

Models of My Life

MODELS OF MY LIFE

Herbert A. Simon



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To Dorothea,
so aptly named

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—The Alfred P. Sloan Foundation

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An earlier form of chapter 23, titled "My Life Philosophy," appeared in *The American Economist* 29 (no. 1): 1985, and this modified version is reproduced with the permission of that journal.

In 1987, when my colleagues in the Psychology Department told me that they intended to make that year's Spring Symposium a Festschrift to honor my seventy years, I asked leave to give a paper at the Symposium on science as problem solving. The Afterword is based on that paper "The Scientist as Problem Solver," which appeared in David Klahr and Kenneth Kotovsky, eds., *Complex Information Processing: The Impact of Herbert A. Simon*, and is reprinted with permission of the publisher, Lawrence Erlbaum Associates.

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The two letters from Bertrand Russell in chapter 13 are reproduced with permission from the Editorial Committee of the Bertrand Russell Archives. Copyright of the previously unpublished letter (November 2, 1956) is held by Res-Lib Ltd.

Finally, I extend warm thanks to Martin Kessler and his associates at Basic Books, who have been supportive at every stage of this venture, and who have made the author's work while the manuscript went to and through the press as pleasant as such work can be. They are understanding of the whims and humors of authors, and the book in its final form owes much to their insight and judgment.

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*Parler sérieusement, c'est parler
comme on se parle à soi-même.
Comme l'on parle au plus près.
—Paul Valéry, Instants*

Introduction

PROUST titled the final volume of his lifework “The Past Recaptured.” But, of course, the past cannot be recaptured. Memory is overlaid with later memory, mangled by self-justification and self-pity, guarded by self-interest, rent by great gaps of forgetfulness. Proust did not recapture his past, but reconstructed it, marvelously, with an insight he most surely did not have as he lived it.

It would be ridiculous for me to imagine that I could imitate Proust, and stupid of me to try. A novelist gives us metaphors and concrete instances; almost no axioms, no theorems, certainly no proofs. It is true that a Tolstoy sometimes violates the rule, delivers sermons, and offers generalizations. Even Proust muses—for example, in his peroration on memory. But by and large, it is the business of the novelist (and perhaps also of the autobiographer) to give us the data; it is up to readers to induce the theory from them.

As I am a scientist, a theorist, I will violate the rule even more often than Tolstoy did. Rereading my manuscript, I find that the offenses become more frequent as time gains on me. How does one age, gradually replacing action by reflection?

I have encountered many branches in the maze of my life’s path, where I have followed now the left fork, now the right. The metaphor of the maze is irresistible to someone who has devoted his scientific career to understanding human choice. And if I had not encountered labyrinths early in life, I would have met them later in the stories of Jorge Luis Borges, as we shall see.

In describing my life as mazelike, I do not mean that I have made a large number of deliberate, wrenching decisions to go off in one direction or another. On the contrary, I have made very few. Obvious responses to

opportunities and circumstances, rather than studied decisions, have put me on the particular roads I have followed.

Unlike the original labyrinth of Minos, my mazes were without minotaurs, were, in fact, benign, never putting me to a life-threatening or even a career-threatening test. The reader will encounter surprises along the path and, I hope, many scenes of interest, but if you are looking for dangerous adventures, or minotaurs, or the heroism of a Theseus, you will have to pick up another book.

When I first came to write a chapter-length autobiography, I called it "A Theory of My Life." Now, enlarging and extending it, I give it the more accurate title *Models of My Life*. The change from singular to plural eliminates any promise of unattainable scientific truth. Lacking that, why not offer several explanations of events, when none seems certain? The reader may wish to provide others.

But there is a further reason for using the plural. It is a denial—a denial that a life, at least my life, has a central theme, a unifying thread running through it. True, there are themes (again the plural), some of the threads brighter or thicker or stronger than others. Perhaps clearest is the theme of the scientist and teacher, carrying on his persistent heuristic search, seeking the Holy Grail of truth about human decision making. In my case, even that thread is woven of finer strands: the political scientist, the organization theorist, the economist, the management scientist, the computer scientist, the psychologist, the philosopher of science.

Then there is the theme of the private person: of growing up, of love and family and friends and travel and leisure. A third thread traces the university politician, seeking to build and shape the environment for his scientific work. A fourth winds its way through New York City and Washington, even Beijing and Moscow: the theme of the science politician, concerned with the health of social science, with science as adviser to the *polis*—even (granted) with the possible contributions of science to maintaining world peace and preserving the global environment.

These four themes (and a few others as well) each place me in a rather separate or separable role, with its own maze as setting. The stingy paymaster of time, doling out only twenty-four hours a day for everything, binds the roles together as they compete for those hours to pursue their searches.

Which of the wanderers through these different mazes will step forward at the call for the real Herbert Simon? All of them; for the "real" self is an illusion. We live each hour in context, different contexts for different hours. To say, truly, that we are actors does not make us "unreal" or hypocritical.

We act out our lives within the mazes in which Nature and society place us.

It is true (as a *Vanity Fair* cartoon once mischievously pointed out) that the stage and early film character actor George Arliss, in all the disguises of the characters he played, was still a recognizable George Arliss. But which was the real George Arliss—Shylock or Disraeli or the familiar nose and eyes and chin that peeked out through the wigs and makeup in all these roles?

I have been a scientist, but in many sciences. I have explored mazes, but they do not connect into a single maze. My aspirations do not extend to achieving a single consistency in my life. It will be enough if I can play each of my roles creditably, borrowing sometimes from one for another, but striving to represent fairly each character when he has his turn on the stage.

Nor will the characters speak with a single voice or style. The simple teller's account of a boy's day or a China adventure or an affair of the heart will not do for setting out a piece of intellectual history or explicating the Byzantine politics of the National Academy of Sciences. So it will not be a single drama at all, but twenty-three one-act plays, some sequels of others, some unattached. So much for the unities.

The "models" of my title is consistent with earlier titles of my works. *Models of Man* was a collection, published in 1957, of mathematical theories of psychological, sociological, and economic phenomena. Then, in 1977, I published *Models of Discovery*, a collection of my papers in philosophy of science. The first volume of *Models of Thought*, my papers in cognitive psychology, appeared in 1979, the second in 1989. Finally, the two volumes of *Models of Bounded Rationality*, collecting my papers in economics, were published in 1982. Even though this volume contains no mathematics or reports of controlled experiments, it is intended in the same spirit as those others.

In my earlier attempt at describing my past, undertaken at about age sixty, I organized the story as a triptych. The first panel stretched from June 15, 1916, to June 15, 1937; the second, to December 15, 1955; the third covered the remaining twenty-odd years up to December 10, 1978. These dates, we shall see, were selected for good reasons: they coincided with my twenty-first birthday (an especially eventful moment), the invention of our first artificial intelligence program, and the conferring of my Nobel Prize.

Triptychs are more conventional, and perhaps easier to design, than tetraptychs (a word my dictionary does not deign to recognize). But now, at age seventy-four, I have to add a fourth panel, narrower than the others, and undoubtedly throwing the whole scheme out of shape. I am somehow comforted by the knowledge that there is a celebrated tetraptych at the altar

of St. Mary's Church on the central square in Krakow.* But it is wholly symmetrical; and besides, the two central panels can be folded back to reveal that, underneath, it is a triptych after all. The whole of this account may have more the appearance of a sequence of snapshots than of a moving picture. But it is mainly as snapshots that I remember my life, a few brilliantly sharp and clear scenes that punctuate the continuous journey—Ando Hiroshige's drawings of scenes along the Eastern Road from Edo to Kyoto.

But all of this will become clear in the telling, and I have said enough about my intentions and how I will organize the story. Let me conclude with a brief outline of the four panels that can serve as a thread to guide the reader through the maze.

The first panel, "Journey to a Twenty-first Birthday," carries me from birth through my undergraduate education at the University of Chicago and my first job, ending on my twenty-first birthday. It is divided into scenes from Wisconsin (chapters 1 and 2) and scenes from Chicago (chapters 3 and 4). Milwaukee was my home through my seventeenth year, and the University of Chicago campus for the next six.

The scenes of the second panel, "The Scientist as a Young Man," have a more varied geography than those of the first. After marrying in 1937, my wife and I remained in Chicago until the autumn of 1939 (chapter 5). We then moved to the University of California at Berkeley for three years (chapter 6). In 1942, we returned to Chicago for another seven years, during which time I served on the faculty of Illinois Institute of Technology (chapter 7). Chapter 8 tells a story of loyalty and loyalty investigations, running from the 1930s to 1963; the events are collected in one chapter for coherence.

We left Chicago, in 1949, for Carnegie Institute of Technology in Pittsburgh. The first seven years in Pittsburgh saw the founding of the Graduate School of Industrial Administration (chapter 9), a research program in economics and organization (chapters 10 and 11), and the birth of artificial intelligence (chapters 12 and 13).

The third panel, "View from the Mountain," runs from the beginning of the artificial intelligence research to my Nobel Prize in Economics in 1978. Chapter 14 discusses the progress of our research, while chapter 15 picks up the thread of my personal life. Chapters 16 and 18 recount events on the Carnegie campus. Chapter 17 reviews some of my scholarly controversies.

Chapters 19 and 20 describe my life away from the Pittsburgh campus,

the former dealing mainly with science politics in New York and Washington, the latter with my wider-ranging travels about the world.

The fourth panel, "Research After Sixty," begins with an account of the Nobel award (chapter 21). This is followed, in the same chapter, by an account of my research since 1978, of developments at Carnegie Mellon University, and of my continuing activities in science politics. Chapter 22 tells the story of travels in the past decade in China and the Soviet Union. Then chapter 23 says something about the general views that have guided my choices in life.

In the Afterword I reflect on the methods I have used in my research. It may be taken as a warning that I don't intend the last chapter to be the final one; if permitted, I will stay at this pleasurable, exciting work a while longer.

*The guidebooks call it a pentaptych, counting the two side panels, the pair of folding panels, and the fixed central panel. The Oxford English Dictionary does recognize *pentaptych*.

Prologue

DROTHEA and I climbed off the plane in Frankfurt early one foggy June morning, claimed our luggage from a long bench in the gloom of the shedlike airport building, passed the perfunctory customs check, and signed the documents for our rented Volkswagen. Darmstadt was our first destination. Two decades had passed since the end of World War II before I felt I could be comfortable visiting Germany. Now, in 1965, we decided to spend a few days searching out my ancestral places in the Rhineland, prior to visiting the Schwarzwald and Switzerland. Our search centered on the fifty-mile strip of the middle Rhine, from Mainz south to Mannheim.

By the time we started south on the Autobahn, the mists had lifted above the road, disclosing the serried tree trunks of neat German forests on each side. As we reached Darmstadt, the sun was making an occasional appearance through broken clouds. In the square where we stopped to buy the makings for our lunch, and a paring knife and can opener we had forgotten to pack, the Saturday market was in full bustle. I was pleased that my Milwaukee German was mostly understood, and I had only occasional recourse to my pocket dictionary. A knife was *ein Messer*, but what was a can opener?

Our immediate goal was the campus of the *Technische Hochschule*, close by the castle. There my father, Arthur Simon, had received his engineering diploma in 1902, and there he had returned once more in 1912, a successful alumnus, to deliver a lecture on his work in electric motor design.

We wandered among the buildings, and through the largest of them, not looking for anything or anyone in particular but hoping to catch a glimpse or a sniff of that sixty-year past. The chunky stone-and-brick main classroom building looked exactly as it had on the 1897 postcard, *Gross aus Darmstadt*, I found in my father's desk drawer after his death. Inside, the building

was austere and bleak, like any old-fashioned engineering school building, whether at Illinois Tech or Carnegie Tech. The bulletin boards expressed mostly the political concerns of 1965. I was moved, but more by my sense of the occasion than by anything I saw. It was solely in my imagination that the mists lifted a little to let me peer into the past.

My father remained only about a year in Germany after earning his engineering degree, spending the time partly in postgraduate study at Darmstadt and Heidelberg, and partly working for the Siemens firm. Why did he leave? The official story, told by both my mother and father, was that grandfather Joseph had promised his son Arthur a trip around the world after his graduation. Setting out, he got as far as Milwaukee, where he had cousins, found a job with Cutler-Hammer, an electrical manufacturing concern, and, seven years later, a wife, and settled down. He got only as far west as San Francisco, and that only many years later.

When I was a boy, that story seemed straightforward; it now seems problematic. Given that Milwaukee was a German city, why did Arthur prefer it to the homeland? And why did he trade his German identity as rapidly as he could for an American one, especially in a city that admired German culture?

German was never spoken in our home (although my mother was ungrammatically fluent in it) except when something was to be kept from my brother, Clarence, and me, and during my fifth year, when Grandma Simon paid us a year-long postwar visit. My father, justifiably proud of his accurate command of English, was only occasionally betrayed by an idiom or verb tense—"Today I go to the office early."

He was scornful of "hyphenated Americans"—German-, Italo-, Polish-, or whatnot—who divided their loyalty between two countries. During World War I, he tried to volunteer, but was rejected, ostensibly because of poor eyesight, probably in fact because of his recent immigration. Since America had not attained its modern sophistication in security checks, he spent the war designing battleship gun turret controls.

At the same time, no bitterness tinged his accounts of his German boyhood. His nostalgia for the family vineyard was transmuted into a loving and energetic pursuit of gardening in our small yard and in a solarium constructed by enclosing half our front porch. Occasionally he would spend Saturday afternoon pruning the grapevines of a landed suburban friend. He was not uncritically admiring of the American way of life, hardly viewing autos and jazz and baseball as progress over the cultured Germany of his youth.

But Prussia was not Germany, and *Prussian* was for him an epithet that conjured up militarism and mindless nationalism. My father sometimes told

of a relative, a baker's apprentice, who had avoided conscription by floating across the Rhine on a bakery breadboard and had found his way to America (the last leg of his journey by boat, I think). Although my father was generally fond of Wagner, he could not endure the nationalism of *Tannhäuser*.

Perhaps this was the clue to his flight from Germany, if flight it was. But another possibility came to my mind some years later, while I was sorting his papers after his death. He had kept only a few mementos of his German youth. Apart from the postcard view of the Darmstadt campus and his small sliderule, which he used all his life, there was just one other item from the college: a formal note, dated June 15, 1899. Translated into English, it read as follows:

Explanation

In my two meetings with Herr Student Arthur Simon, I have let words fall from which the aforesaid gentleman felt that his honor was wounded.

I hereby explain that it was absolutely not my intention to insult Herr Simon or in any way to wish to spite him.

I present therefore to Herr Student Arthur Simon my apology for the insult offered to him.

In attestation of which my own signature,

Ernst Wassermann

The signature was witnessed by a second student.

What had the insult been? And why had my father, who was not a feuding person, kept that note in his desk drawer for forty-nine years? Perhaps it was just college high jinks. Perhaps he was proud that, as a young man, he had been willing to challenge a fellow student to a duel. His sabres and masks were stored in our attic, where my brother and I had discovered and often played with them (apparently with caution, for there were no bloody accidents). All of this conformed with the romantic etching of the Heidelberg castle that hung on the wall near our front staircase in Milwaukee. My father's college days were confounded, in my boy's mind, with scenes from *The Student Prince*.

But even student duels have ugly causes. Remarks about women can cause duels. So can ethnic slurs. The sight of that note of apology stirred memories of an anecdote my father had once or twice told—about a student who thought he was paying a Jewish comrade a broadminded compliment by calling him a "*white Jew*." That circumstantial evidence is certainly not

enough to identify Herr Wassermann's offense or to convict him. But what did students in the Rhineland in 1899 talk and quarrel about during the evenings in the *Bierstube*? History tells us of one topic that came up often and hotly. In Paris, in May 1899, the Court of Cassation had ordered a new trial for Captain Alfred Dreyfus. The second court-martial convened in August; its ambiguous decision was handed down on September 9. Herr Wassermann's apology is almost synchronous with the final burst of public turmoil, in the Rhineland as in France, that the affair of Alfred Dreyfus had sustained for many years.

What was the situation of a Jewish engineering student in Darmstadt at the turn of the century? What echoes of the Dreyfus case reverberated on the campus and in the society? And what were the employment and career prospects of that Jewish engineer when he graduated? (Recall that a young Albert Einstein was seeking a university post and encountering anti-Semitism at nearly this same time.)

Here the mists closed in again. When the questions first occurred to me, Arthur Simon was already dead. Nothing we could now seek out in Darmstadt would reveal the secret of that student quarrel. Probably it is best, in any event, to leave intact the official version of the migration, a trip around the world that was aborted. The mists perform an important social function when they place a statute of limitations on man's memory of ancient wrongs.

Turning west from Darmstadt, and stopping to eat our bread and cheese on the now sunny roadside flanked by vineyards, we reached Mainz in the early afternoon. There Arthur Simon had attended high school, living with his retired grandfather, for the small farm village of Ebersheim could support only a grammar school. Mainz's past was easily captured in its half-ruined Romanesque cathedral, stripped almost bare of ornament by fire bombings during the war. The very austerity of its vast interior, emphasized by the symmetry of the two altars facing each other from the ends of the long, stark nave, called back a remote pre-Gothic time, yet a time when Mainz had already lived a thousand years.

Jews had come to Mainz, it was said, with the Roman soldiers. Jews were there, convenient victims for pogroms, when hordes of Crusaders flowed up the Rhine valley on their way to the Danube and the passes of the Alps. Jews were there still to enjoy the protection of the Holy Roman Emperor and to loan their funds to him, and to the Archbishop. I have no notion of whether my ancestors were among those Jews, or whether they came to the area much later, driven by harsh conditions from France or the Netherlands. The solid river mists in Mainz allowed no glimpse of a connection with that Roman and medieval past. I like to think that, if they parted, they would

show me a homeland nearly as ancient as Israel. But that is just romantic fancy; there is no evidence.

At the hotel desk in Mainz, it was not easy to get directions to Ebersheim. The name of the town was familiar, but the clerk and the manager could not quite agree on which road we should take. The town was a few kilometers to the south (a half-day's wagon trip, my father had said). We set out on a southbound highway. Repeated questions along the way and several detours brought us across an open rolling plateau covered with vineyards, into steep little hills, then, turning back in a northeasterly direction, across a narrow bridge into the south end of the village.

We were on the *Römerstrasse*—the road of the Romans—the main and almost only street of Ebersheim. Along that street, as my father had related the town legends, Roman legions had marched into the hills from the Rhine valley, starting on the long trip across the *Hunsrück* that would take them from Mainz to Aachen.

Somewhere on the *Römerstrasse*, near the Catholic church, we expected to find the house of the Simon family, with a little roadside shrine in the garden wall. The shrine was there, as was the house—or at least one that could pass for it, with the same gray stucco walls as all the other houses of the village. A few yards up the street, in front of the Catholic church, a long stone wall was carved with the endless lists of sons of the village who had fallen in World War I, and the somewhat shorter list of their sons and successors in World War II.

A block beyond the church we found the town hall. In a small room on the second floor, a clerk brought out the black, bound books of births and deaths. Again the mists parted a little, allowing us to gaze back a century and a half, to Napoleon and the Confederation of the Rhine, to records written in French for those early-nineteenth-century years. We found the entry for Arthur Simon: May 20, 1881, son of Joseph Simon, *Weinhändler* (wine merchant), and Rosalie Herf. Joseph Simon's entry was there, too, but now the mists were descending again, and we were lost in a profusion of Simon and Bernays ancestors and cousins, never quite certain that we had traced the right line. There had been much intermarriage between these two Jewish families of Ebersheim, and marriage with the similarly scattered Jews of nearby villages.

The designation *Weinhändler* was a surprise, for my father had never described the family as being merchants. He had always talked proudly of the vineyard that had been in the family for seven generations (a century farther back than even these books could carry us). Was "wine merchant" used as a subterfuge at a time when Jews could not own land? Was Joseph Simon both vintner and merchant? He was, after all, able to send his son,

Arthur, to the university. No one to whom I could put these questions was alive.

The clerk at the town hall directed us to the mayor's house. Yes, the mayor's father, a man in his seventies, remembered Frieda Simon (my father's sister); she had been his classmate in the grammar school. (Their ages didn't exactly bear this out, but the intent was friendly.) We were directed to the Friedhof, the Jewish cemetery, on a steep little hill nearby. The grass was neatly trimmed, and a dozen tombstones, many with the Simon name, stood in irregular rows. It was difficult to decipher the Hebrew inscriptions, so we did not learn much more about the tangled genealogy of the Ebersheim Simons. But it was pleasant enough to walk among them on the sunny, peaceful hillside.

The attempt to peer through the mists did not end in Ebersheim. Rosalie Herf had come from Wörstadt, a few kilometers to the south. As we again followed the route through the vineyards, we stopped to buy our usual cheese and bread at a little crossroads store (a mom-and-pop store, we would call it here). It was owned by a cordial elderly couple. They had relatives near Chicago—name of Bekenhof. Did we know them? We got involved in the usual friendly chitchat among travelers, except for one quick moment when a question crept uninvited into my mind, and stayed there because it could not be asked. Who had owned this little shop in 1930? Wasn't this kind of enterprise usually Jewish? What had become of the owners? It was an unfair suspicion, no doubt, but it settled a chill onto a warm human interchange. We paid for our purchases and continued down the road.

Wörstadt, a more substantial town than Ebersheim, gave us further glimpses of the past. The medieval city wall had been leveled to form a semicircular park and promenade through the town. We found the Jewish gravestones in a corner of the Protestant cemetery (much like Jewish Greenwood Cemetery, next to Protestant Forest Home in my native Milwaukee). One grave belonged to Aron Herf, a great-great-grandfather, who was born in Partenheim on March 9, 1797. So we had reached back to the eighteenth century. But further exploration took us no farther back. Inquiries in Partenheim, a tiny village on the plateau to the west, yielded neither town hall records nor Jewish cemetery—but a denial that the latter had even existed.

On only one other occasion have I tried seriously to raise the mists for a moment. Many years after our Rhineland journey, in the summer of 1977, we visited the wonderful, shabby city of Prague. In the Jewish cemetery, almost all that remains of the Prague ghetto, I walked along the narrow paths amid the crowded tombstones, fifteen feet or more above the surrounding streets, treading softly on the bones of centuries of anonymous

ancestors. They were goldsmiths, the family tradition said, and Alexander Goldschmidt had left with the '48ers, those who were unhappy at the failure of the revolution of 1848, for Chicago and the Civil War, and later a comfortable living as a wholesale whiskey salesman. Coming out of the cemetery, I visited the synagogue at its gates, now a museum of the Holocaust. How lucky were the descendants of Arthur Simon and Alexander Goldschmidt to have had these footloose ancestors, and to have been spared the anguish experienced by their kinsmen who remained behind.

Some speak of search for their roots. But that is a false metaphor. For these strands that we trace backward through time have no root tips. Each ancestral name and date we identify points back toward two more still hidden in the mists, and behind each of these, yet another pair. The mists that hide the distant past are no less dense, no less impenetrable, than those that shroud the future.

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Preface to the Series

THE Alfred P. Sloan foundation has for many years had an interest in encouraging public understanding of science. Science in this century has become a complex endeavor. Scientific statements may reflect many centuries of experimentation and theory, and are likely to be expressed in the language of advanced mathematics or in highly technical terms. As scientific knowledge expands, the goal of general public understanding of science becomes increasingly difficult to reach.

Yet an understanding of the scientific enterprise, as distinct from data, concepts, and theories, is certainly within the grasp of us all. It is an enterprise conducted by men and women who are stimulated by hopes and purposes that are universal, rewarded by occasional successes, and distressed by setbacks. Science is an enterprise with its own rules and customs, but an understanding of that enterprise is accessible, for it is quintessentially human. And an understanding of the enterprise inevitably brings with it insights into the nature of its products.

The Sloan Foundation expresses great appreciation to the advisory committee. Present members include the chairman, Simon Michael Bessie, Co-Publisher, Cornelia and Michael Bessie Books; Howard Hiatt, Professor, School of Medicine, Harvard University; Eric R. Kandel, University Professor, Columbia University College of Physicians and Surgeons, and Senior Investigator, Howard Hughes Medical Institute; Daniel Kevles, Professor of History, California Institute of Technology; Robert Merton, University Professor Emeritus, Columbia University; Paul Samuelson, Institute Professor of Economics, Massachusetts Institute of Technology; Robert Sinshelmer, Chancellor Emeritus, University of California, Santa Cruz; Steven Weinberg, Professor of Physics, University of Texas at Austin; and Stephen White, former Vice-President of the Alfred P. Sloan Foundation. Previous

THE
FIRST
PANEL

*Journey to a
Twenty-first Birthday*

CHAPTER 1

The Boy in Wisconsin

AS my boyhood, reckoned through high school, ended nearly sixty years ago, I find it hard now to think of the boy as me. It is not that we are enormously different in our values or our personalities. (Physical appearance, alas, is another matter.) He was already pretty well shaped and even aimed before he left Milwaukee, beyond major redirection. But now, at this great distance, I see him in my mind's eye from outside, as "the boy." It will be easiest if I talk about his first seventeen years that way.

Answers to a few passport questions will introduce the boy and his family:

Born: June 15, 1916, Milwaukee, Wisconsin, in a rented flat, but soon (1918) moved with his family to a modest frame house owned by his parents in a middle-class neighborhood of the West (that is, the German) Side.

Father: The boy's father, Arthur Simon, was born on May 21, 1881, in Ebersheim, Germany, to Joseph Simon and Rosalie Herf, the seventh generation of a line of vintners and wine merchants; Jews, but by some dispensation, landowners (or landholders) a century before Napoleon overran the Rhineland. Arthur graduated in electrical engineering from the *Technische Hochschule* of Darmstadt and emigrated to Milwaukee in 1903. Employed as an engineer by Cutler-Hammer Manufacturing Company, and later also engaged in private practice as a patent attorney. Active in professional and civic affairs; awarded honorary doctorate in 1934 by Marquette University.

Mother: The boy's mother, Edna Marguerite Merkel, was born on January 20, 1888, in St. Louis, Missouri, a second-generation descendant of German '48er immigrants from Prague (Goldsmith, Jewish; Dahl, Catholic) and Cologne (Merkel, Lutheran). Her grandfather Alexander Goldsmith was a Civil War veteran, wounded at Chickamagua, afterward a whiskey salesman. Her grandfather Louis Merkel was a piano builder. His son