DAVID SHESKIN

KNOTS

MINUTES BEFORE HIS EXECUTION FOR BLASPHEMY, a brilliant Iranian mathematician whispered into the right ear of the guard who was escorting him to the scaffold the proof of a seemingly insoluble problem in number theory that had baffled generations of mathematicians. That evening the guard shared what he had been told with his 20-year-old daughter—an aspiring mathematician named Paveen Jinnah, who a year later published the proof in a prominent mathematical journal and became the youngest person and only second woman to be awarded the Fields Medal, which is considered the Nobel Prize of mathematics. Two years after being awarded the Fields Medal, while attending a meeting of the International Society of Mathematics, Jinnah lost her virginity to Arvid Thourle-an obese, balding 56-year-old Swedish mathematician, who at the age of 32 had also won the Fields Medal when he revolutionized knot theory with his insights into Kazhdan-Lusztig polynomials. Nine months after their coupling, Andreas Jinnah-Thourle sprung forth from Jinnah's loins, and two decades later the lad, who to the surprise of everyone had never displayed even a modicum of aptitude for mathematics yet had acquired an intense abhorrence of Islam from his mother, who had spurned religion for science from the day she was born, took it upon himself to avenge the death of the mathematician to whom Jinnah owed her legacy by activating a suicide bomb in the Masjid al-Haram mosque in Mecca, slaughtering a multitude of pilgrims who had come to the holy city to celebrate the Eid al-Fitr holiday that marks the end of Ramadan.

Two months after this incident, Lieutenant Colonel Muhammad Bukhari of the Saudi secret police was dispatched to Geneva, Switzerland to interview Jinnah, who had been identified as a person of interest in the bombing in a letter sent to the authorities by an embittered rival mathematician. At the time, Jinnah, who had had little contact with her son's father since their one and only coupling, was a senior mathematician at the head-

quarters of the Large Hadron Collider-the world's largest and most powerful particle accelerator, where during her working hours she engaged in complex mathematical analysis of data. She spent her evenings in the company of Hans Sengraum—a brooding, introspective German astrologer, who devised complex birth charts based on the calculation of sensitive angles of the magical moment of birth of his affluent and eccentric clients, many of whom subscribed to dubious political and religious ideologies. As it turned out, the focus of the investigation into the calamity at the mosque shifted to one of Sengraum's clients: the world-renowned linguist Hermann van Ostrum, who had once been a lover of Jinnah and who had been rumored to be the father of one or both of her two daughters, Haniya and Agssa. Like their half-brother, both daughters had rejected Islam, as Haniya lived as a nun in a convent in Brussels and Agssa repudiated all religion and worked as a lion tamer at a circus in Cyprus. It came to Bukhari's attention that van Ostrum regularly purchased the sorts of materials Jinnah-Thourle may have used to make his suicide bomb. After some probing, the linguist begrudgingly admitted that he did stockpile incendiary goods, since unbeknownst to all but a few associates, who knew him by a different name, he was an accomplished pyrotechnician, who when not preoccupied with the complexities of language indulged a secret passion for combustion and concussion that he'd harboured since childhood by orchestrating dazzling fireworks displays throughout Europe.

While contemplating the possibility that van Ostrum might knowingly or unwittingly have passed on explosive materials to Jinnah's son, Bukhari decided to continue his investigation by travelling to Uppsala, Sweden to talk with Thourle, who according to Jinnah had had only sporadic contact with their son over the years but who might have met with the young man only a few weeks before the mosque incident. Prior to leaving for Sweden, Bukhari declined Jinnah's offer of a free astrological reading from Sengraum. If he had accepted, the astrologer would have told him that according to the angles of his birth chart it would be best if he returned to Saudi Arabia and put the affair at the mosque behind him.

Bukhari and Thourle eventually met one chilly and overcast afternoon in the mathematician's study, where they shared two carafes of Thourle's homemade apple cider while discussing his son and related matters. After ruminating about local tax rates and noisy dogs, the now aged knot theorist revealed that as a younger man he had often gone to Saudi Arabia because,

and he hoped the lieutenant colonel wouldn't be offended, he found Saudi women especially appealing. He went on to say that he no longer travelled because of a myriad of physical ailments and that aside from keeping up with topology and other esoteric mathematical topics he spent most of his free time fly fishing along the banks of the Fyris river, which in addition to being relaxing afforded him opportunities to tie exotic knots for fishing lures. After rambling on a bit about the paucity of sunlight in Uppsala and the laziness of the younger generation, he suddenly changed the subject and, to Bukhari's utter astonishment, confided with not the least bit of embarrassment that all during his adult life he had been a devotee of sexual bondage, as it allowed him to blend his knowledge of knots with his sexual urges, which he'd had great difficulty controlling. Somewhat taken aback by this unexpected shift in the tenor of the conversation, the lieutenant colonel, who earlier in his career had worked in the sex crimes division at Interpol, recollected an unsolved series of bizarre sexual assaults in Europe and North Africa, in which the assailant had employed sophisticated knots that even experts could not untie to restrain his victims and impose all sorts of sexual indignities. Could it be that after all this time the guilty party had serendipitously been delivered to him during an investigation of a suicide bombing? And of all the possible culprits, could the perpetrator have been a world-renowned mathematician? For a fleeting moment it reminded him of the case of Dr. D. Carleton Gajdusek-a brilliant pediatrician, virologist, and anthropologist who was awarded the Nobel Prize in Medicine in 1976 and who was later revealed to be an unrepentant pedophile, whose misdeeds were not brought to light until 1996. Was it possible that another scientific genius had also descended into the depths of sexual depravity? As he considered these questions, Bukhari, who it should be emphasized was both a worldly man and savvy investigator, started to feel drowsy and within a matter of minutes lost consciousness.

If an authentic history of all the relevant events surrounding the incident at the mosque is ever written, it will record that Thourle spiked one of the carafes of apple cider he shared with Bukhari with the date rape drug Rohypnol—a compound with which the mathematician had more than a passing familiarity. Hours later, when Bukhari became semiconscious, he found himself tied up like a ball with nylon rope that had been intertwined with a potpourri of stubborn knots, among which were the almost impossible to disentangle Palomar and clove hitch configurations. One week later,

on the island country of Cyprus, Jinnah's youngest daughter Aqssa fed a fully sedated Bukhari to three famished lions, who hours later would entertain an audience filled with excited adults and laughing children. No arrests were even made with regard to the suicide bombing in Mecca, and the disappearance of the lieutenant colonel remained a mystery.