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### Feroz Hassan Khan, Eating Grass: The Making of the Pakistani Bomb

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## BOOK REVIEWS

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Feroz Hassan Khan, *Eating Grass: The Making of the Pakistani Bomb*. Stanford, CA: Stanford University Press, 2012. Pp. 552. \$29.95, PB. ISBN 978-0-80477-601-1.

Feroz Hassan Khan's *Eating Grass* is a must-read, both for those who would like to know more about Pakistan's nuclear program and those who are curious about what the Pakistan Army would like the world to believe about its program. Both the text and the context of this volume are noteworthy. Despite the various accolades it has received, Khan's book often reads more like a masterpiece of clientelism than a piece of objective and empirical inquiry. Pakistan's army and intelligence agencies could not have commissioned a revisionist history as compelling or convincing as *Eating Grass*.

Khan is not a disinterested party to the story he seeks to narrate. He retired as a brigadier in the Pakistan Army, where his last billet was director of the Arms Control and Disarmament Affairs (ACDA) section within the Strategic Plans Division (SPD), the secretariat of Pakistan's National Command Authority (NCA). As Khan notes, the final third of his 32-year career was 'dedicated to the nuclear program' (p. x). This curriculum vitae must surely have given him critical insights into one of the most controversial nuclear programs in the world and, at times, these insights shine through brilliantly.

Unfortunately, Khan is less transparent about his close relation by marriage to General Pervez Musharraf, the former Chief of Pakistan's Army, who seized power illegally in October 1999 and ruled Pakistan until August 2008. Khan's ties to the former Army chief and dictator comprise an important context for the flattering prose the author uses to describe Musharraf and because these familial ties likely helped Khan garner necessary permissions for this project that may not have been available to scholars without such ties. After all, Khan himself notes that 'interviews conducted for this research would not have been possible without the approval of former president Pervez Musharraf, and with the consistent support of Lieutenant General Khalid Kidwai' (p. xii). The reader is entitled to know this connection to Musharraf and should be allowed to determine whether this marital relationship is pertinent to either the story or the history of the program.

Khan appropriately markets his account as that of a highly privileged insider. The reader should appreciate all of the implications of this subject position: Khan is not a scholar without prejudice; rather a retired soldier with deep personal and professional ties to Pakistan's nuclear program. He has significant vested interests in shaping the historical narrative about the program and his role in it. This does not detract from the genuine scholarly contributions of this effort, but it does make discerning fact from fiction difficult for those who do not have a robust history of Pakistan, its army, and the security dynamics of South Asia.

Indeed, Khan is not the first retired brigadier from ACDA to attempt to shape international perceptions of Pakistan's nuclear program. His successor at ACDA, Brigadier Naeem Salik, between 2004 and 2008 received several fellowships at the Johns Hopkins University's School of Advanced International Studies, the Brookings Institution, the Stimson Center, and Stanford University's Center for International Security and Cooperation. Salik, who wrote an uncritical study of Pakistan's nuclear program in 2009, returned to Pakistan to teach at the National Defence University (Islamabad). Khan, however, secured a faculty appointment at the US Naval Postgraduate School's Center on Contemporary Conflict, where he remains.

In well-written prose, amidst compelling insights derived from interviews with his former colleagues in uniform, Khan attempts at least four major historiographical interventions.

First, he counters the dominant view that Pakistan's nuclear weapons program is, in the words of the eminent Pakistan scholar Stephen P. Cohen, a 'triumph of espionage and assistance from a friendly power'.<sup>1</sup> Khan portrays the program as the fruits of 'self-reliance and creativity to overcome the nonproliferation barriers' (p. 139). Instead of corporate espionage, theft, illicit acquisitions, and wholesale material and technological transfer, Khan deploys such euphemisms as 'information transfers' (p. 146), 'wholesale procurements' (p. 148), and 'quid-pro-quo arrangements' between sovereign states (p. 111). More provocatively, he claims that the notorious A.Q. Khan was on the sidelines of the program, rather than a principal character, during formative stages of the program. It is not until chapter seven (pp. 139–61) that he even begins to address A.Q. Khan in any detail. He does, however, exposit the yeoman efforts of Sultan Bashiruddin Mahmood, 'who obtained complete engineering drawings' of both the plant and centrifuges at the Italian Casaccia Nuclear Research Center outside Rome and even copied them by hand in his hotel room (p. 145). Feroz Khan notes that this

<sup>1</sup>Stephen Philip Cohen, *The Idea of Pakistan* (Washington DC: Brookings Institution Press 2004), 80.

'foundational work was occurring as A.Q. Khan was still in the Netherlands gaining valuable information' from the Dutch firm URENCO (p. 145).

Of course, Mahmood brought further disgrace to Pakistan's nuclear program. After retiring, Mahmood (who also calculated the exact temperature of hell and put forth a quantum mechanical understanding of the 'end of days') established an Islamic charity. Mahmood and another associate from the nuclear enclave, Chaudhry Abdul Majid, met with Mullah Omar on numerous occasions and once with Osama bin Laden. Mahmood told Khan that he met these notorious fellows for the noble purpose of soliciting funds to establish a polytechnic institute in Kabul. According to Khan, Bin Laden and his associates refused to provide funding and were more interested in learning about Pakistan's nuclear program. Mahmood disclosed to Khan that 'Osama brought up the nuclear subject in a very general sense and I explained the benefits of nuclear energy and emphasized the difficulties and challenges in building and maintaining nuclear weapons' (p. 363). Khan reassures his readers that Mahmood effectively dissuaded Bin Laden from pursuing nuclear weapons by convincing them that it is 'all very challenging' (p. 362).

While acknowledging the assistance Pakistan's missile and nuclear bomb program received from state and non-state actors alike, Khan stresses Pakistani ingenuity and resourcefulness in rendering this aid materially useful. Khan emphasizes the fact that the blueprints A.Q. Khan acquired from the Netherlands had a technical fault which Pakistani scientists had to fix. He emphasizes throughout how difficult it was for Pakistan's scientific enclave to render these purloined war-head, centrifuge, missile and other designs operational. Ultimately, in this reviewer's assessment, Khan fails to convince his readership that Pakistan's nuclear and missile programs can be attributed more to an indigenous effort than to nefarious acquisitions because he makes frequent admissions that undermine his argument throughout the volume. For example, he notes that General Zia ul-Haq dispatched an emissary to China who 'received some fifty kilograms of HEU [highly enriched uranium] on loan and even a crude bomb design purported to be a copy of China's fourth nuclear test of 1966' (p. 157). Citing 2009 news reports, Khan further notes that China later declared the HEU to be a gift (p. 188). In chapter 8, Khan describes the procurement network in the gray market by which Pakistanis sought to acquire restricted items and technologies. Khan refers to these illicit acquisitions as 'procurement events' (p. 165).

In chapter 12, Khan takes a similar narrative approach to Pakistan's missile program. He concedes the considerable assistance Pakistan received from China, North Korea (and even US cruise missiles that landed on Pakistani soil in 1998). However, Khan stresses the

importance of design modification and innovation that Pakistani scientists engineered. Samar Mubarakmand – one of his interlocutors – explained to Khan that ‘Any missile scientist would tell you that even a slight change in the diameter or configuration of the missile warheads would necessitate redesigning it as if starting from scratch.’ (p. 239). Ultimately, Khan seeks to convince his readers that building a nuclear deterrent from purloined nuclear and missile designs is hard work and that Pakistani scientists should be given the accolades their toils deserve.

Second, Khan’s volume seeks to change the way the world understands the relationship between A.Q. Khan and the Pakistani state. It does so in several key ways. The author rightly attempts to bring into the public a ‘little-known domestic story’ of ‘professional jealousies, claims and counterclaims, and innovation surrounding Pakistan’s centrifuge enrichment project’ (p. 139). In this narrative, the author brings to light poorly understood professional and competitive rivalries among the various scientists involved in Pakistan’s nuclear and missile programs. The author seeks to re-situate A.Q. Khan as just one of several actors. The author ultimately notes that ‘Eventually it was the leadership of A.Q. Khan, a leading Pakistani scientist, and competition within the Pakistani scientific community that led to the project’s success’ (p. 139).

In addition to contextualizing A.Q. Khan as one among several critical actors, the author takes great care to characterize A.Q. Khan’s later activities as beyond the purview of the state. The author has a vested interest in demonstrating the competence of the National Command Authority and the Strategic Plans Directorate in part because he had a role in creating it. After an explanation of development of the NCA and the critical contributions first of Army Chief General Jahangir Karamat and then Musharraf, he notes that the ‘sweeping structural changes brought with them numerous challenges; the largest of these A. Q. Khan’ (p. 355). Feroz Khan even praises the NCA noting that ‘within a year of NCA’s formal announcement, A.Q. Khan, in March of 2001, had been removed from Khan Research Laboratory and appointed scientific advisor to the government’ (p. 336). However, A. Q. Khan was ‘fired from that position as well, after the exposure of his illegal nuclear supply network in 2004’ (p. 336). Of course, Pakistan and the world were aware of A.Q. Khan’s escapades long before 2004.<sup>2</sup> After all, Pakistan’s government had to coordinate aircraft and facilitate other logistical requirements for these transfers.

<sup>2</sup>International Institute for Strategic Studies, *Nuclear Black Markets: Pakistan, A.Q. Khan and the Rise of Proliferation Networks – A Net Assessment* (London: IISS 2007).

In a third historiographical intervention, Khan argues that the Army was a latecomer to the Pakistan nuclear program. On this point he is partly correct. Zulfikar Ali Bhutto had long argued that Pakistan needed a nuclear deterrent, believing (correctly) that India would seek to develop a weapon after the Chinese test at Lop Nor in 1964. America's decision not to get involved in the 1965 Indo-Pakistan war enhanced Bhutto's concerns. He believed that the United States had reneged on its treaty obligation to come to Pakistan's aid, even though Pakistan had started the war and even though the United States had only promised to defend Pakistan from communist aggression. This perceived perfidy, the loss of East Pakistan in the Indo-Pakistan war of 1971, and the Indian nuclear test in 1974 all convinced Z.A. Bhutto of the need to acquire a nuclear weapon. As Khan correctly notes, the Army did not concur. In fact, General Ayub Khan, Pakistan's first army chief, believed that Pakistan could 'buy a bomb' from one of its allies. Most scholars contend that after 1977, when General Zia ul-Haq executed Z.A. Bhutto and seized power, the program passed into the purview of the Army, where it has remained. However, Khan's claim that the 'military was not even aware of the program until 1977' despite the fact that 'it had begun providing technical and logistical support a year earlier to Khan Research Laboratories' is dubious.

Contrary to the established scholarly literature, Khan argues that civilians were actually in charge of the program until October 1993, when the Army forced both President Ghulam Ishaq Khan and Prime Minister Nawaz Sharif to resign (p. x; pp. 257–8). Khan claims that President Khan 'in his wisdom considered it best to hand over the custody of nuclear matters to the Army Chief General Abdul Waheed' (p. 258). Khan continues that 'Contrary to common belief, this was the first time the army had inherited the responsibility for the nuclear program' (p. 324). Among Khan's other astonishing assertions is the claim that Benazir Bhutto 'was the architect of the nuclear policy of restraint' (citing General Aslam Beg, p. 255). But information elsewhere in the book contradicts this claim. For example, this narrative directly contradicts his discussion of Benazir Bhutto's 1988 election as Prime Minister: Khan writes that the Army *allowed* Benazir Bhutto to take up the post only after the Army chief, General Beg, brokered a 'five point deal with Benazir as a quid pro quo for her becoming Prime Minister' (p. 227). As part of this deal, Bhutto agreed not to interfere in the affairs of the armed forces or change Pakistan's nuclear policy (pp. 227–8).

Fourth, Khan attempts to challenge the long-accepted academic account of Pakistan's recent nuclear behavior which depicts Pakistan as pursuing asymmetric conflict under its expanding nuclear umbrella from 1990, if not earlier. To counter this view of Pakistan as a state recklessly pursuing a revisionist agenda vis-à-vis India through



sub-conventional warfare and nuclear coercion, Khan contends that the 1999 Kargil crisis was entirely independent of Pakistan's recent decision to become an overt nuclear power. In contrast, most scholars contend that the 1998 tests emboldened Pakistan to launch the operation to seize territory in Kargil because overt nuclearization raised the cost of Indian escalation. In fact, President Musharraf himself concedes as much. In April 1999, a few weeks before the Pakistani military forces were detected in Kargil, Musharraf announced that while nuclear weapons rendered obsolete large-scale conventional wars between India and Pakistan, they increased the likelihood of sub-conventional conflicts.<sup>3</sup>

In effort to reassure his readers that Pakistan is a responsible nuclear state, Khan risibly argues that Pakistan's leaders at the time of the crisis were too inexperienced in nuclear matters to fully exploit the protection of its nuclear umbrella (pp. 317–18) and thus Kargil could not have been enabled by the tests. However, Khan notes that Pakistan had a 'large bomb that could be delivered...by a C-130' as early as 1984. This is some 15 years prior to Kargil. A perusal of Pakistani writings on Pakistan's nuclear program demonstrates that Pakistani defense planners believed their nuclear assets deterred Indian attacks during crises in 1984–85, 1986–87, 1990, 1999, and 2001–02. This suggests far more sophistication than Khan concedes.<sup>4</sup>

In summation, this text is, in considerable measure, an exculpatory tome that seeks to dramatically reshape the scholarly and historical body of literature about Pakistan, the Army, its nuclear program and the state behaviors that these nuclear capabilities have encouraged. Unlike George Perkovich's scholarly and dispassionate account of India's nuclear program, Khan's account is not impartial or neutral owing to his particular relationship with this program and the activities of key personalities he recounts. For this reason, readers should approach this volume with caution, skepticism and a robust grasp of the competing narratives penned by more objective authors. Perhaps it

<sup>3</sup>Pak defence strong, says army chief, *Independent*, 19 April 1999, cited in Timothy D. Hoyt, 'Politics, Proximity and Paranoia: The Evolution of Kashmir as a Nuclear Flashpoint', *India Review* 2/3 (July 2003), 117–44. See also statement of Musharraf in April 1999 cited in the Kargil Review Committee, *From Surprise to Reckoning: The Kargil Review Committee Report* (New Delhi: SAGE, 15 December 1999), 77.

<sup>4</sup>Zafar Iqbal Cheema, 'Pakistan's Nuclear Use Doctrine and Command and Control', in Peter Lavoy, Scott D. Sagan and James J. Wirtz (eds), *Planning the Unthinkable: How New Powers will use Nuclear, Biological, and Chemical Weapons* (Ithaca, NY: Cornell UP 2000), 158–81; Ghulam Sarwar, (Col. Retd). 'Pakistan's Strategic and Security Perspectives', *Pakistan Army Journal* 36 (Autumn 1995), 63–74; Peter R. Lavoy, 'Pakistan's Nuclear Doctrine', in Rafiq Dossani and Henry Rowan (eds), *Prospects for Peace in South Asia* (Stanford UP 2005), 280–300.



is best to see this book as a compelling and well-crafted historiography of the program rather than an objective study of the same.

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## Response to C. Christine Fair

When *The Journal of Strategic Studies* approached me to write a rejoinder to a forthcoming review that 'raised serious concerns' about my book, it was beyond belief that a journal of such repute would accept a review of such kind.

C. Christine Fair's review is not objective or serious, but rather an accumulation of crass cynicism, personalized innuendoes, and displaced grudges. Fair generally has a personal grouse against the Pakistani diaspora in the United States and in particular has had a history of personal animus with this author that has appeared in several public blogs and tweets that far predate the publication of the book.<sup>5</sup> *Eating Grass* has simply provided an outlet to vent her persistent attacks.

Fair has never written a serious book herself; she has neither the knowledge on nuclear issues nor has the credentials to comment on such a complex subject and country that she claims to be an expert on. My first instinct was to ignore Fair's vituperative assertions as I have done so in the past. I respond, however, given the standing of this

<sup>5</sup> <<https://twitter.com/CChristineFair>>.