

Searching for the Right Theme

The familiar last movement of Beethoven's Ninth (Chorale) Symphony begins with a series of short musical motifs. In a conversation that the composer is having with himself, as much as with his eavesdropping audience, Beethoven rejects one theme after another until he finally arrives at a motif appropriate for the climactic finale.

A scholar who attempts an autobiography is likely to find himself in an analogous position. Over the years I have written various autobiographical accounts. As I embark on the present scholarly autobiography, several potential openers—some already used, some devised for this occasion—occur to me:

\*Trying to envision my childhood, I see myself seated at the piano, usually next to my mother, playing a Bach invention.

\*Two events that were hidden from me—the accidental death of my older brother and my family's losses in the Holocaust—came to dominate my childhood.

\*To all intents and purposes, my involvement with the life of the mind began when I arrived in Cambridge, Massachusetts in September 1961 to attend Harvard College as a freshman.

\*My family has always been the most important thing in my life. As a child, I thought about both of my parents every hour, and now I think about my wife, my four children, and my grandchild with equal regularity.

\*I see my research and writing as having four phases. First I studied how minds developed. Then I studied how minds break down. Third, I studied how minds are organized. Now I study how minds change.

\*Three crucial personal encounters in the 1960s transformed my intellectual development: I remember vividly my first meetings with the psychologist Jerome Bruner, the philosopher Nelson Goodman, and the neurologist Norman Geschwind.

I don't know whether the Beethoven symphony would have achieved equal fame, had the composer chose another motif. I've come to realize that each of these openings—and a dozen more that I could easily contrive—could serve as reasonable points of departure for the present essay. Such openings, after all, are simply convenient clothing racks on which I can hang the crucial names, numbers, and experiences—and, if I so choose—highlight certain perspectives, hide others, pay debts, and settle scores.

In my sixty-two years I have been extraordinarily lucky: lucky in the parents I chose (as I like to put it), lucky with the rest of my family, lucky with my place of birth, lucky with my academic and artistic educations, lucky with my friends and colleagues, lucky with my

supporters (and perhaps even my detractors), lucky with the course of my work. Of course, not everything has worked out in my personal and professional lives—and a full account should chronicle failures, mistakes, and losses. But I have chosen to organize this autobiographical account around the many, mostly highly positive influences that have combined to create a good scholarly life and a good personal life. I delineate the ways I was influenced by these various individuals and forces. And, because this volume is focused on critiques, I include a brief discussion of the influence that I have had, and the influences that I would like to have. My reactions to critiques appear in the final section of the book.

### My Contributions

I view myself as a psychologist/scholar who has tried to understand the human mind in its full richness and complexity; I seek to share my conclusions both with other scholars concerned with the mind and with the broader educated public.

This self-characterization requires a bit of unpacking. All psychologists and many other social scientists are interested in the mind, and properly so. My focus has fallen not on the basic processes of perception, memory, learning, and the like but rather on ‘high end’ cognition—intelligence, creativity, leadership, artistry. Many scholars hope to have a wide readership, but most psychologists devote their efforts to authoring articles that appear in peer-reviewed technical journals. Indeed during the first fifteen years of my scholarly life, I wrote dozens of such articles. Unlike most colleagues I have always written books as well, and now the bulk of my writing is either in book form or in articles intended for a wider audience. Such technical writing as I still do is almost always in collaboration with students, who require training in scientific writing.

My obituary is likely to read “The Father (or, less respectfully, ‘The Guru’) of Multiple Intelligences.” From one angle that appellation is appropriate: I am best known as the individual who, in the early 1980s, argued that human beings are better described as having several relatively autonomous intellectual capacities than as having a single all-purpose intelligence (technically, ‘g’). At least half the communications and half the invitations that I receive continue to focus on “MI” theory; and it would have been easy to load this volume of critique with dissections of the theory.

The hypothetical one-line obituary does not align with my self-concept. To begin with, I see myself as a social scientist or social commentator, and, at times, as a public intellectual. Unlike many social observers and public intellectuals—but like my teacher Jerome Bruner—I approach societal issues from the perspective of cognitive or developmental psychology.

Expanding on one of the trial motifs cited above, I see my career as having had several ordered but overlapping phases:

1. I began my career with a focus on how the mind develops, with particular reference to the development of symbol-using capacities in the arts. I came to construe artistic development as more complex – less linear--than scientific development; in some ways, the child of five more akin to the mature artist than is the child of 10 or 15.

2. Shortly thereafter, I began to study how mental processes break down under conditions of brain-damage, again with a particular focus on higher-order thought processes in the arts and other symbol-using realms. I discovered that the right cerebral hemisphere makes many important contributions to artistic thinking, even in the supposedly 'left hemisphere' realms of language (metaphor, irony, humor, comprehension of narrative all rely crucially on the non-dominant hemisphere). As I put it, it is the right hemisphere that 'gets the point.'

3. These two lines of work culminated in the positing of the theory of multiple intelligences. The dual lines of training, along with considerable firsthand experience with normal and gifted children and with brain-damaged adults, led to the conclusion that all human beings possess linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, naturalistic, interpersonal and intrapersonal intelligence.

The unexpectedly enormous response to MI theory, particularly among educators, led to two further career milestones:

4. I began to focus more directly on educational issues. I pondered the educational implications of MI theory. I embarked on several collaborative projects designed to explore how multiple intelligences could affect assessment, curriculum, and pedagogy. I also began to consider the nature of the unschooled mind; the importance (and the difficulty) of mastering disciplinary ways of thinking; the even greater challenges involved in interdisciplinary thinking; the desirability of alternative, performance-based forms of assessment; and the centrality of deep understanding in any educational endeavor.

5. If MI theory were even approximately correct, this state of affairs entailed implications for the understanding of other human capacities. Exploring human creativity through case studies of individuals who exhibited different intellectual profiles, I discovered as well a variety of forms-- ranging from problem solving and problem finding to the creation of works in a genre and the execution of high-stake performances. I confirmed the importance of non-intellectual factors (personality, temperament, choice of domain, influence of powerful gate-keepers and institutions) in creative achievement.

Turning to leadership, I carried out case studies of individuals who led institutions or populations of various sorts; and I delineated the contributions of story-telling capacities in effective leaders. The focus on leadership has led, in turn, to a more general consideration of what it takes to change minds: as leaders, creators, teachers and trainers, therapists, family members, and individuals who consider ourselves open to change.

6. Since the middle 1990s, I have been carrying out collaborative studies with my close colleagues Mihaly Csikszentmihalyi and William Damon. We have sought to understand the nature of GoodWork®—work that is at once excellent in its technical aspects, ethically responsible, and personally engaging. The Good Worker takes seriously the implications of his or her work for the broader society in which it takes place. Our study has entailed extensive interviews and data analyses with over 1200 professionals in various domains. We have identified both the difficulties of carrying out good work at a time of vastly

powerful market forces, and the particular individual, domain, and organizational features that influence the incidence of good work.

7. Finally, in the recent past, I have begun to think about the kinds of minds that will be needed in the future for our increasingly interconnected and intimate global society. I use the term ‘needed’ in two senses: what our young people will need to compete effectively in this new, multiply interconnected world; what our world will need to survive and to thrive. My current list includes the disciplined mind; the synthesizing mind; the creative mind; the respectful mind; and the ethical mind (See Gardner, 2007).

Examined from the top of the mountain (so to speak), I discern this sequence:

- A. How minds develop
- B. How minds break down
- C. How minds are organized
- D. How to change minds in general
- E. How to change minds in ways that are productive for the society and the planet

### Childhood

Recently I received an unexpected, massive packet from Michael Rich and David Neustaedter, two individuals unknown to me. These distant relatives in Ohio sent me an 80 page tree from the Gardner/Goldsmith (Gaertner/Goldschmidt) side of my family. Scanning this document, I learned about the names of relatives dating back three hundred years. And I discovered that I am related to all manner of persons ranging from the Sulzburgers of the New York Times to the Freud family. Presumably, an analogous family tree from my mother’s (Seidenberger/Weilheimer) side would reveal other surprising and intriguing connections.

Still, from personal testimonial knowledge, my lineage dates back only to the latter years of the 19<sup>th</sup> century in the city of Nuremberg and its suburbs in Bavaria. The Gardners were in the stove business. My father Ralph was born in 1908. When his father Siegfried died unexpectedly in 1925, my father left school and went into the family business—making and selling stoves. He met my mother Hilde Weilheimer in 1930, and they got married in January 1932, when Hilde was but 20. The Weilheimer family were in the ‘hops’ futures business (a career which my uncle Harry has continued till this day).

I would describe both sides of this German family tree as comfortable but not affluent. They were successful in business but not titans. They did not have higher education—in fact, I am probably the first person on either side of the family to have had a full college education. They were not intellectuals, but they read easily and widely, and were interested in music and other arts. Having been born before the first world war and reared in Weimar Germany, they knew conflict, chaos, runaway inflation, and even hunger. Yet they were completely unprepared for the rise of the Nazis and the consequent disasters of the Second World War and the Holocaust.

My parents were eminently sensible persons—they thought ahead and displayed good judgment in abundance. As early as 1934, they moved to Italy to get away from Hitler; and when Hitler and Mussolini signed a non-aggression pact, they moved back to Germany and my father began a series of trips to the United States in an attempt to emigrate. In the absence of rich patrons (which my parents lacked), admission to the United States was not easy to achieve. But both my parents were very determined individuals. Not only did they manage to escape Germany in 1938, arriving in the U.S. on the infamous Kristallnacht of November 9. During the following years, they operated like leaders of a small military unit, tracing the emigration of members of their far flung kin, helping in whatever way they could (I cannot count the number of kin who stayed with us at various times in our tiny apartment), and serving as central figures—cynosures-- for dozens of relatives on both sides of the family.

In 1935, Erich (anglicized as Eric) Gardner was born. From all reports he was an unusually bright and sensitive boy. With my parents, he sailed to New York and then moved to Scranton, Pennsylvania (where my parents remained for fifty-two years). My parents had lost their country and had no money. Eric was the one bright spot in their lives—indeed, knowing no English on his arrival, he had nonetheless skipped second grade. In January 1943, when my mother was three months pregnant with me, Eric was in a fatal sleigh riding accident witnessed by my mother with her own eyes. My parents told me subsequently that if my mother had not been pregnant with me, they would probably have killed themselves. The death of their only son was so painful for my parents that they refrained from telling me about it for a full decade. At some level, I must have known about their loss. I am skirting psychoanalytic interpretations in this essay—but I am sure that the loss of this child placed a heavy psychic burden on survivors in my family, including me.

Following my unproblematic birth on July 11, 1943, I spent the first decade and a half of my life in a middle sized declining coal mining city in northeastern Pennsylvania. I was joined by my sister Marion, born on March 9 1946. Professionally, my father did quite well. Joining forces with his cousins (as he had also done in Europe) he first built up an automotive supply business and then shifted to the binding and sale of children's books. My father was a gifted salesman with good financial sense. He was able to sell the business, retire comfortably at the age of 58, and spend the next 33 years playing the stock market, reading, eating out with his friends (who dubbed him "the baron"), and enjoying his family. I don't think that he ever recovered from the death of my brother and he would have preferred if he had never had to leave German-speaking Europe.

My mother, still alive and active at the age of 94, is a remarkable woman. Deprived of a higher education, and spending her early adult years dealing with personal and national tragedy, she became a much admired leader of the volunteer community in Scranton. People instinctively warm to my mother, and she displays a comfortable and supportive manner to individuals of diverse backgrounds and stations. For decades, indeed generations, she has served as "zero degree of separation" for hundreds of individuals all over the world. Without having to take notes, she maintains a mental catalogue of what everyone has been doing and feeling and makes optimum use of these data in all communications—including not a little gossip! Like my father, she has common sense in abundance; and she

complemented his wisdom about political and business matters with wisdom about personal matters. She was much more involved than my father in childrearing. She sat alongside me nearly every day for years as I practiced the piano. And she exhibited that involvement in scouting, schooling, and synagogue that signaled to Marion and me that what we did was important.

I consider my childhood to have been unremarkable in a positive sense. I was a good student, who loved to read, and stood comfortably at the head of my class. I liked to play the piano and was quite good at it, though I ceased formal lessons before adolescence when it became clear that I would have to practice much more if I wanted to move from amateur to professional status. (In the succeeding five decades, I have continued to enjoy music, I play the piano when possible, and – for a number of years—I supplemented my income with 1-2 piano students). I am not a natural athlete; and because of my brother's death I was sheltered from anything that seemed physically risky. I always had friends though, until high school, I would not have been considered popular. I was a cub and boy scout for seven years and eventually attained the rank of Eagle Scout. I did not love scouting but it was part of 'the program' and, ever the good young German-American, I therefore marched through the ranks without protest. Though awkward, I turned out to be an excellent driller! Like other first generation families, my extended family was quite close. The Gardners spent more time with our relatives in Scranton, New York, and elsewhere, than with any other people. On the whole, I consider this immersion in family to have been a very positive experience.

As I think about influences in my childhood, I would unhesitatingly place my family—nuclear and extended—first. My interests, values, style of interaction all draw on the few dozen Gardners, Weilheimers, and Seidenbergers with whom I spent much of my spare time. I was comfortable with peers and teachers but was rarely stretched by them. Indeed, it was the conclusion—reluctantly reached—that I had more knowledge than some of my high school teachers that convinced me I should finish secondary school at a local independent school rather than at Scranton Central High School. At nearby Wyoming Seminary, I was for the first time challenged by a few teachers and a few peers. I began to learn the difference between reading and reading deeply; between writing the way one speaks and writing to express a point of view precisely, elegantly, and persuasively. And for the first time, I became a leader in campus organizations and in social life.

If you had seen me at age 16 or 17, I would have appeared like the prototypical Jewish boy who hated the sight of blood. Most people, including me, expected that I would become a lawyer—or, just possibly, a journalist. I had the typical teenage boy's interests in popular music, spectator sports, the mass media, social life, and girls. Scrantonian Mark Harris, the peer whom I most admired, had gone to Wyoming Seminary and Harvard College—and so that is what I wanted to do as well.

### Peers, Near Peers, and Students

By far, the biggest influence on my intellectual trajectory over the last three and one half decades has been exerted by the individuals with whom I have been privileged to work at Project Zero. Initially, Project Zero was a small deliberately heterogeneous group of Boston-

area scholars, who shared an interest in the nature of artistic thinking and education and were sympathetic to rigorous philosophical and empirical investigations of artistic cognition. With his scintillating intellect and fascinating research agenda on the nature of artistic thinking, Nelson Goodman was undoubtedly the central intellectual figure. But from early on, I learned a great deal from founding members, including philosophers Israel Scheffler and Vernon Howard, who sharpened our conceptualization of artistic practice; experimental psychologist Paul Kolers, who showed us how to study key perceptual and linguistic capacities in the laboratory; musician-turned -psychologist Jeanne Bamberger, who illustrated how a musically-informed Piaget might have studied the development of musical capacities; and my long-term colleague David Perkins, who has brought the rigors of cognitive science to such elusive topics as artistic problem solving and human creativity. We met regularly alone or with visitors, we debated, argued, designed studies, wrote about them, and felt that we were part of a group of innovators—now unknown, one day to be acknowledged. When Nelson Goodman retired in the early 1970s, he gave Perkins and me the opportunity to continue Project Zero, which we did until 2000, when we turned over the reins to our long-time associate Steve Seidel.

Over the years Project Zero grew steadily in size, scope, and influence. Grounded in philosophical and psychological investigation, we incorporated other disciplines. Focused initially on the arts, we came to consider the range of cognitive (as well as some non-cognitive) capacities. Reflecting the Zeitgeist of the 1980s and 1990s, we became far more engaged in educational issues. And Perkins and I were able to attract a group of talented somewhat younger peers who carried out important lines of research: in my case, Dennie Wolf, who co-directed the study of early symbolization in seven different symbol systems; Laurie Krasny Brown, who studied the effects on cognition of media like television and storybooks; and artist-turned psychologist Ellen Winner, who carried out pioneering studies of how children understand and produce figurative language. After we had worked together for awhile, Ellen and I fell in love with each other. More on that later.

Second in influence to Project Zero was the group of investigators at the Boston Veterans Administration Medical Center and the Boston University School of Medicine, where for twenty years I conducted empirical research on the cognitive effects of brain injury. Norman Geschwind (the other NG in my life) had attracted a group of brilliant colleagues, including Harold Goodglass and Edith Kaplan, From these redoubtable clinicians, I learned how to examine patients, how to observe changes in behavior from one day or week to the next, and how to put together disparate lines of evidence to arrive at a diagnosis and regimen of treatment for victims of brain injury. In turn Geschwind, Goodglass, and Kaplan had assembled a set of wonderful contemporaries of mine, chief among them Edgar Zurif, a talented psycholinguist from Canada. For close to twenty years Edgar and I co-directed a laboratory that focussed on the breakdown, under conditions of brain-damage, of linguistic and other cognitive and symbol using capacities. Edgar provided powerful theoretical insights, many of them from Chomskian linguistics, as well as considerable experimental ingenuity; I was the observer of intriguing clinical phenomena and the writer who wove together our sometimes disparate lines of research. From day one, we had pleasurable intellectual and personal relations, perhaps because there was just the right degree of distance from one another in terms of background and interests. Once again, as rising young

investigators, we were able to attract a very talented set of younger persons, most prominent among them Hiram Brownell, who has continued several lines our work, sometimes in collaboration with Ellen Winner.

Working for twenty-plus years on a daily basis with such talented colleagues is a rare privilege. None of us can say for sure which conceptual ideas or methodological innovations came from whom, at what time, or in what way. Nor does it matter, except possibly to historians of Project Zero, the Boston VAMC, or behavioral science in the latter years of the 20<sup>th</sup> century. Science is a communal effort and nearly everything that was discovered by one person would have been discovered sooner or later by others. It is important to say that, like many aging investigators, I look back on these times, when we could pursue our own interests without undue attention to careerist opportunities and senior-scholar obligations, as unforgettably special.

Pleased to report, there were other catalytic groups as well. As early as the middle 1970s, with the support of the Spencer Foundation, psychologist-educators David Olson from Toronto, Gavriel Salomon from Israel, David Feldman from Boston, and I began to meet regularly, to discuss the role of symbolization in the development of human cognition. These meetings were important for me. We were a group of young investigators, all influenced by Piaget, but all cognizant that Piaget had ignored issues of media, symbol systems, and education. Discovering common links and a common cause, we began a series of informal contacts and collaborations that have endured. From the middle 1970s, I also had regular encounters with leaders in the area of arts education, such as Elliot Eisner from Stanford (with a special expertise in visual art), Maxine Greene from Teachers College Columbia at University (literary arts), and Bennett Reimer, from Northwestern University (music). Not only did these personal associations connect me to other Centers that were carrying out work analogous to our Project Zero efforts: but their expertise in different art forms complemented my own artistic profile.

In the late 1970s, a Dutch Foundation, the Bernard Van Leer Foundation, awarded a large grant to Harvard for a study of ‘the nature and realization of human potential.’ This grant gave me exposure to another set of valued colleagues in Cambridge and elsewhere. As one of the leaders of the project, I also had the invaluable opportunity to synthesize my own and others’ works on human cognition, an opportunity that led, ultimately, to the positing of the theory of multiple intelligences. The Project on Human Potential included collaborations with individuals abroad. I made several trips to Western Europe, and also initial trips to Latin America and Africa, and intellectually-more-crucial trips to Japan and China.

By the 1980s, I was regularly attending a number of national and international forums, and benefiting from the colleagues encountered there, not to mention the intriguing places that academics choose as meeting sites. For over a decade I attended the annual meetings of the Europe-based International Neuropsychological Symposium. Not only did I meet spectacular colleagues; but I learned that even in science, the kinds of issues approached and the ways in which they are framed typically reflect distinct cultural styles. For example, my interest in artistic and other forms of symbolization proved closest to that of Italian colleagues with whom I ended up forming valued ties. During the same decade, I played a

central role in a committee of the Social Science Research Council focused on the development of human talents. I continued my relation with David Feldman and entered into fruitful collegial relations with Anne Colby, Mihaly Csikszentmihalyi, William Damon, Howard Gruber, and Helen Haste. This group, which also continues its informal links, helped to effect a number of important shifts in the understanding of giftedness, talent, and creativity. These phenomena came to be seen as processes that develop, rather than as traits with which individuals are born; and instead of being construed as properties of a single human psyche, they came to be seen as phenomena that jointly involve an individual, the particular domain or discipline in which she works, and the judgments of quality and originality rendered by a group of knowledgeable experts.

By the 1990s, I had ceased attending most of these regularly-scheduled professional ‘initialized’ meetings (APA, SRCD, INS ): they were getting too large and I no longer enjoyed the m $\acute{e}$ lange of disparate talks and incessant networking. Unlike many of my colleagues, I had no interest in leading these groups: I sought neither the power, the prestige, nor the responsibilities that attend the presidency of a scholarly group. Instead, more of my work centered around meetings with close associates on common research interests. As a direct consequence of a year at the Stanford Center for Advanced Study in the Behavioral Science (1994-5), I began the longest and deepest collaboration of my scholarly life—the GoodWork Project, in association with fellow Fellows Bill Damon and Mihaly Csikszentmihalyi. Since the three of us did not have funds for regularly scheduled meetings once we had returned to our respective campuses, we became extremely opportunistic. Whenever we received invitations ‘in the neighborhood,’ we found ways to spend face-to-face time together. And thanks to telephone, FAX, and e-mail, it has proved possible to collaborate even over vast differences in space and time. While there is no substitute for being together in the same locale, long-distance collaboration has become infinitely easier in the last few decades.

Until the middle 1980s, the younger persons with whom I worked were paid research assistants, many of whom also turned out to be fantastic colleagues and persons (For example, Dennie Wolf, Ellen Winner, and Laurie Brown all started out as researchers on specific Project Zero strands of research). By the middle 1980s I had accepted a teaching position at the Harvard Graduate School of Education, and I began to have regular students as well. Difficult as it is to single out peers by name, it is even more problematic to single out a few students. With the understanding that they stand out for a much larger cohort, I will mention Mindy Kornhaber, who has carried out important studies of multiple intelligences, with special attention to policies directed towards underserved populations; Veronica Boix-Mansilla, who has been a valued partner in studies of disciplinary and interdisciplinary knowledge; and Tom Hatch, who approached the most complex issues of school reform with rigor, skepticism, and hope. And, from a different category altogether, I mention Marcelo Suarez-Orozco, an expert on the educational effects of immigration on succeeding generations of students, the younger colleague from whom I have learned the most in recent years. Indeed, catalytic conversations with Marcelo led to my current interest in the agendas of education and globalization.

Beyond influences: Going my own way

So much of my life as a scholar can be explained in terms of strong, benevolent influences. In reflecting on these influences, however, I realize that I did not just accept these influences passively. In fact, like many ambitious young persons, I also was capable of moving away from these influences.

First the movement was geographical: later, it involved shifting interests. At age 15 I left the comfort of Scranton Pennsylvania and my extended family—attending a boarding school fairly close to my home; and then, at age 18, moving permanently to Massachusetts. Beginning college, I expected to be a lawyer, but then I elected to pursue a life of scholarship. I shifted from clinical psychology to developmental psychology, then to neuropsychology, then to educational studies, and now to broad based social science research and commentary on public issues. Within my chosen fields, I also was capable of rejecting the orthodoxy. Most cognitive developmentalists focused on scientific development, while I targeted the development of artistic capacities and skills. Most psychologists endorse the picture of intelligence as a single faculty, but I rejected that perspective. Most of my peers remained as laboratory experimentalists publishing primarily in technical journals, but I undertook case studies, qualitative analyses, syntheses, and lots of books. Clearly, though I feel myself to be traditional and conservative, it does not look that way from the outside.

The greatest intellectual influence in my life was Jean Piaget, a brilliant scholar whom I met only a few times. But I can see much of my career as a struggle with Piaget's major ideas. Piaget saw all development as of a piece and foregrounded scientific development. I looked at development from the perspective of artistry and came to see human intelligence as multi-faceted. These 'lovers' disputes' did not in the least lessen my regard for Piaget, because it is he who posed the fundamental questions in my area of study.

I can tally my differences with the other scholars who exerted enormous influence on me. Erik Erikson seduced me into the study of psychology—but I came to see rather soon that the questions that most engaged me were cognitive in nature, rather than questions of personality, affect, trauma, or therapy. Also, I was more interested in understanding people than in helping them. Nelson Goodman showed me the consequences of following a line of thinking to its logical conclusion. But I came to realize that human psychology is not always logical, and that empirical findings can—and often do-- trump an analysis which seems impeccable on rational grounds. Norman Geschwind opened my mind to the complex, often non-rational ways in which the human brain makes sense of experience. But Geschwind paid too little attention to the role of different kinds of tools and media in human cognition and also—despite his cosmopolitan bearing—did not factor cultural influences in his account of cognition. My eyes were opened to these neglected factors by my studies of the writings of Lev Vygotsky, Alexander Luria, Clifford Geertz, and my decades-long interaction with Jerome Bruner. My modest disagreements with Bruner have to do with educational matters. Like John Dewey, Bruner underestimates the power of the early theories espoused by children and the educational challenge involved in overthrowing those misconceptions in favor of more adequate explanations. Bruner famously asserted that one can teach any idea to any child at any age in a form that is intellectually honest. I would

respond that almost every person is filled with ideas that are attractive but false, and that successful teaching must grapple with these already extant ideas.

Friends While I do not have that gift of friendship on which my mother holds the patent, I have been fortunate to have had good friends throughout my life. And though it is not always possible to do so, I have sought to retain relations with friends from my earliest years in Scranton, secondary school at Wyoming Seminary, and especially my roommates and closest associates at Harvard College. (Recently I spent a memorable day with ten of my closest friends from College). The latter is the easiest to do because almost everyone who attended Harvard returns at least periodically to visit, and those of us with offices within a stone's throw of Harvard Square indeed occupy a 'window on the world.' Not only do I get unequalled personal gratification from these early friends; they keep me in touch with a world beyond my immediate professional circle and often are called upon to fill the role of imagined conversationalists when I am trying to explain my incipient ideas to a wider world. Though I am not by nature an host (I am too introverted and I cannot boil an egg), Ellen and I try to mark visits from friends from out of town by hosting meals of various sizes, including an annual brunch. Given the hectic lives that so many of us lead, it is far preferably to see both personal and professional friends at least once a year, rather than leaving reconnection to chance. And at such social events we make every effort to involve individuals of widely different ages; for many years, my close friends included the noted psychologist Henry A. Murray and his wife Nina, though 'Harry' was fifty years older than I was; and David Riesman, the sociologist, who was 35 years my senior, along with his wife Evey.

Most of our friends share at least some common professional interests—friendships are easiest to maintain when they involve overlapping worlds. But sometimes the connections evolve out of strange coincidences. Both Mark Wolf, District Court Justice in Boston, and James Freedman, also a distinguished lawyer and the former President of University of Iowa and Dartmouth College, live close by. And yet we might well not have become friends if we had not met at a Renaissance Weekend a decade ago. And so now two of my closest friends happen to be lawyers—and we often get together with another friend, the redoubtable lawyer Alan Dershowitz. By coincidence I had breakfast with that trio the morning after the con man/assistant was discovered. Just think of what it would have cost to assemble the legal talent that happened to be gathered around that table at the Charles Hotel that December morning in 2003.

I cannot always specify how friends affect my work, though I know that they do in important ways. And I know that they affect my psychic health, certainly important influences in being able to work and play productively.