo da Vinci, who pursued not only painting but many other disparate subjects, including anatomy. During the 19th century, Florence Nightingale, the founder of professional nursing, was significant in statistics and social reform. In the 20th century, physician Albert Schweitzer was a theologian, philosopher, and musician who was awarded a Nobel Peace Prize.

Polymathy persists among leading scientists. A survey of 20th-century Nobel prizes revealed that many of the science laureates were accomplished outside the lab. "The greatest scientists are artists as well", said amateur violinist Albert Einstein. Ronald Ross, who received the Nobel Prize in Physiology or Medicine in 1902 for his work on the transmission of malaria, was a poet, novelist, song composer, and painter. More than half of science laureates had "at least one artistic avocation, and almost all had an enduring hobby, from chess to insect collecting; one quarter were musicians; and 18 per cent practised visual arts such as drawing or painting", writes Ahmed. His investigation of polymathy, its currently diminished practice and possible future revival, comes with a prologue by art historian Martin Kemp, a leading expert on da Vinci, and an intriguing chapter on "21st-century polymaths" based on Ahmed's interviews with individuals including linguist Noam Chomsky, information technologist and inventor Nathan Myhrvold, and physician and philosopher Raymond Tallis.

> "The book's focus on polymathy is pioneering…"

The book's focus on polymathy is pioneering—there are vastly more publications with "genius" in the title than "polymathy". The reasons for such a disparity are a mix of straightforward and subtle, as Ahmed does his best to explore across the arts and sciences. Most important is the assumption that great achievements by individuals must result from concentrating on one field. Marie Curie epitomises this belief, which could partly explain the paucity of women featured in *The Polymath*. "Even as women began to enter the public sphere professionally in the modern era, they had to work twice as hard as men", notes Ahmed, "and specialisation and single-field focus was seen as the way to go about proving themselves worthy". However, wider structural economic and political factors are also important in relation to women polymaths; these merit more than a brief analysis. Additionally, social acceptance of the division of labour and narrow specialisation has become entrenched as an economic and educational virtue in high-income societies since the Industrial Revolution. Hence, polymathy seems to militate against the organisation of the professions and the universities.

And yet, as Ahmed suggests, the secure "cult of specialisation" frequently fails to satisfy us. He agrees with this comment by Tallis: "Why restrict your curiosity, for God's sake? Don't just look that way; explore what's behind you and sideways. Learn the best of what's been taught and said in every area." As both Myhrvold and Wikipedia founder Jimmy Wales remind the author, polymathy, with the growth of the internet, has the opportunity to flourish as never before. Probably, too, polymathic versatility has never been more needed, to deal with complex challenges such as climate change. Perhaps, as Ahmed provocatively argues, "the true specialist is actually a polymath".

Andrew Robinson

Andrew Robinson is the author of six biographies in the arts and sciences, including *The Last Man Who Knew Everything*, a biography of Thomas Young, and the author of *Genius: A Very Short Introduction*