Constantine Zreik
American University of Beirut
Beirut - Lebanon
5 February 1985

Dear Najla,
Warm greetings,

Please find enclosed the manuscript of your book about our dearly departed Salwa Nassar, which you kindly entrusted to me for reading. I apologize for the delay in returning it, owing to the many circumstances that have arisen over the past few weeks.

I read this biography with great pleasure, as did my wife, your namesake, Najla, for we both enjoyed a long acquaintance with Dr. Salwa and shared a close friendship with her. We also hoped that our daughter, Ilham, would have the opportunity to read it when she next comes to Beirut. Ilham was one of Dr. Salwa's physics students, and she received from her every kindness, encouragement, and care. She continues to cherish the warmest and most treasured memories of her teacher.

Najla and I deeply appreciated the tremendous effort you devoted to gathering scattered information from living sources (relatives, colleagues, friends, and others), as well as from printed and unpublished materials. Truly, this undertaking is an act of love. You could never have embarked upon it had you not held your late friend in such profound esteem and admired the intellectual and human qualities that distinguished her. Equally admirable is your determination that these qualities should not remain confined to fading memories and forgotten papers, but should instead be shared with others, so that citizens, and younger generations in particular, may draw inspiration and guidance from them.

Beyond this, the biography reflects your deep attachment to the institution where both you and Salwa received your education: Beirut University College. You recount the early development of the institution, which you witnessed firsthand, the vibrant intellectual and social spirit that prevailed, and the invaluable services it rendered to generations of young women from Lebanon and across the Arab world. These are aspects of its history that deserve to be remembered and recorded, so that successive generations of the institution's alumni may return to them, draw inspiration from them, and be guided by their example.

This biography deserves to be read not only by those who knew Salwa Nassar personally, but also by those who experienced the early years of Beirut College for Women. It offers them a vivid portrait of her remarkable personality, of the intellectual and social milieu in which she flourished, and of the qualities that earned her such an esteemed place in the minds and hearts of all who knew her.

That said, if the biography is intended to reach a broader readership and achieve a wider impact, I would suggest abridging certain passages and omitting others that may be of limited interest to the general reader. By way of example, I would mention the correspondence between Salwa and members of her family in the fourth section; page 7 of the fifth section; her letter on pages 9-10 of that same section, which could be condensed; the reminiscences of her friends in the sixth section (page 20 onwards); and portions of Chapter Eight (pages 12, 13, and 15). I would also encourage you to revisit the book as a whole with the general reader in mind – someone who did not know Salwa personally, did not live through her time, and may not recognize many of the people mentioned – so that the broader significance of her life and legacy may emerge more clearly and the work may speak to a wider audience.

It only remains for me to commend your sound judgment, your genuine warmth of feeling, and the grace and clarity of your prose, all of which make your writing a source of both enlightenment and pleasure.

Please accept, from Najla and me, our sincere affection, admiration, and warmest good wishes.

Najla Akrawi

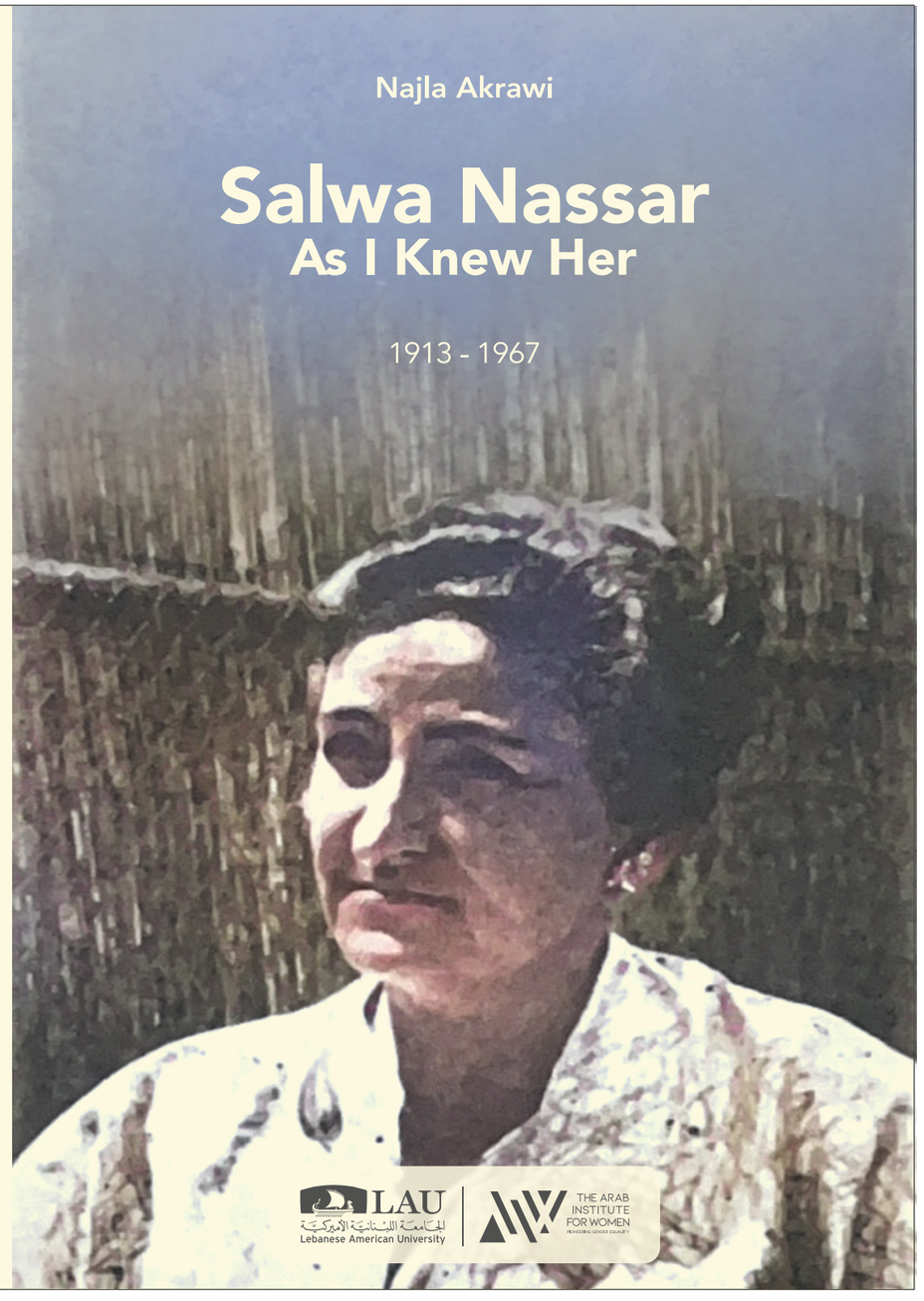
Salwa Nassar As I Knew Her

The Arab Institute for Women
Lebanese American University

Najla Akrawi

Salwa Nassar
As I Knew Her

1913 - 1967



LAU
الجامعة اللبنانية الأميركية
Lebanese American University

THE ARAB INSTITUTE FOR WOMEN

Salwa Nassar
As I Knew Her

Najla Akrawi

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The Arab Institute for Women
Formerly known as
Institute for Women's Studies in the Arab World

Lebanese American University

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Translated by Valerie Aoun

Salwa Nassar
As I Knew Her

Najla Akrawi

The Arab Institute for Women
Lebanese American University

Foreword

To write a foreword to Najla Akrawi's Salwa Nassar: As I Knew Her is a humbling experience and a tribute to an extraordinary scientist and to the enduring power of education, perseverance, and vision. Some lives leave an impression not through noise or exhibition, but through the quiet force of intellect, integrity, and perseverance. Such was the life of Salwa Nassar, the first female physicist in the Arab region and a pioneer who paved the way for generations of women to pursue careers in science, technology, engineering, and mathematics.

The book offers insight into Salwa's life through the accomplishments that were visible to the world, while also shedding light on the private struggles, sacrifices, and moments of unwavering determination that shaped her character. Each chapter draws the reader into her world, which is defined by achievement and intellectual brilliance, as well as discipline and quiet strength. On these pages, we encounter a woman whose brilliance was matched by her humility, who broke barriers while remaining deeply grounded in her values, her family, and her friendships. Salwa belonged to a generation that faced immense social and cultural barriers, particularly for women seeking a place in the sciences and academia. Yet, she moved forward with courage and quiet determination, shaped by hope, perseverance, and a belief in the transformative power of education and knowledge, opening doors for those who would follow. Her achievements were rooted in a profound sense of purpose and responsibility, and her strength of spirit inspired everyone fortunate enough to have come into contact with her or to have known her.

From the outset, the goal of the book was to move beyond Salwa's achievements and shed light on the person behind them. Her close friend, Najla, was entrusted with the delicate and demanding task of tracing the journey of a remarkable pioneer through insight, reflection, and discovery. I stand here in awe and with great admiration for the founder of AiW, Dr. Julinda Abu Nasr, whose unwavering support for women of achievement in Lebanon and the Arab world led her to recognize the importance of documenting the life and work of Salwa.

This book is far more than a record of events. It is a labor of love – a collective effort by AiW, Salwa's family, and her closest friends. Julinda's determination to bring this project to life; Najla's dedication to research, investigation, and

writing the book; the family's vigilant efforts to verify and preserve the details of Salwa's journey (including their generous provision of documents, personal materials, and photographs) as well as the commitment of the Lebanese American University (LAU) to translating the book into English all speak to the profound admiration and respect Salwa inspired in those around her. Furthermore, the family's donation of Salwa's entire archival collection to LAU will ensure that her memory, achievements, and intellectual legacy endure and continue to inspire generations to come.

If books have the power to inform, challenge, and transform us, this book succeeds in doing all three. It encourages curiosity, investigation, analysis, and a deeper understanding of the life and legacy of a scientist whose contributions speak loudly. The lessons shared in this book are not abstract or theoretical. They are grounded in Salwa's lived experience: in triumphs and disappointments, in illness and endurance, in moments of uncertainty and self-doubt, and in the unwavering support of family and friends. By reading this book, you are entering into the history of one individual, while stepping into a larger conversation about education, scientific excellence, sacrifice, and growth.

Salwa's story deserves to be remembered. More importantly, it deserves to be read.

May these pages inspire future generations to dream boldly, persevere through adversity, and believe that no ambition is beyond reach.

Myriam Sfeir
Executive Director
The Arab Institute for Women (AiW)
Lebanese American University (LAU)

Introduction

Here are the thoughts of the esteemed historian and professor, Dr. Costantine Zreik, on this biography.

> I have read and enjoyed this biography and appreciate the effort you have invested in gathering disparate strands of information from living sources (relatives, colleagues, friends, and others) and from both published and unpublished materials. Your endeavor, I must say, is a labor of love, a proof of your profound regard for your departed friend and her remarkable blend of scholarly and humane virtues. Your unwavering commitment to ensuring that these virtues are not confined to memories and paper documents but are disseminated to enlighten people, particularly the youth.
>
> Moreover, this biography captures your profound attachment to the alma mater where you and Salwa studied: Beirut University College. You eloquently portray the genesis of this institution and the cultural and social ethos it fostered, as well as the invaluable services it rendered to countless young women in Lebanon and throughout the Arab world. These are narratives that deserve to be preserved and passed down so that successive generations of students at this institution can continue to appreciate and draw inspiration from its illustrious history.
>
> This biography is crafted for connoisseurs of Salwa Nassar and her contemporaries from the early days of the establishment of Beirut College for Women. Its pages unveil a vivid portrait of this remarkable figure and the social and academic milieu in which she flourished, capturing the attributes that bestowed upon her a lofty stature in the hearts and minds of those who knew her.
>
> Allow me to commend your keen intellect, poignant sentiment, and eloquent prose, which transform your writing into a source of enlightenment and delight.
>
> Constantine Zreik

This memoir-biography was commissioned by the Institute for Women's Studies in the Arab World (LAU) in 1982 and penned by Mrs. Najla Akrawi.

At the request of the Institute, the manuscript was reviewed by literary scholars Rose Ghorayeb, Dr. Mounir Khouri, and Dr. Jamal Karam Harfoush, who all expressed their appreciation and desire to see it published. However, due to unforeseen circumstances, publication has been delayed until now.

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Chapter I

Junior College

On a warm September evening in 1931, female students gathered around the fire in the college garden. They had arrived within the past two days. Some were newcomers embarking on their freshman year, while others returned to continue their studies as sophomores. The seasoned students took it upon themselves to welcome the newcomers, guiding them through the college's regulations, dormitories, and the daily routines expected from boarding students while at college. The gathering was intimate, with no more than fifty attending, yet it represented a kaleidoscope of diversity from across the Arab and Middle Eastern countries. There was a handful from Palestine, both Arab and Jewish, along with a few Iraqis, Syrians, and a *Bahá'í* Iranian residing in Haifa, Palestine. Among them was a Greek from Cyprus, Lebanese from the mountains, Armenians, and others hailing from the major Lebanese cities of Beirut, Tripoli, Sidon. They sprawled upon the lush green grass, seeking acquaintance and entertainment. The American teacher, Miss Markle, led the gathering with folkloric songs along with the senior students to foster an atmosphere of joy and excitement. Meanwhile, Boutros, the gatekeeper was immersed in kindling the fire with pieces of wood, intensifying its glow and blaze.

Miss Markle delivered a welcoming speech to the freshmen students, announcing registration schedule for the next two days, before inviting everyone to indulge in refreshments and sandwiches in the college garden. As the students engaged in conversation and introductions around the table, their dialects often revealed their countries of origin and even specific regions and locales therein.

I approached a brunette with wide expressive eyes, her hair was pulled back into two braids, defying the prevalent fashionable cropped hair at the time. Clad in black attire, her dreamy eyes held a hint of sorrow, tranquility, and reserve. Drawing near, I introduced myself, to which she replied, "Salwa Nassar, from Dhour El Shweir".

"Why are you wearing black?"

"My brother... my brother passed away. He was a second-year medical student at the American University. He contracted typhoid fever."

Her voice was barely audible, tinged with sorrow, a heart-wrenching tremor that conveyed the weight of her loss and that of her family. It stirred every ounce of my compassion and concern.

"And which school did you graduate from?"

"I graduated from the British friends School in Brummana... and before that, from the Shweir Secondary school in Ain El Assis."

The Brummana High School held a prestigious position among high schools in Lebanon, renowned for its high academic standards and excellence, especially in the fields of science and mathematics. As for the town of Dhour El Shweir, a place I had yet to visit, I had heard much about it and imagined it to be a place of natural beauty, with an impeccable climate and lush hillsides adorned with pine trees—making it a picturesque destination that attracted vacationers from Beirut and all the neighboring Arab countries. I had also heard of several prominent figures from Dhour El Shweir who had migrated and flourished, like Nemat Yafet and his family, who generously contributed to charitable and educational institutions in Lebanon. Others excelled in the fields of science and education, such as the esteemed educator Gerges Hammam, known for his reading books series incorporated into the elementary and middle school curriculum in many private schools across Lebanon. There was also Professor Daoud Qurban, an Arabic language instructor at the American University of Beirut, and the brilliant mathematician Professor Mansour Jardak, who taught at the same university and authored mathematics textbooks. Not to forget the renowned historian Dr. Assad Rustom and other poets and writers whose literary works we discovered at a young age, enriching our tender memories with excerpts of their poetry and memorable sayings, like Sheikh Amin Daher Khairallah and folk poet Assaad Rustom, whose humorous verses enlivened our gatherings, and offered poignant critiques of social and administrative flaws in Lebanon.

After that brief gathering, we dispersed, each to her room in the dormitory. Most of the rooms were shared by two or three students, except for a very small number of private rooms occupied by students who paid additional fees.

Alma Mater

The college was in its seventh year when I arrived along with Salwa Nassar to join the freshman class. It was the first institute of higher education for women in the Arab world and the Middle East, a descendant of the American College for Women founded in 1834 by Mrs. Eli Smith, wife of one of the first American missionaries. The latter school marked the inception of the first school for girls in the Ottoman Empire, as engraved on a memorial pillar outside

the Evangelical Church adjacent to the school location in Zqaq el-Blat Beirut: "Site of the First Edifice Built as a School for Girls in the Turkish Empire". This institution played a pivotal role in the Arab Renaissance, advocating for the education of young women and facilitating their emancipation from the constraints of antiquated customs that had ensnared them for generations in underdevelopment and stagnation. It produced a succession of enlightened housewives and educators who played a leading role in spreading knowledge and elevating living standards not only in Lebanon but also across the Arab world. It is noteworthy that the Protestant translation of the Bible into Arabic was undertaken for the first time in comprehensive detail within the hallowed halls of this school, in one of the rooms on the upper floor. This significant undertaking was spearheaded by Eli Smith and Cornelius Van Dyck of the American Presbyterian Mission, in collaboration with the esteemed educator Boutros Al-Bustani. After a decade of unyielding dedication, this work was completed in the year 1864.

Higher Education

In 1924, the first higher education class (Freshman) opened at the school, with eight students enrolled. Two years later, three of them graduated with Sophomore diplomas: Munira Barbeer, Saniyya Habboub, and Armanouhi Magardichian. At that time, the veil was still common among Islamic families, and both Saniyya and Munira wore it to school. Among the documents preserved by the college is a photograph of the 1926 graduates with the founding president, Frances E. Irwin, where both Saniyya and Munira are seen wearing their veils.

Saniyya Habboub and Armanouhi Magardichian continued their university studies, each earning a medical doctorate degree. Saniyya became a pioneering gynecologist in Lebanon, while Armanouhi practiced her profession in Homs, Syria.

The old building of the American School stood firm until the mid-sixties, when the property was sold, the structure demolished, and the school relocated to the Rabieh area on the outskirts of Beirut, near Antelias. The Evangelical church, situated in close proximity to the school, bore the brunt of destruction during Lebanon's civil tragedy in 1975 and its subsequent aftermath.

Today, no trace remains of that parcel of land that once housed the first girls' school and heralded the advent of women's higher education, alongside one of the pioneering Arabic printing presses in the region[1]. Those noble endeavors, which were instrumental in the advancement of education and the catalysts for progress in the Arab East, now exist only in memory, preserved in a solitary memorial pillar that serves as a silent witness to the founding history of the school.

In 1927, the college parted ways with its founding institution, relocating to a grand building in Ras Beirut, leased by the American Mission from the Sarrafian family near the American University on Al Maamari Street. It was a spacious villa surrounded by a sprawling garden, reminiscent of the elegant houses in Beirut during that era. The garden was expansive, accommodating a tennis court, a basketball court, and a volleyball court. The road leading to the college from Bliss Street, adjacent to the American Hospital, was lined with prickly pear trees and verdant plots of lettuce and vegetables that adorned most of Ras Beirut in those days. The building comprised three floors: the ground floor, which housed the laboratories, a spacious dining hall, a kitchen, and its annexes. The first floor was allocated to classrooms, administrative offices, and some dormitory rooms, while the uppermost floor boasted a wide room designated for the library and general meetings, alongside additional dormitory chambers.

The college remained in this building until 1933 when it relocated to its current location atop the hill between Marie Curie and Sadat Streets. Towards the end of the academic year in 1933, just weeks before we graduated from Sophomore studies, Salwa Nassar was invited, along with the other graduates, to attend the cornerstone laying ceremony for the new college building atop an isolated hill, seemingly distant from the bounds of city life. Among the attendees at the ceremony were the college president, Miss Irwin, her vice president Winifred Shannon, along with several faculty members, and Reverend James Nicol from the American Presbyterian Mission, who would later serve as acting president of the college between 1941 and 1943.

The second image of Salwa that etched itself in my mind, after the delightful acquaintance party in the college garden, occurred a few days later. I heard the student assigned to greet guests call out loudly, "Salwa Nassar, your father!". I was in the garden and saw Salwa hurrying towards the entrance, only to return a moment later, her arm intertwined with her father's.

Her face lit up, and together they made their way to the reception room in the central building. Shukri Nassar was in his fifties and bore a striking resemblance to his eldest daughter, Salwa. Wide eyes, dark hair, and a tan complexion were common features that caught the eye. He was also of medium build and sturdy stature. Between them was a harmony that spoke of a rare understanding seldom seen between fathers and daughters. He seemed joyous and proud of his daughter, their synchronized steps towards the inner gate were brisk and congruous. I do not know what caught my attention and made me observe this

[1] The first American printing press that printed in Arabic was founded in Malta and later moved to Beirut in 1834. In 1841, it began printing with beautifully crafted Arabic letters cast in Leipzig. For more on the history of Arabic printing presses in Lebanon and neighboring regions, refer to: Salibi, Kamal. **The Modern History of Lebanon**. London: Widenfield and Nicholson, 1965, pp. 127 – 128.

ordinary scene so attentively. It lingered in my mind over the years and resurfaced vividly the day fate brought Salwa and me together in her room at Middlesex Hospital in London on December 26, 1966, where I sat on the chair opposite her bed, a pen and paper in hand, transcribing her will as she dictated, "I, Salwa Shukri Nassar from the town of Shweir... hereby bequeath the following: (…….)".

Outstanding Mathematician

In no time, I began to uncover new dimensions of Salwa's character. Our paths crossed in various classes, and it became apparent from the very first semester that this quiet girl, who rarely raised her voice in or outside the classroom, and who was never drawn into debates or arguments, possessed a remarkable aptitude for grasping mathematical concepts. During our breaks, we would gather around her, seeking assistance. However, we soon realized that what seemed effortless for her in solving intricate problems demanded from us sheer perseverance and extensive explanation and analysis. Nevertheless, when her exceptional talent and ability shone through and our comprehension faltered, there was no hint of exasperation or boasting from her that stood as a barrier between her and those seeking her assistance. Instead, she approached the problems methodically, arriving at clear solutions. It was not long before we came to understand the limitations of our own understanding in comparison to her penetrating insight.

It appears that her exceptional aptitude in mathematics was a prominent aspect of her academic journey since her elementary years in her hometown of Shweir. Salwa reflects on that period of her life, recalling:

> Our school consisted of a single room that accommodated six elementary grades. It was there that I received my first encouragement in arithmetic. With two teachers overseeing six grades, they taught two grades simultaneously, leaving the other four grades to study independently. As arithmetic was taught to the more advanced grades, I listened intently to the lesson, frequently raising my hand to participate, and thus receiving consistent encouragement from the teacher to give the solution.[2]

Having completed her elementary schooling, Salwa moved on to the prestigious Shweir Secondary School in Ain El Assis. It wasn't long before she earned the title of the school's math prodigy. She reflects, "The math teacher would assign me extra-curricular lessons to occupy my spare time, being - if I remember well - the top student in the class."[3] As she had once been the math prodigy at Shweir Secondary School, Salwa swiftly ascended to a similar status at Junior College.

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[2] Sabri, Marie Aziz. **Pioneering Profiles** – Beirut College for Women. Beirut: Khayat, 1967, pp. 84-85.

[3] Unpublished biographical data about Salwa Nassar, with a covering letter to Miss R. Ghorayeb by William B. Miller, the United Presbyterian Church in the United States of America, dated Dec. 8, 1977, pp. 2-3.

Upon graduating from Shweir School in 1930, Salwa proceeded to enroll in the prestigious Brummana High School, which was affiliated with the British Quaker Society. She was the sole female student among twenty-seven students in the graduating class. Initially, the teachers were reluctant to allow her to pursue physics, as she had not been introduced to its principles during her secondary education. However, Salwa was insistent on participating, much to the surprise of both teachers and students alike when she achieved the highest grade in the first physics exam administered to the class. Salwa recalls:

> I obtained the highest score in the exam, far surpassing the following one, which angered the boys because the exam was exceedingly difficult, and it was a make-it-or-break-it exam.[4]

She maintained her leading position in the class thereafter.

At the graduation ceremony in June 1931, the school principal, Mr. Naish, announced a departure from the usual tradition of reading graduates' names in alphabetical order. Instead, the school administration decided to place Salwa Nassar's name at the beginning of the list to receive the diploma, acknowledging her outstanding achievements and excellence. Salwa's mother fondly remembered this gesture with pride and affection, as she recounted it when I visited her in the hospital a few months before her passing.[5]

Following that, her teachers encouraged her to enroll in Junior College in Beirut to continue her higher education. When she and her father came to apply for admission to the college during the fall of that year, they were met by Vice President Miss Winifred Shannon, from the Presbyterian Mission[6] . Miss Shannon recalls the meeting:

> The teacher sent to meet the father and daughter found their eyes captivating with their penetrating gaze. The father was earnest in his request, and the girl was eager to obtain what she desired.She wore black as a sign of mourning for her brother, as was customary at that time. Her long black hair was braided back, and she looked well dressed in her simple black dress.
>
> The father requested financial assistance for his daughter: "I can pay half of the tuition." He then handed fifteen gold lira coins from his pocket." Is there a possibility that she could work to earn the remaining half? "The teacher glanced at Salwa's excellent high

[4] Sabri, Marie Aziz. **Pioneering Profiles** – Beirut College for Women. Beirut: Khayat, 1967, pp. 86.

[5] An Interview with Mrs. Victoria Hajjar Nassar, Mother of Salwa Nassar, May 1978.

[6] Winifred Shannon joined the American Presbyterian Mission in Lebanon in 1925. She played an active role in the growth and development of the college. She served as acting president from 1935 to 1937.

school transcripts and suddenly remembered a $100 cheque she had received shortly before her trip to Lebanon from a dear friend in New York. As she pondered this, Salwa's father spoke again: "I wish I could pay more than that. I may be able to do so next year." There was no further persuasion necessary, as the teacher had already made up her mind about what needed to be done. She sought permission from them to inform the principal of their request. She proceeded to the administration office with Salwa's academic records and the cheque, returning shortly thereafter to inform them that their enrollment request had been accepted.[7]

Life as a Boarding Student

That year, the student body was comprised of no more than seventy students, including both freshmen and sophomores. The majority of these students resided in the boarding section, which offered them the opportunity for complete immersion in their studies and in the overall atmosphere fostered by the college for the education and growth of its students. This was achieved through a combination of academic pursuits, extracurricular activities, and cultural engagements. Over the course of those two years, one of the most valuable aspects of our experience was the chance to become intimately acquainted with the personalities of our fellow students in the day-to-day rhythms of life. Such an experience was less readily available to those who commuted. Boarding students were subject to a specific set of regulations, reminiscent of those found in secondary schools with boarding facilities. The administration was keen on respecting local customs and traditions, striving to avoid cultural divides between students and their families or the wider community. Upon enrollment, parents were required to designate a guardian for their daughter and provide a list of approved individuals with whom she could visit and who could visit her during the academic year.

Visiting hours were set for Saturday afternoons. Upon arrival at the college, visitors had to announce their names to the designated student responsible for welcoming them. While they waited outside near the entrance, the student would consult with the administration. After some time, she would return with either a positive or negative response based on the list provided by parents to the administration. How many times had the visiting young men returned disappointed, unable to enter the college grounds? The supervising student would inquire about the visitor's relation to the student, and often, the response would simply be "cousin", encompassing various degrees of kinship. This was an attempt to secure permission for the visit. Hence, the term "cousin" became broadly and liberally applied to any young man visiting the college, regardless of his connection to the student, whether he was a friend, relative,

[7] Unpublished biographical data about Salwa C. Nassar, p.1.

or acquaintance, to the point where all students at the American University became identified as cousins. When visits were permitted, they occurred in the common reception room, where visitors and students gathered, forming clusters in different corners of the spacious room. These visits were limited to half an hour, and at their conclusion, the visitor was escorted out of the gate under the supervision of the designated student, who maintained constant communication with the administration throughout the day.

Students were permitted to visit the market twice a month to purchase essentials, exclusively on Saturday afternoons. Prior to departing the college premises, the student was required to log her name, departure time, and intended destination. She was required to return to the college grounds by six in the evening, failure to comply would result in disciplinary action and suspension of this privilege for a full month.

In the Student Handbook for the academic year 1931-1932, a publication issued by the college and which has remained in my possession throughout the years, surviving numerous travels and relocations, there was a compendium of general rules that were to be observed. These included: no visits permitted on Sundays, students not allowed to receive guests in their rooms, visitors from outside town permitted only half an hour after classes, and the administration preferred visits to be arranged solely on Saturday afternoons. Attendance at the daily prayer in the assembly hall at half past ten in the morning was mandatory. The service, conducted in the Protestant tradition, commenced with a hymn followed by a sermon. The sermon could cover religious, ethical, or cultural themes. It concluded with another hymn along with recitation of the Lord's Prayer and a request for blessings from the preacher or lecturer. This was interspersed with guidance and recommendations from the administration. The administration made efforts to diversify the speakers invited to participate in these proceedings. This included faculty members, professors from the American University, theologians from the Presbyterian Mission, and -on occasion- visiting guests from abroad.

The regulations allowed for an option known as the "alternative chapel" for students who, for various reasons, preferred not to participate in the Christian prayers held in the assembly hall. To exercise this choice, a student needed to formally request exemption from the administration. The college would then arrange a separate session presided over by one of the teachers, where general cultural topics were discussed devoid of religious overtones. This procedure was invoked only once in the college's history when a Jewish classmate (rumored to be a Zionist) from Jaffa came across the regulation outlined in the student handbook. Collaborating with two other students, she challenged the requirement and requested an exemption from the Christian service. Reluctantly, the administration acquiesced, and the trio's withdrawal from the public prayers stirred both interest and controversy among faculty

and students alike. Reactions ranged from approval to reproach and critique, placing the president and missionary educators in a quandary as they grappled with a perceived shortfall in upholding their mission's idealistic aspirations and noble principles, which they had hoped to instill through prayer and Christian service.

Likewise, it was obligatory for boarding students to attend the Sunday afternoon prayer service at the American University Church, under the supervision of one of the teachers who accompanied them to and from the church. Students were expected to wear modest attire with long sleeves, a hat, and gloves.



Sage Hall, 1933.
First building in Junior College (Lebanese American University).



Salwa Nassar with her three sisters in 1926, a student at the Shweir Secondary School.



Junior College, 1933
Salwa Nassar, first from the right, front row.
Najla Akrawi, fourth from the right, second row.



Salwa Nassar with King Faisal bin Abdulaziz of Saudi Arabia during his visit to the University of California, Berkeley, in 1941, where Salwa was a student.



Salwa Nassar with His Highness Sheikh Jaber Al-Sabah, in 1964, during the groundbreaking ceremony for the Science Department building at Kuwait University.



Salwa Nassar with Mao Zedong in Beijing, 1964.



Salwa Nassar with al Hajj Husseyn Al Ouweini during inauguration of the Emile Bustani building for Physics at the American University of Beirut, 1964 .



Salwa Nassar with her students at the Beirut College for Women, 1946.



Salwa Nassar, Head of the Physics Department at the
American University of Beirut, 1952.



The appointment of Salwa Nassar as the President of Beirut University College, 1966.



Sage Hall building at the Lebanese American University, 1997.v

Daily Routine

The students were awakened by the sound of the bell at precisely six in the morning. They were presented with the choice of a cold spray shower, which was available at all times, or hot water one, which was provided only twice a week. There was no heating of any kind. At precisely seven, they proceeded to the dining hall, which was located in the central building of the college, knowing that arriving late meant missing out on their meal. Unless one of the students took pity and stashed a piece of bread with cheese or labneh for them to munch on en route to classes, which began promptly at 7:30 a.m. Faculty members joined the students in the dining hall only for lunch, while they had breakfast and dinner in their private quarters.

The meals were simple yet wholesome and nutritious, selected according to the advice of the college physician. Breakfast typically consisted of tea or coffee with milk, accompanied by olives, cheese, or labneh served with Arabic pita bread (*kamaj*). Butter never graced the table, for it was both scarce and expensive in those times. Truth be told, we never missed it, nor were we accustomed to its use; we had heard that foreigners consumed it abundantly. For lunch, it was common to enjoy a portion of meat or broth with rice, potatoes, and vegetables, followed by a piece of fruit or a slice of dessert. Dinner usually commenced with soup, followed by a serving of meat or cheese accompanied by jam and fruit. Some dishes were novel to our traditional Lebanese cuisine, such as roastbeef with potatoes and vegetables, or slices of fried liver served with mashed potatoes and vegetables. Whenever the flavors of these dishes were foreign to our palates, we complained yet accepted them after hearing that the college physician recommended them for their health benefits. Consequently, we ate silently yearning for the traditional Lebanese delicacy of charcoal-grilled liver marinated in garlic, oil, and lemon.

Attire

The attire of the students was generally simple and modest in those days, devoid of the extravagance and variety that define the contemporary girl. Lebanon was struggling with a severe economic crisis that affected all classes alike, due to local factors under the French mandate administration, besides major global currents which contributed to economic crises and upheavals at varying levels in various developed nations worldwide.

The typical student's wardrobe consisted of no more than three dresses for everyday wear, along with two Sunday dresses and two or three pairs of shoes for the entire academic year. While the school administration promoted a well-groomed appearance, they disapproved of extravagance in dressing or flaunting luxurious attire. Only a handful of students, mostly from relatively affluent families, deviated from this norm.

For sporting activities, students were required to wear knee-length black shorts with a white shirt featuring short sleeves. The college offered a range of sports options, including basketball, volleyball, tennis, hockey, and baseball.

Swimming, an Adventure

Swimming was not a common pastime for girls during that era. So imagine our astonishment when one morning during assembly, one of the teachers announced that the college was ready to provide suitable opportunities for swimming lessons at the American University pool. Any interested student needed written permission from her parents or guardian to avail herself of this privilege. I recall only three girls out of the seventy stepped forward to seize this rare chance, deemed at the time as an adventure, even a challenge to convention and tradition. I obtained permission from my elder brother because I dared not broach the subject with my parents. The swimming attire was markedly different from what we see today in local or international pools. It was a one-piece garment that covered most of the body, with only the neck and legs visible, extending down to the knees and completely covering the back. It featured short sleeves, along with a skirt cinched at the waist, covering the pants.

The inaugural group of female swimmers at our college that year were Alice Abou Chanab and myself, the author of these lines, with Lily Badr joining the following year. The cost of the swimming attire, as listed in the student handbook, was one hundred and eighty Lebanese piastres. This was a considerable sum in those lean years, and could certainly make a dent in a student's budget. I recall on this occasion asking my friend Hilda Moussa, a Palestinian from Nazareth, whether she would join us in this adventure. Her response was, "Leave me out of this predicament, Najla... boys from Nazareth are dispersed throughout the university campus... and if my family were to find out, the consequences would be dire!" It is worth noting that swimming training sessions took place at a time when there were no male students present in the university pool; only a trainer and a female instructor accompanied the girls back and forth.

Relationship with the American University

From the very moment we stepped foot into the college, it became evident that our connection with the American University operated on multiple levels. There existed a formal agreement between the university and Junior College stipulating that the college would handle the education of female students during the initial two years (freshman and sophomore). During this period, the university would refrain from admitting them. The college ensured that the academic standards met the university's requirements, facilitating the transition for graduating students without any additional conditions or exams.

Moreover, the college administration sought the help of several university professors to organize and supervise certain academic courses, in addition to delivering extra lectures. Junior College students were permitted to visit the university library twice a week and attend scientific lectures, as well as cultural events organized in West Hall occasionally, chaperoned by a faculty member. I recall among the contributors to these enriching events Professor Lawrence Seely, head of the philosophy department at the American University, Dr. Anis Freiha, professor of Semitic languages, Professor Soltou, a British national from the history department, Dean Nicolai, Professor Boulos Al Khauli, head of the education department, Dr. Stuart Dodd, head of the sociology department, and Dr. Habib Kurani from the social sciences. Among this esteemed group was a young prodigy, who had graduated early and had recently returned from the United States to join the university faculty. He held a PhD in Arab history from Princeton University, profoundly believed in the glory of the Arab nation, and championed the revival and dissemination of Arab heritage. He had dedicated his heart and mind to this pursuit for nearly fifty years. This luminary figure was Dr. Constantine Zreik, an esteemed educator, diplomat, and historian. We eagerly flocked to his lectures, keen to benefit from his vast knowledge and impassioned insights.

Another Victory for Salwa

Professor Seely was responsible for teaching a Social Science course, which was a mandatory requirement for all university students and college sophomores. The curriculum covered a variety of human subjects, including the philosophy of history, ethics, anthropology, and psychology, as well as the origins of human societies and general cultural topics. This course was comparable to today's Cultural Studies course, which is mandated by the American University for all sophomore students. Once a week, we would attend public lectures delivered by Professor Seely and some assistant professors on this subject to university students at the American University. A college teacher was tasked with managing the discussion and subsequent application on the college's campus. The professor himself relied on multiple choice testing once a month to evaluate students and their grasp of the curriculum. The outcome of our first test was a disaster, both for us and for the university students. The prospect of a near-collective failure loomed, sparking concern and speculation. Sensing the gravity of the situation, both the administration and Professor Seely took steps to avoid a repeat of the debacle. The following month saw a transformation in the exam format, with questions now divided into two types: multiple choice and explanatory. Grades rose to a more reasonable and acceptable level, yet the challenging nature of the lessons remained a source of anxiety.

As the academic year drew to a close for the sophomores, four exceptional students were exempted from the final examination. Instead, each was tasked

with presenting a paper on the topic of "Science and Religion from a Sophomore Perspective." On the day of the final examination at the college, I accompanied Salwa to seek permission from the administration to head to Professor Seely's office at the university and deliver her paper. This marked another triumph for Salwa in the humanities, to be added to her already considerable brilliance and distinction in the physical and mathematical sciences.

Social Traditions

We took great pride in our affiliation with the American University. Entering its campus felt like stepping into a realm adorned with an aura of dignity and restraint. The number of female students back then could be counted on one hand, and their mere presence among the male students attracted attention, curiosity, and comments. Among them were Muslim students like Fadwa Abdul Wahab from Tripoli and Rida Al-Nu'mani from Beirut, both of whom wore a black scarf wrapped around their temples and long, modest dresses with long sleeves and high collars covering their necks. At that time, interacting with male students was inconceivable. Female students were required to sit separately from male students in class, as well as during church services and public lectures in the West Hall. Mixed dancing too was not allowed, and acting in theatrical plays alongside the opposite sex was unheard of. Engaging in lengthy conversations with male classmates or sitting closely to them in the university garden often sparked whispers and raised eyebrows, a venture rarely attempted by a girl, particularly among Arab Christians or Muslims.

I vividly recall the reproachful words Anissa, our dear friend, uttered when she spotted Salwa and me entering the university campus with our heads bare. There was a hint of surprise in her tone, and our friendship lent weight to her words, "Salwa and Najla! You're stepping into the university without veiling your heads! What will the other students say about us? We are supposed to set an example! While we have been given the opportunity to pursue education alongside men, should we disregard propriety?"

Walking into the university without head coverings represented a bold defiance of norms and a rebellion against tradition, despite the fact that in our rural upbringing, head coverings were reserved solely for church visits.

The story of the poet Ibrahim Tuqan's encounter with the two sisters from the Tīn family had spread far and wide long before our time by a few years. In the late 1920s, Ibrahim Tuqan was a student at the university and was known as the university poet. Among the students were two sisters, graduates of the college, from the Tīn family of Damascus (T/N: The term "Tīn" means fig in Arabic). One day, as the sisters strolled through the university grounds, Tuqan followed along with a friend, attempting innocent banter. He called out, "Oh Tīn!" (Oh fig!), but there was no response.

He then called out, "Oh Tūt!" (Oh mulberry!), but still, there was no answer. Undeterred, he called out, "Oh pomegranate!" The sisters continued their walk, ignoring his calls. The young poet and his friend were left empty-handed.

So his friend suggested, "Your call sounded like poetry, Ibrahim! Why not compose a poem?". And so, his famous lines were born:

> Oh fig, oh mulberry, oh pomegranate, oh grape, Oh
> pearls, oh ruby, oh sapphire, oh gold,
> God, what charm is this, what allure,
> Forever stirring the heart's core.
>
> Oh fig, oh mulberry, oh pomegranate, oh grape.
>
> Oh fig, how I wish your grove would gather us,
> Oh mulberry, how I wish your shade would cradle us,
> And you, oh pomegranate, how I wish you'd nurture us,
> While you oh vine, how I yearn for the Vine Maiden's generosity to overwhelm us.
>
> Oh fig, oh mulberry, oh pomegranate, oh grape.
>
> Oh fig, I hastened toward you, to gather you,
> Shedding my tears to water you,
> Resting my head upon your branch, whispering my plea,
> And the birds above echoed my lament, in harmonious spree.
> Oh fig, oh mulberry, oh pomegranate, oh grape.

The story behind this poem had reached us, we recited its verses and appreciated their charm and aesthetic appeal. Yet, this did not prevent us from feeling that a young man had dared to court a university student, inscribing her name in his verse and tarnishing her reputation. The incident sparked more than just a reaction, as the girl lodged a complaint against the poet Tuqan with Dean Nicolai. The latter promptly requested Professor Freiha to translate the poem to examine its contents[8]. This episode was later recounted by President Dodd in his book on the American University, depicting the social life of that era and the complete segregation of female students from their male counterparts[9]. If only we had been aware at the time that the name of that female student would one day be immortalized in his genius poetry we would have offered him praise instead of reproach and complaint.[10]

[8] Anis Freiha: "Before I Forget", Dar al-Nahar Publishing, Beirut, 1979, p. 132.

[9] Dodge, Bayard. The American University of Beirut. Beirut: Khayat, 1958, p. 60

[10] Recently, I browsed through two collections of poems by the poet Ibrahim Tuqan in search of these verses, but I couldn't find any trace of them.

Tea Time with the Professors

The social life of female students was severely constrained, primarily revolving around college activities and extracurricular events organized by associations and sports competitions with select high schools in Beirut, Tripoli, Sidon, and elsewhere. Occasional visits to relatives and friends during weekend breaks were granted only upon parental approval, signaled by a written permission note submitted to the administration during registration. Hence, we eagerly welcomed invitations to tea at the residences of university professors, where we socialized with fellow students, relishing the chance to break away from the monotony of life and to acquaint ourselves with the rituals and conversations surrounding Anglo-Saxon tea culture.

The hostess, seated around a modest table, poured tea from a delicate pot, which she served with sandwiches, cakes, and biscuits that were foreign to our Lebanese palate. Our eyes wandered, intrigued by the furnishings, which were markedly different from the typical décor of Lebanese households in any milieu. Each piece reflected a unique American aesthetic, unlike anything we had encountered before.

One family that we became acquainted with during those occasions was the Seely family, who had constructed their residence in Ras Beirut. However, it was later demolished in the mid-1940s, making room for the "Horse Shoe" café. The road leading to their house was unpaved, so whenever we visited for Sunday afternoon tea, our shoes would inevitably be filled with red sand.

We were also invited to the homes of other university professors, who generously hosted us, adding a touch of joy and entertainment into the otherwise mundane life of a student in those days. It struck me that the kindness exhibited by these esteemed professors was perhaps influenced by the university administration's commitment to nurturing and enriching students' personalities beyond the confines of the curriculum. Many of them hailed from an era of missionary zeal, carrying within them a fervent faith in God and humanity. This unwavering faith compelled them to venture to faroff lands, vastly different from their own traditions and cultures, all to offer their best to the youth they devoted their lives to serving, mind, body, and soul.

The 1st: "Homeland in Ibrahim Tuqan's Poetry" by Al-Badawi Al-Ghashim (Yaqoub Al-Awaidat), published in Amman, Jordan, in 1960, with an introduction by the renowned Arab author, Professor Akram Zuaiter.
The 2nd: "Diwan of Ibrahim Tuqan" published by Dar al-Quds, Beirut, in 1975, with an introduction by his sister, the poet Fadwa Tuqan.
I consulted Professor Zuaiter as well as Mr. Wael Tuqan, the poet's nephew, regarding these verses. I was informed that Tuqan did not include them in any of his collections. Most likely, he composed them in collaboration with some university companions at the time who participated in the innocent banter mentioned earlier.

A Talented Actress

I met with Salwa at the Arab Association, which convened twice a month with the aim of promoting the Arabic language and training female students in eloquence, public speaking, and literary and cultural debates covering a range of topics. Occasionally, the association invited guest speakers among whom I recall Professor Daoud Qurban from the American University, who was asked to judge in an impromptu debate on the topic of "Cinema: Benefits and Drawbacks". Our mentor in the association was Rose Ghorayeb, a student at the American University at the time. Rose lived with us in the college dorms, much like other female university students, as there wasn't a dedicated building for female students on campus during that time. An agreement had been made between the university and the college administrations to provide accommodation for them within the college premises.

Rose Ghorayeb was a brilliant student who excelled in various fields of science and literature, setting a record unmatched by her peers when she graduated from college a year ahead of us. Her exceptional intellect and rare talents were further enhanced by several years of teaching experience prior to her enrollment in the college, which endowed her with a breadth of knowledge and made her afront runner in all domains. In that year (1933), the association decided to organize a theatrical performance to raise funds for the Village Welfare Service initiated by the Sociology Department at the university. The initiative was inspired by the department head, Dr. Stuart Dodd, and supported by professors Halim Najjar and Afif Tannous. The college also launched a similar project, which involved training volunteer students to participate in a summer camp held for a few weeks in underprivileged villages in Lebanon, Syria, and Palestine. The curriculum included literacy education for illiterate individuals and children, promoting general health and cultural principles, training in various manual skills, recreational activities, and the fostering of sports hobbies. The initiative targeted several locations, including the village of Jdaydet Artouz near Damascus, Jebrayel in Akkar, and Jubb Ramlah and Sarmiyeh near the town of Masyaf in the Alawite region of Syria.

One day, Rose sent after Salwa and I and recommended we visit the author Farid Medawar[11], who was a professor at the preparatory department of the American University. He was renowned for his socially relevant plays with a populist flair. Rose hoped to seek his permission to stage one of his works and to assist us in selecting a play suitable to our abilities. We visited him in his office at the university, where he welcomed us warmly and graciously presented us with several of his plays. Following a brief discussion, we selected the play *Abu Tansa* for production. The author, Farid Medawar, provided us with the script.

[11] Born in Choueifat 1896-1974, he graduated with a Bachelor of Science degree from the American University of Beirut in 1920. He taught at the university's preparatory department from 1926 to 1935. Among his theatrical works are *Lebanese Beauty, Beyond Revenge, A Lie Father, Adonis and Ishtar, Opera of the Virgins of Afqa, Memoirs of a Hamshari* and *Abu Tansa and Um Tansa*.

We then presented it to our mentor, Rose, who approved it and subsequently oversaw the casting, training, and directing.

The play is centered on a modest rural family, comprising Abu Tansa, Um Tansa, and their only daughter, Youssfiyyeh. Deaibes, the neighbor's son, develops a romantic interest in Youssfiyyeh. He is a simple young man of similar humble origins, with a pure heart and good intentions. Deaibes visits Abu Tansa's family in the hopes of glancing in Youssfiyyeh's sweet eyes and winning her affection. He is warmly welcomed by her family. Deaibes is confident that the future will bring him his heart desires. But circumstances quickly change when this rural family unexpectedly inherits a fortune from a relative abroad.

The family leaves their rural mountainous village and heads to the bustling city marking a significant shift in their lifestyle. Abu Tansa swaps his traditional *sirwal* for a suit and trousers. Um Tansa acquires the latest furniture and fashionable clothing for herself and her daughter, Youssfiyyeh. Urban amenities like a telephone now adorn their home, alongside a touch of sophistication and luxury. Nevertheless, the flame of love still burns brightly in the heart of the young Deaibes. He ventures into the city, seeking Youssfiyyeh's hand in marriage, only to be met with rejection. How could he not, being a simple villager still wearing his *sirwal* with modest financial means and standing? Circumstances and times have changed, and what was acceptable yesterday is no longer desired today. With the help of some resourceful friends, Deaibes devises a plan. He disguises himself in a new attire, donning a suit, trousers, hat, and glasses, presenting himself as a wealthy immigrant named Mr. Dobbs, who recently returned from America, searching for a bride befitting his status and wealth. Youssfiyyeh had captured his interest, and he thus proposes marriage. The family is delighted and welcomes the prospective son-inlaw. However, they are soon shocked when Deaibes begins to remove his clothes, one piece at a time, placing the suit jacket on the chair followed by the trousers, hat, glasses, and so on. Clad in his authentic rural attire, Deaibes stood before them, evoking astonished outcries from the assembled family, "Deaibes! Deaibes!". He looks at them, gestures towards the discarded clothes, and declares proudly and disdainfully, "This is the groom you wanted for your daughter. Well, congratulations!" With that, he departs, leaving the family stunned and disheartened.

Salwa Nassar took on the role of Abu Tansa, while, yours truly, the author of these lines portrayed Deaibes. Gladys Sarkis played Um Tansa, and Edvick Jureidini took on Youssfiyyeh. Supporting characters were expertly handled by Alice Abou Chanab, Wadad Abdul Kareem, Shafica Karagulla, Lily Rbeiz, and Linda Nassar. Salwa Nassar's performance was exceptional, captivating the audience with her portrayal of the Lebanese farmer with remarkable precision.

Through her gestures and expressions on stage, she vividly depicted Abu Tansa's new life in the city, filled with surprises and events, eliciting laughter and amusement from the audience. Particularly memorable was Abu Tansa's comical response to the incessant ringing of the telephone, punctuated with his signature "Hold your horses! I'm coming! I'm coming!" Shukri Nassar, impressed by his daughter's theatrical talent, exclamed, "Even the way your hand moved on your knee while seated on the mat perfectly mirrored the gestures of farmers during their evening gatherings."

Salwa possessed a subtle sense of humor, a kind unlike any I have encountered before. It complemented her silence and tranquility, emerging spontaneously, far from the clamor, chatter, and artifice of speech. Salwa wasn't a masterful conversationalist, weaving captivating tales or regaling listeners with witty banter nor did she possess a repertoire of amusing anecdotes to share in social settings or among friends. Instead, she wielded silence, staying away of debates and discussions. Yet, her talent couldn't remain hidden for long amidst social interactions. It revealed itself through a quiet smile at times, a succinct remark, or a simple folk proverb that carried weight, or a sparkle in her wide eyes, at other times.

The newspapers were abuzz with reviews of the play the following day, lavishing Salwa Nassar with unprecedented praise. An-Nahar newspaper highlighted her exceptional acting talent and predicted a promising future for her in the field!

The significance of this play extended beyond its initial scope, and it's worth mentioning some related details. The theatrical performance was originally intended for women only, following the college's tradition up to that point. I can't recall how the idea came to Salwa and me to invite men to attend, but I remember vividly that we went together to the administration and proposed the idea to Miss Irwin and Miss Shannon. After considerable discussion and negotiation, we managed to convince them to extend invitations to the students' parents, as well as faculty and staff from the American University. Our joy was immeasurable when the modest hall in our college filled with a diverse audience of men and women. The performance was a resounding success, garnering press coverage the following day. We were asked for another performance, and we donated the proceeds to the Village Welfare Service. I still recall a humorous incident that occurred during the performance. I was playing the role of the young, infatuated Deaibes who came carrying a bouquet of wildflowers for Youssfiyyeh, intending to declare his love. Yet, his nerves got the better of him, stumbling over his words, resulting in a comical mix of boldness and hesitation: "Youssfiyyeh!... Youssfiyyeh!... I... I lo..lo..ve...I love you."

Before he could complete the phrase "I love you, Youssfiyyeh!", a young man from the audience shouted at the top of his lungs in a distinctly Iraqi accent, "Go on! Go on! You can do it!". This elicited laughter and applause from the audience who appreciated the humor and admired the young man's bravery.

This play evokes the works of the renowned French playwright Molière, particularly his play *Le Bourgeois Gentilhomme* (The Bourgeois Gentleman), through its intricate plot, witty dialogue, and comedic surprises. Molière's plays often feature ballet dances and singing, and Medawar's play included folk songs and *dabkeh* (folk dance). In both plays, there is an underlying atmosphere of humor, subtly intertwined with sharp social criticism. While the former portrays human reality through French society, the latter depicts it through Lebanese society.

Sex Education

Exploring matters of sexuality was strictly forbidden during that time. Tradition dictated a complete avoidance of the topic, particularly when it came to the upbringing of girls. Reading books on such topics, regardless of their content, was met with disdain and condemnation from authority figures. Those who dared to peruse such literature did so in utmost secrecy.

We were somewhat taken aback when the subject was seriously and openly addressed during health class, taught by Vice President Winifred Shannon, and in child psychology class, taught by Kate Seely, wife of Professor Lawrence Seely. The objective of both courses was to provide an understanding of sexuality as a natural phenomenon, free from shame, and to encourage parents and educators to address children's questions about the topic in an appropriate manner, tailored to their level of comprehension. The course placed significant emphasis on the importance of honesty and the avoidance of fabrications and myths, such as a mother saying, for example, "You were delivered by a stork", or "I found you under a cabbage leaf", and other tales used as a means of concealment and deception, and that had no place in modern education.

When the topic was first broached in class and the teacher supplemented her lesson with visual aids in the form of anatomical illustrations of the genitalia pinned on the board, expressions of shock showed on students' faces, with the majority stifling their surprise. We sat listening with utmost decorum and respect to the lecture, an unusual stillness settling over the classroom. It is worth noting that the university had adopted the inclusion of "sex education" in a scientific manner into its curriculum, especially since American education had introduced it into its educational programs since the early 1920s.

Salwa Broke her Promise

Among the extracurricular activities the college was involved in was the organization of student conferences during the Easter holiday. One such conference took place in the city of Baalbek in the spring of 1932. It was attended by several college students as well as a group of high school students who would later join the college, including those from American schools in Beirut, Tripoli, Sidon, and some private schools. It was then decided to hold the second conference in the spring of 1933 at the Conference Center in Ain El Assis-Shweir, the hometown of Salwa Nassar, and in the building that had served as Shweir Secondary School until 1931, where Salwa completed most of her secondary education. The conference's slogan was "Expanding Horizons and Breaking Barriers" – barriers of religion, society, and race. We also learned a new anthem for this occasion, which we repeated during the conference proceedings.

"Break down barriers, change our thoughts; help us to widen the reach of love." A call to exchange ideas and broaden the scope of love and tolerance. What a fitting motto for us today.

I still remember vividly the excursion we took on the picturesque hills of Dhour El Shweir on that occasion. It was springtime, the air crisp with the scent of pine, carried by the refreshing breeze. The lush green grass and vibrant wildflowers adorned the slopes and hillsides. Salwa and I stood on a hill opposite the St. Elias Monastery on one side and overlooking the St. John Monastery on the other. It was my first visit to Dhour El Shweir. I gazed upon those verdant hills decked with splendorous Spanish broom, poppy, and cyclamen, and I was captivated by the enchanting and unique beauty of the town of Shweir. It still mesmerizes me every time I return, renewing my bond with it and its nature, with its rich tapestry of hues and colors ever-changing with the passing days and seasons.

Standing on that hill, I exclaimed in awe and delight, "Salwa! Your village is truly stunning! How fortunate! Just look at this hill! Look at the monastery, at those majestic pine trees! You're fortunate to have such breathtaking scenery! Look at this magnificent beauty!"

As I rambled on, repeating expressions of amazement and enthusiasm in words and gestures, Salwa, without a word of comment, turned to me, her eyes fixed on me with that special smile of hers, tinged with a hint of playfulness and teasing.

She said calmly, "You know Najla, I'll find you a farmer from our village to marry so you can spend your entire life here! What do you think?"

We laughed and laughed, and I found no offense in her remark, for her goodnatured spirit elevated jest and banter to pure delightful humor and that's

what I cherished in her. A close bond united us throughout the years, no matter how far apart. On that day, however, I felt that Salwa was years older than me, despite the few months age difference between us.

Salwa didn't keep her promise and didn't find me a farmer groom from Shweir, and every time I met her after our college graduation, I reminded her of that broken promise. However, several years later, I returned for a summer vacation in Dhour El Shweir, and I was fated to wed in the church of St. Elias Shwayya Monastery. As for the groom, he wasn't a farmer from Shweir, he hailed from distant lands, from Mosul on the banks of the Tigris River opposite the ruins of Nineveh in northern Iraq.

Our Reading List

The majority of the courses outlined in the college curriculum—ranging from sciences, mathematics, and literature, to humanities in all their branches—were taught in English. Consequently, our studies and readings were predominantly in that language, serving as the common medium of communication amongst students, regardless of their genders, ethnicities, or cultural backgrounds. As for Arabic and French lessons and their respective literature, they were devoted to each language and its unique heritage. In French classes, we were introduced primarily to classical and romantic authors such as Corneille, Racine, Molière, Voltaire, Hugo, Flaubert, Ernest Renan, and others. In English literature, we delved extensively into Shakespeare, analyzing his poetry and plays at length. Additionally, we briefly explored 19th-century literature, wherein we were captivated by the English novel's artistry, creativity, and its exploration of human nature and rebellion against social norms, particularly as depicted by literary prodigies like Charles Dickens, Jane Austen, the Brontë sisters—Charlotte, Emily, and Anne—and other immortal authors.

In our study of Arabic literature, our primary reference was the *Al Rawa'eh* (Masterpieces) series by Fouad Ephrem Al-Bustani. This monumental endeavor that significantly contributed to the preservation and appreciation of the Arabic language and literature. It garnered widespread acclaim and admiration from enlightened circles across the Arab world in the early 1930s, from Iraq to Egypt, and across Syria and Lebanon.

In the modest shelves of our college's second-floor library, Mikhail Naimy's *Al-Ghirbal* (The Sieve) occupied a place of distinction. It opened up new avenues for us in profound literary criticism, leaving an indelible mark with its teachings on evaluation, selection, and the application of classical standards. The criteria set forth by the author of *Al-Ghirbal* remain immutable guidelines and pillars, untouched by time. Naimy urged us to rebel against stale conventions, to boldly reject the banal and the trivial. He advocated for the establishment of an authentic Arab theater rooted in the essence of life and national heritage. Naimy brought to light the issue of

theatrical language, laying it bare for thorough examination, at a time when Arab theater was suffering, constrained, and perceived with disdain as a superficial art form suited merely for amusement and diversion, rather than for exploring profound themes of human suffering.

We were captivated by Gibran, drawn to him not just as a literary figure, but as an enigmatic soul unto himself. From the realm of youthful romanticism, we elevated him to a sphere of ethereal spirituality, which seemed to some earnest intellectuals as a disconnection from reality. We bestowed upon him a halo of light. Then came the day when we raced with bands of young men and women along the winding paths from Jbeil to Koura and Bsharri in the North, to welcome his casket back to his homeland, and we scattered roses upon it. It felt as though one of our own had returned after a long absence, reassuring us that he belonged to us and our heritage and that even death could not uproot him. Gibran, through his ever-renewing style, his transparent poetry, and melodic prose, expressed our yearning for a realm beyond the limitations of reality and rationality, a domain of transcendence and beauty.

Ameen Rihani, the genuine Lebanese author, beckoned us to break free from parochial regionalism and embrace a more expansive connection with the broader Arab world surrounding us. This stance challenged not only his immediate environment but also some of his fellow Lebanese authors with whom he constantly disagreed. At a time when many Lebanese sought salvation in the traditional French protection, Rihani advocated for independence. We echoed his words when he stood as a speaker in West Hall and proclaimed, "I am convinced that the mandate is beneficial for the time being, but independence is more just and enduring."

We had access to esteemed journals such as *Al-Hilal* and *Al-Muqtataf*, both influential in the cultural renaissance of the Arab East for nearly eighty years. These magazines served as open platforms for writers, poets, and intellectuals from diverse fields, and a reliable source of informed opinion, precision, and standards. We also perused *Al-Mar'a Al-Jadida* (The New Woman) magazine owned by Julia Tohme Dimashqieh, a pioneering figure who dedicated a significant portion of her life to empowering women and advocating for them. We also read *Al-Sayyidat wal Rijal* (Men and Women), owned by Nicolas and Rose Haddad, and published in Cairo.

Expanding Horizons: An Azhar Scholar and a Rabbi

One of the slogans embraced by the college in its mission to educate and guide its students was "Expanding Horizons". It sought to achieve this through various means, including encouraging students to partake in extracurricular activities such as sports, and cultural and artistic associations, as well as exploring diverse hobbies. It also provided opportunities for them to attend public lectures and cultural events held at the West Hall auditorium

of the American University. Erected in 1914, this building stood as a hub and focal point for cultural and religious endeavors, serving as an open forum for thinkers, writers, and spiritual leaders to disseminate ideas and exchange views in a conducive democratic environment.

We were once informed that a revered Azhari scholar, a prominent figure in Egypt's intellectual circles, would deliver a lecture at West Hall. His name was Sheikh Mustafa Abdul Razzak[12]. Besides his deep knowledge of Arabic-Islamic culture, he held higher degrees from the universities of Paris and Lyon. The administration encouraged us to attend his lecture on "Religion and Science" and emphasized the significance of seizing this invaluable opportunity to learn from his expertise and extensive knowledge. A small group of us accepted the invitation and accompanied one of the teachers to West Hall in the evening. As we listened to the Sheikh's discourse, the hall was filled with students, faculty members, and notable figures from Beirut's literary and religious circles. The lecture surpassed our expectations, it was of a high academic standard, marked by logical coherence, clarity, boldness and smooth language devoid of stumbling or artificiality. In line with the ethos of expanding horizons and fostering intellectual and cultural openness, we were subsequently invited to attend a lecture titled "Judaism: Religion and Ethnicity", delivered by a Jewish rabbi from Columbia University, New York, at the theological college adjacent to the Evangelical Church.

Arabism and Zionism

Student strikes, political activities, and raucous protests were unheard of in those days. Most of what we heard in this context revolved around some Arab students at the American University going on strike on the anniversary of the Balfour Declaration. The day of the strike passed quietly, without any upheaval, tumult, or disruption of order. The presence of Jewish students in both the University and the College was accepted as commonplace and normal. However, tensions simmered between the two groups, foreshadowing the storm that was brewing before the explosion. We felt a simmering frustration and resentment among one group, while the other expressed complaints and dissatisfaction. These dynamics hinted at a fundamental cultural disparity between the two groups, manifested in differences in language, culture, and social traditions, which made achieving harmony nearly impossible. Instead, they manifested as contradictions and conflicts in behavior and reactions, even in mundane daily matters. As the academic year drew to a close, colleagues went their separate ways, and news of them ceased. However, the reports of

[12]1885-1936: He graduated from Al-Azhar and studied under Sheikh Mohammad Abdo. He studied at the University of Lyon and became a professor of Islamic philosophy at the Faculty of Arts in Cairo. He assumed the helm of the Ministry of Endowments in Egypt in 1945. He was a member of the Arab Scientific Academy and the Egyptian Scientific Academy. Among his works are "The Biography of Mohammad Abdo" and "Religion, Revelation, and Islam".

the tragic struggle in that sacred corner of Earth continued unabated, raging like a torrent, leaving behind the wreckage of victims and destruction.

The Palestinian cause and the Arab-Zionist conflict over the holy lands expanded into a catastrophe that befell Palestine and the Arab world due to Jewish immigration and Western collusion in settling Jews in Arab Palestine. We heard tales of heroism, sacrifice, and imprisonment among the youth rebelling against oppression under British mandate in the early 1930s. However, the situation hadn't escalated to the intensity and violence we have witnessed thereafter. Among the students at our college were groups of Palestinian Arab women from Nablus, Jerusalem, Ramallah, Birzeit, and Nazareth, alongside a cohort of Zionist Jewish women of European origin, whose families had migrated to Palestine with the first wave of Zionist migration.

Chapter II

A Dream Comes True: Enrolling in the American University

After graduating from Junior College, a young woman had three options: marriage, the fate of the overwhelming majority of graduates, continuing her university studies to earn a Bachelor's degree in Science; or taking up a teaching position. We often heard President Frances Irwin saying, "I prefer marriage for my female students, and I consider our experiment successful if we prepare them to become accomplished homemakers who excel in raising their children and elevate the standards of family and social life in their communities." The aspiration for further academic pursuit was a common dream among many of us, yet it was frequently thwarted by challenges that seemed insurmountable. Foremost among these hurdles was the prevailing and ingrained notion that two years of college, culminating in a sophomore diploma, represented a bold enough stride for a female student and her family that allowed it. Since marriage and the responsibilities of managing a household and raising children awaited young women sooner or later, there was little incentive for further educational attainment. If one were to compare the educational achievements of a college graduate with those of her mother, aunts, or even older sisters – often limited to elementary schooling – she would be considered a scholar of her time. While those who defied tradition by enrolling in coeducational university programs were considered as breaking away from the norm.

The second hurdle in this daring endeavor was purely economic. For many parents, affording a university education was a daunting task. They eagerly awaited their daughter's graduation so she could secure suitable employment to financially support her family or contribute to the education of her younger siblings, still in elementary or middle school. Lebanon, at that juncture in its history, was still grappling with the financial burdens imposed by the aftermath of World War I. It endured the oppressive rule of the crumbling Ottoman Empire, with its deliberate policies to tighten the noose, starve, and even exterminate the Lebanese, especially those in rural areas. Another factor contributing to the crisis was the collapse of the silk industry. For centuries, it had been a major source of income for Lebanese families, providing for essential needs, livelihoods, some luxuries, and school fees. However, this industry suffered a fatal blow when synthetic silk flooded the markets in the

second half of the twentieth century. Unable to compete or withstand the onslaught, the silk factories closed their doors, the sericulture and silkworm cocoon seasons collapsed, and the export of silk threads to Lyon, France, and other industrial capitals in Europe came to a halt. The mulberry trees, once adorning the hillsides and rural slopes, lay neglected, their barren branches resembling forlorn remnants of a bygone era. While the abandoned silk factories stand as melancholic ruins, silently narrating tales of a prosperous past and a vibrant way of life lost to time. Lebanon suffered the loss of one of its vital lifelines that supported its existence and ensured its resilience.

The Lebanese looked to emigration as an escape from poverty and misery, undaunted by the adventures and perils ahead, for they are descendants of seafaring people who had braved the seas and tamed them since ancient times. America beckoned, rumored to be the land of gold, abundance; and readily available work for those willing to seize it, a land where wealth seemed within easy reach. Emigration weakened family ties as fathers left their loved ones behind, hoping to send for them once circumstances allowed, and sons, the pride of their parents, departed the village to try their luck abroad and send back whatever support they could. Entire families migrated to these foreign lands, making emigration an integral part of Lebanese life, serving as another facet of Lebanon in the Western world and providing a lifeline in times of need and crisis.

However, the global financial crisis of 1929, which devastated America's economy and shook its very foundations, had adverse effects on remittances sent by migrants to their families in Lebanon. It also impacted the financial aid flowing from America to the American University of Beirut, vital for its budgetary stability and ongoing operations. This financial hardship became one of the foremost concerns of President Bayard Dodge (1922 – 1948), who employed various measures to overcome it. In 1929, university professors donated ten percent of their salaries, contributing alongside the administration to sustain the university and its continuity.[13] Requests from families for financial assistance to educate their children grew significantly, but meeting all these demands proved exceedingly difficult. Consequently, a considerable number of Lebanese students were denied the opportunity for higher education due to the severe crisis in the country and their families' inability to cover the necessary expenses.

As for the prospects awaiting female graduates of Junior College, these were primarily limited to careers in education, either in Lebanese high schools or in neighboring Arab countries. Opportunities outside of teaching, suchas administrative, commercial, or technical roles, were not yet accessible to young women. Government positions were reserved for men, especially

[13]Dodge, Bayard. The American University of Beirut. Beirut: Khayat, 1958, p. 64.

those who graduated from French institutes and Jesuit universities, leaving graduates of the American University and Anglo-Saxon institutes with limited options.

Salwa Nassar was the only student from our graduating class to enroll at the American University in the fall of 1933. How did she achieve such a feat? Salwa recounts:

> My family expected me to secure a job upon graduating from Junior College. The weight of responsibility to support my family was overwhelming, so the thought of attending university never crossed my mind. Then, I received incredible news that seemed too good to be true! Some of my teachers at Junior College, along with a close friend of theirs in New York, generously offered to help finance my university education. In return, they only asked me to work at the college's chemistry lab. As for my modest personal expenses in those days, including the cost of books, I managed to cover them by offering private tutoring.[14]

It was extraordinary, given the dire circumstances, and certainly caught attention because a talented student might secure financial aid only after submitting an application and demonstrating both competence and need. However, to receive such assistance without actively seeking it out speaks volumes about the college administration and its faculty. It was a clear testament to their profound trust and appreciation for the talents of that student, as well as their anticipation of an extraordinary academic future ahead for her.

Salwa enrolled in the Faculty of Arts and Sciences, majoring in mathematics, becoming a pioneering figure who defied traditions and hardships to pursue global academic excellence. Co-education was a recent development in Lebanon, dating back to 1924 when the American University decided to open its doors to female students. In 1925, seven female students enrolled in the Faculty of Arts and Sciences. Among them was Mrs. Ehsan Ahmed Al-Qousi from Egypt, who wore a double-layered veil, as President Dodge recounts. She was accompanied by her husband, and enrolled as a student to be near her during this bold adventure among a large number of Arab and foreign students.[15] The following year, thirteen female students joined the Faculty of Arts and Sciences. That same year, Mrs. Sarah Lafi earned a diploma in pharmacy, becoming the first woman to obtain an academic degree from the university, excluding the graduates of the nursing school founded in 1905. President Dodge's annual report on this groundbreaking initiative stated, "The experiment succeeded, with female students attending classes without any disturbances.[16]"

[14] Unpublished biographical data about Salwa Nassar, p. 3.

[15] Dodge, Bayard, **The American University of Beirut**. Beirut: Khayat, 1958, p. 60.

[16] Penrose, Stephen B.L. Jr. **That They May Have Life**. New York: 1941, pp. 252-254

The Spiritual Environment

During Bayard Dodge's presidency, the American University continued to draw inspiration from the spiritual and moral principles set forth by its founding fathers. At its core was the dissemination of Christian values in their broadest sense, alongside a respectful acknowledgment of other faiths and religions present within the student body. Dodge outlined the university's directions and its spiritual responsibilities in his inaugural address upon assuming the presidency on June 28, 1923, stating:

> Given our belief that education entails the development and alignment of various facets of life, we believe that by directing these forces toward a common goal, we will succeed in shaping balanced individuals. Our university motto is: 'So that they may have life and have it more abundantly' (*Ut vitam habeant et abundant*). Yes, we glorify life: the life of the body, the life of the mind, and that life which is a spark ignited by God…We view religion not as an ultimate aim of education, nor as a set of concrete facts to be taught or a creed to be embraced, but as something more fundamental: an awareness of the spiritual forces guiding life and seeking goodness. Religion transcends the confines of the church; it is found everywhere, in honest studies, in the spirit of camaraderie, and in dedication to serving humanity…The University, far from attempting to detach students from the customs and rituals of the ancient Orient, aspires only to impart to them the spiritual experiences of the West... Our university does not endorse any particular religious community, we champion spiritualism, the endeavor to work in collaboration with God. It is our hope and desire that every student embrace religion..."[17]

The *Al-Urwah al-Wuthqa* association served as a meeting ground for Arab students, fostering their interest in the Arabic language, culture, and patriotic sentiments. Within its confines, they discovered an avenue for their nationalist inclinations and a free platform to express their literary talents in rhetoric, writing, and theater. Esteemed intellectual leaders and figures of the nation were also invited to guide students and share their opinions on various occasions. As for the Student Union, it primarily focused on the English language and its literature.

National Service

One of the university's notable endeavors during that period was its keen interest in rural revitalization, culminating in the establishment of the Rural Life Institute in 1930 under the leadership of Professor Halim Najjar. Its objectives included serving Arab farmers, enhancing agricultural methods, combating

[17] Penrose, Stephen B.L. Jr. **That They May Have Life**. New York: 1941. The Trustees of AUB, pp. 292-294; Al-Kulliyah IX, 8:128-30 (June 1923).

illiteracy, disseminating health education, and training farmers' children in modern agricultural practices such as poultry and beekeeping. Additionally, it engaged in various activities aimed at elevating living standards and improving the conditions of farmers in Lebanon and neighboring Arab regions.[18]

This activity was followed by the Village Welfare Project in 1933, spearheaded by Professor Afif Tannous alongside professors Halim Najjar and Dr. Khalil Wakim, among others from the teaching staff. The initiative called upon student volunteers, who were trained during the academic year and early summer break, to undertake developmental projects in camps organized in rural areas across Lebanon, Syria, and Palestine. Among these activities were the combating of illiteracy, the improvement of health conditions, the promotion of local crafts and handicrafts, and the organization of recreational and physical education programs.

The leaders of the initiative underscored the significance of student-driven involvement in project planning and curriculum development. They perceived this positive national service as an exemplification of the noble spiritual principles that characterized the university environment during a period when the Arab East was seeking visionary leaders and reformers. Among the areas targeted by this initiative were the village of Jebrayel in Akkar, Lebanon, Jdaydet Artooz near Damascus, and some Palestinian villages. The volunteers underwent training during the summer break at the Taalabaya Farm in the Bekaa Valley, affiliated with the American University, under the supervision of both Professor Halim Najjar and Afif Tanous. Given that the volunteers were of both genders and this was a new endeavor, it attracted attention. It was humorously dubbed by one of the witty individuals at the time as the Village Revival instead of the Village Welfare due to this activity!

Among the initial volunteers who participated in this national service were several students from the university and Junior College. Their numbers grew over time, to include for example: Rose Ghorayeb, Eva Badr Malik, Najla Qortas Zraik, Hanaa Melki Samaan, Adma Nakhoul Shakhashiri, Najla Dabaghi, and myself. As for Anissa Rawda Najjar, she was the only one to persist in this endeavor following its discontinuation by the university. In 1951, she founded the Village Welfare Society which played a pivotal role in educational and social domains to uplift women and rural life in Lebanon. Contributing to the initiative's success were Dr. Afif Moufarrej, Khalil Wakim, Rakan Shakhashiri, Afif Abdul Wahab, Salah Habri, Rasim Al Zawk, Albert Badr, Yahya Safi, Mahfouz Ibrahim, and others. The relatively small size of the university in the mid 1930s facilitated the efforts of those managing the initiative and encouraged volunteers to engage and directly interact with students.

[18]Dodge, Bayard, **The American University of Beirut**. Beirut: Khayat, 1958, pp. 64-65.

Moreover, during that era, the primary concern of university students was predominantly directed toward academic pursuits. Political affiliations had not yet captured their interests. Dean Nicolai, with his commanding presence, exerted a tight grip over student conduct, overseeing their activities both within and outside the university premises. If summoned to his office, students were aware that there would be no leniency in holding them accountable, and thus dreaded the repercussions.[19]

University Life

An agreement was reached between the administration of the American University and the Methodist Missions Councils that oversaw the Junior College, allowing female students of the university to reside on the college campus due to the absence of separate housing facilities for them within the university premises. Consequently, along with her peers, Salwa relocated to the newly constructed Sage Hall situated on the hill between Rue Madame Curie and Sadat Streets. It was ready to welcome the students in the fall of 1933. Salwa's life became a blend of Junior College, where she resided and assisted in the chemistry lab, and her studies at the American University. There was no drastic change in her life during that period; it was a natural extension of her previous way of life. She immersed herself in her studies with passion and zeal, focusing all her attention on delving deeper into the vast realms of science and mathematics, subjects that had always fascinated her. Her proximity to male counterparts did not awaken any desire in her to put on makeup or change her appearance. She remained true to the simplicity that defined her.

Her friend Rose Ghorayeb recalls a conversation she once overheard between Salwa and Arjan Maqsoud, a fellow female university student at the time. Salwa remarked, "I believe shining shoes is more important than powdering one's face."

Arjan quipped, "Polishing shoes is for men while powdering the face is for women."

Salwa remained resolute in her decision to eschew makeup. Thus, throughout her life, she remained unchanged, her face untouched by the allure of cosmetics. Rose Ghorayeb also remembers a conversation she had with Salwa when they were both students at the university. Salwa approached her with a pressing matter on her mind, saying:

> A male classmate asked me to clarify some mathematical concepts for him. I agreed, and we sat together on a bench near the library. Time slipped away unnoticed until an hour had passed. Do you think I made a mistake?

[19] *Al Kulliyah Review*, Commencement, No. 1935, p. 26.

The young girl felt flustered for sitting with a male student in the garden, offering him assistance in full view of others. Rose adds, in her description of Salwa:

> in her social interactions, she was serious, cautious, and avoided male company. If she found herself alone with a boy, even to solve mathematical problems, she believed she had erred. She remained extremely reserved throughout her life.[20]

Her favorite pastime during this period of her life was collecting stamps and listening to classical music. During summer vacations, she would give an Armenian student math lessons in exchange for violin lessons. Her social life while attending university was very limited, as she preferred spending the summer holidays with her family in Dhour El Shweir, where she organized a summer school for the village children. Thus, she did not participate in the Village Welfare Service, which attracted many of her peers and friends during those years.

After graduating, Salwa missed this life, so she penned a letter to her friend Anissa Rawda on July 16, 1935, saying:

> I now realize that university life in our Eastern lands is unparalleled, and by university, I mean its library, laboratories, and some of its professors, because unfortunately, I didn't integrate much into its social life. I think every student should seize the opportunity to contribute in every way possible, so I urge you to stay as you were in the past, or even intensify your engagement, as time permits, so you won't have any regrets when you leave... The phrase 'if only' keeps echoing in my mind, even though I know very well that my time didn't allow me, nor did my busy schedule and my studies…

She concludes her letter by saying:

> Yes... I am sad that I am leaving the university, yet an inner drive compels me to embrace life and fulfill my duties towards humanity. I pray that God assists me in offering to others what has been bestowed upon me.

This guiding principle remained entrenched in Salwa's consciousness, and it motivated her to continuously give and serve her family, her country, and humanity, leveraging all her mental, material, and spiritual talents and capacities.

In the summer of 1937, Salwa joined the Village Welfare Service at the American University upon the invitation of her friend Anissa Najjar and her uncle, Professor Halim, who asked her to partake in the activities of the camp and the summer school established in Jdita, Bekaa, where she worked for over a month.

[20]Unpublished remarks.

Two of her professors left a significant imprint on her intellectual development and personal growth: Mansour Jurdak[21], professor of mathematics and from Dhour El Shweir, who affectionately referred to her as his dear daughter Salwa, and Ivan Rubinsky[22], professor of physics who introduced engineering to the university's curriculum in 1929. He was instrumental in its establishment and development over the years, eventually transforming it into a distinguished and independent department in the mid-1950s, now known as the Faculty of Engineering and Architecture. Rubinsky was also considered one of the founding members of the university's Physics Department. When contemplating her postgraduate studies for a Master's degree in Science following her graduation, Salwa frequently turned to Professor Rubinsky for guidance and counsel.

In a letter to her friend Anissa Rawda during the summer of 1935, Salwa writes:

> Rubinsky suggested that I focus on Mathematical Physics for my thesis. He indicated that it is a challenging topic. I am still uncertain whether I should discuss this topic with Brown, Bacon, and Jurdak. Rubinski has been very supportive and advised me to attend Cambridge as the mathematical resources here are insufficient. He promised to send me - to Palestine - all the books I need.[23] He's willing to help in any way he can. And you know his intelligence, knowledge, and acumen. He's truly a scholar, not just in his field but in mathematics, astronomy, engineering, and others. Think about how amazing that is.

Salwa graduated from the university in June 1935 with a Bachelor of Science degree with distinction. She was the sole female among twenty-eight graduates from the Faculty of Arts and Sciences.[24] Her choice to specialize in mathematics as a female was unprecedented and unheard of and it drew considerable attention and curiosity.

In the Commencement edition of *Al Kulliyah* Review for that year, there was an article that highlighted entrenched beliefs regarding a woman's capacity to grasp complex mathematical and scientific concepts, often considered beyond her natural abilities and conflicting with societal expectations of

[21] Mansour Jurdak: 1881-1964, graduated from the Syrian Protestant College (later known as the American University) with a Bachelor of Science degree in 1901 and obtained his Master's degree in 1907. He served as a mathematics professor at the American University in Beirut from 1901 to 1947. Jurdak authored several textbooks on mathematics education.

[22] Ivan Rubinsky: He joined the American University in Beirut in 1926. He taught engineering and mathematics at the Faculty of Arts and Sciences at the American University in Beirut until 1955.

[23] Salwa had signed with Birzeit University in Palestine to teach mathematics.

[24] Her grades in the university registrar's office at the American University indicate that she ranked first among thirty students, with a final GPA of 88.4.

femininity and traditional choices. The article discussed the achievements of the graduates from the Faculty of Arts and Sciences, detailing their merits individually. When Salwa Nassar's name was mentioned, it remarked:

> As for Salwa Nassar, she is the young woman who **specialized in mathematics!**... How much passion did this girl have to master such a complex science? It is said she is also proficient in a discipline called calculus, and when she walks in the graduation procession to receive her diploma, we'll applaud her with admiration and respect!

Having females pursue higher education in a coeducational environment had become somewhat acceptable, but specializing in mathematics remained a peculiar phenomenon that sparked astonishment.

In that same edition of *Al Kulliyah* Review, there was the transcript of the traditional sermon delivered by President Dodge to the graduating class at the university church on June 22, 1935[25]. In it, he revisited the spiritual principles he had touched upon in his inaugural address twelve years prior, urging students to prioritize genuine religious values over superficial practices. He emphasized the importance of upholding noble principles and engaging in humanitarian service driven by love and dedication.

He also said:

> Here at this university, we have not sought to impose upon you any particular belief or creed, but rather endeavored to make you understand that material aspects of life are of lesser importance than the spiritual virtues of service and love.

Speaking of the challenges awaiting the graduates in their new lives, he says,

> And should your spiritual strength ever falter, replenish it by drawing from the endless wellspring of spiritual life that never runs dry for He is eternal. If doubts assail you, strive to live with the full power of the Holy Spirit, so you may bring beauty, integrity, and love to the hearts of others.

These overarching principles and final exhortations for the graduates vividly portray the spiritual atmosphere and lofty goals that the university sought to instill among its students during that epoch of its history, and which have often aided them in persevering and overcoming trials along the thorny path of life, serving as guiding lights illuminating the way toward righteous and good service.

Among Salwa's closest friends during that phase of her life was Rose Ghorayeb, who graduated from the university in 1934 and earned her master's degree

[25] *Al Kulliyah Review*, Commencement, No. 1935, p. 26.

in 1935. She had become intimately acquainted with Salwa through their involvement in the Arab Association at Junior College and remained companions for two years during their university studies. Another close friend was Anissa Rawda, who encountered Salwa in some common college classes and graduated from university in 1936. Reflecting on Salwa, Rose reminisces:

> She was funny, quick-witted, adept at gentle sarcasm, forthright, and bold in expressing her opinions. She once overheard a friend reciting a conventional speech she had prepared for an occasion, and said to her, "This speech is nothing but a collection of lies."

Rose adds, "I believe her strict scientific spirit made her firm in her judgments."

Anissa Rawda recalls:

> I remember the chemistry and algebra classes in college. Some classmates, including myself, preferred Salwa to explain the problem on the blackboard. We understood her explanation of the equation better than the teacher's. Sometimes, she amused us by deducing equations we only knew after memorizing them. While we discussed our summer reading lists and recounted the novels we had read, Salwa would have immersed herself in the latest publications on algebra and mathematics. We took six classes in college, but Salwa took seven, with calculus as the extra class.

Anissa then recounts:

> Before her trip to Palestine in the summer of 1935, she was giving private lessons to the children of the Melki family in Aley. She used to visit us in Abadiyeh, which delighted my entire family. They grew fond of her and shared the same friendship that I had with her. She was sociable and valued practicality and its benefits. She sewed her own clothes and enjoyed cooking, and some would even say she was a "master" cook.

Chapter III

With the Apostles of Knowledge, Palestine – Iraq

Salwa left Lebanon in the fall of 1935 and embarked on a new chapter as a mathematics teacher at Birzeit College in Palestine. She remained in her position for three years until late 1938. She found fulfillment in her role, earning accolades from the administration and relishing the supportive atmosphere. She journeyed across Palestine, driven by her "love for the land and its people", as she expressed in one of her letters. She spent her summer holidays among her family in Dhour El Shweir and often visited her many friends and professors in Beirut during spring breaks. Although Birzeit College expressed interest in renewing her contract, Salwa was determined to pursue higher education and specialize further. She set her sights on traveling to America to enroll in one of its prestigious universities, but this required some financial preparation before putting her plan into action. The salary offered at Birzeit scarcely exceeded fourteen dinars a month. Although comparatively higher than what a teacher of Salwa's caliber might earn in Lebanon, it paled in comparison to the rates in Iraq during that period. There, a teacher with a Bachelor of Science degree could expect a monthly income of twenty-one dinars. This led Salwa to contemplate opportunities in Iraq, specifically within the secondary schools associated with the Ministry of Education. Naturally, she reached out to her friends Anissa Rawda and Rose Ghorayeb, both based in Mosul in northern Iraq. Anissa held the position of headmistress at the Central High School for Girls, while Rose taught Arabic language and literature. Several correspondences ensued, seeking their counsel on securing a position within the Iraqi educational system, especially if it were in close proximity to them. Her letters also painted a vivid picture of the situation in Palestine, offering insight into their lives.

In an undated letter from Birzeit, likely penned in November 1937, addressed to "Beloved Rose and Anissa", she writes:

> Peace be unto you. How I yearn to join you in that vast arena of work for the advancement of the country. What's more, your strong sense of purpose and proactive efforts are truly inspiring. It brings me immense joy to learn about the presence of several companions, which fills a deep void created by emigration and a change of environment.

She shares updates from her teaching endeavors, detailing her preparations for English matriculation exams and how she is motivating students towards disciplined and organized thinking and self-reliance, employing various means to achieve the desired goal.

As for the situation in Palestine, she lived through the tragedy unfolding in the country and engaged with it with every fiber of her being. She recalls the martyrdom of Sheikh Farhan al-Saadi, whose execution while fasting during Ramadan shook the entire nation. She notes:

> The situation in the country is truly heart-wrenching. Martial law has been declared since November 18th. Yesterday, they hanged the leader, Sheikh al-Saadi.[26] He was known for his unwavering opposition to espionage against the Arab cause. His bravery and steadfast principles ultimately led to his demise. He was captured two weeks ago in the village of Jenin for killing a spy, with the help of his brave men. Even when they apprehended him armed and carrying plans for a revolution, despite their threats and intimidation, his resolve remained unshaken, and he convinced them that he was the one responsible for what happened. Neither his age, nor his valor, nor his integrity, nor even the most eloquent defense attorney in Jerusalem could intercede on his behalf. When he stood trial, the commander-in-chief entered flanked by officers, and followed by the army, which was armed to the teeth with cannons, bombs, and armored vehicles, creating the impression of a complete war zone. When legal arguments were exhausted, one lawyer insisted "Leave a sheikh of his age die a natural death, for he has only a few years left."
>
> To which the commander-in-chief responded: "There is no time left to reform him... If he has not progressed throughout his life, it would be better for him to die."

As for her readings during that period, Salwa found herself engrossed in a particular book chronicling the adventures of travelers in India and their encounters with spiritual luminaries. She reflects on the author's narrative which often ventures into such fantastical realms that it can lead the reader to question his sanity, given the extraordinary wonders he depicts:

> He interprets all human interactions through the lens of wave theory. Happiness, for instance, is portrayed as the synchronization of an individual's wavelengths with those around him, while sadness and despair are depicted as their antithesis. According to him, the soul is akin to waves lingering in space, discernible by those who have reached a level where their oscillations or thoughts can intercept those

[26] The Diary of Akram Zuaiter. The Palestinian National Movement, 1935-1939. Palestinian Studies Foundation, Beirut, 1980, p. 340.

> waves. Thus, the possessor of the soul, even if deceased for two or three centuries, remains perceptible.

Salwa attempts to expound on this concept by stating:

> It is a theory that aligns with the wave theory in science, as contemporary naturalists posit that everything emanates from waves. For instance, electrons are depicted as the collision of waves. This wave theory often substantiates miracles and enigmas that defy comprehension.

Concerned that she might have delved into murky depths of ambiguity, she adds, "I'll give you more details about the book once I have comprehended and studied it more thoroughly." The phenomenon of miracles and the attempt to understand them in the context of scientific theories occupied Salwa's mind across various stages of her life, prompting her to embark on quests to reconcile phenomena governed by scientific laws and natural principles with what transcends them, between faith and logic, material and spiritual. I vividly recall the conversations we shared on this topic during my visits to her while she was hospitalized in London, mere weeks before her passing.

On March 28, 1938, she pens another letter to her friend Anissa, apologizing for the delay in responding to a letter she received. She attributes the delay to her overloaded schedule filled with exam grading, assessments, and other academic tasks. At times like these, she wishes she could be a student again. She reflects again on the ongoing tragedy in Palestine:

> Since the arrival of the new High Commissioner, MacMichael, on March 4th, hardly a day passes without news of the death of at least two or three Arabs, Jews, or Englishmen. The towns of Lydda and Ramle have become battlegrounds, while Jaffa awaits the end of the orange export season. True turmoil and absence of order reigns in places like Jenin and Nablus. The situation is chaotic economically, socially, and politically. Imagine the mindset of the youth growing amidst such mayhem. Yes, they are dying and are filled with a drive to resist and defend a spirit of sacrifice, yet their restless souls are rebellious and unpredictable, and cannot be confined within limits, rather they are like a raging fire consuming itself, ever-burning.

In a letter to her friend Anissa on May 21, 1938, she recounts her decision to submit her resignation to Mr. Nasser, the principal of Birzeit College. He urged her to reconsider, but she prefers relocating to Iraq, eagerly awaiting further correspondence on the matter. Reflecting on the escalating tension in Palestine, she laments:

> The anguish in our hearts has deepened, Zionist propaganda is on the rise. Hope for finding a solution to the Palestinian issue is dim,

with only the ominous prospect of partition on the horizon. The Jews are clinging to this solution, relying on their financial and scientific capabilities.

She recalls that among the Jews, there are some scholars who do not favor the idea of a national homeland at all. For instance, the president of the Hebrew University and others like him prefer Palestine to be a religious or cultural center for Jews, nothing more. She adds:

> As for the Arabs, they remain committed to the committee moving from place to place to study the country's conditions. So far, they have not yet been able to establish contact with any Arab in the villages. Furthermore, activity in the markets is at a complete standstill.

On the same date, May 21, 1938, she also penned a letter to her friend Rose Ghorayeb, expressing her disappointment at not receiving a response to a previous letter. She also asks her about life in Mosul, the social environment, teaching hours, and the type of students. She mentions her trip to Beirut during Easter break, where she spent three days visiting friends, including Professor Rubinsky,

> He's the sharpest and most knowledgeable person I've ever known, with a mind that never ceases to generate ideas. His latest project involves devising a water pump to be operated by donkeys to replace the traditional waterwheel in Syrian villages and towns. He's already built a prototype, currently undergoing testing at the university.

In the following paragraph, she remarks

> You must have read about what happened to May Ziadeh and the considerable suffering she endured. She has now settled in Beirut, residing near the American University, where she meets only a select few. It appears she has resumed her literary salons, which are attended by Ameen Rihani, Constantin Zureiq, and Charles Malik, and occasionally, the leader of the Syrian Nationalist Party. A speech she delivered at West Hall, upon invitation by *Al-Urwa Al-Wuthqa*, has been published lately. It was entitled 'A Writer's Message to the Arab World' and she didn't show any signs of distress or oddity while delivering the speech.

Regarding Charles Malik, whom she had not met yet, she says:

> I have heard that he is considered a philosopher. He went abroad to specialize in engineering or mathematics and returned as a philosopher. Perhaps unsurprisingly, given that philosophy is the culmination of every science. It is said he excelled not only at the American University in Beirut but also at the universities he joined in America. It is also rumored he will be heading to the Village Welfare Service project in Akkar this summer,

where he will be holding meetings to discuss Plato's Republic and its relevance to our present world. I hope we will have the opportunity to sit with him, to listen, deliberate, and decide for ourselves.

Salwa left Birzeit at the end of the school year in 1938 and came to spend the summer with her family in Dhour El Shweir. She was still awaiting word on her appointment in one of the secondary schools associated with the Ministry of Education in Iraq. She remained in constant contact with her friend Anissa, who invited her to spend a few days with her in Abadiyeh. Salwa sent her a letter from Dhour El Shweir on 7/8/38 apologizing for not being able to accept the invitation because her sister Yvonne was bedridden and being prone to anxiety, fretted over the slightest concerns, especially when the doctor mentioned the need for blood and urine tests, fearing typhoid. "Fortunately, the results came back negative", she remarked and added:

> So, you see, I am the nurse, and the one who eases my mother's worries, for she cannot bear to see anyone sick at home. When the doctor expressed doubt about typhoid, she was in tears until the results were confirmed. She is not to blame.[27]

Salwa then extends an invitation to Anissa to visit her in Dhour El Shweir:

> You promised me, and one's word is one's bond. I won't settle for anything less than a full day with all the family. Do not disappoint me. We will go for a walk together in our beautiful woods where you can immerse yourself in an atmosphere of purity and clarity. Come, Anissa, and let Asma and Salwa come with you. My mother remembers you whenever she experiences pain in her stomach and says, "How kind is that lady (your mother)", and regrets the state she was in at the time.

Towards the end of the letter, Salwa revisits the topic of Palestine and the tragedy of the Palestinian people, saying:

> Do you not ache for the plight of Palestine?! I feel as though my very core is being torn apart by the injustice and the vileness, much like what that British commander who committed suicide told the High Commissioner: "Now I feel that we British are defending disgrace and degradation by attacking Arab honor, nobility, and valor."

She wonders "Was his suicide a more fitting end than his survival?" She concludes her letter with a question about Anis, Anissa's brother, who seems to have been traveling. She inquires, "Did he go for work or simply for leisure? How wonderful it is to wander!"

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[27] Perhaps she's referring to the death of her half-brother Edmond Andraos from her mother's first marriage. He passed away from typhoid fever while he was a medical student at the American University in 1930.

On the Banks of the Tigris

Finally, Salwa secured a teaching position with the Ministry of Education in Iraq for a monthly salary of 21 dinars. It was quite an enticing salary for a Bachelor of Science graduate in those days. Indeed, since the early 1920s, graduates from the American University had been setting their sights on Arab countries like Sudan, Egypt, Palestine, and Iraq for administrative or teaching jobs, with salaries ranging between 18 and 25 dinars or pounds per month— amounts several times higher than what a Lebanese could earn in their own country at the time. The French mandate, which had taken control since the early 1920s, had achieved notable successes in the fields of security and justice, but it did little to alleviate the economic crisis plaguing the country. In fact, some believed it had exacerbated and prolonged it. Meanwhile, Arab countries under British mandate enjoyed relative economic prosperity, attracting Lebanese intellectuals, especially graduates of Anglo-Saxon institutes who were unable to occupy government positions in Lebanon during the French mandate.

In the mid-1930s, the Ministry of Education in Iraq had made significant progress in establishing elementary schools and promoting education throughout the country, given the high illiteracy rate among the population, estimated to be over 70% at that time. The Iraqi government relied on university graduates from neighboring Arab countries to undertake the task of teaching, as the local pool of Iraqi intellectuals was insufficient to fill the gap. This policy was initiated in the mid-1920s, bringing in scholars from Lebanon, Syria, Palestine, and Egypt. It continued until the 1940s, gradually phasing out the services of foreign teachers as new graduates from Iraqi missions or the Higher Institute of Teachers emerged. Arab professors from outside Iraq were contracted by the Iraqi government for a renewable one-year term and were considered foreign employees without retirement or compensation rights, regardless of their academic qualifications. It is noteworthy that the prevailing state policy at the time was one of Arab nationalism. The overarching focus of national education, particularly in history and social studies classes in secondary schools, as well as the role of teachers, was geared towards fostering Arab unity and Arab nationalism to nurture a generation committed to upholding genuine Arab heritage.

Palestine held the collective concern of Arabs everywhere. The Iraqi government, along with many leaders across politics and education within the state apparatus, provided support and encouragement to their Palestinian brothers. At times, they even welcomed some of the freedom fighters, offering them work opportunities. These individuals fled their homeland to escape incarceration and the tyranny of the British mandate, seeking refuge in Iraq, which had gained independence in 1932.

During those years up to the late 1940s, there were two main routes to travel to Iraq: the first, across the desert from Damascus to Al-Rutbah, then Baghdad, either in compact six-passenger vehicles or in sizable buses operated by the English-owned Nairn Transport Company or local companies. This journey typically spanned 18 to 24 hours, punctuated by a short break at the Al-Rutbah station in the heart of the Syrian desert. Upon reaching Baghdad, teachers headed to their places of work across Iraq, heading north to Kirkuk, Sulaymaniyah, Erbil, and Mosul, or south to Al-Hillah, Al-Diwaniyah, Al-Najaf, and Basra, either by road or by rail. The other route was by train from Tripoli, Lebanon, to Aleppo, and then to Tall Kujik near the northern Syrian-Iraqi border, eventually reaching Mosul. Regardless of the chosen route, the journey proved lengthy and grueling, with roads often unpaved as should be. Yet, for the young, ambitious, and hopeful, there was a way to overcome challenges, endure hardships, and confront dangers...

In the fall of 1938, Salwa commenced her tenure at Mosul's Public Secondary School for Girls, following in the footsteps of her friends Anissa Rawda and Rose Ghorayeb. Reflecting on that chapter of their lives, Rose states:

> We resided at the American Mission School, overseen by Nelly Ayyoub from Deir Qoubel that year. As for the public school where we worked, it was managed by Anissa Rawda, who was succeeded the following year by Milia Malek Khayr. The work was taxing, the classrooms crowded, the streets muddy, yet our lodgings were comfortable, the meals clean, the climate cool and invigorating, and the majority of the school's teachers were Lebanese. Salwa thrived both physically and emotionally during that year. Her reputation as a math prodigy had preceded her to Mosul, and she shone brightly in her teaching role, attracting numerous requests for private lessons. She accepted some of these requests, she declined others, setting aside a portion of her tutoring income to purchase a precious gift for her beautiful and beloved sister, Yvonne, on the occasion of her wedding that year.

Reflecting on Salwa's extracurricular activities, Rose recalls how she organized a party that included theatrical performances, songs, and dances, the proceeds of which went to the Palestine Relief Committee. Salwa did not forget Birzeit or the years of struggle for Palestine that she experienced there. Rose also recounts incidents that demonstrate Salwa's humanity, altruism, and desire to help others, including: The school janitor and his wife, who lived in the building, had a disabled grandson, and a new daughter-in-law instead of the boy's mother whom their son had divorced. Salwa felt deep sympathy for this family, offering them both health and humanitarian guidance. She counseled the grandparents on the appropriate care of the disabled child, emphasizing their responsibility in this regard. Additionally, she advised the young mother to consume dairy products and other nutritious foods to facilitate the breastfeeding of her frail baby daughter.

In the spring of 1939, Salwa embarked on a journey to the great cities and historical sites of Iraq. She visited Basra, Babylon, and Taq Kisra, and upon her return to Baghdad, she contacted me and paid us a visit. I hadn't seen her since our graduation from Junior College in 1933. She shared with me her plans, firmly set on traveling to America to pursue further studies and specialize in nuclear physics. She mentioned that she had been awarded a scholarship from Smith College in the United States for one year, during which she would obtain a master's degree, with plans to transfer to one of the major universities to specialize in atomic research. Therefore, she had no intention of renewing her contract with the Iraqi government, despite her successful teaching tenure and Iraq's pressing need for math teachers of her caliber. I found Salwa just as I had left her five years ago: simple in attire, calm, modest, sparing in words, conservative in habits, reserving her energy for matters of importance, and looking to the future with dreamy eyes, a sense of reassurance, determination, and confidence.

Salwa was enthralled with Basra, that quaint and uniquely charming city, situated on the banks of Shatt al-Arab River in the southernmost part of Iraq at the confluence of the Tigris and Euphrates rivers. It was the breathtaking natural vistas of this gateway to the Arabian Gulf and the bustling markets of India and the entire Asian continent that lured her in. Basra pulsates with life, a vibrant hub renowned for its fertile soil and abundant palm trees, known to produce more than half of the world's dates. Canals weave through the ancient neighborhoods of the city, earning Basra the title of the "Venice of the East". Much like its Adriatic counterpart, locals use the slender, gracefully curved boats with elegant, upturned tips, known as *sajah* rather than gondolas, to navigate the waterways between the streets and homes.

Salwa was truly captivated by the authentic Arab hospitality she discovered among the people of Basra – an experience unparalleled anywhere in the world. She recounted a particular day when she, accompanied by a group of teachers and a Lebanese family residing in Basra, embarked on an excursion along the Shatt al-Arab. Upon disembarking from the boat onto a lush green meadow to enjoy their meal, servants from a nearby residence promptly arrived with mats, seats, and tea with all its accoutrements. They warmly welcomed the honored guests, kindled a fire, served tea, and were ready to assist with anything they might need. Intrigued by this kindness, Salwa inquired with her friends if they were acquainted with the gracious residents of the house. Their response was negative, explaining that it was an Arab tradition cherished by the residents of Basra, proudly inherited from their forefathers and untouched by the tides of rapid modernization within the city.

Salwa also recounted an amusing encounter with an Indian merchant in Basra who shared her hobby of stamp collecting. As they exchanged stamps, each time she

offered one, he reciprocated with another, playfully uttering "tit for tat"[28]. Salwa couldn't help but burst into laughter, her eyes glistening with tears, as she narrated to me this amusing incident.

Taking advantage of her two-day stay in Baghdad, Salwa seized the opportunity to explore the ancient relics of the city. Together, we ventured to the Iraq Museum (The Baghdad Archaeological Museum), established by Gertrude Bell[29] in the early 1920s, and the historic madrasa Al-Mustansiriya, dating back to the late Abbasid era. Our exploration also led us to the magnificent Al-Kadhimiya Mosque on the northern outskirts of Baghdad, marveling at its dazzling ornate façade and the splendor of its gilded domes, without entering it. As we strolled along the bustling Al-Nahr Street, we stumbled upon the workshops of the Sabean silversmiths, marveling at their craftsmanship. We witnessed a cherished tradition passed down through generations.

From there, we made our way to the banks of the Tigris in Al-Rusafa, where we found a cluster of boatmen. We asked for Dannoush, an old acquaintance, and suddenly, one of them bellowed, "Dannoush! Dannoush!" And lo and behold, he began to row towards us in his small boat with a spirited vigor. His broad grin preceded him, his radiant teeth illuminating his bronzed countenance. His lean frame and muscular arms exuded an air of confidence. Adorning his head was a black-striped cotton turban, while his bare feet shuffled beneath a white robe. We told him we wanted a kuphar (*quffa*). Swiftly and deftly, he propelled his boat towards a nearby companion and retrieved a small kuphar—a coracle boat made of palm fronds and bitumen, said to have ancient origins, perhaps dating back thousands of years to the days of Sumer or Babylon. Who truly knows? This vessel has been present ever since the days when palms and bitumen first graced the lands of Mesopotamia. It is even said that it harkens back to the days of Noah when he constructed the ark, "and sealed it with bitumen inside and out". It had endured the passage of time, a constant presence on the Tigris, undeterred by the clamor of modern boats with their engines and noise, steadfast in its quiet efficiency across generations. We navigated across the river in the kuphar, making our way to Al-Karkh. There, we meandered through its ancient, narrow streets for a little while, visiting the Institute of Elementary Teachers affiliated with the Ministry of Education. After approximately an hour, we returned to Dannoush and the kuphar, crossing the river once more to the eastern bank in Al-Rusafa.

As dusk settled, the lights along the Tigris shimmered in its waters, with numerous boats shuttling between Al-Rusafa and Al-Jisr. The night had cast

[28]A popular English expression meaning "an eye for an eye", "like for like" or "quid pro quo".

[29]A British writer and archaeologist, 1868-1926. She joined the English campaign to conquer Iraq during World War I. Later became an advisor to the High Commissioner, Sir Percy Cox. She played an influential role in Iraq's politics during the early years of the British Mandate.

its veil over the city, revealing its dusty, earthy hue. Baghdad appeared anew, resplendent and radiant as if touched by a mystical wand. Oh, the enchanting beauty it held under the cover of night!

The following day, we accompanied Salwa to the railway station, where she boarded the train bound for Mosul to resume her work. Life in Mosul wasn't drastically different from Baghdad. The weather was harshly cold in winter and scorching hot in summer, with no heating or cooling systems available in those days. Yet, Mosul, nestled near the ruins of Nineveh on the banks of the Tigris in northern Iraq, was known as the "Mother of Two Springs". Here, the autumnal greenery rivaled that of spring. Excursions to lush meadows adorned with countless flowers of various hues, and outdoor dining is a cherished pastime for locals. Some families would invite the Lebanese teachers to these leisurely outings, where they would be hidden by surrounding wheat stalks swaying gently in the breeze. Close bonds of friendship sometimes blossomed between the Lebanese teachers and Iraqi families, enduring even after the teachers left their positions in Iraq, offering a reprieve from the social barrenness and monotony of daily life.

The *hijab* (veil) was prevalent across all social strata and religious denominations. School girls would arrive cloaked in somber black *abayas*, their faces veiled with modest scarves, and it was rare for families to challenge this tradition. The entry of men into girls' schools was strictly forbidden. However, Anissa Rawda dared to defy this norm when she permitted Dr. Zaki Mubarak to address the students at her Mosul school. Dr. Mubarak, employed at Baghdad's Higher Institute of Teachers at the time, had come to the northern capital for a visit. Anissa urged her students to maintain absolute secrecy, fearing news of the visit would leak and trigger a backlash. Life within families was largely divided into two spheres, one for men and the other for women. Some families had begun to tentatively embrace mixed-gender interactions in select, occasional gatherings, particularly if the housewife hailed from Turkish or European origins.

The education of girls was taking its first tentative steps, with only two high schools for girls in Iraq at that time, one in Baghdad and the other in Mosul, along with one Institute of Female Elementary Teachers in Baghdad. In 1937, the Higher Teachers' Institute in Baghdad attempted to admit ten female graduates from the central high schools. Dean Matta Akrawi secured approval from the Minister of Education, Sheikh Mohammad Ridha Al-Shabibi, on the condition that the matter proceed quietly without being announced in the newspapers, fearing opposition or negative reactions. The students then wore veils and sat in class cloaked in the traditional black *abaya*. Despite this, the first experiment proved successful, laying the groundwork for Iraqi girls topursue higher education. Among the first cohort of university graduates were educators, writers, and poets who played a significant role in Iraq's

modern renaissance. A literary awakening emerged from the Higher Teachers' Institute as well as a call for renewal in modern poetry, giving rise over the years to figures like Nazik Al-Malaika, Atikah Al-Khazraji, Badr Shakir Al-Sayyab, and Lami'a Abbas Amara.

At the end of the academic year, Salwa resigned from her teaching position and returned to Dhour El Shweir to spend the summer vacation with her family. She longed eagerly for the familiar hills, the beautiful forests, and the scent of pine and herbs that perfumed the air.

Amid Salwa's papers, we stumbled upon a yellowing sheet dated back to her time in Mosul. Scribbled upon it were a few verses, a poetic endeavor undertaken by a group of junior class students from the Mosul High School.

It was a heartfelt tribute to their beloved teacher, Salwa Nassar, and it read:

The peaceful daffodils, with dewdrops kissed,
Like shining teardrops in your eyes, reminisced.
The violet, humbled, bows to your grace,
In awe, it bends before your gentle face.
Spring's diadem graces your lovely head,
These flowers adorned in your aura, they tread.
In you, I adore a purity rare,
Purer than blossoms, beyond compare.
My verses found solace, their purpose defined,
As they read poetry in your eyes, entwined.

Signature:
Wishing you a long life
Your beloved junior class students

Chapter IV

The United States of America
1939 - 1945

On August 7, 1939, Salwa finally realized a long-held dream that had occupied her thoughts for four years since her graduation from the American University: to journey to America and enroll in one of its prestigious universities to further her education and specialization. During her time in Birzeit, Palestine, and Mosul, Iraq, she diligently prepared and saved money to fulfill this pressing aspiration. Now, aboard the De Grasse, a French line transatlantic passenger ship, venturing into the unknown, bidding farewell to her homeland for her first trip across the seas. Her previous travels had been confined to exploring Lebanon, then Palestine, and Iraq, two neighboring Arab countries, and she could reconnect with her family in Dhour El Shweir during spring and summer breaks whenever the yearning arose. But now she was on an exciting journey to a new and strange land with its customs and traditions, albeit with a broad knowledge of its language. She had always heard of America as the land of wonders, innovations, and extraordinary achievements.

In a letter addressed to her parents from Brooklyn, New York, on August 29, 1939, Salwa says:

> It's been over half an hour now, and I've been trying to write to you, but my eyes fill with tears of longing, and I find myself unable to continue. I send you kisses, though across the seas. My solace is that I will be away for only one year. I pray that God keeps you safe and sound until I return to gaze upon your beloved faces and share all the experiences and encounters of my journeys through diverse lands. I hope to receive a letter from you soon, to reassure myself of your well-being, ease my mind, and allow me to resume my studies.

She vividly recounts her journey since leaving Beirut on Monday, August 7th, at 10:30 p.m.:

> The view of Lebanon from the sea is enchanting. I watched the lights of Ajram Restaurant flicker until they dimmed momentarily, then lit up again. By Tuesday morning, we docked at the port of Haifa, where we stayed for four hours before continuing our voyage to Alexandria.

Salwa missed the chance to see Alexandria and get acquainted with it due to a "mild dizziness", as she puts it. Two days later, the ship arrived at the port of Piraeus in Greece, but time constraints prevented her from exploring the archaeological sites in Athens. They reached Marseille on Monday, a week after the journey began:

> On Tuesday, the following day, I strolled through its streets and visited its churches. It happened to be the Feast of the Assumption (August 15th). The streets are beautiful and lined with lush trees on both sides. They felt oddly familiar rather than alien. There was a certain echo of Beirut in ambiance and language.

Salwa was amazed by the breathtaking beauty of France's forests during the train journey from Marseille to Paris which lasted twelve hours:

> No wonder Charles Debbas said 'Make Lebanon green' following his visit to Marseille. The city appears affluent, busy, with a soul. By Wednesday morning, Paris greeted us with its architectural grandeur, elegance, and charm. Sculptures adorned the buildings, and the streets were impeccably tidy.

Salwa spent two days in Paris visiting the Louvre, and exploring its ancient artifacts, relics, and artistic masterpieces. She also visited Notre Dame Cathedral, the epitome of artistry and splendor. She longed to extend her stay to discover more of this historic city. Upon reaching Le Havre on Thursday evening, she noted its mountainous terrain by the sea, reminiscent of Lebanon. She reassured her family of her well-being, that she slept well and savored a hearty meal. The following day, Friday, the ship set sail for New York, briefly stopping at "Southampton, one of the English ports". Afterward, she saw neither the sky nor the sea until Sunday, August 27th. The initial seven days proved tiresome, with Salwa experiencing bouts of dizziness. However, the final three days unfolded differently:

> I found myself wandering around the ship, soaking in music, catching films, and mingling with fellow passengers. There were a total of 263 passengers in my class, mostly Americans, intrigued by my journey from Lebanon to the U.S. to pursue my education... On the last night aboard the ship, I donned my peasant dress (from Birzeit). Several passengers approached, inquiring about Lebanon and Palestine, admiring the dress. It gave me a chance to introduce them to our country, its people, art, heritage, and refined tastes. The third-class manager invited me to join a party held on the first-class deck, but I declined, content with whom I already met.

As the voyage neared its end and land loomed in sight, Salwa reflected:

> As the sun began to set on Saturday, August 26, a distant island materialized on the horizon, signaling our nearing arrival to New York.

> What a beautiful scenery it was, after eight days at sea with no traits of land, our eyes feasting on the grandeur of the Statue of Liberty with its torch held high, and the towering skyscrapers of New York City.

The ship docked at the port of New York on Sunday morning, August 27. Salwa's uncle, Antoine Hajjar, warmly welcomed her, escorting her to his home in Brooklyn, where a throng of relatives and friends eagerly awaited to greet her. She found comfort and solace in her uncle's house and under his care, and described it saying, "He is pulling out all the stops to make me feel at home and comfortable". Yet, there was a twinge of regret for not meeting the expectations of those who anticipated her beauty to rival that of her mother, Victoria. Salwa humorously remarked on this, saying, "Unfortunately, I disappointed them!"[30]

Salwa concludes her letter with inquiries about her beloved sisters, Yvonne, Helen, and Marcelle. Urging her family to write back promptly, she requests the addresses of her uncles in America, hoping she might be able to visit them.

> God willing, I'll finish my studies in one year because I feel that no country in the world can replace Lebanon in my heart no matter how big or small.
>
> With all my love,
> Your obedient daughter,
> Salwa

About a month after her arrival in New York, Salwa enrolled at Smith College for Women in Massachusetts, having secured a generous scholarship covering tuition, accommodation, and personal expenses. Smith College was renowned as one of the top women's colleges in the United States at the time, boasting a student body of 2,200, and a faculty comprising half women and half men. In a concise autobiography penned at the request of her mentor, Winifred Shannon, after obtaining her PhD, Salwa reflected:

> My years at Smith College were incredibly fruitful and successful. I supplemented my studies with physics courses to fill any gaps in my knowledge. My academic focus at the American University primarily centered around mathematics, complemented by chemistry and physics as ancillary subjects.

Consequently, she could only commence her master's thesis halfway through the year and proudly recalled conducting her research under the tutelage

[30]The truth is, there was no resemblance between Salwa and her mother who had a remarkable beauty that she preserved even into her old age. Salwa inherited her facial features from her father, Shukri Nassar. When I mentioned this observation in front of Mrs. Victoria, who was over eighty-five, she said, "That's true, but excessive intelligence is inherited from the Hajjar family!" And we both laughed…

of two esteemed professors, the distinguished scientist Curslow and the esteemed female scholar and scientist Ewing. Her thesis explored "The Absorption Spectra of the Aromatic Amino Acids and Proteins".

Her efforts culminated in success and recognition as she earned her Master's degree in Physics by the end of the year, and her thesis was published in the renowned scientific journal, *Journal of the American Optical Society*.

Salwa considered her first academic year at Smith College as a successful and encouraging prelude to the following five years she spent in America, alternating between studying and teaching. Her time in the country provided her with opportunities to visit scientific institutions and establish close connections with physicists she had previously only known through their publications. Concurrently, she felt a keen desire to understand the American lifestyle and ethos through work and social engagement.

She engaged in various extracurricular activities, responding to invitations from various associations and clubs to deliver lectures on the pressing issues facing the Arab world, particularly the plight of Palestine. At the San Francisco conference of 1945, she co-organized a ceremonial tribute for Arab delegations.

She visited several renowned universities in America, including the University of Chicago, Yale, Columbia, and Washington, among others. During these visits, she met eminent scientists, including two Nobel laureate physicists, Dr. Millican and Dr. Carl Anderson.[31]

Among her papers, we found a photograph of her with several guests at a party in Dr. Millican's house in Pasadena, California. Scribbled on the photo was "Salwa Nassar and her admirer Carl Anderson" dated May 30, 1942. The handwriting was not Salwa's. On the opposite corner, Salwa herself had written in her handwriting:

> In conversation with Carl at Dr. Millican's residence. Carl Anderson, the discoverer of the Positron and Nobel laureate for this groundbreaking discovery.

Salwa had been preparing to return to Lebanon in 1940 after completing her master's degree. However, the outbreak of WWII thwarted her plans. It was exceedingly difficult to secure transportation, yet Salwa wasn't one to sit idly by in the face of adversity. Born and raised in Shweir, a village nestled amidst the towering and rugged mountains of Mount Lebanon, she had learned early on how to confront challenges and obstacles. Her life was a series of silent, stubborn trials, met with unwavering determination and indomitable spirit.

[31] *Al Kulliyah Review*, Journal 1946, No. 1, pp. 12-13.

She confronted various problems with resolute willpower and an unshakeable resolve in pursuit of a clear, defined goal. Since the tender age of six, she braved the biting cold and snow, clutching her books and a piece of wood for heating, trekking on foot to the village school with its single room. There, she attentively learned the alphabet and listened intently to the math lessons taught in the same room for the higher grade, eagerly raising her finger to participate in answering questions. Upon returning home in the evening, instead of playing like other children or immersing herself in her studies, she assisted her mother with household chores. She is the eldest daughter of Shukri Nassar, and like many of her counterparts in the close-knit Lebanese family system, she shouldered responsibility from an early age and bore it with patience and resolve. She defied traditions and financial difficulties when she insisted on transferring to the prestigious Brummana High School to complete her secondary education in 1930. The headmaster of Shweir School, Mr. Fares Badr, recognized her exceptional abilities and encouraged her parents to fulfill her aspirations. A family council was convened to consult on the topic, chaired by her eldest uncle, the renowned lawyer Gabriel Nassar. The decision was made that it was not conceivable for a girl her age to be sent to the boarding section of a school predominantly attended by boys, and in a town other than her own. When the recommendations of Mr. Fares Badr, her excellent grades, and her top ranking in class, failed to achieve her desire, Salwa resorted to tears. She lay on her bed, weeping and sobbing until her father found her. There was no need to persuade him further. He reassured her, "Salwa, my dear daughter, I will fulfill your wish no matter the cost."

Throughout her life, Salwa never forgot her father's compassion and support and never failed to mention it on different occasions. She considered the year spent in Brummana as a turning point in her life. From Brummana to Junior College, Salwa's journey reflected her resilience and courage, as well as her father's sacrifice and his faith in her and her abilities. Upon graduating from college, she stood out as the sole student from her cohort to secure university admission. She focused on her studies while working in the laboratory and offering private tutoring to cover personal expenses. Salwa's travels to Palestine and Iraq, her commitment to teaching amid challenging circumstances, and helping her sisters complete their high school education were all milestones in her journey of perseverance, determination, and accomplishments. So, she will summon the same resolve and won't be thwarted in finding a solution to the obstacles.

She sets her sights on a new objective: pursuing further higher education to obtain a doctoral degree. But how to achieve that when she lacks the means and finances? She submitted multiple applications for financial aid to various renowned American universities and received positive responses from the University of California, as well as Brynn Mawr College and Smith College.

She chose the University of California because she believed it ranked highest in the field of physics. Merely being accepted there was, in her estimation, a stroke of good fortune. The scientists she studied under at that university were brilliant luminaries in their fields, including Oppenheimer, Segrè, Alvarez, McMillan, Raymond T. Berge, Victor T. Lenzen, W.H. Williams, W.E. Hazen, and E.O. Lawrence.

On January 14, 1941, from her residence at the International House in Berkeley, California, Salwa wrote a letter (in Arabic) to her sister Marcelle, detailing some of her experiences in her new environment. The letter reveals her interest in her sister's education, her attachment to her family, and her longing to reunite with them. Marcelle was still a student at the American School in Sidon. Among the sentiments expressed in the letter were:

> My dearest Marcelle,
>
> I was truly delighted by your letter, with everything it contained, and particularly by your return to school... Did you visit home during the break? How is the family? Marcelle, I don't believe it necessary to remind you. I trust you to take care of our parents and never forget the sacrifices they made for us. Many young women crave knowledge but have been denied it due to their families' indifference and shortsightedness, despite being more financially secure than our parents. And you are the only one with them at home until my return, which will be soon, God willing.
>
> I am on the western coast of the United States. Take a map of North America and compare the two states, where I was last year and where I am now, and count how many states I had to cross to reach California. I described my journey in a letter to my parents. The experiences I gained are far more valuable than what I learned from books. Hopefully, you will embark on similar journeys after you graduate. I felt a deep sense of sadness for our beautiful homeland, and how it lacks men and women willing to make sacrifice for its sake.

Regarding her courses, she describes them as incredibly engaging.

> Last semester, I was studying with Professor Lawrence, the inventor of the cyclotron, who is now one of the most renowned physicists in the world. I remember reading about him in one of the issues of *Al-Muqtataf* in 1936 or 1937. How I wished back then to meet him! Now we are at the same institute, and he is constructing a cyclotron that could generate a hundred million volts, due to be completed in 1943. I wish you could read that article in the Modern Science News section; undoubtedly, you would benefit from it and learn something about what I am studying here.

On the 21st of July 1942, she writes again to her sister Marcelle, detailing the reasons for her delayed return to Lebanon and her upcoming transfer from the University of California back to Smith College. Penned in English, the letter reads:

> I was delighted to hear your news and your progress in mastering the typewriter. If only you were nearby, it would have saved me a great deal of effort and money spent on writing reports. What do you think about printing my doctoral thesis? I am impressed by your organization and writing style.
>
> Your plan to attend college after graduation fills me with immense joy. It's hard for me to imagine that you've reached an age where college is within reach, as I still think of you as my young sister, just as you were when I left.

Then she asks Marcelle about the courses she intends to take in college, recommending physics, chemistry, and mathematics, and offers assistance if Marcelle wishes to continue her studies at the university afterwards, upon her return to Lebanon. Then she transitions to say:

> As for my return to Lebanon, the reasons behind the delay are as follows: Traveling by ship is fraught with peril. It takes a minimum of two months and costs a thousand dollars, and if the ship is forced to make stops along the way, the duration and expenses could escalate further. I even considered air travel, but securing a spot on a plane proved exceedingly challenging. I know two individuals from Egypt, whose government has been trying to repatriate them, and they have been waiting in New York for about a year. Hence, my dear, despite my fervent yearning to return home, I find myself unable to do so given the current circumstances.

Reflecting on her return to Smith, she shares

> Smith College has offered me a position on their faculty in the Physics Department. It's truly a rare opportunity to prove myself and secure a prestigious position. As you know, I'm still working towards my Ph.D. I've completed all the prerequisites and qualifying exams, with only research and dissertation writing remaining.

In the span of two years, between 1940 and 1942, Salwa completed all the required courses and examinations necessary for her doctoral candidacy. The sole task left was to conduct research for her dissertation. However, the exigencies of war, which diverted the attention of most professors to governmental duties for the war effort, coupled with the scarcity of essential materials for individual scientific research, thwarted her progress and achievement of her objective.

Salwa returned to Smith College, where she was offered an academic position that opened up avenues for her research on the same topic she had explored for her master's thesis. Her research findings were published in *The Physical Review*, a preeminent scientific journal renowned nationally and internationally.

From the Physics Department at Smith College, Salwa dispatched a letter in English on October 30, 1943, addressed to her sister Marcelle, who had enrolled at Junior College in Beirut. She inquired with great interest about Marcelle's new life, the courses she was taking at college, and the professors instructing her. She advised her to stay calm and not to fret if she encountered initial difficulties. She encouraged her, soothing her fears, stating:

> I have several freshmen students under my supervision at Smith who excelled in high school but are finding it challenging to maintain the ranks they were accustomed to. This is due to several factors, including the increased competition in college compared to high school, as well as the complexity of navigating new systems and environments.

She offered Marcelle another piece of advice:

> There's something important I'd like to point out, Marcelle. You might encounter people at college who knew me before. They might suggest you take after your older sister as a role model. Pay no heed to such remarks. Stay true to yourself and build your character based on your strengths and merits. Let your unique thoughts and personal goals guide you.
>
> Rose Ghorayeb and Louise Fleihan are among your teachers, distinguished by their loyalty and dedication. I'm sure they are ready to offer any advice you may need, and you can consider them friends, not just teachers. Try to benefit as much as possible from your lessons with Rose Ghorayeb, even if your specialization lies in another field.

She transitions to discussing her current work, saying:

> I returned from Amherst College, where I worked during the summer break. Today, I teach two courses in physics: one in the laboratory and the other for senior students specializing in physics. I supervise seven students in the lab, and we explore topics of their choosing, including radio and electronics issues, nuclear physics, and cosmic radiation.
>
> Thus, I am incredibly busy, but I find fulfillment in my work. The lab equipment doesn't always behave as anticipated by the students. You can imagine the anxiety and worry evident on their faces and the sense of guilt when a strong current flows through the sensitive galvanometer![32]

[32] An instrument used to detect and measure small electric currents.

> There's another task I share on rotation with a colleague from the faculty, which involves leading a physics study group once every two weeks. I'll tell you more about it later. I think you have heard enough about physics for today!

In the following paragraph, she returns to inquire about Marcelle's social life, how she spends her free time, and the quality of her friends at college.

> When was the last time we were home together? How is everyone there? How did you spend the summer in Dhour? Tell me about Mom and Dad. Do they seem much older than when I left them? Oh, how I long to return and see you all. I'll write to them soon. Send them my love, and my regards to Rose and Louise.
>
> Your loving sister,
> Salwa

On January 22, 1944, she writes to Marcelle again, inquiring about her life and academic progress at college:

> I'm writing to you while listening to the opera Carmen broadcasted from the Metropolitan in New York. I wish you could hear it. How have you been, and what about your musical pursuits? Are you still taking piano lessons?
>
> Try to attend the musical concerts at the American University. Yesterday, we heard the famous violinist Yehudi Menuhin. He's a young virtuoso who came to Smith and performed for us. He is indisputably exceptional in his art. Last week, I joined my colleagues from the physics department to attend the annual meetings of the American Physical Society held at Columbia University in New York. Most of the studies revolved around cosmic radiation and the mesotron. There was a presentation on physics and industry. I wish you could take just one physics class.

Salwa remained at Smith College until the summer of 1944 when she was offered a teaching position at the University of California in the Naval Training Program. She began her new job in July of that year, and on October 26, she sent a letter to Marcelle describing her life in California and the nature of her work at the university. She also recounted a trip she took with an American family she had met there. Here's an excerpt from that letter:

> Here I am at the end of a four-day vacation spent in the San Jaquine Valley in California, one of the richest grape-producing regions in the world. Everything seems on a grand scale here. You wouldn't believe how much grape I've devoured on this trip. I'm a guest at some friends, the

Altthous family, I met their daughter, Elzie, in Berkeley, and they've come to consider me as one of their own. Today, we mentioned you, especially since their youngest daughter is off to college. The mother suggested I write to you on this very paper she uses for her correspondence with her daughters. She's a gracious lady with a generous heart.

We drove around in their car, exploring the valley or should I say the vast plains. The father, a civil engineer, took us to the courthouse where he had to testify regarding a land survey in the area. We had an enjoyable time.

Today, I am heading back to Berkeley and I will resume work tomorrow. Berkeley is 270 miles away from this valley, which is more than the distance between Jerusalem and Beirut and the journey takes six hours on the express train. Have I told you before that most of my students in California are from the Navy, training to become officers? They are robust, towering figures, some of whom served in the Pacific Fleet. I teach five classes and pursue my personal research on cosmic radiation.

With all my love and longing,
Salwa

In a letter dated May 8, 1945, she writes to her parents, recounting her meeting with members of the Lebanese delegation at the San Francisco conference. Among them were Dr. Charles Malik, his wife, Eva, and Najla Jurdak. She shares her encounter with the head of the delegation, Wadih Naim:

> When he heard my name, he asked if I knew Gebrayel Nassar. Upon discovering he is my uncle, he told me a lot about him and how he is one of his dearest friends. He also mentioned that he is part of a committee striving to award him the Lebanese Order of Merit.

She mentions her meeting with several members of the Egyptian, Iraqi, and Saudi delegations, noting their unity and harmony, working with one heart towards common goals. Yet, amidst these gatherings, something dawned upon Salwa, prompting a playful remark, even at her own expense:

> I noticed my Arabic is getting rusty due to the lack of use, but I hope I will regain my fluency upon returning home. So, don't worry, and don't get ready to laugh, for I still speak better than R.J. anyway!

She says that she is in contact with her paternal uncles, and her maternal uncle and his family, albeit by phone. She anticipates the end of the war in Europe which will bring her closer to reuniting with her family and returning to her beloved homeland.

She addresses a brief undated message to her beloved parents, just after earning her PhD, saying:

> How I wished you were with us yesterday. A group of Arab youth and several professors hosted a reception in my honor at one of the luxurious hotels in town to celebrate my doctoral degree in physics. Someone said to me, 'Your joy would have been complete if your parents were here.' I have also received telegrams of congratulations from friends at Smith College, and gifts and flowers poured in from friends in Berkeley. How I wish you were here with me.

Regarding her travel plans, she mentioned that it wouldn't be before mid October, possibly even later.

> I'll be leaving California in three weeks, and hopefully, I'll manage to visit family on my way. I'll do my best, and until we meet again soon, God willing.
>
> Your dutiful daughter,
> Salwa.

The news of Salwa Nassar's academic excellence and the significance of her scientific research had reached the ears of the Syrian community[33] in the United States. She became a source of pride and honor for them, particularly among her family and relatives who maintained constant contact with her.

Her uncle, Antoine Hajjar, who welcomed her upon her arrival in New York on August 28, 1939, sent a letter to Marcelle, his niece, conveying his emotions and delight at Salwa's brilliance. He wrote:

> Your sister has acquired an illustrious reputation globally for her brilliance in the field of physics. She has surpassed students from the most prestigious colleges in America, and her name has become renowned in major American publications and newspapers. I am sending you an article about her in English, which was published in the *As-Sameer* newspaper in New York, so you can only imagine her greatness. May the Lord bless her and bring her back to you in good spirits, for I know that you all eagerly await her return.

Entitled *Syrian Girl Assisting a Prominent Physicist* (a special feature article for *As-Sameer*), the writer describes Salwa Nassar from Dhour El Shweir as:

> Having wide expressive eyes, slender and dark-skinned. At first glance, she seems disconnected from the intricate sciences she specialized in. Yet, in reality, she may well become one of the eminent scientists in the near future. She stands poised to present her doctoral thesis in physics at the University of California.

[33] At that time, this designation included both the Syrian and Lebanese communities.

> When news of the atomic bomb spread worldwide, our thoughts turned to this girl who has been and continues to conduct research with Professor Lawrence, the inventor of the Cyclotron, the machine for atomic explosion.

The writer continues, stating:

> Miss Nassar is thoroughly acquainted with all aspects of this machine because her work revolved around atomic explosion. However, when we asked her about the connection between her work and the experiments that led to the discovery of the atomic bomb, she denied that her research had any direct relation to the atomic bomb.

She added, clarifying:

> My research didn't directly involve atomic explosions, but rather delved into closely related areas, particularly radiation theory—the very theory that encompasses aspects of cyclotrons and even the atomic bomb.

She added:

> Most of these research endeavors today have applications in the field of medicine. Regarding the atomic bomb, the closest work I've done in this field was assisting in the creation of a machine known as the Mass Spectrometer, which we used to separate Uranium-235 from other uranium atoms.

The writer states that this encapsulated much of what he could grasp from Miss Nassar's explanation of her field of expertise. Despite her efforts to simplify the complex scientific theories, much of what followed was beyond his comprehension. As for her plans for the future of her country, she contemplates establishing physics laboratories and even a Cyclotron machine, aiming to conduct scientific research to serve both the medical and industrial fields.

The newspaper clipping sent by Antoine Hajjar to Marcelle bears no date, yet the interview must have been conducted in August 1945, the month when Salwa completed her doctoral thesis. Also, the explosion of the atomic bomb referred to in the article indeed occurred on August 6th of the same year. The letter was written in Brooklyn on September 20, 1945.

In her correspondence with Winifred Shannon, Salwa reflects on her interests during her first four years in America, focusing on nuclear and atomic physics. She recounts how her research endeavors were predominantly within these fields. However, upon returning to the University of California at Berkeley to complete her doctoral work, she found that Cyclotron machines had been monopolized by the government for wartime efforts. Moreover, acquiring radioactive materials became increasingly uncertain.

Thus, she shifted her focus to the closely related field of cosmic rays, which had captivated her interest and passion. Additionally, at that time, the dissemination of information on this subject was unrestricted and uncontrolled by governmental oversight. Salwa chose to focus her research on "Cosmic-Ray Showers". The results of her work were highly encouraging, as she noted, and were published in *The Physical Review* in April 1945. Salwa concludes her brief account with these words:

> Thus, a year after my return to California, I earned my PhD and was elected to the following scientific societies: Sigma XI, Phi Beta Kappa, and the American Physical Society. Although Smith College invited me to stay and teach, I chose to return to Lebanon.[34]

Salwa wrote this brief four-page autobiography in the summer of 1945 before leaving New York to return to Lebanon. This was at the request of her teacher, Winifred Shannon, who had taken an interest in Salwa's studies since she was a student at Junior College. True to her nature and renowned humility, she did not mention her remarkable achievements among the highest echelons of academia. Instead, she limited herself to sharing a few basic facts about her serious accomplishments in scientific research and training, without any commentary or explanation of their significance.

We had to wait until the spring of 1967, a few weeks after her passing, for the full picture to emerge. It was then that some of her professors, who knew her well during that period of her life, provided their testimonies. This was in response to questions posed by the editorial committee of the Beirut College for Women Alumnae Bulletin, which had announced the death of Dr. Salwa Nassar. Their reactions were as follows:

One of her professors, Raymond T. Birge, Professor Emeritus of Physics at the University of California, said:

> I am deeply saddened to hear of Dr. Nassar's passing. I knew her well when she was a graduate student at Berkeley. I was her faculty advisor throughout her time at Berkeley and served as the head of the Physics Department. Therefore, I remember her distinctly. I can say with certainty that she was one of our finest students at the university, and she had a remarkable and captivating personality. Until my retirement in 1955, she remained our only student from Lebanon.

Professor Victor F. Lenzen, also Professor Emeritus of Physics at Berkeley, added:

> When Dr. Salwa Nassar was a student in the Physics Department at Berkeley, she was a prominent member of the Advanced Dynamics course, which I taught. She was among the brightest students I've

[34] Unpublished biographical data pp. 5-6.

known, her intellectual achievements and captivating personality distinguished her, earning our admiration. She also served as a dedicated teaching assistant during the challenging times of World War II. Her untimely passing is a loss for us at the University of California, as it is for Beirut College for Women.

Professor Wayne Hazen, from the Physics Department at the University of Michigan, who knew her at various stages of her life, remarks:

> It was my good fortune and pleasure to have known Salwa Nassar when she was a doctoral student at Berkeley. The best testimony to her research prowess is that the findings of her work are now featured in one of the accredited textbooks on modern physics. My initial acquaintance with her marked the beginning of a long-standing friendship, characterized by my growing admiration for her talents across all her endeavors. I was fortunate to have had the opportunity to get to know her as a student, as a colleague at the American University of Beirut and the University of Michigan, and as a unique friend. All of us who knew her mourn the loss of an irreplaceable friend and the loss of significant scientific achievements she could have accomplished for the advancement of humanity.

Since 1944, there have been several correspondences between Salwa and Mr. William Stoltzfus, the President of Junior College in Beirut. This was because Salwa's younger sister, Marcelle, was a student at the college, and reports on Marcelle's progress and academic journey reached Salwa, who had been diligently overseeing her education since Marcelle's days at Sidon Girls School. Another reason for these correspondences was that President Stoltzfus had requested Salwa to join the faculty at the college. At that juncture, Salwa was only two years into her academic journey, with modest academic credentials compared to the rigorous standards of the prestigious universities she had encountered, particularly during her studies in America, and her scientific pursuits were not evident yet.

What was strange was Salwa's keen interest in this request. By her second year at Smith College, she had already made significant strides in the field of atomic research, with publications in leading scientific journals. Here is her response to President Stoltzfus in June 1944:

> I deeply appreciate your offer for me to join the faculty at Junior College, and I earnestly hope to accept this offer, which I consider a privilege. I am planning to return to Lebanon once the war is over and after I have completed my doctoral studies, which are greatly influenced by the current situation and its impact on individual research projects.

[35] Alumnae Bulletin, Beirut College for Women, Vol.XV No.2 Spring 1967, (36 pp. 8-9).

Then she reflects on her first year at Smith and the scientific courses she attended, while conducting research for her master's thesis which was published at the time. She describes her two years of education at Smith by saying:

> I engaged in the study of both theoretical and experimental physics during my time, as well as overseeing an advanced course in laboratory science. Leading an educational workshop on nuclear physics for physics majors was a particularly enriching experience, offering me the opportunity to engage with the American Physical Society and the American Association of Physics Teachers. My work at Smith College was both stimulating and rewarding. Indeed, I relished every moment of teaching. This summer semester, I am teaching until July 5th . Recently, I had to decide whether to continue working at Smith or move to the University of California. Each had its merits, making the decision challenging. Ultimately, I opted for Berkeley, where I will have the opportunity to work on completing my doctoral research, a prospect that excites me greatly. I will start teaching at the University of California on July 10th. This means I will enrich my teaching experience in physics at a department renowned as one of the leading scientific centers in the world.

On June 10, 1945, just before completing her doctorate, Salwa wrote once more to President Stoltzfus, expressing:

> Following our previous correspondence, I remain interested in joining the faculty at Junior College, should there be any openings or plans for expansion. Please inform me at the earliest opportunity, preferably by telegram if possible, and I am willing to cover any expenses.

She requests clarification on the terms of employment, including working hours and salary, indicating her readiness to provide the administration with necessary references and recommendations. Concluding her letter, she adds:

> I hope to receive a favourable response for I long to return home!

Salwa's desire to return home after a six-year absence was not inherently surprising; she longed with nostalgia for her family, her hometown, and her numerous friends. However, what caught the attention and stirred questions was the trajectory of this physicist's journey. She was the eighth woman to earn a doctoral degree from the University of California in physics and the first Arab woman to delve into the field of atomic detonation, unraveling its enigmas. Her prowess earned admiration from global specialists, unlocking avenues for publication in the most prestigious scientific journals. She engaged in teaching and organizing scientific workshops at a university college at the forefront of women's education in the United States. At the University of California,

a bastion of physics and nuclear research on both national and global scales, her research findings found their place in accredited physics teaching textbooks. Yet, she declined work in America, despite the vast opportunities offered there for scientific exploration that had always captivated her and fueled her curiosity. She relinquished the thrill of discovery and the quest to unravel more of the universe's secrets, along with the stimulating intellectual discourse with eminent minds and renowned scientists, and the attractive salary she greatly needed. Rejecting all these opportunities, she opts instead to return to her modest college in Beirut, where the academic standards, laboratory facilities, and science teaching are rudimentary at best, perhaps not much more advanced than those of a high school in more developed nations. It is something that begs reflection, questioning and analysis.

Perhaps the answer lies in an idealistic inclination that consistently propelled Salwa toward service and sacrifice, in her deep-rooted patriotism that pulled her back to her homeland, in her love for her family and friends, who perennially served as a wellspring of inspiration and solace for her. Added to these sentiments was a sense of duty and gratitude towards that modest college that recognized her talents and believed in her when she was a student there, enabling her pursuit of higher education through financial support and unwavering encouragement. It was she who said on her graduation day from the American university: "May God grant me the ability to give to others as much as has been given to me." Who knows, perhaps her return to her homeland could contribute to the establishment of a scientific renaissance and guide the youth towards a love of knowledge. Something she believed was vital in shaping nations and advancing them. Maybe there are young souls awaiting awakening, and minds and talents in need of guidance and refinement. She had received word of developments in her homeland; Lebanon had gained its independence in November 1943. It stands at a pivotal crossroads, venturing towards a new destiny brimming with possibilities, requiring the mobilization of efforts and the unleashing of capabilities. Its fate largely depends on the correct guidance and the establishment of sturdy foundations with wisdom and foresight. Will she stand idle in the face of this challenge? If there is building and laying of foundations to be done, why not contribute her share to this new endeavor? She, the daughter of Shweir, whose ancestors chiseled rocks into pillars and arches that adorned Lebanon's palaces from Beiteddine Palace in the Shouf to Higher Metn, and the plains of Akkar.

Chapter V

Return to Lebanon

In October 1945, Salwa returned to Lebanon and joined the faculty at the Junior College, where she taught mathematics and science. President Stoltzfus had full confidence in her, giving her free reign to introduce a physics program into the academic curriculum the following year. Her first year was grueling, with twenty-one hours of teaching per week, including lab work, along with extracurricular responsibilities such as supervising students' cultural and social activities and accompanying them on various excursions.

She resided in Nicol Hall, the college dormitory, situated on the hill where she had witnessed the cornerstone laying ceremony for the first building in 1933 when she was still a student. She began spending most of her holidays with her family in Dhour El Shweir, her hometown, to which she remained deeply attached. It was her sanctuary, a place she returned to after extensive travels and exhausting work to relax, recharge, and renew her energy.

At that time, the college had made significant strides in its development. Since assuming the presidency in 1937, President Stoltzfus had implemented a series of reforms in both the external appearance and the academic objectives and curriculum. A new building had been added on the western side of the college grounds to serve as the residence for the president and his family, while Nicol Hall was built as a dormitory on the eastern side near Madame Curie Street. The original Sage Hall remained dedicated to classrooms and laboratories.

The campus grounds had also seen considerable improvement, transforming the once barren hill into an attractive landscape adorned with lush, evergreen grass shaded by tall trees. Climbing plants covered the rocks, and comfortable benches were scattered across the area, providing students with places to study and relax. The college's appearance had become quite appealing, reminiscent of the campus of the American University of Beirut, which had emphasized the cultivation of gardens since its founding in the mid-19th century, following the tradition of well-known and prestigious American colleges and universities, which allocate a significant portion of their budgets to maintaining and enhancing the beauty of their gardens.

Among the new subjects introduced by Stoltzfus into the academic curriculum was an expanded home economics program, which he named Euthenics. This program encompassed social psychology, child development, family relationships, nutrition, and all aspects of domestic life. Esteemed women's colleges in the United States, such as Vassar College, had incorporated this specialization into their curricula. The American University of Beirut encouraged this new direction for the Junior College with a decision from its Board of Deans on June 12, 1940, which they communicated to the college administration through a letter from President Dodge and Dean Brown. They hoped the college would steer its academic program towards this specialization until it could become a four-year institution capable of granting a Bachelor of Science degree.

However, the war years delayed the project's implementation, and the college remained a two-year institution until the 1947-1948 academic year when a junior year was added, making it a three-year program. In 1950, the first class graduated with a B.Sc. degree after the Presbyterian Mission granted the college the right to award Bachelor of Science degrees in the following specializations: home economics and child development, education and psychology.[36]

Naturally, the student population grew over the years, reaching 187 in the 1945-1946 academic year, compared to 82 in 1937. The student body was diverse, representing twelve nationalities and thirteen religious denominations. According to the Educational Committee of the American Council on Education, which visited in 1946, the college aimed to provide a broad education that prepared students for family life, teaching careers, and admission to the American University of Beirut. The faculty consisted of the president, twelve full-time professors, both males and females, and four part-time instructors. Among them, ten held Bachelor of Science degrees, four held Master's degrees, and one had earned a Doctorate.

The mandatory core courses for Freshman year largely mirrored the 1933 curriculum: Religion, Sociology, History of the Near East, Health Science, English, Arabic, or French. Additionally, students had to choose between Mathematics or a course in the expanded field of Home Economics. For Sophomore year, the mandatory core courses included Home Economics, Psychology, Religion, and Physical Education. Students also select a course each semester from the following elective courses: English, Arabic, European History, Political Science, Psychology, Art, Zoology, Botany, Chemistry, Economics, Family Relations, Philosophy, Music, and Typing. The college also placed a strong emphasis on extracurricular activities,

[36] Roberts, Donald. **The Beirut College for Women, A Short History**. Beirut, 1958, pp. 60-65.

which included the Student Council, the Arabic Society, the Crafts Club, and the Cooperative Club.[37]

Most students at the college believed their education was complete upon receiving their sophomore diploma. They would return home, either awaiting a suitable husband or seeking a teaching position at a secondary school. Only twenty percent pursued further their university studies. This tradition undoubtedly influenced the college administration's decision to focus the academic curriculum on home economics and preparing students primarily for family life.

Salwa Nassar had high ambitions, hopes, and a strategic plan to foster a generation that would embrace and advance science, thereby contributing to the nation's development and helping it keep pace with more advanced countries. But how could she embark on this ambitious journey from a small, limited-scope college? What is the practical plan for the future?

On April 20, 1946, Salwa was in her hometown of Dhour El Shweir, enjoying her spring break. She penned a letter to Winifred Shannon, sharing her general impressions about the country.

> There are significant duties and responsibilities that must be undertaken. Courage, perseverance, and faith are imperative if we aspire to steer the country on the right path towards progress. It saddens me to acknowledge the scarcity of competent leadership in key positions at present. It seems that the country's progress is superficial at best. We need to foster a sense of social responsibility. More education at higher levels and additional health initiatives are crucial. I was disappointed by various prominent figures upon my return to Lebanon, especially considering what I had heard about the reform efforts in the country.

In another letter from Dhour El Shweir, dated August 27, 1946, she shares:

> I feel that my teaching year has been remarkably successful. My students have diligently applied themselves and I believe they have learned something. Similarly, my lectures outside the college have been met with enthusiastic response.

Mindful not to appear overly self-indulgent, she adds with humility:

> I apologize for dwelling on these matters about myself, but I know you are interested in hearing them. There is ample room for improvement and reform. I hope the equipment for the physics laboratory will arrive soon.

[37] Matthews and Akrawi, **Education in Arab Countries of the Near East**. Washington D.C.: American Council on Education, 1949, pp. 498-499.

As for her plans for the upcoming year, she notes:

> I intend to lead a seminar on nuclear physics for both faculty members and students from both the college and the American University. I am undeterred by the prospect of a small number of participants, as quality supersedes quantity in such matters. I have penned some ideas for establishing a science club aimed at facilitating the exchange and discussion of scientific ideas, while also encouraging students to raise questions and nurture their curiosity.[38]

Over the following two years, Salwa managed to realize some of these plans. She finally received new equipment for the physics lab from America, which had been a long-held dream ever since she started working at the college. Simultaneously, she inaugurated the Science Club, designed to instigate students into perusing scientific journals and delivering synopses during general meetings. Eminent scientists were also invited to give lectures on various scientific topics. As part of the club's activities, excursions to water purification facilities and the radio tower were organized, alongside visits to thermal mineral springs in Syria. In November 1946, the Syrian government tasked Dr. Salwa Nassar with inspecting water sources and compiling a report on radioactive activity levels. She diligently undertook the assignment, her report revealing the presence of radioactive activity in three of them.

Perhaps the most poignant testament to the role Salwa Nassar played in the college during this period, and the profound impact she had on her students, is a brief note written by one of the students in the 1946 college yearbook. This note eloquently captures Salwa Nassar's character and the scientific awakening she fostered in her students. It read:

> She shone brightly and then vanished from sight, only to be swept away by the war for six long years, reemerging as a gift of peace. Her return brought comfort and hope to the college environment and joy to those who had known her. "Where is she? How is she? I want to see her." These questions buzzed among the students upon her arrival. Finally, we got to know her. We got to know her in the lecture halls, with her stern face and immense self-confidence, explaining, interpreting, and unraveling the complex problems of science. We got to know her in the classroom with her piercing gaze, expressing all that she expected from her students: constant silence, attentive ears, meticulous preparation, and readiness for any surprise. We got to know her in the garden and during social gatherings, where she laughed and mingled with students as if she were one of them, answering their questions with kindness and pleasure.

[38] Unpublished biographical Data p.7.

Regarding her return from America and her decision to forgo the opportunities that lay before her there, the unnamed student writes:

> One of her most remarkable traits is that genuine Arab spirit which prompted her to leave the West, where her exceptional talents and rare intellect had ample room to flourish. She came back to us from America, bearing insights from her physics studies and the essence of culture and general knowledge. She returned hurriedly for she realized we were dormant, prompting us to awaken from our deep slumber and propelling us to catch up with the West, which had already made significant strides.

She concludes her tribute with:

> This is Dr. Salwa Nassar. A source of pride for Lebanon and the Arab world. She lived as an inspiration, a beacon of science, perseverance, and dedication to life.[39]

One of the anecdotes shedding light on Salwa Nassar's personality and some of the conversations circulating about her among the students at that time, is this amusing dialogue between one of the students and Ahmed, the owner of the college's store, just before the final exams:

Student: "Please, Ahmed, a kilo of pistachios..."

Ahmed: "A whole kilo, miss? Isn't that a bit much?"

Student: "Yes, I know, but I desperately need them... I have some tough math problems, and I can't solve them without munching on pistachios."

Ahmed: "Wow! If eating pistachios is necessary for solving math problems, then Dr. Nassar is having tons of them!"

In the 1948 yearbook, one of the students asks Dr. Salwa Nassar the following question: "Who is the ideal girl deserving of the best recommendation along with her diploma upon graduation?"

To which Dr. Nassar replies, "She's the girl who dedicates 25 hours of her day to continuous study, considering weekends as an optimal time for it. She's the one in whom physics runs through her veins, and mathematics has become part of her being!"

In another article discussing the objectives of the college and the extent of their fulfillment, a student poses the question to Dr. Nassar, to which she responds:

"Among the college's aims is to equip the female student in the Arab East to assume her role in society, initially as a citizen wielding substantial influence in nation-building, starting within the household, and subsequently to

[39] **The Trireme**. American Junior College, 1946 p.16.

provide her with sound scientific preparation enabling her to engage with scientific advancements and assume various governmental positions."

"Has the college achieved its objectives?"

"In my opinion, it hasn't, or rather, it was closer to achieving these objectives in the distant past than it is now. In the past, a greater proportion of graduates demonstrated an understanding of the cultural and spiritual essence of the institution. Currently, many students enroll for reasons other than the pursuit of knowledge. The war and its psychological effects have contributed to this trend."

"Did you enjoy your time at the college?"

"I loved it immensely. Coming here felt like receiving a precious gift. It provided me with the opportunity to serve my country. It connected me with the scientific field to which I've dedicated my life, while also allowing me to engage with the minds of the youth. It's unfortunate that, thus far, there hasn't been a genuine desire for fundamental scientific research at the college, and I hope this will change in the near future.[40] "

Yet Salwa carries a message to her fellow women that transcends physics and mathematics. She calls for the liberation of women from outdated traditions, for equality with men, for a sense of responsibility, armed with knowledge, and an openness to the positive aspects of Western civilization. Six continuous years in the United States have altered her outlook on life significantly. She has closely experienced the importance of women's freedom, their determination, and their national responsibility in daily life, especially during WWII.

In a speech she delivered in English before the College Alumnae Association on November 28, 1945, she shared some impressions of her first journey to the United States across the Atlantic Ocean, saying:

> For days, all we beheld were water, sky, and the flying fish. As the ship neared the end of its journey, the traveler spotted a faint light in the distance, steadily growing brighter—it was the torch, held aloft by the Statue of Liberty. A statue of a silent, tranquil woman, yet exuding majesty and grandeur, welcoming newcomers as if to say: "You're arriving to quick-moving land, propelled by wheels, if you fail to keep pace, you risk falling behind. It's a land of opportunity and challenge, where your future hinges on how you face it. A land proud of its achievements, boasting the tallest buildings, the largest university, the highest number of radio stations, and the mightiest cyclotron. It is a land where tradition doesn't fetter its youth, nor do social considerations

[40] **The Trireme**. American Junior College, 1946 p.16.

> curb their resolve. Women here enjoy their rightful place in all aspects of life, and children are listened to and cared for attentively. It is a land that values work, where the ultimate judgment is based on how you perform your job, no matter what it may be." This woman says all this with pride and admiration, yet suddenly, she seems bashful, bowing her head, she addresses newcomers: "In this land, particularly, a land of wonders and accomplishments, the color of one's skin still holds a peculiar significance, and racial considerations breed prejudice and odious bigotry."

In this captivating introduction, Salwa opens her talk with a rhetorical skill that one would hardly expect from a nuclear physicist accustomed to the rigorous style of scientific research. She seems well-versed in the art of rhetoric and refined literary techniques, piquing the audience's curiosity for what she has to say next. The Statue of Liberty beckons visitors to enter the extraordinary island, buzzing with the vigor and fast pace of a new life—a life Salwa deeply and broadly experienced over six years of relentless effort in the university environment, laboratories, and scientific discoveries, extending into the heart of American family life and daily routines. What insights does she wish to impart to the graduates from these rich experiences she had the privilege to observe firsthand? Having returned to that small hilltop, she aims to "give to others as much as has been given to her", as she puts it.

She speaks of Smith College as it was in 1939-1940, during her initial encounter with American life, when half the faculty were women.

> In my first year there, I met a graduate student in her second year. She was studying physics and diligently working on her master's thesis. She held a full-time job, prepared her meals, cleaned her apartment, and went out with her boyfriend twice a week. By the year's end, she got her master's degree and the man of her dreams.

Salwa had come a long way from the shy, hesitant girl at the American University of Beirut, who once felt uneasy speaking with her peers. Now, she admired and respected her American friend's relationship with the man she married after earning her master's degree. This evolution was natural, considering that a decade separated these periods, most of which she spent in America. There, she had the opportunity to embrace American life and adapt to many of its customs and traditions.

Salwa particularly admired the American woman for being capable, energetic, independent and productive. She had contributed significantly to the war effort, demonstrating her competence and ability to keep secrets in critical wartime research.

As she continues to share her impressions of American life, she highlights the high level of respect accorded to workers and the societal respect for all types of labor:

> A carpenter, for example, earns two dollars an hour. This benefits students who take on extra jobs to cover some of their study expenses—they might wash dishes, serve tables, or clean windows.

This perspective was revolutionary for the Arab society at the time, which frowned upon manual labor being undertaken by the educated class, let alone by those who were economically privileged.

From her impressions of American life was the ethos of offering opportunities to others. She eloquently remarks:

> When President Roosevelt passed away, and Truman assumed the presidency of the United States, and the nation was divided between Democrats and Republicans, they rallied behind him despite the prevailing impression at the time that Truman was not a skilled politician or an outstanding person. Yet, every official in the state contributed their share of assistance with honesty and dedication to keep the wheels of the state running smoothly.

In August 1946, a journalist from Women's Voice (*Sout al-Mar'a*) weekly newspaper asked a series of questions to Dr. Salwa Nassar seeking insights into the most compelling facets of Western existence that had captivated her attention. She replied:

> What struck me first was the speed, comprehensiveness, and effectiveness of work, along with the abundance of women involved. The clarity of purpose among individuals and the positive spirit of competition.

In discussing the contrast between Eastern and Western women, she remarks:

> The Eastern woman is often more emotional than rational. The Western woman, however, possesses a sense of freedom coupled with the responsibility to control that freedom. She is characterized by self-reliance, candor, and ingenuity. She does not lag behind men in any human endeavor.

Regarding a woman's goals and the ways for achieving them, she responds:

> Her paramount goals begin with the pursuit of a well-rounded domestic life, then active engagement within her community, and culminate in professional undertakings. The crux of achieving these goals lies in conscientious effort, freedom, and equality between her rights and the rights of men.

Regarding her stance on educational initiatives, she advocates for standardized curricula across all schools, coeducational settings when possible, and compulsory education until at least the age of fourteen. She emphasizes the necessity of acknowledging the value of sciences which fosters a precise, structured, and accountable scientific thinking, even within the realm of humanities. Furthermore, she underscores the importance of emphasizing the study and appreciation of the arts, especially music.

"In which fields can women excel over men?"

> When given equal opportunities and upbringing, both women and men have demonstrated equal aptitude for excellence. Women may excel in areas related to childcare, such as nursing and education. The trials of this war (WWII) revealed that women outperformed men in tasks requiring precision and patience.

Regarding her plan for the country's scientific future, she remarks:

> We must establish laboratories, even if modest, not limited to the natural sciences but extending to chemistry, agriculture, and medicine.

The journalist concludes her interview by asking about Salwa Nassar's message to our society, particularly to women. She replies:

> Firstly, combating illiteracy, as education is a weapon against all kinds of diseases and fosters a sense of responsibility. As for my specific message to women, it is about raising well-rounded children with proper physical and mental upbringing. The first year of a child's life is crucial for their future. Women must become independent and embrace their social and economic responsibilities. They should contribute their knowledge to support their community and be unafraid of rolling up their sleeves and asserting their strength.[41]

In 1949, Salwa received an invitation from the University of Ann Arbor, Michigan, to join the faculty of the Physics Department as a visiting professor. She left her teaching duties at Junior College at the end of the academic year and returned to the realm of experimental scientific research. During the summer break, she stopped in Europe and spent a month at the Polytechnic Institute in Paris. Additionally, she spent a month at the University of Bristol to train in using the nuclear emulsion technique for studying cosmic rays. She attended two conferences on atoms, the first in Basel, Switzerland, and the other in Como, Italy. Her assigned project at the University of Ann Arbor for the academic year 1949-1950 was the establishment of a dedicated cloud chamber for studying radiation and particles for the Physics Department at the mentioned university.

[41] **Women's Voice (***Sout al-Mar'a)*, August 1946, Volume 2, Issue 41, pp. 4-5.

Chapter VI

A Passion for Science: 1950 - 1965

In 1950, Salwa joined the faculty of the Physics Department at the American University of Beirut, where she remained until 1965. During this phase of her life, she held the positions of professor and head of the Physics Department successively, being the first woman entrusted with a tenured professorship and department chairmanship at the mentioned university. Taking a broad look at these fifteen years in higher education, one finds them replete with multifaceted activities and significant achievements across academic and administrative domains, fundamental scientific research, publication, and lecturing. Salwa participated in international scientific conferences both within and beyond the Arab world. Moreover, she demonstrated a deep-seated commitment to Lebanese educational affairs, actively contributing to the development of plans and guidelines alongside officials in the Ministry of Education and beyond. It's a remarkable, uninterrupted sequence of effort, pursuit, planning, and execution, scarcely paralleled in the lives of individuals but also among educators and scholars in our Arab region.

In 1952, Salwa spent three months at the Atomic Energy Research Establishment in Harwell, England, where she conducted research on the applications of radioisotopes. She also visited other British institutes to study their methods of utilizing radioactive atoms. Upon her return to Lebanon, the Ministry of Education awarded her the Gold Medal of Merit.

I interviewed Salwa Nassar when she assumed the presidency of Beirut College for Women, and the interview was published in the Alumnae Bulletin, Volume 14, Number 1, 1965. When I asked her about the driving forces behind her prolific output and brilliance, she replied, "A passion for science that I wanted to share with my beloved compatriots."

In 1953, Salwa Nassar represented Lebanon at a conference for the Organization of Arab Scientists held in North Africa. The following year, she attended the Arid Zone Conference in New Delhi, India, where she was the only woman present. In 1955, she represented Lebanon at the first Atoms for Peace conference in Geneva, Switzerland. In 1956, she served as a visiting professor at the University of Michigan, Ann Arbor, in the United States.

In 1958, she once again represented Lebanon at the second Atoms for Peace conference in Geneva. In the same year, the Prime Minister of Lebanon awarded her the medal of Grand Officer of the Order of Merit, in recognition of her efforts in organizing an intensive course on the techniques and applications of radioactive isotopes in the fields of industry and medicine. As a result of this initiative, Lebanon received scientific equipment from the U.S. Atomic Energy Commission valued at a quarter of a million dollars, which was entrusted to the Physics Department and the hospital affiliated with the American University of Beirut. In the summer of that year, Salwa received an invitation from the Iraqi government to attend a conference on nuclear physics held in Baghdad, and organized by the Iraqi Academy of Sciences, of which she was a member.

In 1959, Salwa was invited to an international conference in Tunisia to discuss 'The Role of the University in Society', organized by the 'International Association for Cultural Freedom' in collaboration with the University of Tunisia. The conference included numerous educators and scientists from the Arab world and abroad. Salwa presented a paper titled "The Scientist and Society in Lebanon", which was published alongside other contributions in a special edition of the Tunisian magazine *Al-Fikr* in October 1959. That same year, she was invited to deliver a series of lectures on atomic physics in Kuwait, and her lecture *Nuclear Physics and Medicine* was published as part of the Kuwait Lecture Series for that year. Additionally, she was elected to the Board of Trustees of Beirut College for Women, where she served on the Academic Committee.

In 1960, Salwa Nassar's name appeared in a distinguished register of the world's prominent figures in the field of atomic science, published in London.[42] The following year, she was invited to participate in an international conference held in Poughkeepsie, New York, to celebrate the centennial of Vassar College, one of the most renowned women's colleges in the United States. The conference gathered a large number of specialists in the humanities, applied sciences, and sciences from around the world, most of whom were women. The conference aimed to explore "The Role of Education in the World". The papers presented by the specialists were published in a book titled *Education in World Perspective*, which was released in 1962. This volume included a chapter by Salwa Nassar on "The Wonders of Creativity". In that same year, she was invited to participate in the annual conference of the Massachusetts Institute of Technology (M.I.T.) in the United States, one of the largest institutes for graduate studies in science and engineering on both the American and global fronts. The theme of the conference was 'Science and Technology'. Salwa presented a paper in which she analyzed educational and technological methods to make the study of science a vibrant subject in schools and colleges

[42]Who is Who in Atoms. Ed. By A.W. Haslett, London: Vallancy Press 1960, vol II. L-Z.

in developing countries. On February 7th of the same year, Salwa joined the University of Ann Arbor, Michigan, to continue her research on cosmic rays. At the end of the academic year, the U.S. government invited her to visit atomic research centers in the United States.

On September 14, 1962, a presidential decree was issued establishing the National Council for Scientific Research in Lebanon. The following year, the names of the thirteen members were announced, with Dr. Salwa Nassar being the sole woman among them. Regarding her involvement with this council before its establishment and her subsequent activities, we shall delve into them in greater detail in the upcoming pages. In 1964, she participated in a global conference held in Geneva, Switzerland, focusing on the utilization of atomic energy for peace. Additionally, she attended another conference in Beijing, China, which attracted five hundred specialists from various fields of natural and social sciences, representing 43 nations.

Time Capsule: Three from Lebanon

In that same year, she was invited to participate in the 'Time Capsule' project organized by a group of American scientists on the occasion of New York's World Fair. This project aimed at gathering information from specialists worldwide about the 20th-century civilization and then placing it in a metal capsule that was impervious to atomic and nuclear radiation, moisture, or any other factor that could corrode metal. This capsule was to be buried underground to be opened in the year 6000 AD. Among the six scientists chosen to study the conditions in Africa and the Middle East, three were from Lebanon: Dr. Costantine Zreik, for education in the Middle East; Dr. Charles Malik, for global events and Middle East and Africa events; and Dr. Salwa Nassar, for the sciences.

Upon receiving the invitation to participate in this significant cultural event, Dr. Salwa Nassar told An-Nahar journalist that she is deeply committed to the project. She will work diligently to develop a comprehensive plan for Science education in the Middle East and Africa, highlighting its global value as well as discoveries made in these regions over the last quarter-century. She mentioned that her work would focus on physics, chemistry, natural science, and technology. At the end of her interview, she remarked:

> Lebanon will undoubtedly feature in our study. I am actively consulting colleagues and professors across Africa and the Middle East. I am hopeful that I will fulfill my duties to the best of my abilities.[43]

The consultants were scheduled to carry on their work until October 1965, the date set for burying the capsule deep underground. While it is well-known

[43] *An-Nahar*, Supplement. Sunday, May 17, 1964. p. 2.

that Salwa Nassar was actively involved in this notable project, unfortunately, we do not possess the specific details of the information she sent to the relevant authorities at that time.

The National Council for Scientific Research

In the mid-1950s, Salwa Nassar spearheaded a national scientific initiative that had a profound impact on Lebanon's scientific future. This began with a lecture she delivered at the American University of Beirut titled "Scientific Research in Industry and Construction", part of a series on "Development and Reconstruction Projects in Arab Countries". Her lecture was later published in the university's journal, *Al-Abhath*. [44]

At the end of her lecture, Salwa introduced the idea of establishing the National Council for Scientific Research, outlining a comprehensive plan with few details for its organization and execution. In her visionary address, she proposed the formation of a National Council for Scientific Research in Lebanon, composed exclusively of competent scientists. The council's mission would be to design extensive training programs for scientists and technicians in specific fields, reaching advanced levels, and to establish a research institute supported financially by industries and governments without imposing restrictions that would hinder scientific production. The proposed constitution for the council included the following elements:

Functions: First, to advise the government on scientific matters both nationally and internationally. Second, to oversee government-sponsored research projects and to ensure the appropriate allocation of funds. Third, to provide financial aid for education or specialization within Lebanon or abroad. The council reports directly to the President of the Republic.

Committees: Life Sciences, Geology, Chemistry, Physics, Scientific Statistics. Arabic translation of technical scientific terms, measurements, and weights.

Annual Budget: 1% of the government's budget.

Council Members: Candidates for council membership must hold a doctoral degree or its equivalent in one of the natural sciences. The council initially consists of members appointed by the President of the Republic, followed by individuals elected by the council through a majority vote. The council includes a president, vice president, secretary, treasurer, and committee directors. The term of membership is three years.

Council Publications: annual report, individual scientific research papers, and a biannual newsletter available in Arabic, English, or French.

On January 12, 1955, Salwa gave a lecture at the Lebanese Cenacle on Atomic Energy. This lecture was later published in the January 1956 proceedings

[44] *Al-Abhath*, Volume 8, Part 3, September 1955, pp. 398-400.

of the symposium. In her talk, she discussed the Geneva Conference on the Peaceful Uses of Atomic and Nuclear Energy. At the end of her lecture, Salwa called for the establishment of a National Council for Scientific Research, which would report directly to the President of the Republic, and would be tasked with the following:

First, a comprehensive survey of our scientific capabilities, including both the specialists currently in Lebanon and those abroad who long to return if offered conducive working conditions and a productive scientific environment.

Second, the development of a long-term plan for selecting individuals who are eager and apt to specialize in their fields.

Third, the establishment of an institute dedicated to pure scientific research, including nuclear sciences, which would serve as a hub for the advancement of natural sciences and for training in scientific research methods. As for the funding of this project, Salwa suggested that one percent of the state budget be allocated to the center, based on her knowledge of similar centers in other countries.

Prior to this, Salwa had engaged in a voluminous exchange of correspondence with Dr. Charles Malik, Lebanon's ambassador to the United States, during the mid-1950s. These letters evidenced her profound interest in the project and her unwavering conviction regarding the significance of scientific research in developing countries, with particular emphasis on Lebanon.

On November 16, 1954, Dr. Charles Malik gave a speech at the United Nations General Assembly on the peaceful use of atomic energy. In his address, he raised several fundamental and pressing issues: why certain nations excel over others in modern scientific discoveries, especially in uncovering the secrets of the atom; the significance of development and its link to power in these nations; the relationship between development and industry, the close connection between industry and scientific and technical culture, and the urgent need for a scientific and technological renaissance in developing countries aspiring to claim their place in modern international political relations.

On December 11 of that year, Salwa, with her colleagues from the Physics Department at the American University of Beirut, Professor Byron Youtz and Professor James R. Heirzler, wrote a letter to Dr. Charles Malik. In their letter, the physicists expressed their gratitude for Dr. Malik's dedication to scientific advancement, pure research, and the use of atomic energy for peace. They appreciated his emphasis in his speech on the importance of these activities for the progress of developing countries that send their representatives to the UN platforms and international conferences to sit as equals with the representatives of advanced nations.

The professors highlighted the lack of development projects in Lebanon based on scientific research and technological progress in all fields. Drawing from their knowledge, they proposed the urgent need to establish a National Council for Scientific Research in Lebanon, with nuclear energy and its peaceful use as one of its main focuses. The three physicists concluded their letter by expressing their willingness to devote all their resources and energies to the implementation of the agenda mentioned at the United Nations symposium.

On January 10, 1955, Dr. Charles Malik sent a letter to Dr. Salwa Nassar in response to her joint correspondence with her colleagues from the Physics Department. Dr. Malik raised several key points: the world is on the brink of a tremendous technological revolution that would profoundly impact the political and cultural progress of nations. Consequently, it was imperative for the Near East to be fully prepared to harness these opportunities from the outset. He wrote:

> I am pleased to see that you and your colleagues share a deep interest in this subject. You can count on my support for understanding and collaboration.

Regarding the establishment of a National Council for Scientific Research, Dr. Malik was favorable to the idea. He encouraged Dr. Salwa and her colleagues to unite all those involved in various scientific research fields into a single organization comprising competent scientists. He suggested that Dr. Nassar contact the President of the Republic and present him with a detailed plan for implementing the project.

On August 14, 1957, Salwa wrote to Dr. Malik from Dhour El Shweir, mentioning the financial assistance UNESCO had provided to the Syrian University in Damascus to advance their scientific research. She recounted a recent conversation with several UNESCO representatives regarding obtaining similar financial aid and discussed with them the proposal for a nuclear research program in Lebanon. The representatives showed understanding and readiness to support the initiative. Therefore, she suggested that Dr. Malik directly contact the Director-General of UNESCO to request assistance.

In the final paragraph, Salwa reiterated the importance of establishing a scientific center for nuclear research in Lebanon. She expressed her hope that it would be included in the action plan of the upcoming ministry in Lebanon as a core part of its policy and agenda.

But the years passed with no sign that this crucial scientific project, to which Salwa had devoted so much thought, planning, effort, and outreach, was any closer to realization. Undeterred, she renewed her efforts in the early 1960s, reaching out to Dr. Adma Abu Shadid, the president of the Lebanese Association of University Women, to present the idea to

President Fouad Chehab. On February 7, 1961, Dr. Abu Shadid wrote a letter to the President on behalf of the association, requesting the following:

1. The formation of a National Council for Scientific Research.
2. The establishment and equipping of a National Scientific Institute for Research.
3. The revival of the agreement Lebanon signed with the United States in 1955 regarding the uranium grant intended for operating a nuclear reactor. It is noted that the United States is willing to cover a significant portion of the reactor's costs based on reliable reports from the esteemed physicist, Dr. Salwa Nassar, a proud member of the Lebanese Association of University Women. Dr. Abu Shadid hoped that His Excellency the President would personally take an interest in this matter and assign Dr. Salwa Nassar to contact the nuclear scientist Glenn Seaborg, the new chairman of the U.S. Atomic Energy Commission, who is both an acquaintance of Dr. Nassar and a known advocate for science. As Dr. Nassar is about to travel to the United States for six months, she finds this an opportune moment to negotiate with Seaborg for the benefit of Lebanon.

The letter reads:

> We are in the era of atomic and space sciences, with most nations in a constant race to advance in these fields. Where does Lebanon stand in this race? Some may argue that Lebanon's small size disqualifies it from participating in scientific research, but brilliance and intelligence are not confined to large nations alone. Lebanon is currently fostering a promising group of scientists, yet, unfortunately, they receive no encouragement and find no opportunities to contribute within their own country. As a result, they are compelled to go abroad, where they find supportive environments and well-equipped laboratories.

What interests us in this letter to His Excellency the President are the ideas and proposals it contains, which Salwa Nassar had previously presented in her lectures and published articles. This demonstrates Salwa's perseverance and determination to spread her vision and her continuous efforts to establish a foundation for science in her country. She firmly believed that despite its small geographic and demographic size, Lebanon could contribute to scientific research if given the opportunity, encouragement, and resources to participate alongside the advanced nations in the fields of atomic and space sciences.

Before leaving Lebanon in the spring of 1961, Salwa once again reached out to the President, leaving with him a comprehensive plan for the establishment of the National Council for Scientific Research. This plan included various details and proposals for organization and funding, as outlined in her previously published lectures. It appears that her proposal was met with interest and

support from the President and other official bodies. Upon her return from the United States in September 1961, she found that the Lebanese government had adopted her proposal and had requested an expert from UNESCO to draft the constitution and plan for the council's establishment. Following Salwa's decade-long efforts, a presidential decree establishing the National Council for Scientific Research was issued on September 14, 1962. In January of the following year, the names of the council members were announced, and Salwa became an active member of the Basic Sciences Committee. She represented the council at several international scientific conferences, the last of which was the World Atomic Energy Conference in Vienna, Austria, in the fall of 1966, just a few months before her death.

Dr. Hassan Musharrafieh, a distinguished physicist who had first encountered Salwa during the 1948 UNESCO conference in Beirut and later collaborated with her on various educational and scientific initiatives, reflected:

> Salwa believed that every country, no matter how small, should contribute to the realm of science and knowledge, rather than being a mere spectator. This belief underscored the need to establish a National Council for Scientific Research. Concurrently, President Chehab, who was interested in progressive movements within the country, requested UNESCO to send experts to provide a report on setting up a National Science Council. A preparatory committee was formed for this purpose, and Salwa actively participated in its activities alongside international experts.

He added:

> Salwa, Father Dupré Latour, Dean of the Faculty of Medicine at Saint Joseph University in Beirut, and myself were part of the Basic Sciences Committee. Our primary focus was on sending students on missions to study abroad across all scientific fields and disciplines. We selected the top students from among all candidates, regardless of their background or political affiliations.

Dr. Musharrafieh recalls another noteworthy collaboration with Salwa, involving the incorporation of the baccalaureate curriculum into Lebanon's Anglo-Saxon educational system. This initiative took place in 1951, during his tenure as an expert at the Ministry of Education, where he supervised baccalaureate students, particularly in the science department. He says:

> The Ministry at the time attempted to persuade the American University to adopt the baccalaureate exam for students aspiring to enroll in university. Initially, the university administration hesitated, as the concept diverged from the American education model. Leveraging my acquaintance with Salwa, we collaborated to persuade the university

> administration to accept the idea, and our efforts bore fruit. I entrusted Salwa with overseeing the formulation of questions in English.
>
> Her involvement proved instrumental in fostering closer alignment between the Lebanese Ministry of Education and the American University. Together, we worked to adapt the question format to better suit the American perspective. The science questions were primarily developed in collaboration with Salwa. Her approach was profoundly patriotic, and I found her to be exceptionally responsive and cooperative throughout.

Regarding Salwa's idea of establishing a science museum, he says:

> Salwa harbored a profound wish to establish a central science museum that would draw young people towards science. Regrettably, this dream remained unfulfilled. The National Council for Scientific Research sought to honor her memory and bring her vision to life, but to this day, they have not succeeded. The obstacles are numerous and intricate. Such a museum must be of an internationally respectable standard, requiring a well-equipped building and an army of personnel, including scientists, experts, and technicians. In truth, it is a challenge for a small country with limited resources like Lebanon.[45]

Professor Joseph (Yusuf) Najjar, Chairman of the Board of the National Council for Scientific Research, recounts that Dr. Salwa Nassar, a founding member of the council, actively participated in its board meetings and served on the Basic Sciences Committee. Since the council is a member of the governing board of the United Nations Atomic Energy Authority (UNAEA), headquartered in Vienna, Austria, Dr. Nassar was delegated to represent Lebanon at the international conferences organized by the UNAEA. Dr. Nassar had a visionary idea to establish a science museum to benefit the youth and the general public. Following her passing, the council decided to adopt her idea and honor her memory. However, the implementation has been delayed due to the tragic events that have afflicted the country.

Professor Najjar elaborates on the council's scientific policy, emphasizing its commitment to promoting and supporting scientific research nationwide. This policy includes fostering development in culture, science, economics, and social studies; sending students abroad for specialization, with many returning to contribute to the nation's progress; conducting scientific research at the council's facilities; and collaborating with universities through financial support and human expertise. The council allocates 20% of its budget to pure scientific research and 80% percent to applied research.

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[45]Dr. Hassan Musharrafieh earned his PhD in Physics from the University of Paris (Sorbonne) in 1951, and founded the Faculty of Science at the Lebanese University in 1960. He served as Minister of Planning in 1970 and was the Dean of the Faculty of Science from 1970 to 1978. Currently, he oversees the Computer Center at the Faculty of Science. - Interview, February 10, 1981.

The council is limited to a maximum of fifteen members. Among them, Dr. Nassar and Father Dupré Latour have passed away, and some others are absent due to ongoing crises. One member is from humanities major while the rest are from the fields of pure sciences, medicine, and applied sciences. The council's funding is a grant from the Prime Minister's office. Originally, the council's constitution mandated a minimum of one percent of the state budget to be allocated to the council, but this has now become the maximum limit, and the council struggles to secure even this amount.

The council also receives additional funds from various institutional donations. For example, a contract was signed with the Ford Foundation to finance a project for studying and researching environmental issues due to the war. The council began work on this project, but the research was interrupted, and some of it was lost.[46]

Dr. Khalil Bitar, a professor of physics at the American University of Beirut and one of Salwa's former students, recounts:

> My acquaintance with Salwa Nassar precedes my time at the American University. It goes back to the mid1950s when my family spent summers in Dhour El Shweir, where we rented from her father one of their family houses. I got to know her during that period, and she showed great interest in me and took me under her wings. In the academic year 1957-1958, she helped me gain admission to the International College (I.C.). She kept in touch with me, always inquiring about my studies and well-being. In 1960, I graduated from I.C. and, with her help, I enrolled at the American University. Under her guidance, I chose physics as my major, and she also helped me secure financial aid. During this time, I was in regular contact with her. In the following academic year, 1961-1962, I took a course with her. I found her to be very strict, demanding a high academic standard from her students. However, this did not affect the friendship, kindness, and care that she extended to her students outside of class hours. In the academic year 1962-1963, as I entered my final year, she entrusted me with teaching a nuclear physics course on her behalf due to her illness. She guided us towards specialization opportunities at American universities, caring for us as if we were her children. Despite her strict teaching methods, we felt a close bond with her. I have two vivid and complementary images of Salwa Nassar: one of strict discipline and the other of a nurturing mentor devoted to her students' well-being. She closely monitored our progress at the university and worked tirelessly to help us secure scholarships abroad. She even attended to the details of each of our journeys.

[46] Interview on May 4, 1978.

Dr. Bitar continues reminiscing about Salwa Nassar, saying:

> After graduating from the university in Beirut, I went to Yale University in the United States for further specialization. In the spring of 1965, just as I was about to take some exams, Salwa suddenly appeared before me. She had come to check on me and my work. Her concern for me was like that of a mother or an older sister. She also took the time to visit some of her other students who had been in Beirut and were now at various universities in America. Her influence on her students was profound, she challenged them while also providing guidance and assistance. Many physicists at the American University of Beirut would not have chosen this field without her direction. She was dedicated to spreading her vision. Personally, if it weren't for her, I would not have chosen physics as my field of study.

Regarding her accomplishments in the fields of science and education, Dr. Bitar cites, for instance, the National Council for Scientific Research. He says:

> I am certain that she was the mastermind and driving force behind the establishment of this council. The Department of Physics at the American University owes its independence, expansion, and elevated standards to Salwa Nassar. When Salwa joined the university in the early 1950s, the department was part of the Faculty of Engineering. It was she who worked to separate it, transforming it into a respected independent department.[47]

Dr. Khalil Bitar's remarks prompt us to delve into some of Salwa Nassar's activities and achievements within the Physics Department. In 1950, when Salwa joined the American University, the department's faculty comprised just three professors: Dr. Robert Sloane, Professor Fadel Antiba, and Professor Nicolas Shahin. In 1952, Salwa was appointed head of the department, and a young lecturer, Benjamin Robush, who had graduated from the same department with a master's degree in physics, was added to the faculty.

From the moment she took on the leadership role, Salwa dedicated herself to expanding the department, securing its independence, and raising its standards. Her efforts were bolstered by the university's policies under President Penrose, which aimed at growth and development across all academic and economic facets. In 1953, two new scientists, Dr. James Heirzler and Dr. Byron Youtz, joined the department, even though its budget remained a modest seven thousand dollars.

In 1956, Salwa acquired a microscope for studying nuclear emulsion and secured a grant for a neutron monitor. By 1958, she had introduced a new

[47] Interview on February 23, 1981.

course into the department's academic curriculum focused on the use of radioactive atoms, aiming to apply this knowledge in the fields of medicine and industry. As a result, she obtained a grant of a quarter million dollars, which was allocated to the department and the hospital.

By 1964, Salwa's last year at the university, the department's faculty had grown to include 11 professors with PhDs, assisted by 6 M.S. holders. The department's budget had increased to two hundred thousand dollars ($200,000), a significant increase from the seven thousand dollars ($7,000) in 1950.[48]

This significant expansion had multiple contributing factors, including the university's overall policy during those years, the increasing number of students, and the growing financial grants from the United States, which were the result of President Penrose's efforts and his success in influencing American public opinion. However, the growth of the Physics Department, in particular, can be directly attributed to the relentless efforts of Salwa Nassar, her vitality, and her unwavering commitment to achieving the goals she set before her.

During her tenure at the American University, Salwa lived with her parents in an apartment in Ras Beirut, in the Hamra area near Commodore Street. She maintained close contact with a large circle of friends, often hosting them at her home. With some, she would listen to the masterpieces of classical music that she greatly enjoyed; with others, she would discuss the latest scientific and educational theories. She also treated her guests to homemade sweets.

One of the most charming anecdotes about her is from 1963 when she participated in the International Flower Show organized by the Young Women's Christian Association (YWCA). The event featured a competition for the most beautiful potted plants, and Salwa won one of the prizes.

She was a woman of broad horizons, engaged in a variety of activities and hobbies. Despite her passion for pure scientific research within the confines of the laboratory and her continuous excellence in it, she was not one to retreat into an ivory tower. She never sought fame or recognition, yet she did not decline the honors and awards that came her way during that prolific period of her scientific achievements.

A dedicated citizen with a firm belief in her country's future, she consistently aimed to consolidate it through science, education, and social service. Additionally, she was an active member of numerous organizations and associations with varied goals and activities. Among these were the Lebanese Association of University Women, the YWCA, the Board of Supervisors for Beirut College for Women, and the National Council for Scientific Research.

[48] Frans Bruin, History of Science at AUB. April 6, 1964. Manuscript, courtesy of Department of Physics, AUB.

Here are the testimonies of several friends who knew Salwa well in her daily life over many years. Their memories paint a vivid picture of this calm yet active citizen and individual, who left an indelible mark on the hearts of her friends and the life and future of Lebanon.

Suad Khalluf Katul, a graduate of Beirut College for Women, first met Salwa Nassar in the early 1950s while teaching psychology at the American University of Beirut, where Salwa was the head of the Physics Department. She wrote:

> When Salwa Nassar's name is mentioned, the first images that come to mind are of the dedicated physicist absorbed in her lab research, the renowned professor, or the esteemed head of Beirut College for Women, or any of the many vibrant roles this remarkable woman assumed. Yet, the image I hold dear is of Salwa as a slender young woman in white shorts, standing opposite me on the tennis court, completely focused on giving her best and mastering the game.
>
> We met for the first time during a long and exhausting faculty meeting at the American University, where I was working as a psychology assistant. After the meeting, Salwa noticed my tennis gear nearby and asked if I would like to play sometime. I was delighted by her request and considered it an honor. We agreed to meet twice a week during lunch. From then on, we regularly met on the tennis court whenever the weather was sunny. We found great joy in this pastime, despite our limited skills. Initially, no one noticed us, and things went on naturally without drawing attention. However, after a short while, we found several spectators gathering around us during our games, increasing day by day. They were Salwa Nassar's physics students and my psychology students. Some came regularly to cheer and applaud, while others helped by collecting balls and keeping score.
>
> One day, one of the students approached Dr. Nassar and, with utmost seriousness, offered to trade lessons with her, he would coach her in tennis in exchange for a physics lesson from her. I don't recall if they ever struck a deal, but I do remember the laughter and cheers from the students gathered around us when they heard their classmate's proposal.

Suad concludes her memories of Salwa Nassar by saying:

> Salwa Nassar was a spirited and athletic woman with a passion for sports. She was energetic and quick on the tennis court. Though her skills never reached professional levels, I eagerly anticipated those few hours of outdoor enjoyment with her. I was proud of my friendship with such a distinguished physicist, who took the time to spend with

a novice educator like me, fostering an atmosphere of warmth and reassurance.[49]

Professor Rose Ghorayeb's relationship with Salwa Nassar dates back to the early 1930s, beginning with their first meeting at Junior College, then at the American University, and later in Mosul, Iraq. When Salwa returned to Beirut in 1945 to join the faculty at Junior College, she was delighted to find her friend Rose teaching at the French Evangelical School in Beirut (Collège Protestant Français). Over the years, they shared a wealth of experience, mutual respect, an idealistic commitment to national service through education, and a dedication to scientific integrity. This dedication was evident in their collaborative educational work and individual achievements in their respective fields.

Reflecting on her memories with Salwa, Professor Ghorayeb says:

> She was driven by an insatiable thirst for knowledge, her mind always active. Her desire to help others was just as strong as her passion for science. I visited her once in Dhour El Shweir, and she told me she had just returned from visiting a relative or friend who was suffering from cancer. She had gone to comfort and cheer him up, knowing that he took solace in her company. Salwa had many hobbies. When I visited her apartment in Beirut, I found her busy watering the flowers she had planted on the balcony. She showed me her collection of records, which kept her company during her solitary hours. I noticed some pictures and paintings waiting to be hung on the wall. When I mentioned that she would need a carpenter, as drilling into concrete requires a special tool, she replied, "I am the carpenter, and I have a special tool for drilling into concrete".
>
> Among her hobbies were stamp collecting and mountain climbing. In the early 1950s, while she was at the University of Ann Arbor, Michigan, I happened to see her name among a group of travelers planning a trip to Africa. She went on the trip, and I wrote to her, applauding her courage and her zest for travel and exploration.
>
> Salwa's kindness and compassion extended to animals as well. She had a cat that once fell from a high roof and broke its leg. She brought in a doctor to set the fracture, and the cat recovered. Salwa's joy at the cat's recovery was immense.
>
> It seems to me that her life was a continuous ascent. The most remarkable aspect was her calm and faithful acceptance of illness,

[50] *Memories*, March 4, 1980.

[49] *Memories with Salwa Nassar*, April 5, 1981.

which she faced twice with unwavering composure. She never lost that serene smile I first noticed when I met her in 1931.[50]

Anissa Rawda Najjar, President of the Village Welfare Society and a pioneer of the women's renaissance movement in Lebanon, accompanied Salwa through various stages of her life: at Junior College, at the American University during their college days, and later in Mosul, Iraq. A strong friendship blossomed between them, extending its influence to all the members of the Nassar and Rawda families. They met frequently in Dhour El Shweir, Abadiyeh, and Beirut, and their correspondence, dating back to the mid-1930s, unveiled much about Salwa's personality, thoughts, and aspirations. Anissa wrote:

> Memories come rushing back as if Salwa is right here beside me, and we are reliving the past together. When she returned from America, she was filled with a longing for Lebanon and a desire to contribute through research and exploration. The American University appointed her as the head of the Physics Department, a position she embraced with great satisfaction. Her goal was to secure a room equipped for studying radiation and particles to advance her research on cosmic rays. She received a grant from an American lady, on the condition that the room be used in Lebanon.
>
> My son Khaled, who was twelve at the time, was fortunate to go on one day with Aunt Salwa to visit her lab. There, she explained to him the contents of the lab, sparking his interest in science. My children considered her a true aunt, often turning to her for help with challenging concepts in science and mathematics. Every visit was accompanied by delicious homemade biscuits she brought for them. We had lunch together every Monday, where she would share the latest theories in physics and agriculture.
>
> We often took trips to the Bekaa Valley and Dahr El Baydar, where Salwa and I learned to drive. Occasionally, we spent weekends at our house in Riyaq. I recall a funny incident when we went to see the snow with the children. Fouad[51] locked the car and played in the snow with the kids, then sat beside Salwa to chat while I handed out afternoon snacks to all. As the weather grew colder, we decided to head back, but we couldn't find the car keys. It seemed impossible to find them with the ground covered in a pristine blanket of snow, marked only by our footprints. I turned to Salwa and said, "You're the smartest among us; you have to save the day."

[51] Professor Fouad Najjar is the husband of Anissa Rawda. He is an agricultural engineer and graduated from the University of Montpellier in France. He is a former Minister of Agriculture in Lebanon, the president of the Association of Friends of the Book and the Farmers' Union. He is also the owner of Najjar Agriculture and Trade Company.

Salwa thought for a moment and then said, "It's unlikely the keys fell from your pocket while you were playing, Fouad, as your coat pocket is deep. They must have fallen out while you were sitting with us." She walked to where Fouad had been sitting, reached under the snow, and pulled out the keys as if she had placed them there herself. It was a moment of great joy.

The problems of the nation were always on her mind and her main concern; she would discuss them with us and propose solutions. Her understanding of the Zionist threat to the country stemmed from her time in Birzeit and our experience together welcoming Palestinian refugees in 1948 at Karantina and Deir Al-Moukhalles.

She was a devout believer[52] , faithful to the principles of her Orthodox Church, and women's advocate, firmly believing in their ability to share responsibilities alongside men.

Dr. Shafica Karagulla, a lifelong friend, first met Salwa in the early 1930s at Junior College and later at the American University of Beirut. She recalls:

My memories take me back to 1933-1934 when Salwa was a student at the American University, and I was still at Junior College. We shared a room with a third student from Turkey in an apartment on Sadat Street that the college had rented for female boarders, as 'Nicol Hall' had not yet been built.

I remember many virtues about Salwa that characterized her throughout her life: she was serious about her work and social relationships, focused on her studies and laboratory work, and persistent in achieving her goals. She never engaged in arguments or debates, spoke little, never complained, and kept her personal emotions private. She excelled in mathematics, possessed a remarkable inner strength, and was a steadfast friend, always reliable in times of need.

Shafica goes on to share more of her memories:

In the early 1950s, I visited her at the Physics Department of the American University of Beirut, where I often met with her and our friend, Jamal Karam Harfoush. Our conversations would revolve around humanity, life, the spiritual world, the latest discoveries in physics, the tangible and the intangible, and other topics that fascinated us.

I visited her again a few years later in the same department and introduced her to Mrs. Frances Farrelly, a woman with an extraordinary ability to heal and diagnose illnesses. At that time, our friend, Professor Zein Zein, a historian from the American University, was also with us.

[52] *Memories in Arabic*, February 7, 1981.

> Salwa's interest in the metaphysical and the latent human potential, known as higher sense perception—transcending the limits of the five senses to explore knowledge and discover truths—was very evident.
>
> There was another meeting in Dhour El Shweir in 1964. At that time, Salwa was suffering from back pain following surgery she had undergone the previous year. Shafica recalls that meeting: We drove together in Salwa's car to Dhour El Shweir, where her roots were firmly planted and where she found ever-lasting rest. She mentioned she was seriously considering accepting the presidency of Beirut College for Women. Our conversations, as usual, revolved around the meaning of life and death, spiritual matters, human existence on earth, and our relationship with the Creator and the universe, among other reflections and contemplations.
>
> I kept a cherished photograph of Salwa from that time. It was winter, the sun was setting, and the snow-covered mountains reflected its fading light. Salwa was standing in a square in the center of Shweir, with Mount Sannine behind her. It is a beautiful picture of Salwa and the village she loved.

In 1965, after becoming the president of Beirut College for Women, Salwa traveled to the United States to visit several American colleges to study their curricula and system of operation and learn from their experiences. Shafica recalls that visit:

> Salwa called me from her hotel in Los Angeles, where a room was booked for her. I went to see her, realized the environment was inappropriate for her, and so I invited her to spend the night at my apartment. We had a delightful evening together, joined by an old friend of mine who had collaborated with me on research about higher sense perception. This friend believed in reincarnation and told us during our conversation that Salwa and I had met in a previous life in the land of the Chaldeans, where we were sisters. She even mentioned that Salwa had fallen from a horse in that past life.
>
> The next day, I drove Salwa to Berkeley, where she planned to visit an ill friend. I suggested she meets with one of the doctors I knew, who had remarkable healing abilities, but Salwa insisted on going directly to Berkeley to see her friend, driven by her strong sense of duty. I later learned that she visited the Mayo Clinic, where her friend Dr. Khalil Wakim worked, and consulted with some specialists who reassured her about her health.

Among her memories of that period was a day when she and Salwa visited an American lady named Mrs. Mulkey, who lived in a suburb of New York.

She was an elderly woman, nearly ninety years old, a devout Christian who performed a few daily prayers with special supplications for each of her friends scattered around the world, and Salwa was among them. It appears that she had been financially supporting Salwa's education at the American University of Beirut since her first year at Junior College. That was the last time I saw Salwa. I remember her for her virtues including her scientific integrity, loyalty to her friends, and dedication to serving others.[53]

[53]Interview on January 29, 1982. Dr. Shafica Karagulla earned her M.D. from the American University of Beirut in 1940. She practiced psychiatry and neurosurgery at McGill University in Canada. In 1957, she was appointed as a professor of psychiatry at New York University. Currently, she holds the position of Head of Research at the Higher Sense Perception Research Foundation in Beverly Hills, California. She is the author of the book "Higher Sense Perception – Break through to Creativity".

Chapter VII

An Overview of Scientific Contributions

The initial difficulty we face in attempting to evaluate the scientific contributions of any given scientist stems from the fact that the individual effort of a scientist in their field is, in reality, a link in a continuous chain of research, theories, and discoveries accumulated over generations. When a scientist presents new theories or discoveries, they do so by relying on the body of knowledge inherited from their predecessors, building upon that foundation with their own scientific activities and outputs.

It is rare to say that a particular scientist alone has revolutionized thinking, made groundbreaking discoveries, or opened new pathways towards creativity, innovation, and unveiling the universe's truths. Although such instances are possible, they are exceedingly rare.

The second challenge we encountered while conducting this study on Salwa Nassar lies in evaluating the significance of her research in atomic physics and cosmic rays. Her work spanned various institutions, including her time in the United States, the American University of Beirut, and several nuclear research centers in European capitals. Assessing the value of her contributions requires a meticulous scientific analysis and extensive knowledge of these subjects, a task that falls within the purview of a select few specialists in the field of physics. We do not possess the tools or qualifications to undertake such an evaluation.

Moreover, an equally significant obstacle is that the educated reader to whom we hope to leave this biography is, in most cases, not a science specialist. Such a reader would struggle to understand an analysis of the scientific results Salwa Nassar obtained through her quarter-century of research within the walls of various laboratories. Even if a specialist attempted to simplify physics and bring the scientific theories closer to the reader's comprehension, such research would likely remain incomprehensible.

However, there are indicators and measures we can rely on to provide a general assessment of Salwa Nassar's research and its scientific significance, without delving into the core of the subject and its details. It is widely recognized today

that one of the most telling signs of the value of scientific research in any field is the quality of the journals that publish that research and their acknowledged scientific merit. Other factors include the academic institutions where the scientist was educated, the laboratories where they conducted their research, and the opinions of other specialists regarding the value of their scientific output and publications.

Additionally, the scientific societies to which the scientist belonged, both national and international, the scientific missions entrusted to them in the fields of education and pure scientific research, and the prestige of the higher institutions associated with these activities, all serve as important indicators of the significance of their contributions.

Salwa Nassar's pure scientific research began during her graduate studies at Smith College and the University of California, Berkeley, in the United States from 1939 to 1945, where she pursued her master's and doctoral degrees. As mentioned earlier, her research was published in leading American scientific journals, foremost among them the internationally recognized *Physical Review*, underscoring the importance and seriousness of her work.

Salwa Nassar herself remarked on her cosmic ray research published in that journal in April 1945:

> The significant results I obtained led to the initiation of new theoretical studies aimed at explaining the slight discrepancy observed between the experimental results and the existing theoretical ones.[54]

Further validation of this view comes from the testimonials of her professors, which we mentioned in previous chapters. Notably, the esteemed scientist W.E. Hazen highlighted the significance of her research results, noting that they were incorporated into the core contents of physics textbooks used in the United States.

Additionally, Salwa's membership in various scientific societies during her time in the United States attests to her academic excellence and commitment to scientific inquiry. These included Phi Beta Kappa, an honor society for high achieving graduate students; Sigma XI, a society dedicated to promoting scientific research in higher educational and technological institutions; the American Society of Natural Sciences; the American Physical Society; and the American Association of Physics Teachers.

As mentioned in previous chapters, the prestigious academic positions entrusted to Salwa during this phase of her scientific career included appointments at Smith College, the University of California, and Amherst College. This was followed by a year at the University of Ann Arbor in Michigan

[54] Unpublished biographical data, p.6.

in 1949-1950. These positions undoubtedly reflect Salwa's excellence in her field and underscore the respect these esteemed institutions had for her scientific contributions.

It is worth nothing that the University of California, Berkeley, is one of the world's leading centers for physics research, renowned for hosting eminent physicists such as Oppenheimer, Hazen, Lawrence, and Segrè. Salwa studied under these luminaries and collaborated with them in higher education and research.

As previously mentioned, she was offered faculty positions at both Smith and Berkeley, where, in the latter, she participated in training naval officers during World War II.

Salwa Nassar's scientific contributions were not confined to the pure research she conducted within the walls of the laboratory. After returning to Lebanon in 1945, her primary focus was on promoting the advancement of science education in primary and secondary schools and higher institutions across Lebanon. She advocated for the establishment of scientific clubs, the organization of local laboratories in various Lebanese regions to serve as centers of enlightenment for the younger generation, and the founding of the National Council for Scientific Research. She also envisioned the creation of a central museum. Salwa frequently expressed her belief that Lebanon, despite its small size and limited scientific and financial resources, should actively participate in conducting research and scientific activities at all levels alongside the civilized world.

During her tenure at the American University of Beirut from 1950 to 1965, Salwa delivered numerous lectures on science. Her objective was to introduce the latest scientific theories to the general public and simplify them for better understanding by the non-experts. Some of her lectures were published in Arabic, while others were in English. Notable publications from that period include *Cosmic Rays*, *New Horizons in Atomic Science*, and *Research in Industry and Construction*, all of which appeared in the *Al-Abhath* journal published by the American University of Beirut, as discussed in detail in previous chapters.

She also lectured at the Lebanese Cenacle, which published two of her lectures on the atom and its use for peace in the mid-1950s. In 1960, Salwa Nassar's name was listed among prominent atomic scientists in the book *Who's Who in Atoms*.

She embarked on several journeys to Arab countries to attend scientific conferences and deliver lectures on modern scientific ideas. Among these were a lecture in Aleppo on *Atomic Energy* and two lectures in Kuwait on nuclear physics in medicine and cosmic rays. Through these activities,

Salwa sought to simplify physics and make its fundamental principles more accessible to the Arab public, which was and still is, lagging in this field. One of her key messages was that science is not exclusive to men; women can also participate in this domain if given the opportunity. Dr. Leila Nehmeh[55] reflects on this topic:

> Salwa Nassar was a pioneer of the scientific renaissance in the Arab world, carving her path despite deep-seated traditions that excluded women from scientific fields. Even in the United States, women face difficulties entering the realm of pure sciences, which is typically considered a male domain.

She was also invited to participate in scientific conferences beyond the Arab world, including China and India in the Asian Continent. Additionally, she was hosted in some of the major scientific centers in Europe and the United States. These endeavors led to several publications, some purely scientific and others aimed at simplifying physical sciences and the latest scientific theories. She also published cultural and educational research, highlighting her extensive knowledge beyond her field of specialization and her openness to diverse areas of study.

We found it fitting to provide an overview of select examples of these culturally-oriented publications, aiming to spotlight their key ideas and the distinctive style that characterized them. Salwa notably favored writing in English over Arabic, and it seems evident that her Arabic publications were initially composed in English and subsequently translated with the help of friends or collaborators. Among her personal papers, we found handwritten English drafts much of what was later published in Arabic.

1. The Wonders of Creativity[56] is a lecture delivered at the conference held in Poughkeepsie, New York, from March 19-24, 1961, to celebrate the centennial of Vassar College for Women. The theme of the conference was *Education in World Perspective*. Below are the key points from that study, which we consider among Salwa's finest contributions to the field of general culture:

A creative individual is a vibrant and dynamic member of society. They generate ideas, discover laws, devise methods, and express themselves through literature or the arts, all through constant interaction with their social environment. Thus, the social changes unfolding in today's world—

[55] Dr. Leila Nehmeh, a professor of physics at Beirut College for Women, holds a graduate diploma in mathematics from the Sorbonne and a Ph.D. in physics from the University of Utah in the United States. It is worth noting that we have adopted the terms for various scientific concepts used in this study as recommended by Dr. Leila Nehmeh.

[56] *Education in World Perspective*: The Vassar International Conference on World Educational Problems. New York: Harper-Row, 1962, chap.8, pp.93-98.

often sparked by these very creative individuals—inevitably have a profound impact on them and their creative pursuits.

In ancient times, intellectuals and creative thinkers often did not interact with all the echelons of society, living instead in relative isolation from the general populace. They relied on ruling authorities and, occasionally, on religious institutions for financial and moral support. Consequently, their influence was confined to a specific and limited circle. Ancient Eastern traditions emphasized respect for knowledge, with religion sometimes serving as a catalyst for this attitude. For instance, during the golden age of Islamic Arab civilization, from the 9th to the 12th centuries AD, Arabs preserved Greek heritage and were highly innovative in the fields of pure sciences and mathematics.

History provides numerous examples of the blending and interaction of civilizations and the exchange of ideas, which enhance the creative capacity of thinkers. Language itself is a result of cultural interaction. The alphabet emerged from the creative interplay between Phoenician thought and both the Akkadian cuneiform script and Egyptian hieroglyphics. The concept of symbolism in Babylonian algebra was born from the fusion of Semitic and Sumerian cultures. The flourishing of mathematics among the Greeks occurred during a period of significant contact and interaction with Eastern peoples. However, these interactions, often facilitated by traders and warriors, were relatively limited in scope.

In the present age, new factors have emerged that amplify the interaction between the creative individual and society. These include technological advancements, knowledge expansion and democratization with the spread of education across all social strata, and interweaving economic relationships. Furthermore, it has become possible for creative minds from diverse societies and all corners of the globe to connect. This connectivity fosters healthy competition and mutual inspiration, leading to collaboration and the swift recognition of shared scientific truths, irrespective of varying political ideologies.

Consequently, the scope within which the creative individual operates expands, increasing both responsibility and opportunities. However, the creative individual may face challenges, such as the temptation to satisfy societal demands by sacrificing quality and high standards for quantity, depth of thought for easily accessible superficiality, and holistic beauty for mere convenience and suitability. Additionally, developing nations face linguistic challenges, as their national languages have not yet evolved to encompass modern scientific terminology. The widespread dissemination of education is the most effective way to overcome these obstacles. Modern communication tools such as radio, television, and theater serve as powerful means for spreading knowledge and culture.

Every act of creativity encompasses a three-faceted relationship: the interaction between one creative individual and another, between a creative individual and society, and between one society and another. These three elements are fundamental to the integrity of the whole, and the effectiveness of the entire system relies on the effectiveness of each component. A state of internal and external balance is essential for the continual renewal of the creative and innovative process.

The individual who discovers a natural phenomenon or law is not responsible for how their discovery is later utilized and developed by creative scientists, nor for whether society will use it for constructive or destructive purposes. When James Clerk Maxwell proposed his theory of electromagnetic radiation, he could not have foreseen that it would lead to the invention of radar, saving millions of lives, half a century later. Similarly, Marie Curie did not anticipate that her research on radium would result in thousands of people working in factories based on her discovery. Rutherford, while probing the atomic nucleus to the point of extinction, did not envision that his findings would enable future scientists to split the atom, causing the deaths of a hundred thousand people in an instant, nor that his techniques would eventually be used to transfuse blood and save millions of lives.

These are the boundless wonders of creativity. Encouraging creativity in the advancement and evolution of humanity must remain the ultimate goal of education.

2. The Scientist and Society in Lebanon[57], lecture delivered at the international conference held in Tunisia in April 1959 to examine the role of universities in society, organized by the International Association for Cultural Freedom in collaboration with the University of Tunisia.

A scientist is an individual deeply engaged in a specific intellectual field, continuously seeking to educate themselves and pursue knowledge. This quest may involve understanding oneself or the biological and natural world surrounding them. It may also entail exploring new realms to uncover fundamental insights into the spiritual and natural relationships that connect individuals with the rest of humanity.

The true motivation for a scientist's work is primarily internal. They conduct research for the satisfaction of their curiosity and the exhilaration of discovery, regardless of any material gain that might follow. Moreover, scientists may also be driven by external factors, such as the satisfaction of sharing their discoveries with others and the creative joy they experience in their work.

[57] *Fikr* Magazine, Tunisia, Special Issue: The Role of the University in Society, Year 5, Issue 1, October 1959, pp. 32-37.

A scientist has the duty to use their educated mind, creative imagination, analytical thinking, and precise expression to enhance the quality of the society in which they live and to establish fundamental principles of values. This responsibility requires several essential conditions, namely: freedom of work, a minimum level of economic security, an atmosphere of intellectual openness rather than mere tolerance, and a general appreciation and respect for scientific and intellectual achievements.

Since the scientist is an integral part of the system in which they live, and since their responsibilities and achievements are greatly influenced by that society, it is essential to highlight some characteristics and needs of Lebanese society while discussing the role of the scientist in Lebanon.

Lebanon, a small country in terms of area and population, cannot rely on its military strength or natural resources. However, it boasts a rich intellectual heritage that could establish it as a center for producing scientists and thinkers. Lebanon has significantly contributed to the history of human culture, a fact that justifies its independence and garners support from other nations around the world.

The history of Lebanon stands as a testament to its unwavering commitment to freedom of thought and press. This legacy traces back to its earliest inhabitants, who sought refuge in its hills and mountain villages to escape persecution and the suppression of liberties.

In Lebanon today, there are three universities and two institutes of higher education: the American University and Saint Joseph University, both of which have played a pioneering role in the renaissance of Lebanon and the Middle East. The Lebanese University was established in the late 1940s. Arabic, the official language of Lebanon, faces several challenges: the wide gap between its spoken and written forms, the insufficiency of essential books in Arabic, the limited usefulness of dictionaries except to those highly proficient in the language, and the underutilization of public libraries due to the poor organization of Arabic books.

Lebanese society is presently undergoing a transitional phase across various dimensions: economic, political, and cultural. It is witnessing rapid development driven by the influence of modern science and technology. However, the Lebanese people have not played a significant role in these advancements, and their impact on them is likely to differ from their effect on Western societies. A population that does not participate in creating modern technology, while enjoying its benefits, cannot fully appreciate the brilliance of the minds nor the knowledge that they generated. Moreover, they lack the motivation to improve or expand upon these achievements.

In light of the above information, we can outline the role of a scientist in Lebanon as follows: A scientist must continuously expand their knowledge and uphold a high standard of scientific excellence. They should train future educators, cultivate excellence within the top-ranking educators according to their profession, and impart in them a drive to seek knowledge. A scientist should also help develop intellectual methodologies, as they are primarily responsible for instilling objective scientific method and intellectual integrity in their students across various disciplines.

Furthermore, scientists should contribute to achieving social justice and technological progress within a well-functioning democratic system. They should champion the highest ideals and goals for the nation to unify its diverse social elements into a cohesive whole. They must advocate for freedom of thought and expression, as well as the freedom of analysis and critique.

From the summary of the two articles we presented, we can discern several recurring traits in many of Salwa Nassar's publications, both in Arabic and English. These include a rigorous scientific approach that pervades her writing style, a logical and coherent progression of ideas where each paragraph is tightly connected to the preceding and following ones, and a succinctness in presenting ideas that can verge on terseness, were it not for the reader's pleasure in discovering the engaging subjects she addresses. She seldom employs introductions, and when she does, they are extremely concise: her sentences are stripped of any superfluous elements, making it challenging for an editor to summarize or omit parts without altering the content. Each word is carefully chosen to convey its intended meaning.

Furthermore, she possesses extensive knowledge in various humanistic and cultural fields beyond her scientific specialization, including both ancient and modern history. She offers personal insights on certain cultural phenomena and their relevance to contemporary society, coupled with a comprehensive philosophical perspective on society, the individual, and the universe. This perspective is consistently accompanied by a practical inclination toward implementation and application, with a meticulous analysis of the scientist's role and their multifaceted responsibilities—ethical, educational, and economic.

3. Science and Religion, a lecture delivered at the Lebanese Symposium on January 10, 1966, discussing Khalil Ramiz Sarkis's book *Fate*.

At the beginning of her lecture, Salwa explains that her choice of the topic "Religion and Faith" is motivated by two factors. The first is her wish to share with the audience the fruits of her personal journey in the realm of pure science, where she has been rigorously trained in methods that rely on empirical evidence and the disciplined organization of knowledge under the guidance of human reason:

> My deep passion for the mysteries and sanctity of science, along with the bonds of love I share with my people and contemporaries, has always urged me to share these insights. This passion has reinforced my belief that creation and innovation are acts of glorifying the Creator.

The second factor is her encounter with the author when writing his book *Fate*, and the profound connection she felt between their mutual quest to uncover the truth of the universe and man and their relationship with the Creator. She highlights the author's proclamation that humans are both flesh and spirit, "word and body".

In the next paragraph, she poses the following question: Is there a true contradiction between science and religion, between empirical rational evidence and the yearning for the spirit, between "all that is seen and unseen?" Where do human beings, stand in relation to these questions? Humanity is forever striving to uncover the laws of nature and what lies beyond, only to collide with the limits of human knowledge. Yet, the wandering mind envisions the unseen, armed with the tools to explore the unknown: a scientific heritage, a fertile imagination, logic, and an unrelenting thirst for liberated truth.

But how can one reconcile between the scientific approach, based on experimentation and sensory evidence, on one hand, with faith, which relies on hope and intuition, on the other hand? Salwa clarifies that the mistake in posing this question lies in assuming the use of a single system to apply to two different realities or two aspects of one inseparable truth: the universe as both spirit and matter, and whether scientist or writer, believer or atheist, one can partake in both realms.

In the next paragraph, she provides some examples for clarification. One such example is the assertion by some scientists in the late nineteenth century that light consists of **waves**, a conclusion they reached after conducting rigorous scientific experiments. However, in the first quarter of the twentieth century, other scientists discovered that light is solely composed of **particles**. This apparent discrepancy caused some debate, concern, and confusion within the esteemed scientific community until science itself revealed the truth that light possesses both properties: it is both wave and particle. From this, Salwa concludes that if such confusion is possible within the realm of scientific experiments, how much greater is the error when we attempt to apply a single system to uncover both the spiritual and material mysteries of the universe? She concludes her lecture by addressing some of the accusations leveled against science, particularly regarding its occasional use for destructive purposes. She states:

> We must distinguish between science as a tool for knowledge and liberation, and the misuse of its products. Likewise, we should

differentiate between the creative human vitality of the scientist and the machines of ruin and destruction.

Salwa repeatedly raised the issue of science's responsibility in the use of scientific results as tools for destruction and devastation. Her stance consistently defended scientists and deflected accusations against them and against their services in their field of specialization, arguing that they should not be held accountable for the application and execution of their discoveries.

We must remember that Salwa was conducting her atomic research in the mid-1940s at the University of California, Berkeley, studying under Oppenheimer, Lawrence, Hazen, and other prominent physicists. It is likely that she contributed, to some extent, to their research efforts that led to the detonation of the atomic bomb in Hiroshima on August 6, 1945, which shocked the world with its horrifying results. This nightmare continues to haunt humanity and influence the policies and international relations of the civilized world to this day.

Did Salwa, as a nuclear scientist, feel a personal responsibility for this human catastrophe, leading her to focus on nuclear research for the sake of peace? Were her repeated efforts in conducting scientific research to provide beneficial services in medicine and industry, along with her numerous lectures on the subject, a response to those accusations? These are questions we cannot answer with certainty. However, it seems that this sense of responsibility was present in Salwa's mind throughout her scientific career and served as a driving force behind her dedication to applying scientific advancements for peaceful purposes, imbued with a sense of justification and transcendence.

When asked by some reporters in August 1945 about the relationship between her research and the detonation of the atomic bomb, she initially denied any direct connection. However, she later clarified, stating that her work was in related fields, specifically on the theory of cosmic radiation, a theory that underpins aspects of both the cyclotron and the atomic bomb. In the same interview, she said:

> The closest work I did in this area was assisting in the development of a device called the Mass Spectrometer, which is used to separate uranium-235 from other uranium isotopes.[58]

4. Knowledge is the Foundation of Freedom, in November 1965, after becoming the president of Beirut College for Women, Salwa delivered a lecture at the American University upon the request of the Lebanese Students Association to celebrate Lebanon's Independence Day. Here are three key points from her lecture:

Firstly, knowledge is the foundation of all freedoms. It has liberated humanity from fear, superstition, ignorance, and disease. Geographic discoveries and

[58] Unpublished biographical Data, p. 56.

scientific inventions are direct outcomes of liberated knowledge. Knowledge emancipates individuals as well as nations.

Secondly, there can be no true freedom unless we base our independence on knowledge. A nation ignorant of its own reality and content with a superficial gloss over its past and present is destined to perish. It will not withstand the scrutiny of history and the judgment of time, which reveal true values. Here, she highlighted some of the new initiatives that she is seeking to introduce at Beirut College for Women—among them, Lebanese Studies, a program designed to deepen knowledge about Lebanon through open public lectures, the incorporation of select courses into the core academic curriculum, and the expansion of the college library to serve as a central hub for Lebanese studies and a repository of the works of Lebanese intellectuals.

Thirdly, she calls upon the Lebanese youth, whose love of country pulsates in their veins, to channel this passion into a practical effort to truly understand and know their country. She urges them to exercise wisdom and discernment in preserving the valuable aspects of their heritage while adopting the beneficial and significant elements from Western currents invading our shores. She acknowledges that this process of sifting and refining is challenging, but she believes it is possible and is part of their national and humanitarian mission.

5. The Student and Faith, a lecture was presented at the Orthodox Youth Association on April 29, 1960, on the occasion of its founding anniversary.

After a brief introduction on the significance of the topic in the history of the civilized world and the intense conflict witnessed in the West over the past two centuries between religious institutions and secular trends, she raises several important points. Among them is the importance of religious education and spiritual guidance for students at all stages of their education. The reasons for this are numerous, as a sense of security and reassurance provide a strong foundation for shaping, stabilizing, and developing an individual's personality, whether as a child or a young adult. True faith and sound religious education are factors that protect students from anxiety, disintegration, and collapse.

In the next paragraph, she asks the audience to accompany her on a general exploration of some influences a student faces at various stages of life and development. She explains:

> During childhood, individuals accept all spiritual nourishment given to them without question or analysis. However, during adolescence and toward the end of high school, students begin to ask fundamental, pressing questions as they strive to develop a personal perspective independent of inherited knowledge and traditions. Questions such as: Who am I? Who is the Creator? What is my relationship with Him? How free am I? Doubt may infiltrate their hearts and minds. They start to

> think independently, relying on scientific facts and methods to seek the truth. This questioning and newfound freedom of thought can lead them to rebel against the values and traditions they have inherited, possibly resulting in rejection and even atheism.

In facing this complex issue, Salwa asserts that as educators, our role requires understanding and patience. We must extend a hand of support and guidance to the rebellious students rather than imposing harsh judgment. It is essential to grant them the freedom to express their struggles and conflicts while steadfastly sowing the word of God with unwavering faith, believing that these rebellious souls are ultimately for the glory and service of God. We must also demonstrate to them it is posssible to reconcile religious teachings with scientific knowledge, although the method we use to uncover spiritual truths differs from that of scientific inquiry.

She concludes her lecture by saying:

> The subject is immensely complex. We are attempting to delve into the depths of the human soul and uncover its relationship with the Creator. God Almighty has His own ways of bringing His lost sheep back to the fold, such as the shock of suffering, the pain of deprivation, the blessing of giving, the reading of sacred texts, and fruitful human encounters. The opportunities God provides for our salvation are numerous, illustrating His tireless effort to gather His creations into His eternal paradise.

Chapter VIII

Salwa Nassar as President

A Small Hill for a Grand Project[59]

There was another encounter with Salwa, a return to that small hill where we had once witnessed together the laying of the foundation stone for the new college building in our sophomore year of 1933. Thirty-two years later, after a prolonged absence, I returned to Lebanon and received the news of Salwa Nassar's election as the president of the college. This was in 1965 when Salwa stepped away from her educational and administrative duties after 15 years of dedicated service at the American University of Beirut. She heeded the call of the Board of Supervisors, who had unanimously chosen her for this new role, marking her as the first Lebanese woman to assume the presidency and the fourth president of the college. Friends and alumnae, especially those from our class who still resided in Lebanon, gathered around her, filled with pride that one of their own had been selected. Until then, the presidency had been a position reserved exclusively for Americans. However, a new direction from the Board of Trustees and the Supreme Council of the Presbyterian Church in America, starting in the early 1960s, had begun to focus on electing a female Lebanese president and entrusting the mission's responsibilities in Lebanon and Syria to local individuals.

When news spread that Salwa Nassar had taken on administrative duties, many of her friends and acquaintances were surprised by this new step in her life. Some viewed it as a deviation from her career in the physical sciences—a highly specialized field to which she had dedicated years of intense study, research, and high-level publishing. This was followed by fifteen years of practical application and scientific activity within laboratories, at scientific conferences, and in the classrooms of leading academic institutions in Lebanon and abroad. Her achievements had been marked by success and recognition.

People questioned how a scientist of Salwa's caliber, whose name was listed among the world's prominent scientists of the atom, could turn away from her research to manage a small women's college with no more than six hundred students, a modest library, basic laboratories, and an academic standard that

[59] Title of an article written in arabic in the early 1930s by Frances Irwin, the First President of the College, and presented to Dr. Anis Freiha, who was teaching her Arabic at the time.

fell short of the requirements for higher education institutions, particularly in the field of pure sciences.

The answer may lie in the strong connection Salwa felt to the college, a connection that dated back to her time as a student there in the early 1930s. During her studies, she had received significant support, encouragement, and appreciation from the college's administration. As we have seen, she chose to work there rather than accept prestigious teaching positions at major scientific institutions in America, even after earning her doctorate from the University of California, Berkeley, in the mid-1940s.

Salwa had a broad vision for her cultural outlook and national mission. Her passion for scientific research never isolated her from her society and its needs, nor did it distract her from advocating women's issues and advancing their educational and cultural standards. She often declared in her lectures and publications that no society could achieve true progress if half of its population was left behind. She recognized the importance of women's education and the crucial role that mothers could play in nurturing and guiding the next generation, even in the field of pure sciences.

Now, the opportunity arose to fulfill this mission and introduce essential reforms within an institution that had dedicated its activities for forty years to educating women and elevating their status. This college had provided Lebanon and the Arab world with generations of graduates who had played pioneering roles in education, social service, and refined family life.

At that time, questions were raised regarding Salwa's health, as news of her illness had spread since 1963. She had undergone surgeries, and there were rumors that her condition was very serious and cause for concern. How could Salwa take on the administrative responsibilities of an educational institution that urgently needed vigorous, active, and healthy leadership? Salwa was not one to make decisions lightly. She was known for her prudence and wisdom, as well as her impeccable moral conduct.

In order to comprehend Salwa's sense of reassurance and optimism in accepting the Board of Supervisors' invitation to become the president of the college, it is necessary to provide a brief overview of her illness, its symptom progression, and the varying diagnoses by specialists. Dr. Amin Youssef, the physician at Beirut College for Women from 1965 to 1967 and currently a physician at the American University, states the following:

In the spring of 1963, Dr. Salwa Nassar underwent surgery at the American University Hospital for a urinary tract obstruction. During the surgery, tissue samples were taken from the lymph nodes in her abdomen. The initial lab diagnosis suggested the presence of lymphoma, a type of cancer that progressively spreads to all body organs and eventually to the

blood. However, not all specialists at the university hospital agreed with this diagnosis. Therefore, the tissue samples were sent to various laboratories outside Lebanon, including the Mayo Clinic in the United States, where they were reviewed by top specialists. The Mayo Clinic diagnosis was not conclusive either; in fact, the results were encouraging, indicating the absence of the suspected cancer. Reassured, Salwa embraced her new role with optimism. Unfortunately, the symptoms of her illness returned shortly after she assumed the presidency, in 1966. She began experiencing severe pain in her side. X-rays revealed that the disease had affected her femur. Her condition rapidly deteriorated after that. At the end of the year, she traveled to Europe and then moved to London in December 1966, where she consulted with Professor Mayhoe from Cambridge University, a specialist in Hodgkin's disease. His diagnosis was definitive, confirming the presence of the disease, and he recommended that she be hospitalized for treatment.

The medical reports exchanged between Dr. William Bickers, Head of the Obstetrics and Gynecology Department at the American University, who performed Salwa's surgery, and Dr. Khalil Wakim, professor and research consultant at the Mayo Clinic, who referred the case to specialist Dr. Malcolm Dockerty, reveal that the symptoms of the disease began as early as 1962. In November of that year, when Salwa consulted with Dr. Norman Millers, she experienced pain above her left kidney. Preoperative diagnosis indicated the presence of multiple fibroids, and during surgery, a mass was found around the urinary tract. The university lab's analysis was inconclusive, identifying the mass as an unclassified tumor. There is a medical opinion suggesting that the leukemia, which claimed Salwa's life nearly four years later, might have been a new condition unrelated to the fibroids excised in 1963.[60]

The New President

Salwa embraced her new role with hope and a steadfast belief in the value of a women's college. She began planning for the future with her usual determination, prudence, extensive knowledge, and perseverance. Before the start of the 1965 academic year, she delivered a lecture at the traditional faculty meeting, which was held over two days at the Moukarzel Hotel in the Bolonia Forest near Dhour El Shweir. In the speech, she shared her vision and plans for the college's future, focusing on the internal organization, the academic curriculum, and the student body.

She affirmed her belief that the college should remain primarily a Liberal Arts College. She added:

> However, since we do not live in a vacuum but within a society with specific needs and demands, this college will also bear the

[60]The dates of these reports range from May 15 to September 4, 1963.

responsibility of training teachers, social workers, nutritionists, and, above all, mothers.

This will require the introduction of new structures within the academic curriculum, as our goal is to achieve exceptional quality. Our plans include revitalizing and expanding the Humanities, adding new courses in French literature, Lebanese history, the origins of Islam, and Lebanese cultural, economic, and educational studies. We also intend to establish a special program for continuing education for women, which will benefit graduates who have had to interrupt their studies for various reasons and wish to return to college to broaden their cultural horizons and receive training for a specific profession.

Furthermore, we plan to expand and enrich the college library, enhance the standards of pure and applied sciences, organize courses to prepare students for medical studies and provide opportunities for specialization in mathematics, nutrition science, and child education.

Speaking of the student body, she mentions that it represents thirty-one countries.

> We aim to expand this diversity to become truly international in every sense of the word. Our goal is to bring together multiple cultures to coexist, interact, and thrive alongside one another. Lebanon's liberal academic environment allows us to fulfill this significant cultural role.

The Inauguration Ceremony

In line with academic traditions in the United States and several European countries, the inauguration ceremony for Salwa Shukri Nassar, the fourth president of the college, took place on January 21, 1966, in Irwin Hall at Beirut College for Women. The event was attended by representatives from seventy universities across Lebanon, the Arab world, the United States, and Europe. Also in attendance were a representative of the President of the Republic, the Minister of Education, Professor Suleiman Zein, who delivered a speech, members of the Board of Supervisors, several cultural and political figures from Lebanon, friends of the college, patrons, financial and moral supporters, and representatives from foreign embassies in Lebanon.

Mrs. Mary Clyde, Vice Chair of the Board of Trustees in America, led the inauguration with a consecration prayer. Professor Farid Fleihan, Chair of the Board of Supervisors, presented Salwa with the ceremonial mace, a symbol of the presidency. The mace, crafted from teak wood, featured the Lebanese cedar engraved on its spherical handle on one side, the college seal on the other, and the names of the three previous presidents along with the new president's name: "I ask Almighty God to be my aid and guide".

The new president began her inaugural address with this expression. In her speech, she provided an overview of the nature of the college she had been appointed to lead, outlining the main goals and directives, the new initiatives she had begun introducing into the academic curriculum, and the emphasis on the female element within it. She stressed the importance of raising the standards of both the faculty and the student body, as well as the curricula, and highlighted the significance of the college's presence in Lebanon, and specifically in Beirut. Here are some key excerpts from her address:

The Nature of the College:

> Beirut College for Women is dedicated to liberal education, which differs from mere vocational training without conflicting with specialization. This institution, founded on Christian faith, prepares our young women for responsible and active lives. It focuses on developing the whole personality of the individual, including fostering a sense of moral values.

To further explain the meaning of liberal education, she adds:

> An individual educated in this manner strives for continuous growth and embodies the qualities of an enlightened and responsible citizen. They are characterized by human sensitivity, a conscious engagement with the intellectual doctrines of their time, intellectual integrity, and the ability to distinguish between principles and details. Such a mind can integrate various fields of study while being proficient in at least one humanistic discipline, whether artistic or intellectual.

Speaking about the human element at the college, namely the faculty and students, she emphasizes that:

> The primary goal should be to uphold a high standard among the faculty and to actively seek out talented students. It is crucial to double efforts to ensure that deserving young women are not denied the opportunity to continue their education due to financial difficulties. The college has a well-established tradition that scholarships are a badge of honor and pride for the student, representing her abilities and the community's support.

The new president believes that our college is fortunate to be situated in Lebanon, particularly in Beirut. She states:

> The freedom of education we enjoy here is vital for intellectual growth and productive cultural exchanges. This philosophy is deeply ingrained in our heritage, as this land has given the world one of the most powerful tools for preserving knowledge—the alphabet, born from the interplay of

> Phoenician, Egyptian, and Akkadian writing systems. These distinctive Lebanese attributes, along with historical evidence of the creative benefits of cultural fusion, inspire the college to enhance the international diversity of its student body.

Regarding her vision for the future, she stated that although the institute focuses on liberal education, it also aims to address some of the needs of modern society, especially those related to women's issues. Therefore, she plans to introduce new curricula including specialization in Lebanese studies and equipping the library with relevant books and documents about Lebanon. She also intends to enhance the Continuing Education program allowing married women to complete their university education, offering general knowledge alongside professional training in fields such as teaching, social work, and public administration, as well as specific summer courses on Lebanon's cultural resources, child nutrition and development, and library work. She also suggested adding a fifth year to the university study to achieve a Master's degree (M.A.), for those wishing to specialize and deepen their knowledge in a particular subject.

She concludes her speech by saying:

> Our college does not exist in isolation from educational institutions, whether local, regional, or international. We will strive to collaborate with other colleges and universities. We are confident that this interaction will enhance the effectiveness of our young women, boost their creativity, and create the ideal environment for them to achieve self-realization, wisdom, and happiness.

The celebration program included a speech by Professor Zein, the Minister of Education, a speech that I - the author of these lines - delivered on behalf of the Alumnae Association, a performance by the college choir conducted by Dr. Afif Boulos, and a piano recital by Ms. Diana Taqieddin. The event was concluded with a reception in the Orme-Gray Hall at the college.

The ceremony's program, as detailed, might appear similar to traditional events held at American universities and some European and Eastern institutions. However, those who attended Salwa Nassar's inauguration as the college president, along with those involved in its organization and preparation, would undoubtedly recall the unique atmosphere that prevailed, making it a truly memorable occasion that revealed captivating facets which commanded attention and merited thoughtful reflection. This event was distinguished by the large audience that filled the hall, encompassing all political, academic, and cultural circles in Lebanon, as well as representatives from several foreign universities. The media, including all daily newspapers and most weekly Lebanese magazines, covered the event with great enthusiasm and interest

the following day. These displays were far from ordinary; they reflected the widespread interest of the Lebanese in this historic cultural event. How could they not be! Salwa Nassar being the first Lebanese woman to head this institution. She was a pioneering physicist in Lebanon and the Arab world, acclaimed internationally for her nuclear research. This slender mountain girl epitomized the aspirations and dreams of the Lebanese people, embodying their steadfast commitment to values. She was a symbol of women's culture and their participation alongside men in the most significant educational and scientific roles. Her journey illustrated self-made success achieved through determination and perseverance, serving as a source of pride for generations of college graduates who saw in her numerous achievements the pinnacle of their own aspirations on every level.

We cannot forget the tears of joy that flowed from the eyes of Shukri and Victoria Nassar, the proud parents who sat at the forefront of the audience in Irwin Hall and stood beside Salwa in Orme-Gray Hall, accepting congratulations during the reception. Did they recall Salwa's tears when she insisted on transferring from Shweir to Brummana High School to complete her secondary education, tears that had swayed her father to promise his support in fulfilling her desire? Did their memories drift back to the years of relentless effort and continuous success in Salwa's academic journey, from one achievement to the next? Or did they reminisce about similar occasions where Salwa was honored with medals and received warm accolades? Perhaps they envisioned young Salwa, hurrying early to school, clutching her books and a piece of wood for heating, her small footprints marking the snow that blanketed the hills and slopes of Shweir.

We will pause our pondering here on what might have been going through Shukri and Victoria Nassar's minds that evening, however one question imposed itself. As I stood close by, I noticed the sweat forming on Salwa's forehead and saw the worried looks in her parents' eyes, watching their daughter's sudden exhaustion. The specter of illness was near, its memory still fresh. Were their tears of joy mixed with fear and anxiety about what the near future holds?

A few days before the ceremony, I was with Salwa in her office at the college. She was telling me about the celebration and the details of the program. As usual, she preferred simplicity and wished the Board of Trustees hadn't insisted on such an important and elaborate event. Suddenly, she confided something that was troubling her. She said, "Najla, my parents and family are all urging me to go to the hair salon to have my hair styled for the ceremony. They say it's a must." She looked at me, her eyes filled with confusion and uncertainty.

I asked, "What do you think?"

She responded with irritation, touching her hair, "It doesn't suit my mood. I prefer my simple hairstyle."

Without hesitation, I replied, "Then do what feels right to you. It's your decision alone."

Salwa felt relieved by my answer, which was what she wanted to hear. She didn't go to the salon and appeared on the platform with the simplicity that had always defined her. On the night of the ceremony, I witnessed firsthand that this simplicity did not detract from the words of honor and praise she received.

About a week after the ceremony, Salwa wrote a letter to Dr. Khalil Wakim, an old friend she had known since the death of her brother, Edmond Andraos. Edmond had been Dr. Wakim's classmate and friend at the American University of Beirut's medical school, in 1930. Upon Edmond's passing, the university delegated Khalil Wakim to represent them and extend their condolences to the family. He delivered a eulogy on behalf of the students at the funeral, where he met Shukri Nassar's family in Dhour El Shweir. This encounter sparked a lifelong friendship. At that time, Salwa was still a student at Dhour El Shweir School, and over the years, she grew to see Khalil Wakim as both a brother and a close friend, frequently seeking his counsel on major life decisions, especially those related to her health.

On January 30, 1966, she wrote a letter to him, in English saying:

> Dear Khalil, how I wished you could have been with me at the inauguration ceremony. The date was postponed to the 21st of this month because I hesitated a lot in accepting the idea when it was first proposed to me. I still believe that we desperately need to devote all our efforts and every minute of our time to the important work that needs to be done at the college. Finally, I conceded to the opinion of both councils (supervisory and trustees), who consider it an important occasion for the institute we are committed to serving. The ceremony was successful and well-organized. Dr. George Hakim represented the President of the Republic. I am sending you the program along with a copy of the inaugural speech for your perusal.

In the following paragraph, she earnestly requests him to be the commencement speaker at the college's graduation ceremony on June 22 of that year. She attempts to persuade him by saying:

> It would truly delight and honor me to have you as the first commencement speaker during my tenure as president of the college. I hope you will accept my invitation. With my best wishes.
>
> Salwa

On the 3rd of February, 1966, Salwa received a letter from Dr. Wakim expressing his gratitude for the invitation to be the commencement speaker. He showed keen interest and willingness to accept the invitation, should his work commitments allow it. He promised to make every effort to fulfill her wish, stating that nothing would please him more than returning to his homeland and addressing the graduates. He congratulated her on the successful inauguration ceremony and the warm reception she received, having learned the details from newspaper clippings sent by friends in Lebanon.

In his letter, he wrote:

> Salwa! You are the salt of the earth... You are a great honor and a source of pride for Lebanon and your friends around the world. May the Lord bless you and guide your steps, granting you health and vitality to lead -with your wisdom- the emerging generation in the Arab East to the highest ideals with your wisdom. You are the shining beacon in the spiritual and cultural sky of Lebanon. Please, take care of your health and keep me informed of any updates in this regard. Remember that your friend and brother Khalil is always ready to assist you in any possible way. It would be my pleasure to help. God bless you, Salwa. With my best wishes.
>
> Khalil

Dr. Wakim wrote again on March 15 of the same year, expressing his gratitude to Salwa for a letter he had received from her while at his workplace. He mentioned that he immediately went home and began drafting the commencement speech she had requested. He said he finished writing it by four in the morning and was now sending her a copy, eager to hear her thoughts and open to any revisions or suggestions she might have. He conveyed his continued efforts to secure permission to travel, hoping that fate would allow him to visit Lebanon and reunite with Salwa and their other friends.

However, circumstances conspired against him, and he could not attend the graduation ceremony on June 22 due to the pressing demands of his important work as a professor and research advisor at the Mayo Clinic in Rochester, Minnesota. Dr. Wakim wrote to Salwa again, expressing his deep regret and hoping to accept her invitation the following year. But fate had other plans, as Salwa did not have another year to oversee the graduation of a new class at the institute she cherished. This institute had been the center of her hopes and dreams until the very last moment of her life.

After assuming the presidency, Salwa moved into an apartment in Orme-Gray Hall, the new building constructed the previous year on the college grounds. She regularly kept in touch with her numerous friends, who visited her from Lebanon and abroad. It wasn't long before she transformed her new home to

reflect the warmth and comfort of her previous life. Her apartment's balconies soon brimmed with various plants, that had adorned her office in the Physics Department at the American University in the past. She also brought along her collection of classical music records, one of her favorite pastimes, and some cats that she loved and cared for.

Living on campus brought her into direct contact with the students, advising, motivating, guiding, and encouraging social and cultural activities for which she fostered the right atmosphere on campus. From the very start of her tenure, she focused intently on securing scholarships for gifted students, particularly those who could not afford the cost of education.

She maintained close contact with her parents and the rest of her family, taking special care of her sister Marcelle's daughters, and diligently overseeing their studies. One day, as we were planning some cultural activities, her father arrived at her office, around 1 p.m., with a lunch box in hand. "Your mother cooked this dish 'with yogurt' because you like it", he said.
Salwa glanced at him and replied nonchalantly, "Thank you, Father, just set it down".
She turned back to our conversation, seemingly indicating that he should leave. A few minutes later, still standing by the door, her father intervened again saying, "The food might get cold; you should eat it now, don't delay." With a hint of irritation,
Salwa replied, "Alright, I'll handle it." Hesitating for a moment as if he wanted to say something more, Shukri Nassar then left abruptly, without Salwa attempting to stop him or showing any concern.

I was surprised by her tone with her father, as it was so unlike her. I asked, "Salwa, why did you speak to your father in such a harsh manner?"

She paused for a moment, gazing intently as if to gauge my understanding of her situation, then said, "I think it's better this way, Najla. My parents need to get used to this treatment which might seem harsh. Who knows what fate holds for them?"

I refrained from pressing further. I understood that Salwa was apprehensive about the complications of her illness and feared the consequences. At that time, she was suffering from severe pain in her side, leaving her with little hope of recovery. However, her awareness of her critical health did not diminish her resolve to continue planning and executing the numerous projects she envisioned for the college. On the contrary, it seemed to drive her even more, as she doubled her efforts and mobilized all available resources around her to engage in the college's affairs. She was in an exhausting race against time, striving to seize every possible opportunity.

Technology and the Humanities

Salwa's numerous achievements during her brief tenure as president were a direct implementation of the policies and plans she outlined in her first speech at the traditional faculty meeting before the beginning of the academic year, as well as in her inauguration address. These accomplishments reflected her commitment to maintaining the college as a women's liberal arts institution that serves its various communities, encouraging them to recognize their needs and sources of material and spiritual wealth.

Salwa endeavored to address a significant educational issue that continues to preoccupy educators and administrators in all higher education institutions: establishing a fruitful and practical balance between the liberal arts approach, which encompasses the humanities, including philosophy, history, literature, and the arts on one hand, and the vocational and technological specializations on the other hand.

In recent times, we have witnessed a significant shift among university students worldwide toward scientific disciplines in liberal professions and technological sciences, often at the expense of the humanities. This trend has sparked considerable concern about the future of global culture. The college has been actively addressing this issue, which has been a recurring topic of discussion in the Board of Trustees meetings in recent years. There remains a dedicated effort to find a balanced approach that harmonizes these two fields of study, ensuring that neither dominates the other.

The renowned Lebanese educator, Dr. Hisham Nashabeh, addressed this very issue and warned of the looming danger to the future of education in a speech he delivered during the Founders' Day celebration on November 24, 1982, at Beirut University College (formerly Beirut College for Women). He remarked:

> I would like to draw attention to the fact that depleting a society of theoretical thinkers, literary figures, philosophers, and artists, will create an unbalanced society. I see no harm in gravitating towards technological sciences, but I lament a society devoid of a social scientist, a great artist, a philosopher, a historian, a writer, or a poet. It is the university's duty to raise awareness within the community to ensure a balance of knowledge and specializations.[61]

> In her 1965-1966 annual report, Salwa outlined the college's role in the region, emphasizing that it offers both a liberal education and practical training. She noted that the institution provides a traditional curriculum along with adaptable modern programs. In essence, the college fosters education in cultural spiritual disciplines and scientific fields.

[61] *An-Nahar*, 24/11/1982.

More than sixteen years have passed since that report, during which the college has undergone numerous changes and developments in its academic curriculum, faculty, and student body. Yet, the issue persists. Those involved in university education continue to grapple with the challenge posed by modern trends that increasingly favor scientific specializations over humanistic culture. If we seek a balanced and effective approach that harmonizes both directions, the proposal offered by the college president during her term remains unparalleled.

The annual report included a detailed list of changes made to the academic curriculum, reflecting the president's ambition to balance between scientific and humanistic disciplines. Among these changes were the enhancement of the natural sciences program through the reorganization of physics and chemistry courses, and the expansion of life science courses to facilitate specialization in this field and prepare students for medical school. Additionally, new subjects were added to the curriculum, such as, History of Lebanon, Rise and Development of Islam, Children's Literature, Modern Arabic Fiction, French Literature, Contemporary Christian Thought, and Christianity in the Near East. The president concluded her report with the statement:

> The purpose of these modifications was to create a modern, unified curriculum that responsibly serves the region in which the college operates, ensuring it is as practically effective as it is liberal.

Cultural Resources in Lebanon

Among the extracurricular activities that Salwa emphasized during her presidency, as mentioned in her annual report, was a seminar titled *Cultural Resources in Lebanon*. The goal was to acquaint both Lebanese and foreigners with Lebanese heritage through rigorous objective research. Salwa entrusted the organization of these lectures to a committee consisting of Maroun Keserwani, Julinda Abu Nasr, and myself. The committee organized a series of lectures held at the college in July 1966, at the end of the academic year. Twenty-three speakers, representing various cultural sectors in Lebanon, participated, including a group of specialized distinguished professors from the American University, Saint Joseph University, and the Lebanese University. Additionally, several clergy members, intellectuals, writers, poets, and artists contributed to the seminar.

The major topics addressed in that seminar included history, geography, Lebanese archaeology, anthropology and sociology, public health, religions in Lebanon, education, literature, and arts. From the outset, Salwa had envisioned publishing the lectures in the language they were delivered, with translations of Arabic lectures into English and vice versa. She assigned the task of publication and editing to the poet Adonis, Mrs. Rosemary Sayigh,

and myself. The lectures were published in a book[62] in 1969, nearly two years after Salwa's passing. The publication was overseen by a council of Salwa's friends who were dedicated to fulfilling her wishes and continuing the cultural activities she initiated that year.

This initiative achieved remarkable success, evident in the large audience of both Lebanese and foreigners who eagerly attended the lectures, and in the media coverage that published summaries of each lecture, widely disseminating them in the press. The success also manifested in the highquality studies presented and the diverse cultural figures who contributed. During July, the college became a hub for cultural and spiritual currents in Lebanon, a platform for freedom of speech and expression, and a catalyst for the fruitful cultural interactions that Salwa championed in her publications and speeches.

We witnessed a renewed vibrancy on the college grounds, transforming it overnight into a national institution that every Lebanese felt connected to, and a cultural center teeming with life and vitality. Salwa personally monitored the progress of this initiative daily, directly overseeing it and attending most of the lectures. She mobilized all the college's resources to organize and execute this event, turning it into a significant cultural event that captured the interest of both Lebanese and foreigners alike.

Salwa found comfort in my collaboration during her presidency. As the academic year was drawing to a close, she offered me a position at the college as her administrative assistant, along with several other opportunities in education and cultural activities. When I hesitated and asked for time to consider, she tried to persuade me, saying:

> You already give so much of your time to the college without compensation. Why not accept the position so we can reward you financially?

The terms of the job were enticing, especially the prospect of working closely under Salwa's guidance. I found that we shared many core values and principles, and despite our different cultural orientations, we resonated well in our thinking. However, my family obligations did not permit me to fully commit to such an important role, so I had to regretfully decline. This led to a letter of thanks from Salwa, dated August 3, 1966, in which she expressed an appreciation for my humble contributions to the extracurricular activities she had organized and planned—an acknowledgment that I had not expected. Below is an excerpt from that letter:

[62]Cultural Resources in Lebanon, Beirut College for Women, 1969.

Dear Najla,

Your clear thinking, practical approach to work, tireless perseverance, extensive knowledge, and keen insight have significantly contributed to the success of the "Cultural Resources in Lebanon Program". I thank you from the bottom of my heart for planning and executing this task with such skill.

Gratefully yours,
Salwa.

During that summer, Salwa embarked on multiple journeys outside Lebanon, attending scientific conferences in Europe focused on the use of atomic energy for peace, and visiting various parts of the Arab world. When she returned to the college at the start of the academic year, I had already traveled to Europe, where I stayed for a few months. In early December of that year, Salwa went to Kuwait for the inauguration ceremony of Kuwait University. Upon her return to Beirut on the 6th of the month, she wrote to Winifred Shannon, saying:

Yesterday, I returned from Kuwait, where I had the pleasure of participating in the university's inauguration ceremony. It was a delightful opportunity to witness remarkable displays of enthusiasm and far-sighted vision.

The university has a college specifically for girls, but I found that several officials are inclined to embrace the idea of co-education. While conversing with an elderly *sheikh*, who had been the Minister of Education when Kuwait first contemplated founding the university, he openly declared that he saw no harm in having girls and boys side by side on the university campus. He added, "What are we afraid of? That they might get to know each other, fall in love, and marry? At my age, I consider this as a natural and acceptable outcome that should be encouraged."

Salwa noted that Kuwait had made substantial progress in higher education, particularly in integrating women into this field. The university had about four hundred students, with women making up forty percent of the student body.

After her trip to Kuwait, Salwa traveled to Vienna, where she represented Lebanon at a scientific conference organized by the International Atomic Energy Agency. There, she was elected to the agency's Board of Governors, of which the National Council for Scientific Research in Lebanon was also a member.

Chapter IX

Unless a Grain of Wheat Dies

I arrived in London mid-December 1966. As I was speaking to my sister Leila at her home, she mentioned, "Salwa is ill in the hospital and would like to see you."

The news hit me hard despite my prior knowledge of Salwa's health condition and my earlier apprehensions. "When did this happen?" I asked.

Leila replied, "A few days ago. She's doing fine now, receiving treatment at Middlesex Hospital, and has been cared for by some of her students and friends."

The next day, I went to the hospital and saw Salwa. She appeared to be in her normal condition, surrounded by several old friends and college graduates: Louise Fleihan, Hilda Katbeh, Nahia Mitri, and Ghuzine Rasheed. Also present was Mr. Marwan Naqeeb, one of her students from the Physics Department at the American University of Beirut, who had taken charge of her and assisted her in getting admitted to the hospital. It was a family-like gathering where we reminisced about our college days. We huddled our Salwa in an atmosphere of relief after being reassured about her health. Before leaving the hospital, I left Salwa the phone number at my sister's house and promised to visit her again the following day.

From that point on, I visited her daily in the afternoon during her nearly three-week stay in the hospital. The journey from my sister Leila's house to the hospital took about half an hour by underground train to Tottenham Court Road Station, followed by a short walk. I would stop at a nearby shop to buy some fruits and sweets, which I would bring to Salwa on my daily visit. We would enjoy these treats while discussing the college, its affairs, and its future. Initially, we didn't mention her illness; I refrained from asking about her hospitalization, and she didn't bring it up either.

On the 24th of December, just a few hours before Christmas Eve, I went to visit Salwa in the hospital with my sister Leila and her ten-year-old son, Anthony. We had brought a small Christmas tree for Salwa, which Anthony placed on the table near her bed, decorating it with candles and colorful

ornaments we had bought on our way there. As we were about to leave around five in the afternoon, Salwa handed each of us a greeting card and gave me an envelope containing a gift. When I opened it at home, I found two gold bracelets and a card that read:

> To my dear Najla, with my best wishes, love, and admiration, I wish you a long life full of health and happiness. Please accept this humble gift for Christmas 1966. Like our friendship, it is made of an everlasting material.
>
> With love, Salwa

I cherish these two bracelets still adorning my wrist, considering them one of the most treasured gifts I have ever received. During the violent upheavals that shattered all values and laws in Lebanon in the mid-1970s, when we were exposed to murder, theft, and looting, one of my foremost concerns was to safeguard this gift that Salwa had described as humble. I hid them along with the card in a secure place, away from malicious hands, and they did not see the daylight for two full years.

The Will

On the morning following Christmas, December 26, I received a phone call from the hospital. It was from the head nurse in the ward where Salwa was staying. She said, "Mrs. Akrawi? Dr. Nassar would like to see you."

I replied, "She knows I'll be visiting in the afternoon as usual."

The nurse insisted, "No, she wants you now, as soon as possible."

I said, "I'll be at the hospital shortly."

I quickly dressed and headed to the hospital, fully aware that Salwa wouldn't have insisted on my immediate presence unless the situation was dire. Upon arriving, I hurried to her room on the third floor and found her in a state of severe distress, struggling to breathe. This sight filled me with dread for the worst. I asked her what was wrong, and with great difficulty and in a halting voice, she said, "Najla! You are the only one I have here, I need your help, please."

She was gasping for air, struggling so hard that I feared she might suffocate. Then she continued, "I need to write my will. I will dictate it to you."

I urged her to calm down a bit while I consulted the doctor or nurse about her condition. I left the room and spoke to the nurse in charge of the ward, explaining Salwa's request to write her will and her difficulty breathing. I asked if there was any way to help her.

The nurse replied, "I know. I gave her an injection a little while ago, and she should soon regain her strength."

I returned to Salwa and told her I was ready to write her will, but only after she regained her strength and her breathing normalized, as the nurse had assured. We waited a few minutes, and soon enough, Salwa began to breathe more naturally.

She then said, "Are you ready? There's paper and a pen on the table. Let's begin immediately."

I responded, "Why the rush, Salwa? Let's leave it until tomorrow or a few days later, once you have fully recovered."

Salwa looked into my eyes in her distinct way, trying to determine if I was unaware or deliberately ignoring the situation. She said, "I'm seriously ill, Najla. I need to write my will now, and I must resign from the college presidency."

"And what is your illness, Salwa?" This was the first time I had asked her that question.

And the answer was clear, cutting off all hope: "Leukemia!"

Our eyes met in a moment of harrowing silence, filled with all the courage and resolve we could muster to accept the painful reality. I didn't utter another word, and Salwa didn't elaborate further.

After a brief pause, I complied with her request, sat on a chair near her bed, took the paper and pen, and began to write her will as she dictated. "I, Salwa Shukri Nassar, born in the town of Dhour El Shweir, Lebanon, do hereby bequeath the following..."

I do not recall exactly how long it took to write the will, but I remember it contained twenty-two clauses. The will had two main parts: the first pertained to the legal heirs, including her parents, Shukri and Victoria Nassar, her sister Marcelle, wife of Youssef Faris, and their family, as well as the children of her sister Helen Abillamah. The second part detailed bequests and financial grants Salwa allocated to the college and various charitable organizations, as follows: ownership of certain shares and their revenues to the Women's Relief Society in Dhour El Shweir, ownership of sixty shares and their revenues in certain companies to the Balamand Monastery in Koura, Lebanon, with the stipulation that the revenues be used to support the monastery's library and school, a financial grant to Beirut College for Women to improve the college entrance, and a dedicated fund whose revenues would be awarded as a financial assistance to a distinguished Lebanese student at the college specializing in the art of teaching within the education department.

Clause eight of the will specified:

> I bequeath my shares and their income[63] to ensure the continuation of the 'Study of the Cultural Resources in Lebanon' project - which we started at Beirut College for Women in the summer of 1966 - that aims to conduct research in various fields and publish scholarly works that will serve as resources for Lebanese studies. I request that the responsibility for this project be entrusted to a council composed of the following individuals: Dr. Fouad Khoury, Dr. Elie Salem, and Dr. Kamal Salibi from the American University of Beirut; Dr. Mohamed Zehdi Yakan, professor of economics at Beirut College for Women; Mrs. Leila Hawi Sawaya, wife of engineer Jamil Sawaya; and Mrs. Najla Akrawi, wife of Dr. Matta Akrawi. This council will have the authority to establish the project's foundational charter and regulations, decide on the location and nature of the research and publications, and oversee all aspects to ensure the project's success and sustainability.

One of the things that lingers in my memory about Salwa during the drafting of her will is the deep affection she had for the daughters of her sister, Marcelle Faris. I vividly remember how she would repeatedly mention their names -Rima, Lina, Rula, and Samar- with a voice filled with love and tenderness. They held a special place in her heart. Over the preceding months, I had seen how devoted she was to their education, addressing any issues by contacting the school administration and offering guidance, direction, and encouragement. She was their aunt, mother, and mentor all at once.

When we finished drafting the will, we agreed that I would take the draft home to make a clean copy and bring it back the next day. On December 28, I returned to Salwa with both the draft and the new copy. After she reviewed it, we contacted the Lebanese embassy to send witnesses for the signing. That morning, Salwa seemed to have regained some of her strength; she appeared very relaxed, showing no signs of the alarming symptoms from the previous days. We sat and talked as usual, and I had bought her some black grapes from the shop near the hospital, which she ate with great appetite—it seemed to be her favorite fruit.

Ambassador and friend Nadim Dimashkieh himself, along with two staff members from the Lebanese embassy, soon joined us to check on Salwa's health and offer any necessary assistance. Seeing us chatting and laughing with clusters of black grapes on paper napkins, he exclaimed in surprise, "What are you eating?"

We replied, "Grapes, would you like some?"

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[63] 413 shares in various companies, with an approximate value of fifty thousand Lebanese pounds in 1967.

He said, "We were alarmed by the call about the will, but it seems everything is fine, thank God."

We responded, "Indeed, thank God."

Since we were informed that two local witnesses from the hospital were required, we notified the administration and two staff members stepped forward to sign. After Salwa and the four witnesses signed, the will was sealed with red wax and sent to the Lebanese embassy in London to be delivered via diplomatic mail to Beirut College for Women in Beirut.

Salwa remained in the hospital receiving treatment until January 7th. Two days before she was set to leave London, she asked me to buy her a blue nightgown and some woolen clothes as gifts for her sister Marcelle's daughters. This request reminded me of a similar occasion in the spring of 1958 when Salwa came to Baghdad to attend a conference organized by the Iraqi Academy of Sciences on the use of atomic energy for peace. Just a few hours before leaving Baghdad, she rushed to our house and asked me to accompany her to the jewelers' shops on Al-Nahr Street to buy some silver jewelry inlaid with enamel for Marcelle's daughters. Recalling that visit, I remarked to Salwa, "It seems that Marcelle's daughters are your primary concern."

She smiled and replied, "Indeed, they are..."

After getting details about their ages and the type of clothes she wanted, I went to Oxford Street the next day and bought the items. When I visited her that evening, I found several friends who had come to say goodbye after learning of her imminent travel. Among them were Ghuzin Rasheed, Louise Fleihan, Ismat Al-Saeed, and my sister Leila.

The next morning, I woke up early and went to the hospital to accompany Salwa to Heathrow Airport. It was a cold, dark day with thick fog typical of London in winter. Upon our arrival at the airport, Middle East Airlines took care of Salwa, providing her with a wheelchair. After completing the necessary formalities and getting permission to accompany her to the plane, an airline employee pushed the wheelchair to the bus and then to the aircraft. Salwa settled into a comfortable seat, and I sat beside her for a few minutes, chatting. When it was time for departure, the flight attendant asked me to leave the plane. I stood to bid farewell to Salwa, and she opened her arms, embracing me warmly without saying a word. Her usual silence conveyed all the love and gratitude she felt for me. Trying to hide my tears, I quickly said, "I'll follow you soon, and we'll meet again on that hill to continue our conversations." She looked at me, her gaze questioning, and smiled. I too, continued to wonder, as I stepped off the plane and headed back home, all the while feeling the warmth of her embrace lingering with me.

I returned to Beirut on January 16. When I arrived at the airport, I found my friend Marcelle Faris and her husband, Mr. Youssef Faris, waiting for me. When I inquired about Salwa, they told me she was back in the hospital. She had been admitted again after spending only a few days in her apartment at the college following her return from London. As we drove towards home, Marcelle, with tears in her eyes, asked, "Miss Najla, what did they tell you about Salwa's illness in London?"

I understood from her question that Salwa had not fully disclosed the severity of her condition to her family, but I also did not want to give Marcelle false hope.

So, I replied, "They told me her illness is very serious and requires long-term treatment...it may take a year or two, and who knows, perhaps medicine will find a cure by that time, it's so unpredictable."

In reality, I conveyed to Marcelle what the head nurse at Middlesex Hospital in London had told me when I asked about Salwa's condition. When we arrived at my house, Marcelle and her husband thanked me for taking care of Salwa while in London.

The following day, I went to visit Salwa at the American University Hospital, which was still located in the old building overlooking Bliss Street. I found a large number of visitors in the waiting room, all there to inquire about her health. Some had come from Tripoli and Sidon. I saw her parents, Shukri and Victoria Nassar, standing at the door of her room, as the doctor had prohibited most visitors from entering. I stood with her parents, and as we were talking, Dr. Amin Youssef came out of her room. Aware of my close relationship with her, he motioned for me to go in.

Salwa was pleased to see me and warmly inquired about my sister Leila and my children. Despite the fatigue evident on her face, she was fully alert and showed genuine interest in everything we discussed. She asked me to contact Dr. Marie Sabri to convey several matters related to the college. Her primary concern was ensuring scholarships for outstanding students.

From that point until mid-February, I visited Salwa almost daily. One day, I found her observing the Intravenous (IV) drip suspended above her head, delivering nutrients into her arm. I overheard the nurse standing next to her saying, "The IV will be empty in an hour, and I'll come back to you, Doctor."

After the nurse left the room, I saw Salwa casting quick glances between her wristwatch and the IV bag. Then she remarked, "No, it's actually an hour and fifteen minutes and two seconds."

I smiled and replied, "You know better... your lab training wasn't for nothing."

During another visit, I was taken aback by her jaundiced appearance, her face tinged with yellow that had spread to the whites of her large eyes. She held a mirror, gazing at her reflection.

Before I could ask, she preempted me, "Do you see the color of my face?"

I ignored her comment and asked about her condition.

She responded, "Jaundice."

I said, "What's the significance of that? Jaundice is easily treatable."

She smiled and, with a touch of agitation, said, "In my case, Najla? No... it's the beginning of the end."

I realized that her liver was affected and felt ashamed of my naivety in trying to downplay the severity of her complications.

My last visit to Salwa was two days before her death. I made my way to her room as usual, disregarding the strict no-visitors rule. Her mother met me at the door, clearly distressed. "Please, go in and talk to her. She loves you; maybe she'll respond to your voice. We've been talking to her, but she doesn't answer..." she pleaded, pulling me by the hand.

Inside, Salwa was in a deep coma. Her mother tried first, shouting, "Salwa! Look, Salwa, your friend is here..."

I followed suit, calling, "Salwa! Salwa!" But the silence was deafening, and I knew she would never wake up. I left the room and collapsed onto a chair in the waiting lounge, bursting into tears for the first time over my friend's impending departure. I noticed her sister, Marcelle, sitting at the other end of the bench, weeping, while my sister, Salwa Fares, sat nearby, trying to console her.

Marcelle said, " Go look at your sister; she needs comfort more than I do."

The following day, Salwa's brother-in-law, Mr. Youssef Faris, contacted me to attend a meeting with Dr. Anis Freiha, Mr. Farid Fleihan, and Mrs. Lily Hawi Sawaya from the college's Board of Supervisors. The meeting aimed to discuss the arrangements necessary in the event of Salwa's passing. It was held in the evening at Engineer Jamil Sawaya's home in the Hamra area of Ras Beirut, and Bishop Hazim, the head of the Balamand Monastery (now Patriarch Ignatius IV Hazim of the Greek Orthodox Church), was also present.

The discussion centered on transferring the body to the college campus, organizing the funeral at the college and elsewhere, the memorial service, the obituary, and other related matters. Dr. Anis Freiha and Mr. Farid Fleihan expressed reservations about moving the coffin to the college, concerned

it might impact the students' morale and disrupt their focus, especially with midterm exams approaching. After considerable back and forth, I convinced them that this action would not be harmful. The college students were mature enough to handle the situation, and death, being a natural part of life, was something they had to face eventually.

Additionally, it was essential to suspend classes for at least one day to honor the passing of the institute's president. Once this proposal was agreed upon, Mr. Youssef Faris requested that I contact Father Hanna Sakkab, the priest of the Orthodox parish at Our Lady of Dormition Church in Ras Beirut, to visit Salwa in the hospital and administer her last rites. He also asked me to write the obituary. I agreed to the first request but declined the second, explaining that although Salwa was in a coma, she was still alive, and I couldn't bring myself to write her obituary before her passing.

Youssef shook his head and said, "Do we still have any hope for her recovery?" Finally, Dr. Anis Freiha stepped forward and wrote the obituary, handing the copy to Youssef.

The following day, I called Father Sakkab at his home near the church. Not finding him there, I left a message explaining the request of Salwa's family. A few hours later, he called back, informing me that he was on his way to perform the necessary rites. I later learned that he had administered the Holy Communion to her. Additionally, I was told that Jesuit Father Dupré La Tour, the head of the medical institute at Saint Joseph University and Salwa's colleague on the National Council for Scientific Research, had visited her in her final days and prayed with her.

Two days after my final visit with Salwa, on February 17th at 5:30 p.m., the phone rang in the office of the college president. Dr. Marie Sabri answered and relayed the news from the American University Hospital: Dr. Salwa Nassar had passed away. A few of Salwa's friends, including Michel Asmar, founder of the Lebanese Cenacle, had gathered in her office, anxiously awaiting any updates. Although we had no hope left for her recovery since I had seen her in a coma during my last visit, the news still shook us. We held a minute of silence, trying to absorb the loss. Then, we sent out a brief announcement to the press in Lebanon, written by Michel Asmar and distributed by Dr. Marie Sabri, informing them of the passing of Dr. Salwa Nassar, President of Beirut College for Women.

On February 19th, the casket was brought to Orme-Gray Hall at the college, where family, friends, alumnae, faculty, and students gathered to pay their respects. Representatives from universities across Lebanon, as well as numerous government and diplomatic figures, attended the solemn event. It felt as if the entire nation had come to bid farewell to their esteemed compatriot. I overheard someone remark that having the casket at the college

was a blessing to the institution. At eleven in the morning, the procession, led by the casket, made its way to the Saint George Orthodox Cathedral in Nejmeh Square, where Metropolitan Elia Salibi officiated the funeral service.

The church was filled to capacity, forcing many to stand in the entrance and the outside courtyard. At two in the afternoon, the procession moved towards Dhour El Shweir. The weather was cold, with snow covering the slopes and roads, compelling the drivers to use chains on their tires to prevent slipping. Upon our arrival in Dhour El Shweir, the casket was brought into the Church of Our Lady, where a brief prayer was recited. The procession then descended to the village of Shweir, where Salwa eternally rested in the soil she loved, beneath the sheltering pines of Shweir where she had grown up, and the snow-capped hills that had witnessed her first steps, charting her path in a continuous ascent toward the summit.

Unless a Grain of Wheat Dies

A new chapter of Salwa Nassar's story unfolded after her death. The delegations that flocked to the college grounds on February 19th to pay their final respects and accompanied the coffin to its final resting place, braving the cold and snow, represented all of Lebanon—government, people, and academic institutions of various orientations and goals. The numerous memorial ceremonies that followed her passing, the tributes and honors given in her memory, and the cultural activities inspired by her life and plans were manifestations of the Lebanese people's admiration for Salwa Nassar—the legend, the symbol of values, defiance, and accomplishments. Writers began to extol her virtues, and speakers rose to eulogize her from podiums, on the radio, and across various types of media.

What was remarkable was that this woman, who inspired every Lebanese to voice their tribute, was extraordinarily humble and modest, far removed from the clamor and glamour of fame. Lebanon, often described as Levantine and known for its mercantile spirit, with its people's relentless pursuit of material gain and profit, revealed on that day a different facet—one that demonstrated its authenticity and depth. It showed a profound appreciation for values, a deep respect for knowledge, and a reverence for the prodigies nurtured by its blessed land across all fields and backgrounds.

Memorial Ceremonies

On February 25, 1967, marking a week since the passing of Dr. Salwa Nassar, Radio Liban organized a memorial event. The speakers included Dr. Suleiman Zein, Minister of Education; Dr. Ikram Haffar, President of the Association of University Women; Dr. Antoine Zahlan, Head of the Physics Department at the American University of Beirut; Professor Mikhail Naima; Father Dupré La Tour, Director of the Institute of Medicine at Saint Joseph University; myself;

and the author Edvick Shayboub, a classmate who played a significant role in organizing the event and inviting the speakers.

On February 28, Beirut College for Women held a memorial prayer service for its late president. The ceremony was attended by representatives from the administration, the faculty, the students, friends of the departed and her family.

On March 31, the college hosted a memorial event in Irwin Hall, featuring speeches from representatives of the Ministry of Education, the college administration, the Alumnae Association, the Board of Trustees, the National Council for Scientific Research, and the American University of Beirut.

Salwa Nassar Memorial Scholarship

A few weeks following her passing, the student body at Beirut College for Women launched a fundraising campaign to establish a scholarship in Salwa Nassar's name for outstanding students. In response, a committee of Salwa's friends and admirers was formed. Within a year, they successfully raised fifty thousand Lebanese pounds to bring the project to fruition. The committee decided that the scholarship would be awarded to a student excelling in the sciences.

Salwa Nassar's Library

In honor of Salwa Nassar's contributions to her hometown and Lebanon as a whole, the Ladies Cultural Society in Dhour El Shweir decided to name their library at the health center the Salwa Nassar Library.

Portrait of Salwa Nassar

On May 3, 1968, a ceremony was held at the Lebanese National Library to unveil Salwa Nassar's portrait, which was placed alongside Lebanon's distinguished figures in the Hall of Honor. This was done in recognition of her contributions to education and science. She became the third woman to receive this honor, following poet Warda al-Yaziji (1833-1924) and author May Ziadeh (1895-1941). The event, organized by the Lebanese Women's Council, featured speeches by Youssef Zaarour, representing the Ministry of Education, Dr. Mustafa Nehmeh from the National Council for Scientific Research, Michel Asmar, founder of the Lebanese Cenacle, as well as Emily Faris Ibrahim from the Lebanese Women's Council and author Edvick Shayboub. Before the portrait was unveiled, Mahmoud Al-Husseini, Assistant Director of the National Library, gave a brief speech, starting with the following words:

> In the name and sanctity of the written word, in the name of science and knowledge, in the name of great intellectuals, we proudly hang the portrait of the esteemed educator, Dr. Salwa Shukri Nassar, within this sacred hall of the book, in recognition of the abundance of knowledge and richness of literature.

The portrait, a masterpiece, by the great Lebanese artist Omar Onsi, was, we are told, lost from the National Library during the tragic events that unfolded in Lebanon during the mid-1970s.

Street Named After Salwa Nassar

In May 1968, the Municipality of Beirut decided to inaugurate a street named after Salwa Nassar, located in one of the newly developed residential areas of Ramlet al-Baida, a burgeoning neighborhood in Beirut at the time.

Recognition from the Faculty of Arts and Sciences at the American University of Beirut

The American University commemorated Salwa through a tribute from the Faculty of Arts and Sciences during a deans' meeting held on February 28, 1967. The dean mentioned the news of the death of Dr. Salwa Nassar, a friend and colleague at the Faculty of Arts and Sciences and the President of Beirut College for Women. He then read the following statement:

> The Faculty of Arts and Sciences received with deep sorrow the news of the death of Professor Salwa Shukri Nassar on February 17, 1967. In appreciation of her services to the American University of Beirut, her colleagues in the faculty record this memorial note.

The note included a brief overview of Salwa Nassar's life, her birth, education, academic degrees, the positions she held, and her contributions to advancing the status of women in the Middle East in both the educational and scientific fields. The note concluded with:

> The Faculty of Arts and Sciences wishes to express its deep gratitude and appreciation for the services Dr. Salwa Nassar rendered to the American University, especially in the field of teaching and developing the science of physics. Her loss has left a profound impact on her colleagues.

National Council for Scientific Research Decision – The Science Museum

The minutes of Administrative Meeting No. 4/67 record the following:

> During the first meeting held by the National Council for Scientific Research on the evening of February 21, 1967, following the passing of Dr. Salwa Nassar, one of its distinguished members, the council unanimously decided to record in the minutes of its meetings its deep sorrow over the significant loss her passing represented. The council acknowledges her exceptional qualities as a scientist and her invaluable contributions, which stemmed from her profound knowledge, extensive academic experience, and her commitment to elevating the status of science in Lebanon. The Council has decided to name the first scientific museum it establishes in her honor. This

decision shall be communicated to her family, the Office of the Prime Minister, the Presidency of the American University of Beirut, and the Administrative Board of Beirut College for Women.

Beirut College for Women Alumnae Bulletin

The Beirut College for Women Alumnae Association dedicated one of its bulletins issued in the spring of 1967 to commemorate the late President Dr. Salwa Nassar. This special edition compiled a brief biography of Salwa, along with excerpts from the eulogies delivered at various memorial ceremonies, letters from friends sent to the publication committee, articles published in the Lebanese press following her death, and testimonials from several of Dr. Nassar's professors in the United States, including those from the University of California at Berkeley and the University of Michigan at Ann Arbor.

Salwa Nassar Foundation for Lebanese Studies

In accordance with the eighth clause of Dr. Salwa Nassar's will, legally executed on May 30, 1967, the founding council held its first meeting on December 8, 1967. The council, as stipulated in the will, consisted of Mr. Elie Salem, Mr. Kamal Salibi, Mr. Fouad Khoury, Mr. Mohammed Zuhdi Yakan, Mrs. Lily Sawaya, and Mrs. Najla Akrawi. During this inaugural meeting, the council decided to name the organization "The Salwa Nassar Foundation for Lebanese Studies". Its mission was to fulfill the objectives outlined in the eighth clause of the will, which emphasized the perpetuation of Lebanese studies and the revival and dissemination of Lebanese heritage both within Lebanon and abroad. The foundation undertook various cultural activities, among the most significant of which were the following publications:

Cultural Resources in Lebanon, 1969: This bilingual book, available in both Arabic and English, compiled the series of lectures presented at Beirut College for Women during the first seminar session under the supervision of Dr. Salwa Nassar in the summer of 1966.

Beirut – Crossroads of Cultures, 1970: This book, published in both English and French according to the language used by the lecturers, compiled the series of lectures presented during the second seminar session organized by the foundation in November 1969. Esteemed specialists were invited to deliver scholarly studies on the city of Beirut, covering its history, the social and ethnic composition of its inhabitants, and various cultural aspects, including educational, artistic, and cultural features of the city.

Lebanon's Role in the Arab World, 1974: This book, published in Arabic, was the outcome of the foundation's third and final seminar session. Expert lecturers examined Lebanon's role in the Arab world from various perspectives, including educational, economic, political, and social aspects. They also

delved into the impact of Lebanese journalism in the Arab world, the cultural interactions within Lebanon, and their influence on the broader Arab region.

Excerpts of Tributes to Salwa Nassar on Various Occasions on February 25, 1967

Tribute of Dr. Suleiman Zein, Minister of Education. Delivered on Radio Liban on the one-week anniversary of Salwa Nassar's passing.

> Her educational and intellectual journey was built upon three fundamental principles: comprehensive education, courageous sacrifice, and humility. When her name is evoked, her personality is vividly conjured – a harmonious balance of these three pillars – imbued with the interplay of light and shadow, reflecting the profound values that enriched the mind of this great Lebanese educator. Salwa Nassar embodied humility; she never sought fame, glory, or wealth. Instead, she achieved significant accomplishments and aspired to greater progress and development for her country and humanity, with which she shared mutual growth and vitality. Her inner voice revived her and led her to a selfearned satisfaction, echoing a well deserved-reward. This contentment led her to embrace the devoted life of educators committed to their mission. Though grieving her loss, Lebanon will forever cherish her invaluable contributions, remaining faithful and loyal in honoring its bright minds.

In his eulogy delivered at Salwa's memorial service held by the college on March 31, 1967, Dr. Anis Freiha, Chairman of the Board of Trustees of Beirut College for Women, said:

> I remember when this hill was a rugged terrain covered with thistle and other weeds. Today it stands as a testament to a vision realized, a dream fulfilled. For great works and momentous achievements start with a vision, and culminate in the realization of a dream. I knew the first woman president of this institute, having taught her Arabic. Her exam involved writing an essay in Arabic, and she chose the title 'Dream'. She dreamt of a college perched upon this hill, a beacon of enlightenment in the East. When we elected Salwa as Lebanese president of this college, we anticipated an abundance of visions and the fulfillment of dreams. Her life was an embodiment of giving, and her death a lesson and a source of solace.
>
> Three days before her passing, she summoned me and said, "Do you remember our discussions about the projects that mean so much to me? I still dream of a small, beautifully designed church, with high ceilings where colored light filters in. If a girl weighed down by life's burdens walks by, she will be naturally drawn in, and there, in silent reverence, she can pour out her soul before God. Our college lab is pitiful; I am embarrassed when a visitor sees it. Science is about

> experimentation and testing. We need a proper lab—don't forget the lab. Our library shelves are empty, and a college without a library is a spirit without a body. Don't forget the library."

Reflecting on these words, Dr. Freiha remarked:

> A house for God, a lab, and a library—faith, science, and free culture. That's why we chose her as president: because we believe in God, in science, and in free culture. Salwa embodied all these values. Though Salwa has passed, her memory will live on in the hearts of those who loved her and as a beacon on this hill, reminding us of her dreams.

Dr. Charles Malik, head of the Department of Philosophy at the American University of Beirut, wrote a tribute to the late Salwa in An-Nahar newspaper on February 18, 1967.

> She loved the tangible truth and sought it with her mind to the farthest ends of the earth.
>
> She loved her fellow scientists, engaging with them in discussions and conferences as an equal.
>
> She loved the youth, dedicating herself to their education and enlightenment with all the knowledge and wisdom her mind could hold.
>
> She loved her family and friends, always a loyal and close companion. She loved Lebanon, believing that freedom, love, and humans are paramount.
>
> She loved God, trusting in Him until the last moment of her life, never despairing of His mercy, surrendering herself to Him with peace and joy. Thus, the mystery of Salwa Nassar is love. As she returns to her Lord today, she undoubtedly finds there what her soul yearned for throughout her life, and what she found here only in echoes and shadows.

Under the title *A Messenger from Lebanon*, Dr. Jamil Jabr penned a tribute in *Al-Jarida* on February 19, 1967. The following is an excerpt:

> With Salwa Nassar's departure from our small world, we lose a radiant presence that embodied our creative spirit. She combined the precision of genuine science with an open-hearted humanity and the innocence of spontaneity, all within a frame of moral nobility. Devoted to science, she achieved the highest academic honors, never content with merely receiving but also giving in a field that, until our time, was predominantly for men. Her contributions to the field of atomic radiation demonstrated that Lebanon is not behind advanced nations in fundamental research and that it is not just a land of poetry and

> literature. She filled a significant void that will be increasingly felt over time, for individuals like Salwa Nassar, among both men and women, are rare. Salwa Nassar marks an era in Lebanon's scientific renaissance, just as May Ziadeh, her predecessor, did in the literary renaissance. She is the Marie Curie of the East. One of the greatest honors for women, indeed one of the greatest honors for Lebanon, is that it gave the world Salwa Nassar.

In a letter sent by Archbishop Ignatius Hazim (now Patriarch Ignatius IV Hazim) to the Beirut College for Women Alumnae Bulletin, he wrote:

> Salwa Nassar embodied upright character and distinguished virtues, a soul refined by the hand of knowledge, resulting in a personality rich in both literature and science. Despite her greatness, she remained humble. She did not get entangled in material pursuits nor did she exhaust her energies solely on scientific experimentation. Her heart remained open to the Creator of the universe, whom she loved with unmatched devotion. She saw Him as the sole source of validation for every achievement, discovery, or creation in this world. Salwa Nassar was a priestess in the temple of science, yet her faith transcended the temple to encompass both the Lord of the temple and science. With each deepening exploration of science, the divine power became even more apparent in her. Thus, she was among the rare scientists who saw no duality between God and His world, no conflict between the universe and its Creator. She was a model of scientific excellence for believers and a model of faith for scientists.

Mikhael Naimy, in a speech broadcasted on Radio Liban to mark the oneweek anniversary of Salwa Nassar's passing, said:

> Blessed is the soil of these mountains, our mountains, which seem to be imbued with the spirit of genius. Indeed, they themselves are a manifestation of genius, having produced and continuing to produce so many exceptional men and women of the caliber of Salwa Nassar. Salwa emerged from a village known for its numerous distinguished figures in various fields of human endeavor. Possessing a brilliant mind and a vast heart, she quickly established herself as a leading scientist in the field of nuclear physics, which is uncommon among women. When entrusted with the presidency of the Beirut College for Women, she revealed herself to be an educator of the highest standard.

Reflecting on her illness, he continued:

> I followed the stages of that heroic struggle from a distance, gathering news from those close to her. It astounded me that even in her moments of extreme suffering, she would occasionally regain consciousness and concern herself not with her own condition but with

> the affairs of the college. Her love for Lebanon was rivaled only by her love for benevolence and her devotion to God. Her presence among us was a blessing for us and for Lebanon.

Mrs. Latifa Ghandour Mneimneh from the Pathology Department at the American University of Beirut wrote:

> I knew Salwa Nassar as a professor of science at Beirut College for Women and at the American University of Beirut when I was her student. She was the epitome of a serious and strict teacher, always aiming for excellence and pushing her students to reach their highest potential, motivating and encouraging them, and rewarding success and achievements with continual challenges. Her productive energy was contagious, influencing everyone around her. I also knew her as a family friend, and the serious impression I had of her softened into one of kindness and calmness, endearing her to us. She would visit us during holidays to offer well wishes, and each family member felt genuine affection and comfort in her presence.

Father Dupré Latour, Dean of the School of Medicine at Saint Joseph University and a colleague of Salwa on the National Council for Scientific Research, wrote:

> What impressed me most about Dr. Salwa Nassar were her significant scientific achievements, her extraordinary intelligence coupled with clarity, steadfastness, and resilience. She was forthright in her opinions and unafraid to declare what she believed to be true and just, even if it caused discomfort among her colleagues. Her dedication to serving Lebanese youth through science and culture was especially evident during her active role in the National Council for Scientific Research. She was unassuming in her appearance, humble, loyal and devoted to her friends. Her deep Christian faith and devout reception of the Eucharist gave her remarkable peace in facing illness and death.

In a speech delivered by Dr. Ikram Haffar, President of the Lebanese Association of University Women, broadcasted on Radio Liban one week after Dr. Salwa Nassar's passing, she said,

> I knew her as a pioneering academic who brought a spirit of camaraderie and serenity to the meetings of the Lebanese Association of University Women. She worked wisely to strengthen understanding and foster bonds of love among various women's organizations dedicated to serving women and society. I knew her as a true Lebanese patriot who traveled the world, moving between many of the world's capitals as a scholar, educator, researcher, and mentor. Laboratories, institutions, and foreign scientific societies opened their doors to her, and she could

have settled there to enjoy abundant material resources. However, she chose to return to her homeland, Lebanon, to contribute to its development. Amidst her sufferings, she refused to succumb to despair, demonstrating remarkable endurance. She continued to participate in international conferences, offering her brilliant ideas and contributing to the mission.

In a speech delivered by author Edvick Shayboub and broadcasted on Radio Liban, she remarked:

> Salwa was a rich, joyful world, an oasis overflowing with shades of tenderness, and of pure, generous love, magically, paving her way to success . Oh God, what wonders she accomplished in just two years as president. She restored Lebanese women's confidence in their ability to lead and command respect. She was a national treasure. People from all walks of life rallied around her, responding with unwavering enthusiasm and determination. Salwa was an exceptional human asset, elevating the foundations of values in an era that had lost faith in them. She stood as an exemplary figure, her heights an aspiration for us all, our eyes fixed in hopeful yearning. In Salwa, we found a rare convergence of values seldom seen in one person. Among my many peers, none were kinder, more attuned to beauty, or more joyous in its presence than her.

In an article published in *Lisan al-Hal* newspaper on February 19, 1967, author Khalida Said wrote:

> I knew the legend of Salwa Nassar before I met her. She was one of those exceptional individuals who create their own legend in life. She became a legend, particularly in our consciousness as Lebanese women, because she was a multifaceted embodiment of our hopes and aspirations. She was a symbol of participation in the civilization of science, a symbol of faith in humanity, a symbol of the self-made woman, and a symbol of a scientist who delves into matter and its mysteries, only to grow spiritually richer. Her legend was conveyed and spread by a silence that rarely transmits legends. When I got to know Salwa Nassar closely, I felt from the moment I saw her that she possessed a unique charm, as if she had the transparency of death. There was something enchanting in the sparkle of her eyes, brighter than intelligence, more intense than longing, and deeper than nostalgia. She was one of those who created a special world around them, a world of faith, love, and hope, where everyone who enters feels they are participating in a unique rite of life, where every movement gains meaning, and where everything is elevated to the level of sanctity.

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Annex 2

Associations with which Salwa Nassar was affiliated

1. The American Association for the Advancement of Science (AAAS).
2. The American Association of Physics Teachers.
3. The American Physical Society.
4. Phi Beta Kappa (An honor society for high-achieving undergraduate students).
5. Sigma XI (A society dedicated to promoting scientific research in academic and technological institutions. Salwa Nassar established a chapter of this society at the American University of Beirut).
6. The Arab Society of Scientists.
7. The Arab Society of Physics Teachers.
8. The Iraqi Academy of Sciences.
9. The Syrian Academy of Sciences.
10. The National Council for Scientific Research in Lebanon.
11. The Cooperative Institution for Education.
12. The Lebanese Association of University Women.
13. Time Capsule Committee.
14. Board of Governors of the International Atomic Energy Agency.
15. Beirut College for Women Alumni.

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From Salwa Nassar to Anissa Rawda	1935-1938
From Salwa Nassar to Rose Ghorayeb	1936-1937
From Salwa Nassar to Marcelle Nassar	1939-1945
From Salwa Nassar to Shukri and Victoria Nassar	1939, 1945, 1966
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From Charles Malik to Salwa Nassar	1955
From C.S.W.U. to Salwa Nassar	1967
From Shafica Karagulla to Salwa Nassar	1967
From Salwa Nassar to Najla Akrawi	1967
From Father Dupré Latour to Najla Akrawi	1967

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2. Dr. Amin Youssef, physician at Beirut College for Women (1965-1967), currently one of the physicians at the American University of Beirut. January 5, 1982.
3. Mrs. Victoria Hajjar Nassar, mother of Salwa Nassar, May 6, 1978.
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8. Dr. Khalil Bitar, February 23, 1981.
9. Mrs. Anissa Rawda Najjar, January 1981, May 1982.
10. Author Rose Ghorayeb, multiple interviews.
11. Dr. Shafica Karagulla, January 29, 1982

قسطنطين زريق
الجامعة الاميركية في بيروت
بيروت – لبنان

١٩٨٥/٢/٥

عزيزتي نجلا

تحية صادقة، وبعد

أعيد اليك رفقا نسخة مخطوط كتابه عن الفقيدة العزيزة سلوى نعمار، التي تفضلت باطلاعي اياها لتقرأها. واعتذر عن التأخر في اعادتها بسبب ظروف حالت دون ذلك في الاسابيع الاخيرة.

قرأت هذه السيرة واستمتعت بها، كما استمتعت بها سيتمتع بها جميع قرائها لمعرفتنا المرحومة بالدكتورة سلوى والصداقة الوثيقة التي كانت تربطنا بها. ورجونا ان نتمكن ابتداء من العام المقبل في بيروت من ان نقيم عليها، لون إلمام كانت احدى ممتازات الدكتورة درست الفيزياء عليها ولقيت منها كل عناية ورعاية، وهي تحفظ لها الحب والتقدير واعترافا.

وقد قدرت فقيدة جميع الذين يتذكرون في جمع المعلومات المتوفرة عن معاصرها الحية (أقارب، زملاء، أصدقاء) ومن المصادر المكتوبة وغير المكتوبة. وبالرغم ان جهودها هذا صرفت فيه، وما زالت تبذل عليه لدى تتوفر العين لتدقيق الرأي فيما كانت تشير به من قضايا علمية وأدبية، وحرصها على ان لا تتبنى هذه القضايا على الأراء في الأوراق، بل ان تنشر للناس ليهتدي بها الواقفون وان شاؤا بصفة خاصة.

وبالاضافة الى ذلك، تعبر هذه السيرة عن تعلق بالمؤسسة التي تعلمت بها سلوى نعمار: كلية بيروت للبنات. فقد عرفت الفقيدة هذه المؤسسة الذي عاصرته، وظروفها التعليمية والاجتماعية التي كانت تسودها، وما ادته من خدمات للعدد الكبير من فتيات لبنان والبلدان العربية الاخرى. وهي امور حبذا لو تدرس وتسجل، وأن تعود الى الاجيال المتعاقبة من رواد هذه المؤسسة لتستفيد بها وتستهدي.

ان هذه السيرة خليقة بأن يقرأها عارفو سلوى نعمار ومعاصروها القدامى من تلاميذ كلية بيروت للبنات، فيستعيدوا معها صورة حية للعلاقات الشخصية الدائمة والعلاقات الاجتماعية والعلمية التي نشأت بينها وللاهتمامات التي كانت تشغل بال هذه الشخصية والتي أهلتها لمكانة رفيعة في قلوب عارفيها وتقديرهم.

على انه اذا اريد لهذه السيرة ان يكون لها تأثير وأثر في دائرة أوسع، فاني ارى ان تزخر بنماذج وخاصة بعض آخر ما عرفهم القارئ العام، ولكني على ذلك أذكر الرسائل التي تبادلتها سلوى وأفراد اسرتها الوارد ذكرها في الفصل الرابع: وهي لا تخلو من فائدة، وتغطي ما بين ١٩٠٩ و١٩١٠ من الفصل ذاته (يوجد) وكذلك صديقاتها في الفصل الدراسي (ص ٢٠ وما بعد)، وبعض ما ورد في الفصل الثامن ص ١٢، ١٥، ١٢. واتوقع ان تتيسر الفكر في ضوء الكتاب، وفي ذهن القارئ العام الذين لم يعاصروا سلوى وكم يعرفها وقد يجهل الكثير من الاشخاص الذين ورد ذكرهم، لتبرز المعاني الكامنة لهذه السيرة ويكون لها أثر أوسع.

يقي أن أشيد بتفكير الرصين وتشجيعك التي واسدتها لي في تجميل هذا المشروع خلال مدة طويلة ومضنية لمشجع.

وأرجو ان تقبلي مني نجلا وبني عاطف مودتنا وأطيب تمنياتنا لكم جميعا.

Note:
This is a reproduction of the original handwritten letter sent by Dr. Constantine Zreik to Ms. Najla Akrawi. The letter has been scanned and reproduced in its original form, as it appears on the back cover of the original Arabic edition of the book. The English text presented on the back cover of this edition is a translation of the original letter.