CHAPTER III

Wings of Fire: A Fascinating Journey from the Local to the Global

This chapter endeavours to critically analyse Wings of Fire, an inspiring success story of Avul Pakir Jainulabdeen Abdul Kalam, with a view to explore vital influences on Kalam’s individuation. It also traces various significant stages in Kalam’s quest for identity, culminating in his “identity achievement”.

Wings of Fire ranks among world’s most popular autobiographies. First published in 1999, it is ready for its 38th impression in 2013. This inspiring account of the son of an ordinary boat-owner in a small island-town, who became a model and guiding force for millions of his countrymen, is truly a milestone in the history of Indian English literature. As M.S. Mukunda rightly recommends, “There is something that everybody can extract from this book… The book is worthy of being read by every Indian” (4). B.P. Chattopadhyay goes to the extent of calling it “a modern classic” and “a book worth its weight in gold” (11). Anand Parthasarthy’s estimation regarding this autobiography needs consideration. He calls it “a warm and intensely personal, deeply passionate story” and contends that “Kalam’s personal story is a valuable document” which conveys a message “that Indians can be world-beaters, with no foreign training or degree. For this upbeat message alone, his autobiography is worth a 100 management tomes” (2). To quote B. Sharma, this book is “the first authentic volume on our (Indian) Space Odyssey” (6).

Born in 1931 in Rameswaram, a well-known religious place in Tamil Nadu, Kalam has become “India’s most distinguished living technocrat” (Parthasarty 2). His career as a defence scientist earned for him the title of ‘Missile Man’ and turned out unparalleled in many ways. As the chief of
‘Defence Research and Development Programme’ (DRDO), Kalam demonstrated unique dynamism and resourcefulness. Without having any political influence, he could reach the topmost position of presidentship on his own merit. His five year tenure as the 11\textsuperscript{th} President of India, from 2002 to 2007, attained incredible significance. He proved to be the first scientist to achieve this place of eminence. The secret of his success lies, in his own words, in his desire “to feel more, learn more, express more…to grow, improve purify, expand…to seek more within myself…to look at how far I (have) still to go rather than how far I (have) come” (140). Despite receiving countless honours and prestigious awards, including the highest civilian award in India, the ‘Bharat Ratna’, Kalam has always been a down to earth person. As Arun Tiwari, the ‘compiler-writer’ of this book mentions in the ‘Preface’, “(Kalam) has an intuitive rapport with the humblest and simplest people, an indication of his own simplicity and innate spirituality” (IX). Throughout this book, the reader experiences in him an elderly companion and a father figure willing to share his gems of wisdom and treasure of worldly experience without any pretence or pomp. As Somasundari Latha observes, Kalam is “a combination of scientific endurance and human diligence who can inspire people in the world irrespective of age, caste, creed, religion and country” (25). Thus it successfully fulfils the anticipation voiced by Arun Tiwari: “Many of you may never meet Dr. Kalam in person, but I hope you will enjoy his company through this book, and that he will become your spiritual friend” (X).

\textit{Wings of Fire} is the story of Kalam’s fascinating journey from obscurity to popularity. At the outset, Tiwari admits that he “could include only a few incidents among the many” narrated to him by Kalam and that “this book provides only a thumbnail sketch of Dr. Kalam’s life” (X). With photographic precision, Kalam describes his boyhood days full of hopes and hardships. He
modestly acknowledges the contribution of those who had a “profound influence” on his life and who shaped his character and career (XIV). In his own words:

This book is… a submission of thanks… to my parents and immediate family, and to the teachers and preceptors I was fortunate to have had, both as a student and in my professional life. It is also a tribute to the unflagging enthusiasm and efforts of my young colleagues who helped to realise our collective dreams (XIV).

It is, at the same time, a touching tale of independent India’s battle for technological independence and defence autonomy. The book is as much about science and politics as about management and administration. It is both personal and representative. Kalam himself highlights this fact thus:

When I first began the reminiscences that have gone into this book, I was uncertain about which of my memories were worth narrating or were of any relevance at all… In the end, I was convinced that these were relevant, if not for anything else, but because they tell something of the story of modern India, as individual destiny and the social matrix, in which it is embedded, cannot be seen in isolation (XIV).

As he further adds,

This story is an account, I hope, not just of my personal triumphs and tribulations but of the successes and setbacks of the science establishment in modern India, struggling to establish itself on the technological forefront. It is the story of national aspiration and of cooperative endeavour… the saga of India’s search for scientific self-sufficiency and technological competence (XV).
S. Somasundari Latha points at the spiritual foundation of *The Wings of Fire* in her critique of the book and underscores its validity in the following words:

The autobiography clearly reveals Kalam’s spiritual moorings even as he worked hard to reach greater heights in his chosen field of missile technology. He was fully engaged in the development of technology that is double-aged: it could kill millions even as it could save millions in times of war. It could help exploring the vast universe and could even be an instrument for humility in individual lives. His awards were meant for developing missile technology in the context of India’s self-defence against possible and probable war mongering and belligerence from other nations. In real terms, Kalam was and is aware that this dangerous bent could still be used for the benefit and betterment of humanity. He sounds that this realisation was not solely base on reason, but in seeking spiritual experience and wisdom (30).

Indeed, though associated with the practical field of advanced science and technology, Kalam exhibits a strong faith in divinity. Curiously enough, Kalam regards science and spirituality as two sides of the same coin. He opines:

I wonder why some people tend to see science as something which takes man away from God. As I look at it, the path of science can always wind through the heart. For me, science has always been the path to spiritual enrichment and self-realization (15).

He has a characteristic habit of viewing scientific phenomenon through the bioscope of spirituality. For instance, while commenting upon the system of the universe, he observes:

Wherever you go on this planet, there is movement and life… Everything solid…contains much empty space within and
everything stationary contains great movement within. It is as though the great dance of Shiva is being performed on earth during every moment of our existence (16).

Kalam is a staunch theist and openly proclaims his love for spirituality. In fact, he gives the entire credit of his stupendous achievements to the Creator: “Each individual on this beautiful planet is created by God to fulfil a particular role. Whatever I have achieved in life is through His help and an expression of His will” (XV). His lucid commentary on the theme and title of the autobiography, too, confirms his piety:

He showered His grace on me through some outstanding teachers and colleagues, and when I pay my tribute to these fine persons, I am merely praising His glory. All these rockets and missiles are His work through a small person called Kalam, in order to tell the several million masses of India, to never feel small or helpless. We are all born with a divine fire in us. Our efforts should be to give wings to this fire and fill the world with the glow of its goodness (XV- XVI).

Using commercial terms, he describes his special relationship with the Almighty:

I have always been a religious person in the sense that I maintain a working partnership with God… I made a true estimate of my own ability, then raised it by 50 per cent and put myself in God’s hands. In this partnership, I have always received all the power I needed, and in fact felt it flowing through me. Today, I can affirm that the kingdom of God is within you in the form of this power, to help achieve your goals and realise your dreams (49).
As a traditional worshipper, Kalam has full faith in the magical power of prayer. According to him, they play an important function in our life. As he claims, “God, our Creator, has stored within our minds and personalities, great potential, strength and ability. Prayers help us to tap and develop these powers” (36). Before going to America for six months’ training at NASA, Kalam went to see his father at Rameswaram. At that time, his father organised a special ‘namaz’ for him. Kalam remarks, “I could feel the power of God flowing in a circuit through my father to me and back to God” (37). When he lost both of his parents, he prayed in the same mosque his father would take him to. At that time he had a mysterious revelation:

I told Him that my mother could not have lived longer in the world without the care and love of her husband, and therefore had preferred to join him. I begged His forgiveness… They carried out the task I had designed for them with great care, dedication and honesty and came back to me. Why are you mourning their day of accomplishment? Concentrate on the assignments that lie before you, and proclaim my glory through your deeds!” Nobody had said these words, but I heard them loud and clear…I came out of the mosque with my mind at peace (87).

Kalam has complete faith in God’s ways to man. He proclaims: “This is my belief that through difficulties and problems God gives us the opportunity to grow. So when your hopes and dreams and goals are dashed, search among the wreckage, you may find a golden opportunity hidden in the ruins” (140). On receiving the Padma Vibhushan award, Kalam was swept over by a flood of memories. He felt as if “the paternal forces of heaven and the maternal and cosmic forces of nature embrace me as parents would hug their long-lost child”
His commentary on the intention of writing down this autobiography reveals his down-to-earth approach and saintly disposition:

I will not be presumptuous enough to say that my life can be a role-model for anybody; but some poor child living in an obscure place, in an underprivileged social setting may find a little solace in the way my destiny has been shaped. It could perhaps help such children liberate themselves from the bondage of their illusory backwardness and helplessness. Irrespective of where they are right now, they should be aware that God is with them and when He is with them, who can be against them? (167)

According to him, “You, me, everyone on this planet is set free by him to cultivate all the creative within us and live at peace with our own conscience” (176). Towards the end of this book, Kalam explains the rationale behind its conception, which attests to his holy temperament:

I do not wish to set myself as an example to others, but I believe that a few souls may draw inspiration and come to balance that ultimate satisfaction which can only be found in the life of the spirit. God’s province is your inheritance. The bloodline of my great-grandfather Avul, my grandfather Pakir, and my father Jainulabdeen may end with Abdul Kalam, but His grace will never end, for it is eternal (177-78).

However, Kalam is keen to maintain distance between belief and blind-belief. He does not approve of superstitions and mindless rituals. He is single-mindedly guided by the principle of “Nishkam Karmayoga”, mentioned in the Bhagvat Geeta. He contends:

While flying, drifting into spells of contemplation and looking down at the landscape below has always been my favourite occupation. It is so beautiful, so harmonious, so
peaceful from a distance that I wonder where all those boundaries are which separate district from district, state from state, and country from country. Maybe such a sense of distance and detachment is required in dealing with all the activities of our life (144).

‘Work is worship’ is the only agenda he seems to follow throughout his life. He does give importance to fate, but he is never carried away by too much reliance on it. He resolutely believes in the saying, “Fortune favours the brave”. That is why he is against the “science” of fortune telling. He bluntly states:

Quite honestly, I have never understood the reason behind the great importance attached by the people to the faraway planets in our solar system. As an art, I have nothing against astrology, but if it seeks acceptance under the guidance of science, I reject it. The highly complicated calculations manipulated around the precise movements of celestial bodies, to derive highly subjective conclusions, appears illogical to me (15).

Both the narrator and the writer being renowned scientists, the structural framework of Wings of Fire is neat and well-planned. The book is compact in size, with no scope for digression. This apparently simple-looking task is, in fact, quite challenging. The compactness and clarity of expression the autobiography has, is the joint success of Kalam and Arun Tiwari. In his ‘Preface’, Tiwari alludes to this fact in these words: “There were complexities, subtleties, and intriguing metaphors and sub-plots in his narrative, but gradually the unfolding of his brilliant mind took the form of a continuous discourse” (IX). The autobiography falls into four segments, which correspond to the four important phases in the narrator’s life as follows:
I. **Orientation** (1931-1963): *Childhood, college life and entry into INCOSPAR*

II. **Creation** (1963-1980): *Creative Period at ISRO, designing of SLV*


‘Orientation’, the first section of the book, covers a major span of thirty-two years of the narrator’s life. It records Kalam’s childhood memories, his school and college life, and his induction into the ‘Indian Committee for Space Research’ (INCOSPAR). This section ends with young Kalam flying to America for a six-month training programme at the world-famous ‘National Aeronautics and Space Administration’ (NASA), which opened up new avenues for this aspirant scientist.

Kalam was born in a humble family. None of his parents were much educated, but both of them influenced Kalam in their own way and left an indelible mark on his disposition. Kalam remained emotionally attached to them throughout his life, perhaps because, being single, he found no substitute to share his affection. Thus, he has dedicated his autobiography to ‘the memory of my parents’. Kalam’s father Jainulabdeen “had neither much formal education nor much wealth” but “he possessed great innate wisdom and a true generosity of spirit” (3). He was a religious person. He had a deep impact on Kalam’s entire life. Kalam’s unshakable faith in divinity is a legacy from his father. His mother Ashiamma was “an ideal helpmate” to his father (Ibid). She was a kind-hearted woman, who remained an eternal source of motivation to her son. In the ‘Epilogue’, Kalam acknowledges her greatness in a poetic fashion:
My mother!
You come to me like heaven’s caring arms…
Your love, your care, your faith gives me strength
To face the world without fear and with His strength.

About his early days, Kalam says, “I would say mine was a very secure childhood, both materially and emotionally” (4).

Rameswaram is a famous sacred place, well-known for the old Shiva temple. The arch-priest of the temple, Pakshi Lakshamana Sastry, was a close friend of Jainulabdeen. Both of them used to talk on religion on many occasions. Kalam could not forget that sight even after so many years. He records, “One of the most vivid memories of my early childhood is of the two men, each in his traditional attire, discussing spiritual matters” (4). Jainulabdeen used to take his son to an old mosque in Rawmeswaram for evening prayers (“namaaz”). Kalam remarks, “I had not the faintest idea of the meaning of the Arabic prayers being chanted, but I was totally convinced that they reached God” (Ibid). However, Jainulabdeen’s approach towards religion was not that of a fanatic. His was a broad outlook, and he inculcated the same in Kalam. No wonder, right from his adolescence, Kalam began to pay equal reverence to all religions and regard every individual as “a specific element within the whole of the manifest divine Being” (5). Before appearing for the first interview in his life, he “bathed in the Ganga and revelled in the purity of its water” (24). He also visited the Sivananda Ashram to see Swami Sivananda. As he entered the ashram, he “could feel intense vibrations” (Ibid). Kalam reproduces the Swami’s advice to him: “Accept your destiny and go ahead with your life… What you are destined to become is not revealed but it is predetermined…Search for the true purpose of your existence. Become one with yourself, my son! Surrender yourself to the wish of God” (Ibid).
In this way, Jainulabdeen’s preaching was as if imprinted on Kalam’s young mind and he followed it all along his life. Indeed, Kalam’s life can be looked upon as the practical version of his father’s ideology. To quote him in the original:

I have throughout my life tried to emulate my father in my own world of science and philosophy. I have endeavoured to understand the fundamental truths revelled to me by my father, and feel convinced that there exists a divine power that can lift one up from confusion, misery, melancholy and failure, and guide one to one’s true place. And once an individual serves his emotional and physical bondage, he is on the road to freedom, happiness and peace of mind (6).

Kalam summarises his parents’ priceless input in his personality development thus:

Every child is born, with some inherited characteristics, into a specific socio-economic environment, and trained in certain ways by figures of authority. I inherited honesty and self-discipline from my father; from my mother, I inherited faith in goodness and deep kindness (8).

Besides his parents, there were some other individuals who too had a lion’s share in Kalam’s orientation and individuation. Foremost of them were his two relatives, Jallaluddin and Samsuddin. Ahmed Jallaluddin, his brother-in-law, always encouraged him to excel in his studies. Himself an ordinary person, he was always concerned about Kalam’s progress in school. To boost his morale, Jallaluddin frequently told him about “educated people, of scientific discoveries, of contemporary literature, and of achievements of medical science” (7). He often spoke to young Kalam about “the power of positive thinking” and Kalam “tried hard to do as he said, which was to strive to control
my thoughts and my mind and, through these, to influence my destiny” (11). Kalam aptly concedes the key role played by Jallaludin in his upbringing: “It was he who made me aware of a “brave, new world” beyond our narrow confines” (Ibid).

Samsuddin, Kalam’s cousin was “another person who greatly influenced my childhood” (7). He was a newspaper distributor, who turned out to be Kalam’s ‘friend, philosopher and guide’. He taught Kalam the value of hard work and convinced him of the importance of self-reliance in a person’s life. During the Second World War, he took Kalam with him to the nearby railway station to catch bundles of newspapers thrown from the train and paid him for that work. Kalam recalls, “Samsuddin helped me earn my first wages. Half a century later, I can still feel the surge of pride in earning my money for the first time” (8). Towards the end of the first chapter, Kalam underscores the pivotal part each of these two played in making meaningful his crucial ‘salad days’:

…it was the time I spent with Jallaluddin and Samsuddin that perhaps contributed most to the uniqueness of my childhood and made all the difference in my later life. The unschooled wisdom of Jallaluddin and Samsuddin was so intuitive and responsive to non-verbal messages, that I can unhesitatingly attribute my subsequently manifested creativity to their company in my childhood (8).

As a student, Kalam was fortunate to have the scholarly guidance of some highly devoted teachers. At Schwartz High School, he came in contact with Iyadurai Soloman. To him, Soloman was “an ideal guide for an eager young mind that was yet uncertain of the possibilities and alternatives that may lay before it” (12). He exercised “enormous influence” over Kalam’s future life and their relationship “grew beyond that of teacher and pupil” (Ibid). Soloman trained Kalam to “understand and master three mighty forces- desire, belief, and
expectation” (Ibid). Kalam alludes to the most significant contribution extended by his beloved teacher in boosting his courage and confidence: “Soloman raised my self-esteem to a high point and convinced me…that I could aspire to become whatever I wished” (13). Thanks to such teachers, by the time he completed his education at Schwartz, he was “a self-confident boy, determined to succeed” (Ibid).

In 1950, Kalam arrived at St. Joseph’s College, Trichi, to study for the Intermediate examination. Soon he realised that, just like many wizards, he “was not a bright student in terms of examination grades but… had acquired a practical bent of mind” (Ibid). He spent four years on St. Joseph’s campus. During all those years, he shared his hostel room with an orthodox Iyengar and a Catholic Christian! The zeal and dedication of the missionary teachers like Rev. Father T N Sequeria left a lasting impression on Kalam’s mind. It was at the same time that he acquired “a taste for English literature”, which retained throughout his future life (14).

After doing B.Sc. (Physics) at St. Joseph’s, Kalam joined Madras Institute of Technology (MIT) for further studies. Apart from the marks he has secured, he could get admission to this institute because his sister Zohara firmly stood behind him and mortgaged her gold ornaments to raise the initial amount for donation. This shows that every success is a combined effort backed by a collective will. Deeply touched by Zohara’s sacrifice, Kalam determined to earn money in order to release her jewellery. He mentions, “The only way before me to earn money at that point of time was to study hard and get a scholarship. I went ahead at full steam” (16-17). At MIT, three teachers shaped his thinking. “Their combined contributions”, Kalam writes, “formed the foundation on which I later built my professional career” (17).
Kalam describes the third (last) year at MIT as “a year of transition” which “was to have a great impact on my later life” (19). At that time, he confronted with a conflict between the prevailing scientific temper and his own spiritual interests. He comments:

I had to test my belief in God and see if it could fit into the matrix of scientific thinking. The accepted view was that a belief in scientific methods was the only valid approach to knowledge. If so, I wondered, was matter alone the ultimate reality and were spiritual phenomena but a manifestation of matter? Were all ethical values relative, and was sensory perception the only source of knowledge and truth? ...The value system in which I had been nurtured was profoundly religious. I had been taught that true reality lay behind the material world in the spiritual realm, and that knowledge could be obtained only through experience (19).

Ultimately, however, he managed to conquer over this dilemma and arrived at a conclusion that both science and spirituality were complementary to each other, and that their relationship was not combative at all.

Kalam left MIT to join Hindustan Aeronautics Limited (HAL) at Bangalore as a trainee. He earnestly wished to make a career in the Air Force and fly airplanes. But his long-cherished desire to fly was not fulfilled. Instead he got an appointment as Senior Scientific Assistant at Directorate of Technical Development and Production (DTD & P) of the Ministry of Defence. His indomitable spirit and optimistic bent of mind saved him from frustration. He mentions: “If this was to be my destiny, I thought, let it be. Finally I was filled with mental peace. No more did I feel any bitterness or resentment at my failure to enter the Air Force” (25).
Thenceforth, there was consistent rise in the burden of responsibilities Kalam had to shoulder. Initially he was sent to the Aircraft and Armament Testing Unit at Kanpur and then was posted to Aeronautical Development Establishment, Bangalore. He was made leader of a project team which had a mission to design and develop an indigenous hovercraft prototype as a Ground Equipment Machine (GEM). A span of three years was given to the team to launch the engineering model. Accepting formidable challenges and defeating the adversities is as if in the blood of Kalam. The task he had to accomplish was quite difficult. He had to face problems on all fronts because the project was gigantic by any standards and the team lacked experience as well as equipment. These unfavourable circumstances did not, however, deter Kalam in the least because, as he affirms, “I knew that I had to create my own opportunities” (28).

While working on the project, Kalam realised that, “once your mind stretches to a new level, it never goes back to its original dimension” (28). V K Krishna Menon, the then Defence Minister, was quite pleased with Kalam’s devotion and determination. He encouraged the entire team a lot. But Kalam’s senior colleagues did not approve of his efforts. In reality, they were envious of this enthusiastic and resourceful young man who outshone them in every respect. Out of jealousy, they used to make derogatory comments on Kalam and his team-mates. Kalam recollects this bitter experience: “Many even called us a group of eccentric inventors in pursuit of an impossible dream. I being the leader of the “navies”, was a particularly inviting target. I was regarded as yet another country bumpkin who believed that riding the air was his domain” (28). All this had a quite discouraging impact on Kalam’s sensitive mind. He admits, “The weight of opinion against us buttressed my ever-optimistic mind” (Ibid). However, against all odds, they successfully completed the project well in time. Krishna Menon himself flew in the designed aircraft, named ‘Nandi’, and
congratulated the team for its commendable job. He promised to offer them all sort of support to devise a more powerful hovercraft. But he soon left the Defence Ministry and the project was shelved all of a sudden. It was a heart-breaking experience for Kalam: “So far I had believed that the sky was the limit, but now it appeared that the limits were much closer. There are boundaries that dictate life: you can only lift so much weight; you can only learn so fast; you can only work so hard; you can only go so far” (30). He was utterly “disappointed and disillusioned” (Ibid). In this period of confusion and uncertainty, he was called to attend an interview for the post of Rocket Engineer. He was interviewed by Dr. Vikram Sarabhai, who later on became his mentor. Impressed with Kalam’s potential, Sarabhai absorbed him in Indian Committee for Space Research (INCOSPAR). Acquaintance with Prof. Sarabhi and entry into INCOSPAR proved to be a turning point in Kalam’s life. He describes it as “a breakthrough a young man like myself dreamed of” (31). Very soon, he was asked to proceed to America for a six-month training programme at National Aeronautics and Space Administration (NASA). Thus the first phase in his life came to a happy end.

The second section of *Wings of Fire*, entitled ‘Creation’, is the longest one in the book, spanning over seventy pages. This is, in fact, the most productive chapter in Kalam’s life as a scientist and technocrat. It throws light on Kalam’s tireless quest towards excellence which not only resulted into his worldwide recognition as the ‘Missile Man’ but also placed India in the company of the G 5. India’s identity as tomorrow’s super power mainly rests on its fabulous progress in science and technology, which owes a lot to the committed crusaders like Kalam.

Unique quality of subtle observation coupled with an ability to think objectively makes Kalam an authentic narrator. After completing his advanced
training at NASA, Kalam returned home in 1963. While working in India, Kalam was exposed to the ugly facet of the Indian mindset. Strongly reminiscent of Anurag Mathur’s interpretation in his debut novel, *The Inscrutable Americans* (1991), he analyses the typical Indian mentality in a realistic manner:

> What makes life in Indian organisations difficult is the widespread prevalence of … contemptuous pride. It stops us from listening to our juniors, subordinates and people down the line… The line between firmness and harshness, between strong leadership and bullying, between discipline and vindictiveness is very fine, but it has to be drawn. Unfortunately, the only line prominently drawn in our country today is between the ‘heroes’ and the ‘zeroes’… This situation has to be changed (38).

India’s first rocket launch took place on 21 November, 1963. Kalam gives the credit of India’s slow yet steady advancement in rocket technology to the visionary leadership of Prime Minister Jawaharlal Nehru and ideal headship of Prof. Sarabhai. Very soon, Kalam designed and developed two truly Indian rockets named ‘Rohini’ and ‘Menaka’. Sensing his aptitude and competence, Sarabhai put a huge responsibility of developing a rocket-assisted Take-off System (RATO) for military aircrafts on his shoulders. This news suddenly brought Kalam into limelight. He was filled with various emotions- “happiness, gratitude, a sense of fulfilment” (51). In 1969, Sarabhai assigned yet another task to Kalam, which was to design the fourth stage of an Indian Satellite Launch Vehicle (SLV). Kalam “laid the foundation for Stage IV on two rocks-sensible approximation and unawed support” (58). With immense commitment and unique devotion, his team completed the mission. But all of a sudden, their French associates changed their policy and declared that they did not need SLV
IV at all. This was “a great shock” for Kalam who had invested “great hope and effort” in that project (60).

The true credit of finding out Kalam’s exceptional qualities and moulding his character as well as career goes to two visionary scientists – Prof. Vikram Sarabhi and Dr. Brahma Prakash. Kalam regards the two as his God-fathers and is highly indebted to both of them. Unfortunately, they died at the point when Kalam gravely needed their guidance and support. The news of the untimely demise of Prof. Sarabhai shook Kalam to the roots. Kalam bewails: “I was shocked to the core…It was a great blow to me and a huge loss to Indian science” (63). He registers the same kind of reaction on hearing the tidings of the decease of Dr. Bramha Prakash fourteen years later:

It was a great emotional loss for me, for I had had the privilege of working under him during the most challenging period of my career…Dr. Bramha Prakash played a very important role in shaping my leadership skills. In fact, my association with him was a turning point in my life. His humility mellowed me and helped me discard my aggressive approach (128).

*Wings of Fire* may be looked upon as a valuable guide to the management students and administrative officials. It is as if a gospel that includes a wealth of wisdom on time management, event management and human resource management. An overview of Kalam’s achievements proves the fact that success is not an accident but an outcome of patience and persistent pursuit. Kalam reveals the ‘sutra’ of his success in the following words: “I have always considered the price of perfection prohibitive and allowed mistakes as a part of the learning process. I prefer a dash of daring and persistence to perfection” (58). According to him:
To succeed in your mission, you must have single-minded devotion to your goal…Total commitment is a crucial quality for those who want to reach the very top of their profession. The desire to work at optimum capacity leaves hardly any room for anything else…Total commitment is the common denominator among all successful men and women (89-90).

He further mentions, “All of us carry some sort of super-intelligence with us. Let it be stimulated to enable us to examine our deepest thoughts, desires and beliefs” (90). He has a priceless advice for everyone to follow:

Your willingness to use your own inner resources to invest your life, especially your imagination, will bring you success. When you undertake a task from your own uniquely individual standpoint, you will become a person…Life is a difficult game. You can win it only by retaining your birthright to be a person. And to retain this right, you will have to be willing to take the social or external risks involved in ignoring pressures to do things the way others say they should be done…As Pythagoras had said twenty-five centuries ago, “Above all things, reverence yourself” (176).

One seldom gets an ideal situation to work in, yet one has to manage to overcome the hurdles. Kalam exemplifies, “Within my own small group of people I found leaders, and learned that leaders exist at every level” (60).

When Kalam took the reins of the ‘Vikram Sarabhai Space Centre’ (VSSC) in his hands, he had to face countless difficulties. While he needed 275 engineers and scientists to finish the job, he could recruit only 50! In spite of this, he fulfilled the task displaying exceptional managerial skills and administrative talent. For this, he adopted a fine balance between the ‘hands on’ and ‘hands off’ approach. As the Project Manager of SLV-3, he followed a planned routine which throws light on his habit of pre-planning. He recalls: “I
used to prepare a general schedule during my morning walk, and emphasize two or three things I would definitely like to accomplish during the day, including at least one thing that would help achieve long-term goals” (69). Kalam stresses the want to develop team spirit among the persons working in the same unit. He is known as “a welder of people” for his dexterity to ignite the sense of fellow-feeling in the people who have little common in them. This can be done, according to him, through constant two-way communication. He attributes the success of SLV 3 project to the “mantra” of effective communication (75). Conversation is generally held synonymous to communication. Kalam rightly points out the difference between the two. As he holds:

Most of the time, communication gets confused with conversation. In fact, the two are distinctly different. I was (and am) a terrible conversationalist but (I) consider myself a good communicator. A conversation…is most often devoid of any useful information, whereas communication is meant only for the exchange of information. It is very important to realise that communication is a two-party affair which aims at passing on or receiving a specific piece of information (76).

Kalam possesses a fighting spirit which is the hallmark of greatness. His words are filled with energy and motivation. Most of Kalam’s advice is youth-centric. He makes a passionate appeal to the young readers many a time in this book. “Be active! Take on responsibility! Work for the things you believe in. If you do not, you are surrendering your fate to others”, he asserts (77). Concerned about the fate of this “future of India”, Kalam is intent on leading them to the right destination. In fact, guiding the youth and providing them a motivation is a prominent intention behind the conception of this autobiography:
The biggest problem Indian youth faced, I felt, was a lack of clarity of vision, a lack of direction. It was then that I decided to write about the circumstances and people who made me what I am today; the idea was not merely to pay tribute to some individuals or highlight certain aspects of my life. What I wanted to say was that no one, however poor, underprivileged or small, needs to feel disheartened about life. Problems are a part of life. Suffering is the essence of success (167).

He further unfolds his purpose thus:

There has been much speculation and philosophising about the life and times of our scientists, but not enough exploration in determining where they wanted to go and how they reached there. In sharing with you the story of my struggle to become a person, I have perhaps tied to give you some insight into this journey. I hope it will equip at least a few young people to stand up to the authoritarianism in our society (175).

According to him, there are four basic factors involved in successful outcomes: “goal-setting, positive thinking, visualising and believing” (136). His thoughts on leadership qualities are worth reading in the original: “Anyone who has taken up the responsibility to lead a team can be successful only if he is sufficiently independent, powerful and influential in his own right to become a person to reckon with” (Ibid). He further adds:

A leader can only be free to lead his team if he keeps abreast of all that is happening around him- in real time. To lead, in a way, is to engage in continuing education…To be a successful leader, one has to stay back after the din and clutter of a working day to emerge better-equipped and ready to face a new day (78).
In his view, “The leader must be capable of instilling enthusiasm in his team. He should give appropriate credit where it is due; praise publicly, but criticise privately” (124). Surprisingly enough, Kalam prefers a leader to lead a lonely and isolated life because he finds “demands of relationships” very difficult to tackle with. The closer the contact, he thinks, the more problems it creates. For instance, “Through loyalty to a close friend one can be easily led into doing something that is not in the best interests of the organisation” (121).

_Wings of Fire_ includes certain terms coined himself by Kalam. He also tends to put in new perspective into the existing terms. For instance, he refers to “performance dimensions” during his discussion on efficiency and creativity. He defines them as

…factors that lead to creation. They go beyond competencies such as the skills and knowledge of the individual… They include attitudes, values and character traits. They exist at various levels of the human personality… If we can identify those performance dimensions which are highly correlated with job success, we can put them together to form a blueprint for outstanding performance in both thought and action (81-82).

‘Flow’ is yet another term used by Kalam in a deeper sense, implying the trance state of mind. As he remarks:

Flow is a sensation we experience when we act with total involvement. During flow, action follows action according to an integral logic that seems to need no conscious intervention on the part of the worker. There is no hurry; there are no distracting demands on one’s attention. The past and the future disappear. So does the distinction between self and the activity (91).
While marching ahead on the path of progress, Kalam received three severe blows in quick succession between 1974 and 1976. He lost his beloved brother-in-law Jallaluddin and both of his parents. His reactions to these utterly distressing incidents are indicative of his mood and mentality. Jallaluddin’s untimely death made him numb and sealed his senses:

For a couple of minutes, I was immobilised; I could not think, could not feel anything. When I could focus on my surroundings once more and attempted to participate in the work, I found myself talking incoherently- and then I realised that, with Jallaluddin, a part of me had passed away too…I felt that I had been thrown into a whirlpool of time and space…Perhaps Jallaluddin went a little too early, a little too soon. I could not bring myself to stay for long at home. I felt the whole of my inner self drowning in a sort of anxious agitation, and inner conflicts between my personal and professional life. For many days, I felt a sense of futility I had never known before—about everything I was doing (83-84).

Father’s death at the age of 102, was not that much shocking for Kalam. He accepted it as a law of nature. Kalam pays tribute to his simple father in unadorned style: “He had lived an exemplary life…He was not a politician, a scholar, or a businessman. He was a plain and transparent man. My father pursued the supreme value, the Good. His life inspired the growth of all that was benign and angelic, wise and noble” (86).

Kalam experienced a dilemma over his duty as a son and his professional commitments after his father’s death. His mother wanted him to stay with her but he refused to obey. Perhaps she knew that her race was nearly run. But Kalam could not read her mind. He later laments: “Was I too stubborn or was I too preoccupied with the SLV? Should I not have forgotten for a while my own
affairs in order to listen to her? I regretfully realised this when she passed away soon afterwards” (86).

The successive demise of the persons closest to his heart made Kalam lonely and helpless for a while. But he heroically overcame this huge loss. With full momentum, he proceeded towards his goal:

With three deaths in the family in as many successive years, I needed total commitment to my work in order to keep performing. I wanted to throw all my being into the creation of SLV. I felt as if I had discovered the path I was meant to follow, God’s mission for me and my purpose on this earth. During this period, it was as though I had pushed a hold button- no badminton in the evenings, no more weekends on holidays, no family, no relations, not even any friends outside the SLV circle (89).

The SLV project reached its completion stage in 1979. The first experimental flight trial of SLV 3 was scheduled on 10 August, 1979. On that day, the 23 meter-long, four-stage SLV rocket weighing 17 tonnes took off elegantly. Stage I performed to perfection but the second stage went out of control. As a result, the flight was terminated and the rocket, with all its spares, splashed into the sea. Kalam experienced “profound disappointment”. He narrates this heart-shattering experience thus:

I felt a strange mix of anger and frustration. Suddenly, I felt my legs became stiff that they ached. The problem was not with my body; something was happening in my mind. The premature death of my hovercraft ‘Nandi’, the abandoning of the RATO, the abortion of the SLV- all came alive in a flash, like a long-buried Phoenix rising from its ashes. Over the years, I had somehow learned to absorb these aborted endeavours, had come to terms with them and pursued fresh
dreams. That day I relived each of these setbacks in my deep despondency (93).

Kalam squarely accepted the responsibility of the SLV 3 crush. He spent hours together in isolation, “to withstand apparently irreversible setbacks” like his recent failure (97). He had full faith in his capabilities. He realised that he “had a long way to go” and decided to move ahead “in little steps- just one step after another- but each step towards the top” (98).

After a gap of eleven months, the SLV 3 was successfully launched into the air and the ‘Rohini’ satellite, carried as payload, was sent into the space. This was a great event for the whole nation and it was celebrated in a grand manner. This achievement epitomised Kalam’s endurance and perseverance. In this way, India made its entry into the small group of nations having satellite-launching capacity. Of course India’s success in this field mainly rests on the incomparable devotion and determination displayed by Kalam. To quote Kalam, “It was both the culmination of a national dream, and the beginning of a very important phase in our nation’s history” (100). On personal level, it was, for him, a unique occasion but he experienced “mixed feelings”: “I was happy to achieve the success which had been evading me for the past two decades, but I was sad because the people who had inspired me were no longer there to share my joy- my father, my brother-in-law Jallaiuddin, and Prof. Sarabhai” (Ibid).

Very soon, Kalam got himself relieved of this project and took up the position of Director, Aerospace Dynamics and Design Group. By now, he was a celebrity and he encountered with an “unpalatable truth” that “by becoming the focus of media attention, I had aroused envy among some of my senior colleagues, all of whom had equally contributed to the success of SLV 3” (102). Kalam was “severely hurt” by their “coldness” and “sense of bitterness”
because, as he asserts, “I have never lived off the profit of others’ minds. My life, in keeping with my nature, has never been that of a ruthless achiever” (102).

Thus, the success of the SLV 3 project brought for Kalam many tribulations and made him restless. He comments:

> My world, by now, had no simplicity left in it. It had become an internally complex and extremely difficult world. My efforts in rocketry and in achieving the goal of making indigenous rockets were impeded by external obstacles and complicated by internal wavering. I was aware that it required a special effort of the will to sustain my trajectory. The coordination of my present with my past had already been jeopardized. The coordination of my present with my future was uppermost in my mind (104).

At this juncture, Kalam was conferred upon the much-coveted ‘Padma Bhushan’ award. It was a pleasant surprise for him. Unfortunately, once again, he had to face the rivalry of some of his own colleagues “who felt I was being unduly singled out for recognition” (106). Fed up with this all, Kalam decided to say goodbye to ISRO where he had spent 18 valuable years. His decision was guided by his “inner voice” which told him “that the time had come for a long felt, but ignored, need for renewal” (106). He dearly sensed the need to “clean (his) slate and write new ‘sums’” (Ibid). On deep meditation, he arrived at an imperative conclusion: “Happiness, satisfaction and success in life depend on making the right choices, the winning choices. There are forces in life working for you and against you. One must distinguish the beneficial forces from the malevolent ones and choose correctly between them” (Ibid). With a view to make the right choice, Kalam took the decision to join the DRDL. He willingly accepted the responsibility to shape the ‘Guided Missile Development
This was the beginning of a new phase in his life, the phase that attributed to him the global identity as the ‘Missile Man’.

Kalam took the charge of the post of the Director of the DRDL on 1st June, 1982. At the outset, he realised that the intellectual climate and working conditions in the laboratory were not at all encouraging. He draws a word-picture of the bleak scenario at the DRDL:

This laboratory was still haunted by the winding up of the Devil missile project. Many excellent professionals had not yet recovered from the disappointment… (They were) living with the pain of dashed hopes. There was a widespread feeling that the laboratory had been cheated by the senior officials in the Ministry of Defence (111).

Kalam’s prime concern was to boost the morale of his colleagues and set the DRDL on a right track. The efforts he took are exemplary of visionary leadership. Kalam adopted interactive method and started inviting experts from well-known institutions like the IIT, CSIR, etc. to converse with the DRDL team. Thus he tried to provide “a breath of fresh air to their choked lungs” (112). In order to accelerate the pace of the R & D activities, he took some progressive decisions. The most significant was to design and develop the ‘Guided Missile Development Programme’ for the production of indigenous missiles. This programme was formally launched on 27 July, 1983. Kalam regards it “the second most significant day in my career, next only to 18 July, 1980, when the SLV 3 had launched ‘Rohini’ into the earth’s orbit” (118). With consistent follow-up, Kalam succeeded in getting sanctioned an amount of Rs. 338 Crores out of the total estimated expenditure of the programme, Rs. 390 Crores. Thus the Surface-to-Surface weapon system, ‘Prithvi’, the Tactical Core
Vehicle, ‘Trishul’, the Surface-to-Air area defense system, ‘Akash’ and the anti-tank missile project, ‘Nag’ were born.

During this entire period, Kalam almost detached himself from the rest of the world. He deliberately avoided all sorts of social contacts because the only desire he had was “to be true to my way of life, to uphold the science of rocketry in my country and retire with clean conscience” (121). He was determined to devote himself for the fulfilment of the promises he had made to himself. Of course, his task was not at all easy. He had to face difficulties mainly due to the non-cooperation of most of his team members who were “full of egotism and rebelliousness” (Ibid). The launch of ‘Agni’ had to be aborted twice due to technical problems. As a result, Kalam and his team had to face severe criticism from all corners of the country. The press, the sole powerful medium of the times, bitterly reacted to this failure and booed the scientists involved in this operation. Kalam’s team members were extremely upset and were “in a state of shock and sorrow” (150). This made his mission more complicated because, scientists, he informs, “are basically emotional people. Once they stumble, it is difficult for them to pull themselves together” (123). However, as a true leader and trouble-shooter, he succeeded in winning their confidence. While addressing his teammates, he made them aware of their responsibility and appealed them to drop their weapons down: “A great opportunity has been given to us. Naturally major opportunities are accompanied by equally major challenges. We should not give up and we should not allow the problem to defeat us. The country doesn’t deserve anything less than success from us. Let us aim for success” (151). No wonder, he calls the successful launching of ‘Agni’ “one of the greatest moments of my life” (152). Kalam exhibited extraordinary courage and exemplary leadership, in the absence of which none of the missions designed and dreamed of would
ever have been ever accomplished. At this juncture, he felt the need to establish a high-tech research centre with all advanced facilities. With this vision, he created the Research Centre Imarat (RCI). He regards it a major achievement in his life. In his own words: “Creating the RCI was perhaps the most satisfying experience of my life. Developing this centre of excellence of missile technology was akin to the joy of a potter shaping artefacts of lasting beauty from the mundane clay” (127).

Kalam’s focus in Wings of Fire is mainly on his own domain, that of science and technology. The book is almost devoid of socio-political context. There are very few references to political personalities in his autobiography. Though born in the pre-independence era, Kalam has hardly anything to say about the tyrannical British rule or the Indian freedom struggle. Indeed, while defending India’s policy to manufacture missiles and gain core competence in rocketry, he acclaims the noble sacrifice made by the martyrs:

In today’s world, technological backwardness leads to subjugation…It is our bounden duty to guarantee the security and integrity of our nation against this threat. Should we not uphold the mandate bequeathed to us by our forefathers who fought for the liberation of our country from imperialism? Only when we are technologically self-reliant will we be able to fulfil their dream (154).

As a general rule, he keeps himself away from the controversial issues like partition, post-partition riots, the Indo-Pak wars, the Babri Masjid demolition and its outcome, etc. What is shocking, above all, is the fact that he does not allude to Mahatma Gandhi even once in this autobiography. At this backdrop, it is surprising that he has high esteem for the Nehru-Gandhi family. He ascribes India’s progress in rocket technology and space research to Pandit Nehru’s farsighted leadership. He describes Indira Gandhi as “a person with tremendous
sense of pride- in herself, in her work and in her country” (128). He also admits, “She instilled some of her own pride into my otherwise modest frame of mind” (129). What appealed him most was her keen interest in the functioning of the DRDL. The news of Indira Gandhi’s assassination shocked him much. He grieves, “Shrimati Gandhi’s death was a tremendous loss to the scientific community. She had given impetus to scientific research in the country” (133). Kalam also praises Rajiv Gandhi for carrying forward the courageous policies of his mother with equal fervour. He states: “Madam Gandhi was a taskmaster, whereas Prime Minister Rajiv Gandhi used his charisma to achieve his ends” (134). However, there is no citation of the untimely assassination of Rajiv Gandhi.

The last section of the autobiography, entitled ‘Contemplation’, covers the span of eight years in Kalam’s life, from 1991 to 1999. True to its title, this section includes Kalam’s spiritual moorings and serious contemplations. He seems to be in the mood of retirement from active life and spend his time in the company of the sweet-sore memories from the past. He seems to be least aware of the supreme responsibility he is going to shoulder in the near future, as the president of India. On receiving the ‘Padma Vibhushan’ award in 1990, Kalam reflects:

Memories of the Padma Bhushan awarded a decade ago came alive. I still lived more or less as I lived then- in a room ten feet wide and twelve feet long, furnished mainly with books, papers and a few pieces of hired furniture. The only difference was at that time, my room was in Trivandrum and now it was in Hyderabad…I was touched by the recognition bestowed on me by my countrymen (160).

At the same time, he touches upon an important issue faced by our country in the present century, that of “brain drain”. His commentary on the
futility of going abroad just for the sake of wealth is thought-provoking: “A large number of scientists and engineers leave this country at their first opportunity to earn more money abroad. It is true that they definitely get greater monetary benefits, but could anything compensate for this love and respect from one’s own countrymen?” (Ibid) A flock of the touching memories of his eventful life knocks upon his ‘inward eye’, making him emotional. Strongly remembering the persons who developed his personality and shaped his career, he contemplates:

The sand and shells of Rameswaram, the care of Iyadurai Soloman in Ramanathapuram, the guidance of Rev. Father Sequeria in Trichi and Prof. Pandalai in Madras, the encouragement of Dr. Mediratta in Bangalore, the hovercraft ride with Prof. Menon, the pre-dawn visit to the Tilpat range with Prof. Sarabhai, the healing touch of Dr. Bramha Prakash on the day of SLV 3 failure, the national jubilation on the SLV 3 launch, Madam Gandhi’s appreciative smile, the post-SLV 3 simmering at VSSC, Dr. Ramanna’s faith in inviting me to DRDO, the IGMDP, the creation of RCI, Prithvi, Agni…a flood of memories swept over me. Where were all these men now? My father, Prof. Sarabhai, Dr. Bramha Prakash? I wished I could meet them and share my joy with them (160).

By now, Kalam had become a well-known figure of international repute. He was showered by various honours and awards. He remembers in particular the honour of Ph.D. conferred upon him by the Jadhavpur University, along with Nelson Mandela. He introspects:

What could I possibly have in common with a legend like Mandela? Perhaps it was our persistence in our missions. My mission of advancing rocketry in my country was perhaps nothing when compared with Mandela’s mission of achieving
dignity for a great mass of humanity; but there was no
difference in the intensity of our passions (162).

On 15th October, 1991 Kalam turned sixty. The seed of penning *Wings of Fire*
was sown into his mind the same time: “It was during this period that I decided
to put down my memories and express my observations and opinions on certain
issue” (166). Kalam explains at length his authorial intentions which have an
intellectual underpinning:

It has been my observation that most Indians suffer
unnecessary misery all their lives because they do not know
how to manage their emotions. They are paralysed by some
sort of psychological inertia…Why not write about the deep-
rooted Indian character traits which manifest themselves in
such widespread, self-defeatist thought patterns and negative
behaviour? I have worked with many people and
organisations and have had to deal with people who were so
full of their own limitations that they had no other way to
prove their self-worth than by intimidating me. Why not write
about the victimisation which is a hallmark of the tragedy of
Indian science and technology? And about the pathways to
organisational success? Let the latent fire in the heart of every
Indian acquire the wings, and the glory of this great country
light up the sky (168).

The intertextual influence on *Wings of Fire* is quite potent and
perspicuous. It tags on Genette’s concept of *architextuality*, which represents
the relationship between a text and the genre it belongs to. Sometimes, Genette
contends, this relationship is quite obvious. The present book fits into this
category because architextuality is displayed in its title itself, printed on the
cover as *Wings of Fire: An Autobiography*. True to the conventional framework
of its genre, the book records its protagonist’s journey from adolescence to
maturity, from obscurity to popularity. The structure of the book is typical and traditional. Its division into separate segments, too, is imitative of some of the classic autobiographies in English as well as Indian English literature viz. Mahatma Gandhi’s *The Story of My Experiments with Truth* (1927). There are a number of photographs, covering the significant events in Kalam’s life.

The autobiography opens with a hymn from *Atharva Veda*, the famous Hindu scripture, which sings the glory of God:

This earth is His, to Him belong those vast
and boundless skies;
Both seas within Him rest, and yet in that small pool He lies (I).

This quotation sets the tone of the entire narrative, which has a tint of spirituality. There are many such references which appear throughout this autobiography. When Kalam went to Mumbai to attend an interview at the INCOSPAR for the post of Rocket Engineer, he was under tremendous pressure. At that time, he mentions, “Lakshamana Sastry’s voice quoting from the *Bhagwad Gita* echoed in my ears” (31). Twice in the book, Kalam alludes to the *Holy Qu’ran* (on page no. 67 and at the beginning of ‘Contemplation’), demonstrating his faith in the Islam.

Kalam spent four years on St. Joseph’s campus. It was at the same time that he acquired “a taste for English literature”, which retained throughout his future life (14). In the ‘Epilogue’, Kalam acknowledges his mother’s greatness in a poetic fashion. There is a statement in this epilogue which is clearly an unconscious imitation of Robert Frost’s closing quatrain from his immortal poem, *Stopping by Woods on a Snowy Evening*:

I remember the war days when life was challenge and toil
Miles to walk, hours before sunrise (98).
Kalam has Miltonic faith in God’s grace. He proclaims:

This is my belief that through difficulties and problems, God gives us the opportunity to grow. So when your hopes and dreams and goals are dashed, search among the wreckage, you may find a golden opportunity hidden in the ruins (140).

Throughout this autobiography, he seems to carry forward, in his own way, Milton’s mission of justifying God’s ways to man. That Kalam is considerably influenced by Milton’s theist philosophy while going through his epic *Paradise Lost* is evident from the following excerpt: “As I see it, the earth is the most powerful and energetic planet. As John Milton puts it so beautifully in *Paradise Lost*, Book VIII:

What if the Sun  
Be centre to the World, and other stars…  
The planet earth, so steadfast though she seem,  
In sensibly three different motions move? (15)

Quite obviously, Kalam is more interested in reading poetry than any other genre of literature. That is why, majority of intertextual associations of this *Wings of Fire* are poetic. V K Krishna Menon, the then Defence Minister of India, chose Kalam the leader of a project team which had a mission to design and develop an indigenous hovercraft prototype as a Ground Equipment Machine (GEM). Many of his elder colleagues did not like this appointment. Out of envy, they made Kalam a target of fun and mockery. Their comments reminded him of “John Trowbridge’s famous satirical poem on the Wright Brothers, published in 1896” (28). On hearing the news of his appointment as the Project Manager of a team to develop a Rocket Take-off System (RATO) for military aircraft, Kalam was “filled with many emotions- happiness,
gratitude, a sense of fulfilment” and “these lines from a little-known poet of the nineteenth century crossed (his) mind:

For all your days prepare, and meet them ever alike
When you are the anvil, bear; when you are the hammer, strike (51)

At the RATO project, Kalam was assisted by Capt. Narayana, who was a quite ambitious and enthusiastic person. Kalam remarks, “I often laughed at his impatience, and read for him these lines from T.S.Eliot’s *Hollow Men*:

Between the conception and the creation,
Between the emotion and the response,
Falls the shadow. (54)

Kalam and his team put their best for the success of the ‘Devil’ project. He reports: “In all, the results accomplished were outstanding, but we still had a long way to go. I recalled a school poem…” (75). Kalam found striking similarity between Dr. Brahma Prakash’s advice to him and “Emerson’s poem on Brahma” (97). After receiving the much-coveted Padma Bhushan, Kalam found that some of his close associates turned envious as they felt that he had been unduly singled out for recognition. To justify his innocence, he quotes the following lines from Lewis Carroll’s poem:

You may charge me with murder or want of sense
But the slightest approach to pretence
Was never among my crimes! (106)

Similarly, when he joined the DRDL, “the general mood and work tempo” reminded him of the often quoted lines from Samuel Taylor Coleridge’s famous poem, *The Rime of the Ancient Mariner*:

Day after day, day after day
We stuck, nor breath, nor motion;
As idle as a painted ship
Upon a painted ocean (111)

He refers to the same poem again, to indicate the poor rapport between the scientists working at DRDL.

Kalam firmly believes that every one of us has a divine internal power within ourselves. He holds that we sometimes get an opportunity to establish contacts with God, not directly, but “from an encounter with another person, from a word, a question, a gesture or even a look. Many a time, it could come even through a book…” (49) Kalam recounts an experience to show how he found the meaning of his existence and his goal in life accidently through a book, when he had been to Delhi on an urgent meeting with Prof. Sarabhai:

I contacted Prof. Sarabhai’s secretary for an appointment and was asked to meet him at 3.30 a.m. at Hotel Ashoka…I decided to wait in a hotel lounge after I finished my dinner…I looked around the elegant lounge. Somebody had left a book on a nearby sofa…it was some popular book related to business management…Suddenly my eyes fell on a passage in the book, it was a quotation from George Bernard Shaw. The gist of the quote was that all reasonable men adapt themselves to the world. Only a few unreasonable ones persist in trying to adapt the world to themselves. All progress in the world depends on these unreasonable men and their innovative and often non-conformist actions (49).

Kalam indirectly acknowledges the influence of Khalil Gibran, the mystic writer, on his mind, when he argues, “I often read Khalil Gibran, and always find his words full of wisdom” (45). There is also a passing reference to the Mahabharata, the saga which is closer to every Indian heart. Kalam remarks that he chose “five Pandavas” who were “married to the Draupadi of
positive thinking” to lead the five projects—‘Prithvi’, ‘Trishul’, ‘Agni’, ‘Akash’ and ‘Nag’—included under the ‘Guided Missile Development Programme’ (124). On his official visit to the USA, Kalam spared time to visit the Crystal Cathedral built by his “favourite author, Robert Schuller” (134). He cites two memorable statements by Schuller, which seem to have made a lasting impact on him: “God can do tremendous things through the person who doesn’t care about who gets the credit. The ego involvement must go” and “Before God trusts you with success, you have to prove yourself humble enough to handle the big prize” (134).

Apart from poems, religious scriptures and inspiring books, Kalam also alludes to few newspaper cartoons and a professional advertisement which represent the scathing criticism of the print media on the twice postponing of the launch of ‘Agni’:

*The Hindustan Times* showed a leader consoling press reporters, “There’s no need for any alarm…it’s purely peaceful, non-violent missile…” *The Hindu* carried a cartoon by Keshav, showing a villager counting some currency notes and commenting to another, “Yes, it’s the compensation for moving away from my hut for the test site- a few more postponements and I can build a house of my own…” Another cartoonist designated ‘Agni’ as “IDBM-Intermittently Delayed Ballistic Missile”. Amul’s advertisement suggested that what ‘Agni’ needed to do was to use their butter as fuel! (150-51)

The researcher would like to draw attention to the fact that the major lacuna of *Wings of Fire* is absence of an important phase in Kalam’s life—his presidential tenure. The researcher felt that an addition to the present body of the book by a separate chapter including Kalam’s experiences during his
presidential period would surely enhance its literary value and add to its historical importance. However, Kalam’s recently released book, *Turning Points* (2012), is indeed a kind of sequel to the earlier one. It deals with the same topic and thereby nullifies this drawback. As the blurb of the book reveals, “*Turning Points* takes up the incredible Kalam story from where *Wings of Fire* left off. It brings together details from his career and presidency that are not generally known as he speaks for the first time on certain points of controversy”. Another vital shortcoming of the autobiography, like many others in Indian English literature (except M.K. Gandhi’s *The Story of My Experiments with Truth* and Kamala Das’s *My Story*), is the protagonist’s absolute silence on the topic of sexuality, which is an essential component of one’s identity and personality. These flaws apart, the narrative covers almost all aspects of Kalam’s multifarious life.

In summation, Kalam’s *Wings of Fire* offers a candid account of his personal as well as professional struggles. It displays various influences on his personality which went on to develop his identity. Many of his prominent qualities are reflected through this autobiography, such as absolute honesty, fighting spirit, indomitable will power and adherence to certain principles as well as ethics. Moreover, it highlights Kalam’s undying pursuit to attain an exclusive identity of his own, while representing the collective identity of a typical technocrat.