

A Journey to the Core of the Sun

Oliver K. Manuel, *et al.**

*The journey of life cannot be successfully traveled alone. The purpose of this book is to share with others **information that was hidden from the public in 1945**. On the next pages are a few of the thousands who contributed to the eventual success of this journey:

Associates on the Journey to the Core of the Sun

The Great: Reality that surrounds and sustains us—Bountiful Earth, Cosmos, God, Higher Power, Truth, Universe—What is revealed by cause and effect, coincidence, destiny, experimentation, fate, insight, karma, meditation, observation, prayer, providence, serendipity, sight (beauty), sound (music), and unmerited acts of human kindness (love and compassion).

Family and Friends: Caroline Annette Manuel, Fay Irene Graham Manuel (1912-1940), Wesley Franklin Manuel (1906 -2003), Leo Wesley Manuel, Viola Marie Womack Manuel (1912-2003), Marlene Joan Manuel Ferguson (1942-2010), Jearl Dean Manuel (1945-1986), Leona L. Manuel (1919-1999), Wesley Kyle Manuel, Wesley Paul Manuel, Robert and Nell Manuel, Kay Adams, Sheri and Calvin Alexander, Jr., Randy Alkire, Bill and Shirley Andrews, Lorie Applegate, Hirofuma Arino, Robert A. Ashworth, Moses and Kathryn Attrep, Sharon Aubuchon, Leonard H. Axe, Marvin and Alice Barker, Jody Baxmeyer, Dick Beaty, Vic and Terri Becker, Marie Bennett, Rayma June Fryar Bishir, Jim Bolton, Terry Bone, Wouter Bosch, Carey Bottom, Shannon T. Bowlby, Glenn Brand, Bobby and Becky Brandon, Terry Brewer, Brian Breyfogle, Bill and Kitty Brown, Gayle Carlson, Phyllis Carson (1923-2009), Jerry Cassidy, Donald L. Castleman, George (K.-Y.) and Linn Chiou, Jim Christian, Milton Cissell, Stuart Clark, Jamie Cochran, Theresa Cochran, Matthew C. Collins, Sherri Coomer, Harry Costas, Allen N. Cowling, Teri and Jeff Crain, Al Crump, Glenn Daniels, Mary and David Denton, Jack Dietzmann, Greg Downing, Ron Dishman, Wayne Duer, Manfred Eberhardt, Noel Eberz, Dan Edwards, James Walton England, Nina Epperson, Jiafu Fang, Ronald (Bo) Ferguson, Tony Flaim, Gerald Fortner, Birgitta Friberg, Stig and Susan Friberg, Ramachandran and Radha Ganapathy, J. Chris Goeke, Daniel S. Goldin, Johnny and Evelyn Gordon, Greg Downing, Neal and Lynn Grannemann, Judy Green, David B. Grelle, Kirt Griffin, Ed Grigsby, Ida Hand, Robbie Hart, Shirley Alderson Haworth, Charles and Leona Heitsch and their son Chuck Heitsch, Tasha Nicole Hill, Martha Hilton, Bill Hitchcock, Cynthia K. Hobart, Charles M. Hohenberg, Joseph M. Hopping, Earl and Edna Hudgens, Anthony Humberston, Golden Hwaung, Arlene and Bill James, Martin and Patty Jischke and their son Charles, Jim and Dorothy Johnson, Joey Johnson, Phyllis Johnson, Robert Johnson, Robert Johnson, Sumeet Kamat, Ichiro and Mieke Kaneoka, Aditya Katragada, Dewayne and Eileen Klauesner, Matthias Kleespies, Melvin Klemp, Jim Knox, Paul Kazuo and Louise Morren Kuroda, Racheal Lamb, Missy Lane, Bin Li, Elmer Ligon, Bill Little, David Ludolph, Don and Helene MacElroy, Margaret Ann Maddox (1908-2010), Molly Malone, Kakha Margiani, Rick & Barbara Matthews, Harry and Anna Mattingly, Mike and Molly Malone, Brian Mays, Ordell Meeks, Randy Menges, John D. and William D. Messenger and “Sparky” the carpenter at Ace Messenger Lumber Co.,

Margaret and Dick Miller, Jack and Georgia Morgan, Spencer Morley, Mike and Tammy Mueller, Elizabeth Munson, Ryan Murtha, William Myers, Muriel Neff, Barry and Veronica Ninham, Joe Nix, Sue Nix, Henry Ngo, J.C. and Paula Oldham, Joseph A. Olson, David Osborne, John O'Sullivan, Ted Perrin, Walt Paquin, Vonda Parsons, Lee Pedersen, Benny Peiser, Verl Pope, Crystal Porter, Lisa Quencer, Gerry D. Reece, Wiley Reed, Wade Reeves, Lennert M. Reisenbichler (1934-2011), John and Sharon Renick, Mike and Sue Reno, Ray Riggs, Ed Rigsby, Louise and Vincent Roach, Randy Roberts, Ken and Kittie Robertson, Damon Ronfeldt, Brad and Brandy Rosenthal, Barbara and Robert R. Russell, Michael T. Ryan, Andrew Schmid, Hans Schreuder, Tony Scoby, Paula Secondo, Shirley Secondine, Chuck Seger, Shirley Secondine, Steve Seidenberg, Jean and Joseph Senne, David Shackelford, Hope and Nirmal Shastri, Bill Shermer, Tadashi Shimamura, John Simmons, Bhudeo Sinha, Richard Sinnott, Dale Sivils, James Skipper, Jeanette Parker-Small and John Small, Shawn Spradling, Uma and Chinu Srinivasan, Pete and Judy Statler, Jeanette Parker Small and John Small, Sandi Staples, Virgil Steele, Bob Steinkamp, Gladys Stuart, Igor Sukhona, Joe Szabo, Wilbur and Marian Tappmeyer, Marie Tatsumoto, Sonya Taylor, Larry Thompson, Kay Thornton, Bob Towner, Richard and Marilyn Vitek, Lou Vogt, Kent A. Walker, Bill and Ruby Webb, Marilyn and Morris Welsh, Marie Wilson, David Whitehouse, James O. Wier, Ken and Gary Windler, Lance Williams, Hester and Jim Wise, Edward Womack, Dean and Irene Womack, Danny Woodward, Johnny Woolfolk, Tim Yu, Bing Zhang, Bo Zhang, Freida and George Zobrist, Frank Zvanut, and others.

Teachers: Eleanor O'Connell, Charles Hoskins, Cecil Gray, James Pauley, Elizabeth Cochran, Paul Kazuo Kuroda (1917-2001), John H. Reynolds (1923-2000), and others.

Research Mentors: Paul Kazuo Kuroda (1917 - 2001), Craig Morris Merrihue (1933 - 1965), John H. Reynolds (1923 - 2000), Mitsunobu Tatsumoto, aka "Tatz" (1923- 1999)

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Qiqing (Max) Zhong, Aditya Katragada, James-Alan Holt Powers (1984-2001), Robertson Johnson, Sumeet Kamat, David Gatten, Marcel Pless, Cynthia Bolon, Andrew Schmid, and many others.

**Eminent
Scientists/
Scholars:**

Philip Hauge Abelson (1913- 2004), Emmit Calvin Alexander, Jr, Hannes Alfven (1908-1995), Claude Allègre, Francis William Aston (1877- 1945), Leonard H. Axe (1900-1975), Asish R. Basu, Friedrich Begemann, Raymond L. Bisplinghoff (1917-1985), Tibor Braun, Wilbur K. Brown, E. Margaret Burbidge, Geoffrey R. Burbidge (1925-2010), James Chadwick (1891-1974), Roger A. Chevalier, Raymond Davis, Jr. (1914-2006), Stephen O. Dean, Albert Einstein (1879-1955), William A. Fowler (1911-1995), Stig E. Friberg, Urs Frick, J. William Fulbright (1905-1995), Ramachandran Ganapathy, Lawrence E. Glendenin (1918-2008), Joyce Ann Guzik, William Draper Harkins (1873-1951), J. Marvin Herndon, Fred Hoyle (1915-2001), Albert Ghiorso (1915-2010), Ichiro Kaneoka, Truman P. Kohman (1916-2010), Paul Kazuo Kuroda, (1917-2001), James M. Donal MacElroy, John R. Maddox (1925-2009), Akimasa Masuda, Michael Mozina, Barry W. Ninham, Uli Ott, Minoru Ozima, Claire C. Patterson (1922-1995), Cecilia H. Payne-Gapochkhi (1900-1979), William Prout (1785-1850), Souriraja Ramadurai, Hilton Ratcliffe, John H. Reynolds (1923-2000), Theodore W. Richards (1868-1928), Berol Robinson, Carl A. Rouse, Marvin Rowe, Dwarka Das Sabu (1941-1991), Carl E. Sagan (1934-1996), Glenn T. Seaborg (1912-1999), Tadashi Shimamura, Stuart Symington (1901-1988), Gary Thomas (1939-2008), Virginia Trimble, Karl K. Turekian, Vic Viola, and others.

Colleagues:

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Technicians:

Phyllis Johnson (1942-2011), Mac McCroy, Mike Myers, Mark Stein

**Spiritual
Advisors:**

Eknath Easwaran (1910 - 1999), Paul K. Kuroda (1917 - 2001), Bo Lozoff, Paul Ohliger (1917-2000), Dwarka Das Sabu (1941-1991), Nirmal Kumar Shastri, Robert Holbrook Smith (1879-1950), *a.k.a.* Doctor Bob, William Griffith Wilson (1895-1971), *a.k.a.* Bill Wilson and others





This book is dedicated to my friend, research mentor, spiritual advisor, and teacher

Professor Paul Kazuo Kuroda (1917-2001)

*We are all on the same journey.
Powerless at birth; Powerless at death.
Events that molded our egos also decided
The difficulties that we would encounter in life.
The most successful lives, escape from the
Best fortified ego cages before death.
In that sense, I was richly blessed
From the start of this journey.*

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Chapter 1: Coincidence

. . . , in the midst of mankind's endless quest to know—“***Where did all this come from?***”— a twenty-three year old graduate student, energized by insecurities and resentments almost from birth, happened - probably in May of 1960 - to join the research efforts of the late Professor Paul Kazuo Kuroda, a talented, compassionate nuclear geo-chemist from the Imperial University of Tokyo that had been granted a special visa to enter the United States in 1949, four years after being sent to figure out the bomb that destroyed Hiroshima on August 6, 1945. Now, sixty-eight years later, this stubborn student of ordinary ability summarizes his findings here.

Professor Kuroda later described four years (August 15, 1945 to August 15, 1949) as “*the most humiliating years of my life*” [ref. 1, page 60]. Out of that tragedy Kuroda learned to accept reality, whether disguised as good or misfortune, a skill the student would need to complete his research assignment. The student confused acceptance with acquiescence, but finally grasped the difference to conclude his assignment by accepting that **world leaders were also frightened in 1945**, tried to save the world, **and are not to blame for hiding answers to "the endless quest."**

After reaching the United States, Kuroda displayed an inexplicable grasp of nuclear fission in reports that self-sustaining nuclear fission reactors occurred naturally in the early history of the Earth [2,3], when the natural abundance of fissile ^{235}U was much higher, and in another report that Earth's early atmosphere accumulated the gaseous products from spontaneous fission before short-lived plutonium-244 ($t_{1/2} = 82 \text{ My}$) became extinct [4]. Measurements [5-7] later confirmed the validity of both predictions [2-4], predictions that had appeared highly speculative to the self-appointed gatekeepers of scientific knowledge in the United States.

The almost perpetually angry student, Oliver K. Manuel, writes this story. It is thus biased by his point of view. The story is not about the student or the professor. It is about the discovery of information purposefully hidden from the public after 1945.

This book is an attempt to report, as dispassionately and candidly as possible, the findings on a journey that awakened the deeply-flawed student to the reality that surrounds us and sustains life. That was not his goal, but that is what happened.

This autobiography will show how government, science and society were warped in 1945 by a clash of the rational side of humans with their instinctive FEAR of death, powerlessness and annihilation.

Those instincts, required for the survival and evolution of life, are now expressed in humans as anger and resentments, as a need to achieve and control, and as pride and arrogance, *etc.* The rational side of mankind emerged later. The scientific method, a recent development, was designed to improve the reliability and the benefits from rational analysis of our surroundings.

But frightening events occurred in the closing days of the Second World War, were hidden from the public, and have now emerged as totalitarian control of the public, exactly as George Orwell [8] predicted in the futuristic novel that he started to write in 1946: “**Nineteen Eighty-Four.**”

This book is also an expression of gratitude that nuclear forces have been revealed which created our elements, birthed the solar system, and now sustain our lives; the force of **neutron repulsion** that **causes cores of atoms, planets, stars** and **galaxies**:

- a.) To **release neutrons and a steady flow of energy**
- b.) To **explode violently** at other times

As this book goes to press, detailed information is still unavailable about the secret explosion off the East coast of Konan, Korea on August 12, 1945 and its influence on decisions to form the United Nations on September 24, 1945 and to hide factual information about energy stored in cores of atoms, planets, stars and galaxies.

But we now know beyond any reasonable doubt that **neutron repulsion** powered the **atomic bomb** that destroyed Hiroshima, the **explosion of the Sun** that birthed our solar system five billion years (5 Gyr) earlier, and the same nuclear force **generates a steady flow of energy and hydrogen from nuclear reactors, some planets, galaxies** and **ordinary stars like the Sun.**

The student would later be disturbed to realize that the products (atoms) of element synthesis in the Sun had organized into living creatures capable of comprehending the process that made the elements, sustained the origin and evolution of life, and endowed humans with creativity and rationality. The student still finds it difficult to accept and communicate that almost inescapable conclusion from half a century of

careful measurements and rational analysis of the results: Human consciousness is the result of spontaneous transformation of a condensed form of matter (neutrons) into an expanded form of matter (atoms). This highly skeptical, simple-minded experimentalist cannot even deny empirical evidence of a possible reincarnation in the next cyclic expansion of the universe, although he certainly does not espouse it!

Was this an imaginary conclusion at the interface of spirituality and science, like an imaginary meeting of East and West? Who knows? The conclusion is unavoidable when the scientific method is rigorously used in order to avoid interference from our instinctive FEAR of powerlessness.

The journey to these inescapable conclusions—especially distasteful to a strong-willed, skeptical student—began with the student's unplanned visit, at least by the student, to hear Professor Kuroda present his own [4] and the results of other recent research findings [9,10] that would eventually led Oliver to an understanding of the origin of the solar system and its elements.

Every discovery on the journey was based on earlier findings by others, especially the discovery—commonly attributed to Albert Einstein [11,12]—of the equality of seemingly opposite qualities: Mass and energy, powerless and powerful, dead and alive, physical and spiritual, inertia and motion. O'Conner and Robertson give an easy-to-read, but concise historical account of this important finding [13].

Why did the disgruntled student decide to join forces with the soft-spoken Japanese professor who invited him to his office – a faculty member that he had not formally met before? He didn't know. He certainly had not planned to do so.

Perhaps the student was intrigued by Professor Kuroda's description of a lecture he had attended as a 19-year old student on 13 June 1936 – exactly four months before the student's birth - a lecture that sparked Kuroda's interest in the nuclear reactions that power the stars and make the chemical elements.

Nobel Laureate Francis William Aston had initiated Kuroda's interest in this subject by the lecture that he presented at the Imperial University of Tokyo on 13 June 1936 [reference 1 (pp. 5-8)] when Kuroda was a student. His lecture had the same title as his Nobel Lecture on 12 December 1922, "Mass-Spectra and Isotopes" [14].

Or perhaps the research described by Kuroda struck a responsive note in the student who had seethed with anger after being told the Biblical story of Genesis by a God that created and controlled everything – a God that must have purposefully created the havoc and turmoil that had ruled the student's life since birth.

The graduate student was too angry and wrapped up in self-pity to realize or care that events in his own life had been far less traumatic than those in the life of the faculty member who witnessed the destructive force of nuclear weapons first-hand in the violent nuclear explosion that shattered the budding academic career of Dr. Kazuo Kuroda in the summer of 1945. Those traumatic events firmly convinced Kuroda to renew his commitment to understand the role of nuclear energy in nature.

Unlike Kuroda, misfortune in the tangled web of events into which the student was born on 13 October 1936 left the student feeling as if life was the uncharted journey of an ordinary twig, carried along by a swiftly flowing stream of rain-water after a sudden spring storm. Exciting, ever changing—but making absolutely no sense to the twisting, turning twig itself—life had been totally chaotic and meaningless to the student since birth. That harsh reality could not be avoided. Repeated attempts to do so had only left the student with deep-seated resentments and anger.

Life made no sense. Life had no purpose. That was the unpleasant conclusion the student had reached when Professor Kuroda invited him to his office in May 1960.

Conflicts with seemingly endless rules and regulations since enrolling as a graduate student at the University of Arkansas a few months earlier had only confirmed this inescapable conclusion—there was no purpose to life—and Oliver saw no escape.

A few days earlier he had thrown his final exam paper on the desk of the organic chemistry professor—who would become the next chairman of the Department of Chemistry at the University of Arkansas—and announced that he would not pursue an advanced degree in chemistry based on his ability to memorize and repeat back the senseless names of organic chemical reactions.

He could do it – probably as well as anybody else – but he was not willing to do so. In fact, he had already applied and decided to accept an offer to join the graduate program in mathematics at the University of Missouri.

Eight years earlier, in 1952, Oliver had dropped out of school after being told that his request for a schedule of classes that would prepare him to enter college after completing high school was not in keeping with the low IQ (intelligence quotient) scores that had accumulated in his official academic record as he had moved almost every year into a different school district.

The counselor suggested that Oliver did not have the aptitude to go to college and should probably go to a technical school to learn a useful skill—like plumbing — instead of wasting his time trying to complete the regular pre-college curriculum.

Probably the counselor looked at his academic record - a record of almost yearly transfers to different schools - sometimes more than once during a single year and often to schools in other states - and decided that it would be useless to spend her afternoon trying to develop a schedule of high school classes that might channel this not-so-bright, unsettled soul into the doors of a college or university.

So in 1952 – after following the rules and completing the compulsory part of his education for nine years – Oliver hid his fears and insecurities behind a seemingly impenetrable mask of self-confidence and marched off to find his own fortune.

It was fortunately a good time to join the workforce. Oliver would turn sixteen in the fall and be eligible for regular, full-time employment. Despite the considered opinion of the counselor, the student would show the world that he was important!

Delusions of grandeur plagued the author for the next forty-four years, as he took full credit when good fortune came his way and blamed others when misfortune arrived. He had already worked part time while attending the ninth grade—to escape the misery of poverty—and had already experienced the exhilaration, pride and false illusion of self-importance that few, if any, could match his boundless energy and drive to excel at any task, . . .

Deep-seated insecurities had driven this budding young workaholic to far surpass the requirements of every job he attempted. They would later resurface as pride and arrogance as he excelled at picking up rocks for home builders in yards of new homes in 1949, serving as a butcher and cashier in 1950-1952, opening the door to Warner's Grocery in downtown Wichita, Kansas every school day at 6:00 am before school, and then returning after school to work until he locked the doors at 6:30 pm and caught the public bus back to his neighborhood.

For a while fortune smiled on the rigorously healthy, energetic young workaholic that joined the workforce full-time in 1952. He was successful at work, handled his money well, and was admitted to college in 1956, without completing high school thanks to a remarkable series of coincidences initiated by his older brother, Leo.

Still energized by resentments at the misfortunes that had befallen him since birth, the young man learned in college that he could earn his living and still cram enough information temporarily in his head to pass classroom tests and make good grades in college classes. Although he had actually retained very little when he graduated in 1959, he had good grades and was welcomed as he entered graduate school that fall.

When he completed undergraduate studies and started graduate school, Oliver was an arrogant skeptic with a superior grade-point average and little or no respect for

classroom grades. He knew they reflected his ability to memorize information for a short length of time, but he gladly accepted the benefits: An extra stipend on his assistantship and a coveted assignment to teach the Honors Chemistry Laboratory.

Resentments, anger and prior conflicts with authority figures probably contributed to the rebellious graduate student's decision to join forces with Professor Kuroda in seeking to decipher the origin of the solar system and its elements. This would be an uphill battle, something the student always relished, but he felt confident of victory after reviewing the exciting discoveries by Kuroda [4] and Reynolds [11,12]. The elements had obviously been produced just shortly before solids condensed in the solar system. This was an incredibly great opportunity for the student to undertake meaningful graduate research that might bring purpose to his unsettled life.

He was certain there was no answer to the question of "Why are we here?" Life clearly had no purpose. Oliver had already accepted that unpalatable fact.

No God would dump misfortune on a small child that had vainly prayed in earnest for relief from misery during the first decade of his life. But now, by coincidence, the young man was being offered an opportunity to help figure out, "*Where did all this come from?*"

Would the student accept this research opportunity? Of course, he would.

Surely the scientific method would provide a better answer than the Biblical story of Genesis that Oliver had been force-fed as a child!

That is why the student took advantage, in May of 1960, of being in the presence of a great teacher—a teacher that would slowly guide this head-strong student to have respect, even reverence, for the scientific method and also show the student, by his own life, to accept the things that he could not change—things controlled by cause and effect—and to change his unhealthy attitude toward them.

But acceptance of reality would not really start to happen in the life of the student for the next thirty-six years, until 1996, when he slowly started to learn to surf the waves of life, waves that had formerly carried him along as a twig moving in the turbulent waters of a spring storm.

That skill allowed the student to realize in 2009 that many of the problems he had encountered in his journey to the core of the Sun were essentially the same ones that Einstein encountered after World War II in his effort to use science in the pursuit of truth, peace, justice [15]: Well-intentioned but tyrannical government efforts to hide forbidden information from the public.

The student had lightly objected to the requirement that he sign a loyalty oath and swear that he had never been a member of the Communist party before getting his first assistantship pay at the university, without realizing that such well-intentioned government actions would frustrate his efforts to uncover and disclose the nature of the energy source at the core of the Sun that made our elements and now sustains our lives.

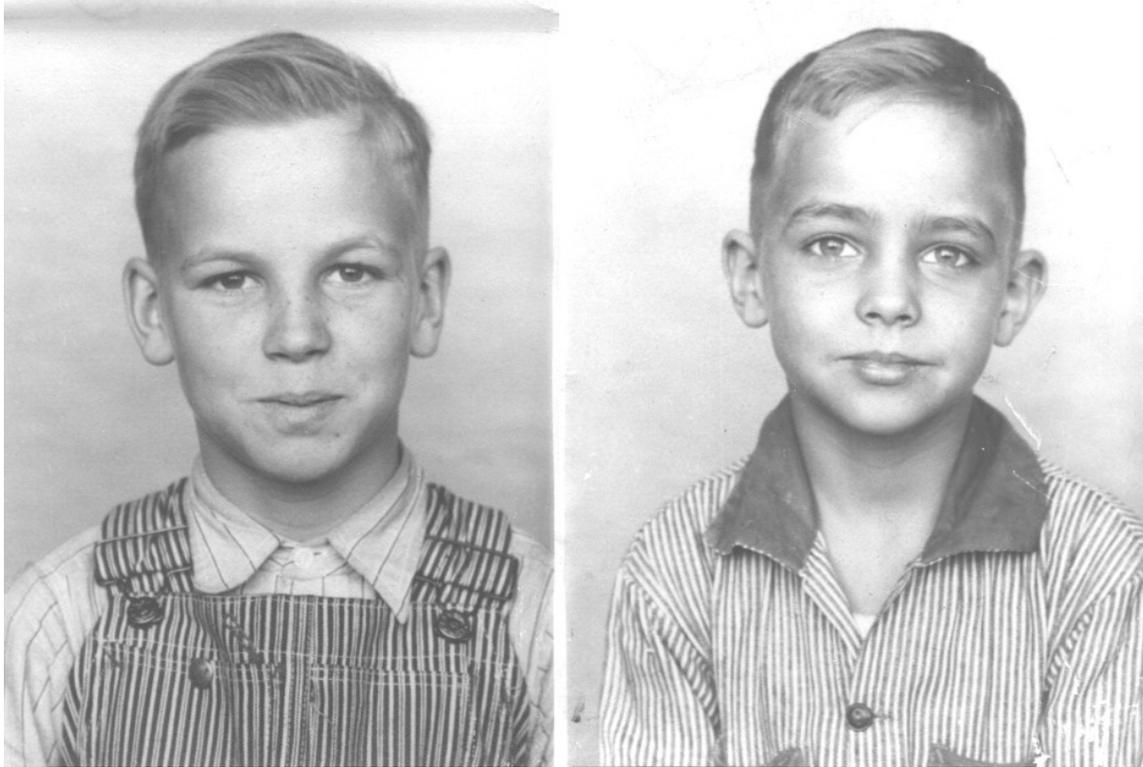
Friends and advisors listed on the title page, helped convince the student to change the only thing that he could—his self-defeating attitude toward reality.

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The school photographs below show Oliver's older brother Leo (left) and Oliver (right) near the end of the Second World War. Dr. Kazuo Kuroda was a faculty member at the Imperial University of Tokyo when these photographs were made.



Leo Wesley Manuel (left) and Oliver Keith Manuel (right) probably in 1944

About a year after the above pictures were made, Hiroshima and Nagasaki were destroyed by atomic bombs. Frightened world leaders and guilt-ridden scientists hid the source of energy stored in cores of atoms and stars to save themselves and the world from nuclear annihilation, and Orwell started writing his warning [15].

In 1960 Dr. Paul Kazuo Kuroda assigned the research project that would require Oliver to uncover these 1945 secrets. Kuroda did not disclose the secrets to Oliver himself. He may have been sworn to secrecy as a condition for receiving the visa for immigration to the United States in 1949.

The author's career confirms Shakespeare's insight into life's journey, ***“All the world's a stage and all the men and women merely players.”*** In that sense, the author's life and his research career have been like the flight of a pigeon carrying a secret message the pigeon has only recently started to comprehend.