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## **A Critical Study of an Intellectual Celebrity: A. P. J. Abdul Kalam**

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**Abstract:** The research paper “A Critical Study of an Intellectual Celebrity: A. P. J. Abdul Kalam” studies the ideology of technological nationalism in the context of A. P. J. Abdul Kalam (1931-2015) and Arun Tiwari’s text *Wings of Fire: An Autobiography* (1999). It studies the way in which technology affects the Indian society and culture in order to promote connectedness and a stronger national identity. The paper attempts to establish the idea that the success of a nation can only be determined by the way a nation, that is, India in this context tries to innovate and diffuse technology across its people. It tries to elucidate the idea that technological nationalists such as A. P. J. Abdul Kalam believe that the presence of national R & D efforts, the effectiveness of these efforts are key drivers to the overall growth, sustainability and prosperity of a nation. The paper illustrates the correlation between economic growth and nationalism.

There is indeed a profound relationship between technology and Indian nationalism in this case which is manifested through a painting that A.P.J. Abdul Kalam comes across in the reception lobby at Wallops Flight Facility at Wallops Island, a NASA facility in East Coast, Virginia. This place was the base for NASA’s sounding rocket programme. The painting depicts a battle scene with rocket flying in the background and the soldiers on the side launching the rockets were not white but dark-skinned with the racial features of people found in South Asia. On closer examination he finds that the painting depicts Tipu Sultan’s army fighting the British. Kalam feels happy to see an Indian glorified in NASA (National Aeronautics and Space Administration) as a hero of warfare rocketry although it was a fact that had been long forgotten in India (*Wings of Fire: An Autobiography* 37-38). This exhibits the glorification of the Indian historical past in terms of



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technological progress and boosts Indian nationalism by showing India to be having an indigenous technological programme even in the eighteenth century thereby negating the theory that India's technological programme is imported. In the process it creates a strong national identity and also talks of a progressive Indian past.

In the mid-twentieth century, intellectuals in a nation were very nationalistic about science and technology and the trend still continues in some of the nations. India is a nation that is very nationalistic about science and technology. In the "Introduction" to *Wings of Fire: An Autobiography* (1999), A. P. J. Abdul Kalam states:

This book is being released at a time when India's technological endeavours, to assert its sovereignty and strengthen its security, are questioned by many in the world. Historically, people have always fought among themselves on one issue or another. Prehistorically, battles were fought over food and shelter. With the passage of time, wars were waged over religious and ideological beliefs; and now the dominant struggle of sophisticated warfare is for economic and technological supremacy. Consequently, economic and technological supremacy is equated with political power and world control. (*Wings of Fire* xiii)

A.P. J. Abdul Kalam on the occasion of releasing the book, *Wings of Fire: An Autobiography* states that the national identity of a nation, that is, India in this case is formulated in the recent times on the basis of economic and technological supremacy. A nation that has attained economic and technological supremacy is said to be strong and powerful which boosts the nationalistic (the policy or doctrine of asserting the interests of one's own nation) image of the very same nation. In India, the story of *Agni, Prithvi, Akash, Trishul* and *Nag* missiles have raised the nation to the level of a missile power of international reckoning (*Wings of Fire: An Autobiography* ii). Thus, the example highlights significance of the relationship between technology and nationalism in the context of a nation's national identity.

Techno-nationalism assumes that the key unit of analysis for the study of technology is the nation: nations are the units that innovate, that have R&D budgets and cultures of innovation, that diffuse and use technology. The success of nations, it is believed by techno-



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nationalists (who rarely if ever label themselves as such), is dependent on how well they do this. (“Contradictions of Techno-Nationalism and Techno-Globalism”)

*Wings of Fire: An Autobiography* is a saga of India’s search for scientific and technological self-sufficiency. Prof. Vikram Sarabhai was A. P. J. Abdul Kalam’s mentor and both were techno-nationalists who have contributed immensely and valuably to the Indian Science Programme. Once Prof. Sarabhai came to Thumba on one of his routine visits he was shown the operation of the nose cone jettisoning mechanism. Prof. Sarabhai was asked to formally activate the system. To their horror, when he pressed the button, there wasn’t any reaction. They asked him to wait for a few minutes while they re-forged some connections. When he pressed the button for a second time, the pyros was fired and the nose cone was jettisoned. Prof. Sarabhai congratulated the team, called Dr. A. P. J. Kalam and talked to him of rocket launching facilities such as launch pads, block houses, radar, telemetry etcetera. He spoke of the failure in activating the system in order to probe the reason behind it and then solve it. The apparent reason that came to the fore was that they lacked a single roof to carry out the system integration of all the rockets and the rocket systems thereby making Prof. Sarabhai decide to set up a Rocket Engineering Section which further led to the setting up of a Rocket Engineering Laboratory. This instance shows the vision and the commitments of techno-nationalists such as Prof. Sarabhai and Dr. A. P. J. Abdul Kalam in making a country progress on the basis of technology. They have been credited with genuine leadership qualities and inspired budding scientists and engineers both through ideas and examples thereby training many scientists and engineers who later took charge of important scientific projects (*Wings of Fire* 61-63). The relentless efforts of the scientists and engineers catapulted India to a level of a technologically progressive nation leaving behind a legacy of a progressive scientific programme.

Ernest Gellner refers to nationalism as a way of adapting to a modern, industrial and globalizing world. (“Contradictions of Techno-Nationalism and Techno-Globalism”)

India displays technological nationalism by developing rockets which made India capable of producing indigenous sounding rockets. It is seen as the revival of 18<sup>th</sup> century vision of Tipu Sultan thereby linking it to nationalism. The Thumba Equatorial Launch Station was developed in active collaboration with France, USA and USSR. It was envisioned as the centre of India’s integral



national space programme. The actual journey however began with *Rohini* Sounding Rocket Programme (RSR). This programme was responsible for the development and fabrication of sounding rockets and their associated on-board systems for scientific investigations in India. Under the RSR programme, a family of rocket sounding programmes were developed. These rockets had wide ranging capabilities and several hundred such rockets have been launched for various scientific and technological studies. It is an effort to develop the country to make it adapt to a modern, industrial and globalizing world (*Wings of Fire* 41-43).

The success of a nation is determined by the way a nation tries to innovate and diffuse technology across its people. In the “Epilogue” of *Wings of Fire*, Dr. A. P. J. Abdul Kalam states:

A nation needs both economic prosperity and strong security for growth and development. Our *Self Reliance Mission in Defence System 1995-2005* will provide the Armed Forces with a state-of-the-art competitive weapons system. The *Technology Vision – 2020* plan will put into place certain schemes and plans for the economic growth and prosperity of the nation. These two plans have evolved out of the nation’s dreams. I earnestly hope and pray that the development resulting from these two plans – *Self Reliance Mission* and *Technology Vision – 2020* – will eventually make our country strong and prosperous, a “developed” nation.

The above example shows the vision of a developing nation as stated by Dr. A. P. J. Abdul Kalam. A nation can grow, be self-sufficient and prosperous if it develops technologically which can only happen when there is realization of one’s dream and its fruits are distributed across the people.

The technology affects the Indian society and culture in order to promote connectedness and a stronger national identity.

Techno-nationalism also takes other forms leading to the creation of national identities fit for a technological age. (“Contradictions of Techno-Nationalism and Techno-Globalism”)

A few nations who have grown very strong technologically, over the past few centuries, have wrested control, for their own purposes. These major powers have become



the self-proclaimed leaders of the new world order. What does a country of one billion people, like India, do in such a situation? We have no other option but to be technologically strong. But, can India be a leader in the field of technology? My answer is an emphatic 'Yes'. (*Wings of Fire* xiii-xiv)

This story is an account, I hope, not just of personal triumphs and tribulations but of the successes and setbacks of the science establishment in modern India, struggling to establish itself in the technological forefront. It is the story of national aspiration and of co-operative endeavour. And, as I see it, the saga of India's search for scientific self-sufficiency and technological competence is a parable for our times.

(*Wings of Fire* xv)

The above examples exhibit that for a nation to forge a strong national identity in the present world it should be technologically strong. Thus, a developing nation such as India will be able to create a strong identity for itself through its struggle on the technological forefront. A nation that is technologically well-developed is a strong nation.

This innovation-centric techno-nationalist understanding is central to national histories of technologies. ("Contradictions of Techno-Nationalism and Techno-Globalism")

The idea that technological nationalists such as Dr. A. P. J. Abdul Kalam believe that the presence of national R & D efforts and the effectiveness of these efforts are key drivers to the overall growth, sustainability and prosperity of a nation forms the cornerstone of a nation's growth and prosperity.

In *Wings of Fire*, the concept of techno-nationalism is explained in the context of the Indian milieu. A country has to be technologically powerful to establish its own national identity and to attain growth. It is a necessary prerequisite to establish the growth trajectory of a developing nation like India.



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### **Works Cited**

Edgerton, David E. H. "The Contradictions of Techno-Nationalism and Techno-Globalism: A Historical Perspective." *New Global Studies* 1.1, 2007, pp. 1-32.

Kalam, A. P. J. Abdul and Arun Tiwari. *Wings of Fire: An Autobiography*. Universities Press (India) Private Limited, 1999.