Global Perspectives and Partnership on the Information and Communication Technology Divide: a Panel Discussion

Susan Kretchmer
Johns Hopkins University, USA

Rod Carveth
Texas Tech University, USA

Karen E. Riggs Ohio University, Athens, OH. USA

susankretchmer@yahoo.com

docrod99@hotmail.com

riggsk@ohio.edu

Abstract

[Not Available]

[The following paper is the perspective offered by Karen E. Riggs.]

The New, New Deal

Karen E. Riggs

Abstract

This paper explores the contours of old age as it meets up with new technologies in contexts of work. Old age is a problematic field, always subject to renegotiation of meaning due to changes in life expectancy and never more so than in the critical first three decades of the 21^{st} century, when the proportion of older people is dramatically increasing, with the West in the lead. I attempt to provide a context in which scholars, activists, and others might begin talking about the changing role of work for older adults in a high-tech economy. Instead of offering a statistical breakdown that can be generalized to our entire older adult population, it tells the stories of real people associated with this complex set of concerns, demonstrating how difficult it is to paint any definitive sort of portrait of aging in American culture. Its primary usefulness might be in the recognition it offers for us that, like the rest of us who are reeling from the velocity at which change is arriving in contemporary life, elders are facing myriad tensions, consequences, and challenges and are meeting these with varying outcomes.

Keywords: age, aging, work, technology, cultural studies, disability, phenomenology

This paper explores the contours of old age as it meets up with new technologies in contexts of work. Old age is a problematic field, always subject to renegotiation of meaning due to changes in life expectancy and never more so than in the critical first three decades of the 21st century, when the proportion of older people is dramatically increasing, with the West in the lead. For instance, In Italy, a land of drastically declining fertility rates, by 2025, people over 50 will outnumber people under 50.¹ Leave it to the Baby Boomers to ensure that aging would become sexy, at least from a marketing perspective. It is my cohort

Material published as part of these proceedings, either on-line or in print, is copyrighted by Informing Science. Permission to make digital or paper copy of part or all of these works for personal or classroom use is granted without fee provided that the copies are not made or distributed for profit or commercial advantage AND that copies 1) bear this notice in full and 2) give the full citation on the first page. It is permissible to abstract these works so long as credit is given. To copy in all other cases or to republish or to post on a server or to redistribute to lists requires specific permission from the publisher at Publisher@InformingScience.org

which has created a best-seller niche for our elders, Tom Brokaw, Jimmy Carter, and Betty Freidan, to extol the virtues of old age, once a near pariah for popular literature.² By January 2002, amazon.com listed 4,448 responses to queries about books on aging. But, while the onslaught of Boomer elders is the largest contribution to our cultural preoccupa-

tion with the subject, that attribution is, of course, not the whole story.

In 1900, the average life expectancy at birth in the United States was 47 years.³ (See Illustration 1.1). Individuals we would think of as "elderly" today were indeed rare. Medical advances due to the popularization of germ theory at the century's start and technological progress throughout the century, together with improved diet and safer living and working conditions, made for improved longevity. By the beginning of the current century, Westerners could fully expect to know their grandchildren, and perhaps their great-grandchildren.

Popular conceptualizations of old in 20th century America and throughout the West clearly fell under indictment as older people gradually began to live longer and healthier lives and, abruptly, as the Baby Boomers—in America, the 78 million people known as the Me Generation—discovered that they were arriving in what they had heretofore tagged middle age. Categories underwent revision, and the cultural vocabulary grappled with awkward new names. Euphemisms like "senior citizen" quickly fell out of favor except for use in talking about the most aged groups, such as those over 75. In general, it has become insulting to address a person as "elderly" unless that elder resides in a nursing home and presumably suffers from dementia and other forms of incapacitation. "Older adults," "mature adults," and simply no tag at all have become preferred, and even these choices are controversial, especially for people with money. Middle-class people in their 60s don their Reeboks and listen to their Rolling Stones CDs and don't want to self-identify as seniors unless it means exercising their AARP discounts on Medicare supplements or their lodging at the Holiday Inn. The change wrought by the Baby Boomers' arrival into their 50s was exemplified by the American Association of Retired Persons' introduction of a second magazine for its younger membership, who did not care to have Modern Maturity arriving in their mailboxes. The magazine? My Generation, its title taken from a '60s hit by The Who. Acceptance of aging on these special, even "cool" terms was further legitimated by the magazine's first cover photo and profile subject—the "cute" Beatle, Paul McCartney, age 57. For Boomers, who may have internists, colon screenings, retirement portfolios, and grandchildren, getting older does not mean being old. After all, their own kids are still going to concerts to see Mick and Tina.

Nicknames for "old" carry distinct burdens for women and men. Women know that youthful attractiveness is sheer capital that has spilled out of their bodies. Because many women among the generations who are now of advanced age have little other capital at their control, they shrink from age-related labels. And because women are four times more likely than men both to live alone in their seventies and eighties and to ultimately be institutionalized, "old" is a label they cannot afford if they wish to preserve their autonomy against those who threaten it, such as their own children.⁴

Old age in 20th century first-world societies has been increasingly perceived as a time of retirement, not a time of paid work. What recently has been considered late middle age, between 50 and 65, has been perceived socially as a time of steady decline in productivity, a combination of the mind/body slowing down and preparation for retirement. But data from manager surveys, physical productivity studies, and other sources counter this stereotype, demonstrating that productivity falls only marginally for most people in this age group. What does change is cost to employers for health plan participation, rising from about 5 percent on average for workers in the United States to 30 percent for older workers, and escalating. Workers are simply less affordable as they age, and they perceive their fringe benefits increasingly as golden handcuffs. After all, it is unlikely that a 60-year-old man with a history of heart disease or cancer, for example, will be able to find affordable replacement insurance if he loses his job, no matter how satisfying or unsatisfying he might find the work.

Generally, economic forecasters cheerily spread the news that today's elders are more affluent and better educated than any previous such group, but that is misleading. Statistically speaking, Americans age 65 and over do hold greater wealth than younger citizens, a phenomenon that has similarly occurred in other first-world nations.⁷ (See Illustration 1.3.) But, as Richard Disney points out, publicity of such affluence

has concealed a tremendous growth in economic inequality that is spreading among the elderly. In Britain, for example, the median income in the top quintile of pensioner income distribution is four times greater than that of the bottom quintile.⁸ In another example, a study of workers in the United States, Thailand, and Taiwan in the 1990s, researchers found that income inequality increases within cohorts with age.⁹

It is logical to conclude that the combination of increased life expectancy and changes in the workforce makeup of first-world societies warrant the construction of new models for workforce and pension benefit participation, with emphasis on flexibility across age segments. Harry R. Moody, a proponent of the "abundance" view of aging, has called for social policies that retrain and create jobs for aging workers who have lost out in the postindustrial economy. (Although Moody's contribution came in 1988, it is only made more significant by the escalation of emphasis on technology in the workplace over the last decade and a half.) Moody's lifespan development model encourages a break from inflexible linear life and career planning. As Moody observes, most people are able to work for several years past 65, although they generally desire flexible work calendars for a variety of reasons, including a wish to pursue travel, hobby, and family opportunities and the need to accommodate health demands. Similarly, younger people, who currently are pursuing full-time work to meet the demands of income need and career track expectations, could benefit from segments of time outside the workforce without penalty, for the purpose of raising children or caring for an elderly relative, for example. 10

New models that would creatively reconstruct workforce participation likely would result in employers investing more in training older workers in high-value contemporary skills (i.e., technology-driven work) and democratizing such work across age segments. In other words, instead of seeing a "natural" association between newly minted younger workers and high-reward, high-tech jobs (versus a similar association between "un-retrainable" older workers and low-reward, low-tech jobs), employers will hold a more creative palette of role design. It will contribute toward clobbering the myth of "aging in the country of the young," as Moody puts it, but only if fairly implemented to counter middle-class careerism that keeps disadvantaged workers down.¹¹

Revised models of work opportunity could contribute significantly to stemming both the feminization of poverty, generally, and the feminization of elderly poverty, particularly. It is widely known that women increasingly head households in first-world countries, make less money than men, and are more likely to live in poverty (with children). What is less widely known is that older women, who are more likely to be single than younger women, are especially vulnerable. Women 65 and over constitute only 60 percent of the elderly population but make up 75 percent of the elderly poor in the United States, for example. They spend one-third more on housing (40 percent of their income) than single elderly men. After they pay for health care (spending twice as much as non-elders), little is left. If workforce systems encouraged the participation of women over 65 as long as their health permitted them to work, such poverty would be alleviated. Even by they reach the status of the so-called "oldest old," 85-plus, they would have enjoyed the benefit of extended career participation and would be less likely to land in poverty.

Robert Butler is the celebrated geriatrician who coined the term "ageism," defined as a conceptualization of age in chronological years and based on beliefs that old people are ugly, sickly, and unproductive. ¹³ Ageism becomes age discrimination when these ideologically based beliefs about chronological age are used to systematically deprive people from opportunities and resources that others enjoy, including jobs. ¹⁴ Age discrimination is proscribed against by various national policies, including, in the United States, the Age Discrimination in Employment Act, which prohibits mandatory retirement except in certain occupations, and, in Canada, the Charter of Rights and Freedoms. Canadian researchers Julie McMullin and Victor Marshall have established that the experience of age discrimination in employment practices in Canada, similarly to the United States, are complicated by social relations such age age, class, gender, and race/ethnicity. In their study of Montreal garment workers, they concluded that older workers are quite aware of ageist practices that overlook them or otherwise marginalize them in the workplace and that such workers experience such ageist practices distinctly according to cultural differences besides advanced age.

These garment workers' class position, gender, and, in some cases, marginalized racial/ethnic position was further hampered by their advancing age status. This reduced the agency they felt in their dealings with management and their ability maintain a greater ability to play productive roles. Such incidents underscore the complications that older workers encounter in their bids to achieve and maintain vitality among colleagues and competitors in the world of work.

Butler has cited a positive correlation between productivity and health, and, conversely, between unproductive living and illness. "Unless we begin to perceive older persons as productive, their lives will be at risk," Butler notes. "They will be seen as a burden." Aging, health, and productivity are interlinked with socioeconomic status and are especially influenced by occupation, education, national origin and residence, race, and ethnicity, Butler continues. He concludes that these issues are not to be solved unigenerationally but that the generations must work together to ensure opportunities for productivity among the able-bodied aged. 17

"Productive aging" is not without its critics as a concept, however, and for good reason. The concept tends to convey the expectation that if we all practice productivity in our later years—successful aging—then problems such as crippling arthritis, dementia, depression, loneliness, and, perhaps most especially, prejudice against the elderly will vanish. Productivity cannot monolithically occur, because some people are unable to practice it. On another front, the notion of successful or productive aging perpetuates a market logic, underscoring the notion that every citizen's duty is to perform for the economy, as Caroll L. Estes and others have observed. Such logic promotes inequality among the elderly, because, as Butler himself has noted, education levels and race/ethnicity influence opportunities for obtaining the plum work that will allow us to age successfully.

As a society, we must learn to honor elders not simply for their role in decreasing their own economic burden through more work but for the complexity of roles they play and have played among us. While it is heartening to see people over 65 enjoying workforce participation in a strange, new technological environment, it is just as significant not to spurn those who are unable to lead such lives—and to ensure that they are not severed from participation in society as a result. Butler and proponents of productive aging argue for intergenerational alliances to feed opportunity for elders to contribute. Estes and similar political economists who critique the productive aging view argue for citizenship models that promote society's interdependence rather than liberal individualism.

Taken together, these approaches can teach a valuable lesson: Advanced age is a complex dynamic, fraught with both opportunity and peril. It is important, but insufficient, to practice policies designed to eliminate simple ageism. The range of differences that both create our wonderful distinctions from one another and our differential access to opportunity play significant roles in the aging process. Policies aimed at enhancing economic opportunities for aging workers and retirees do damage to some if they are written in isolation. Policies designed to level economic access across lines of gender, race, and other cultural differences—throughout the generations—will enhance successful aging for everyone. For example, the United States could take a cue from Sweden in formulating its retirement benefits policies. Instead of offering pensions and health benefits on the basis of work history, as the United States does with Social Security and Medicare, Sweden does so on the basis of citizenship. Economic differences that are due to gender, race, and sexual orientation are assuaged by such a policy. Chapter 10 will return to these matters and suggest an agenda for intergenerational success.

New Technologies

Cultural scholars have been increasingly occupied with understanding the role of new electronic media technologies in the everyday lives of first-world citizens. Among their important works have been attempts to understand and explain the paradoxically empowering and subjugating role that such technologies play. The most successful of this scholarship acknowledges that computers and related technologies play.

gies—cell phones, personal digital assistants, and the like—tend to deepen structural inequalities brought about by the systems in which they are implemented, most notably, late liberal capitalism. At the same time, this line of scholarship acknowledges, these technologies contain inherent possibilities for at least partial equalizing measures of agency. Even as computers are used to dehumanize and deskill workers through what Chris Carlsson has identified as a "creeping monoculture" (think Bill Gates), it doesn't have to end this way. As Pippa Norris observes, politics as usual may be altered by digital technologies through shifting the balance of resources among political interests, reducing costs of gathering and disseminating information, and benefiting fringe activists in the process. These measures, Norris argues, can shift the balance of resources from the holders of land and capital to parties with skills and expertise. ²⁰

In the case of the aged, the picture is mixed. Because most skills and expertise associated with computer technologies and the Internet are acquired through schooling and other activities most frequently associated with younger generations, people over 55 still generally lack such assets. Contemplating the digital divide and the "information poverty" that is associated with it, Norris likens the Internet to gunpowder. In this compelling metaphor, she observes that gunpowder deepened the power differential between societies that had and did not have the technology until it became broadly diffused. The question, though, for Norris, is how the Internet will become diffused in various societies around the world. She speculates that, while less-equipped social classes, age groups, and ethnic minorities will enjoy some degree of eventual "catch-up," the digital divide will never be completely erased, because structural relations will prevent a complete leveling out. Some people will simply never have access to this asset, for diverse reasons, some economic, some social, some cultural.²¹

But the horizon is not all doom and gloom. In the case of elders, for example, people 60-plus spend more time on the Internet than people of any other age group and have shown the largest increase in computer and Internet appliance purchases since 1998. What are they doing with the Internet? Beyond researching their genealogy, e-mailing grandchildren and snowbird pen pals, and looking for love on-line, elders are working (which does not preclude the aforementioned activities as acts of work). They comparison shop for cruises, second cars, and sweaters and researching stock activity as acts of intelligent consumption. They rely on telemedicine to become increasingly proactive patients and Medicare consumers. They engage in lifelong learning to sharpen their skills and intellect. And, increasingly, they use the Internet to learn about technology itself.²²

Complicating Age

This age-work-technology nexus is complicated by the encounter with other categories of cultural identity besides advanced age, chief among them being gender, sexuality/sexual orientation, race/ethnicity, social class, national identity, and religion. Scholars who are variously concerned with these categories have called for examination of how people occupying particular cultural positions find themselves embedded in the historical practices and developing changes associated with work and new technologies. Feminist researchers, for example, have been especially vocal in calling for such examinations, which flow from a political belief that in better revealing the warts of patriarchal capitalism, we can improve women's positions.²³

Thinking through issues involving older workers gets help from these feminist approaches. For example, Juliet Webster, in her critique of work and technology, demonstrates problems that flow from women's absence from the creative process in which technologies later to be used in women's work are first developed and implemented. Webster documents the significance of women's job losses due to automation, the ways in which sexual and racial division at various levels in the workplace may route corporate decision-makers toward cheaper structures of employment, and how new technologies have resulted in a spiraling "feminization" of some jobs that were formerly held by skilled (male) workers.²⁴

In her own critique of technology, Cynthia Cockburn has demonstrated similar points about the distance of women from the "laboratories, drawing offices, and board rooms" and the resultant "black-boxing" of instruments of women's technological labor, from microwave ovens to assembly-line machinery. Women's work in both domestic and paid contexts gets regulated by common-sense architectures that snub women's subjectivities. Gender identity, then, for women is subject to limits that have been set without their prior knowledge or consent, as Cynthia Cockburn has noted.²⁵

Other feminists provide confirming explanations using related media histories as supporting evidence. Lynn Spigel's work on the installation of television in the postwar American suburban home highlights the tension of cultural stability and change in the rich arena of women's work. Spigel shows how women participated in the construction of new modes of domestic labor as they negotiated references aimed at their own gender identity formations in content within and publicity about television. ²⁶ Carolyn Marvin's work on the telephone and the electric light similarly conveys the negotiated nature of women's work practices as they flowed from social introductions of these new technologies. ²⁷

These feminist critiques appreciate the tenuous but almost predictable nature of women's "place" in the work-technology context. Can we similarly struggle to understand the unfolding relationship of older people to new technologies, particularly with regard to how these technologies enter into the world of work for older adults and how they influence (or get taken up in attempts to influence) the places of older adults? And, perhaps most urgent are answers to this question: Given the rapid turn to both a technology-driven economy and an aging society, how can we understand the many, many points at which these two speeding trajectories will cross over one another, now and in years to come? How will ever-proliferating technologies of work get along with an older body of workers?

We can approach these questions from a number of fronts. First, taking feminist researchers' notions of an ever-feminized workplace, whose workers get disadvantaged by historical structures of gender bias, it is useful to ask how ageism might also come into play. If feminist scholars mourn the distance of women from the places where technologies are developed and implemented, what does this mean for research about older adults? As reported in the U.S. Department of Commerce white paper *The Digital Work Force: Building Infotech Skills at the Speed of Innovation*, three-fourths of computer systems analysts and computer scientists, and four-fifths of computer programmers, are under the age of 45. The study's authors found that almost half of IT managers in their 20s and 30s—accounting for many of the sector's gatekeepers—had never hired a worker under 40.²⁸ Granted, the role of education accounts for much, but not all.

Bias against older workers is so firmly entrenched in the country that legislation had to be implemented to warn against it in the Older Americans Act of 1965. It is useful to wonder what software engineers, employers, supervisors, trainers, and other gatekeepers of work and new technologies are thinking about the roles that older adults might or might not play in their worlds. In these spheres of increasing influence, it is important to know something about the structures in which older adults have labored previously and how changing work conditions likely will either keep such structures intact or lead toward change. Not to be discounted is simply the demographic shift, wherein the proportion of older adults is mounting furiously. Some countries, in fact, may exceed a median age of 55 by the year 2035. People are living longer after retirement, and fewer new employees are being turned out to take their places. Many employers throughout the first world have begun to see older workers as a compliant source of cheap temporary and part-time labor in flush times, which is both enabling and disempowering to elders. For example, in Japan, men are likely to be forced to retire at age 55 and must find other work, often temporary and almost always at much lower pay.

I attempt to provide a context in which scholars, activists, and others might begin talking about the changing role of work for older adults in a high-tech economy. Instead of offering a statistical breakdown that can be generalized to our entire older adult population, it tells the stories of real people associated with

this complex set of concerns, demonstrating how difficult it is to paint any definitive sort of portrait of aging in American culture. Its primary usefulness might be in the recognition it offers for us that, like the rest of us who are reeling from the velocity at which change is arriving in contemporary life, elders are facing myriad tensions, consequences, and challenges and are meeting these with varying outcomes.

I am especially interested in the stories of the elders whose high-tech adventures are not celebrated in the pages of the *Wall Street Journal* and not championed on the home page of Seniornet.com. The middle and upper classes of retirees whose retirees have discovered the World Wide Web as a hobby destination have certainly been able to enrich their lives, a wonderful and laudable accomplishment. But the stress points of elderhood are much more provocative for me: The older adults who "survive" in the computerized pink-collar shop. The working-class unskilled laborer who craves computing classes for another, better chance at paid work, or the one who shuns computing from her home because of its forbidden and frightening threats to personal safety and security. The Gen-X office manager who must bring older adult workers on-line or turn them out to pasture.

Most generally, these kinds of stories are complicated by struggles associated with class, gender, race/ethnic, and its other arenas of difference. These struggles, when combined with the challenges of advancing age, can set the scene for serious negative consequences. But failure is not destiny. People caught in the "triple bind" of gender, race, and age disadvantages in the work place can thrive. On the other hand, the much-maligned white male worker, predictably in his peak earning years between 50 and retirement, can be awfully vulnerable to harsh employment conditions in which information technologies' roles bear on the deliberations by those who will decide his fate.

bell hooks has written about the uphill climb in privileging class as the concern of academic writing. She is right, of course. It is difficult for middle-class feminists to engage in ethnographic research, or research from other methodological traditions, without making references to people they understand well—other middle-class women. hooks insists that "class matters" as much as race and gender, especially in light of the ever-gaping digital divide.

I have the same feeling about age. In the conference papers I hear and the essays and books I read, feminist researchers of contemporary culture most often refer to themselves in the third person somehow, and very few of them are over 50 right now. Thirty-something feminists write about Oxygen and the pleasures of shopping. I have heard more Buffy papers written by young women in graduate school than I can keep straight. I have heard the youngest students at communication conferences deliver papers on teenage "girl power."

Such distinction makes complete sense, and it's a phenomenon to celebrate. Pieced together, as the quilt of cultural research so beautifully invites its readers to do, these writings from variously aged researchers helps to construct an intergenerational understanding of women, of feminism, that enriches a broad conversation. But, on the whole, the conversation says little about the role that older adults—women and men—play in contemporary culture, both in its production and in its consumption.

I believe a chief reason for this short shrift is that the idea of developing theoretical discourse on subjectivity just becomes unwieldy at a point. If we dare to cover, in our broad discussions, the entire package of the "holy trinity" of gender, race, and class (perhaps substituting sexuality for one of these, probably class), it becomes too onerous to think about other differences. After all, our conference papers must be limited to twenty-five pages. Studies focusing on young people, at least, can focus on children, teens, and young adults in their role as emerging consumers.³²

Other reasons exist for the near absence of older age from the broad discussions of gender, race, and class. Scholars, like other members of our particular culture, easily identify as first gendered or as members of a particular race or ethnicity, and at least in cultural studies, that they might occupy marginal positions because of such identities propels them into study and writing. As hooks has observed, this has been less

apparent along the axis of social class. In Western society, people—even academics—are unlikely to identify first and foremost as old, middle-aged, or young. Age as subjectivity, unless it calls attention to itself through reminders of the limitations, is simply not salient for most people most of the time.³³

Especially in North America and Western Europe, where the category of middle age has expanded terrifically to suit the sensibilities of sexagenarians whose parents are living longer than expected into old age, elderhood as an experiential concept is increasingly rejected. In countries where youth is supreme, growing numbers of people who would have, two decades ago, been considered elders at their present age now think of themselves as relatively young. This reprieve provides no small solace to a generation careening into the latter segments of life.

Old age, as it embodies the perceived loss of vitality and the decay that signals death to come, holds no allure for most scholars. As Margaret Clark observed about her own field more than thirty years ago, studying the aged body is anathema to the anthropologist because it is "somewhat akin to necrophilia." We are grossed out by the decay that greets us. We are reminded that it will happen to us.

Some wonderful scholarship from the humanities has taken place in the field of aging, however. Some of the most important contributions, many of which have influenced my own thinking, have taken place in connection with the Center for Twentieth Century Studies (now known as the Center for Twenty-first Century Studies), located at the University of Wisconsin-Milwaukee. Former Director Kathleen Woodward's work on the images of aging, especially in literature, has been at the center of this project on age. One of the most compelling points that Woodward and many of her colleagues press us to see is that we cannot study late life without considering its roles relative to the occupants of other stages. Intergenerational relationships are part of everyday life. We cannot theorize Grandma without also theorizing the many-aged people who are her kin, the providers who meet her needs and desires, and those who might exploit her. (I am not necessarily suggesting that these categories of people are mutually exclusive.)

The argument to study age, not just aging, is especially powerful in light of the changes being wrought by longevity, lower birth rates, and the aging of the Baby Boomers. There simply are growing to be, in many countries around the globe, many more elders than we are used to having. Their numbers are uncomfortably rubbing up against those of younger workers, who labor to pay their pensions; care givers, many of whom belong to different class and ethnic groups; and children, whose very definition is being reimagined because of their changing ratio to elders. Never before at any time in the United States have there been so few children compared to so many elders. (See Illustration 1.2) These younger groups of people and elder generations are in the midst of many struggles to invent new intergenerational relationships that work, and the models are often hard to locate in practice. For example, in her work on care giving, Sharon Keigher has found that, increasingly, elders in need of (and able to afford) services are suburban whites, and paid caregivers are younger people of color living in urban areas. This presents much more than a transportation problem but a larger one of deepening cultural divisions.

Nowhere is this discomfort in inventing new intergenerational relationship models more pronounced than in the age-work-technology nexus. Elder workers often feel pressed to step aside in the workplace to make room for freshly trained, computer-hip personnel to spread their wings. A sliver of a generation of young workers vaguely is coming to resent having to "prop up" an unprecedented swell of Social Security pensioners. In greater numbers than ever, 50-plus citizens return to complete undergraduate degrees or seek graduate education. Seated alongside pimple-faced "traditional" students, they turn the class dynamic on its head.

For many elders, notions of work are entirely bound by the concept of place; for their juniors, it is not. On the other hand, for the juniors, the Internet clearly is a place; for their elders, it is often an opponent. With all the rules changing faster than we can keep track, high-tech work in this postmodern era demands intergenerational bridges for which no blueprints have been drawn. The old rules were long ago thrown out (gold watch, respect your elders, honor seniority), and the rules for Generation X are that there are no eas-

ily discernible rules (dot.com millionaires, dot.com layoffs, downsizing). The "rules" for Generation Y, the generation following X, are not yet entirely discernible.³⁹ Part of the mission of this book is to help draw some of those new blueprints for intergenerational bridges.

One way of working toward formulating bridges is by inviting phenomenology and disability studies to help broaden our understanding of elders' encounters of technology in the workplace. Phenomenology is concerned with reality as lived experience, and many practitioners of disability theory enlist this approach because they are interested in how people with disabilities live through bodies that are always a site of struggle and always subject to definition by others. As the phenomenologist Drew Leder notes, "Insofar as the body tends to disappear when functioning without problems, it often seizes our attention most strongly at times of dysfunction." Likewise, following Merleau-Ponty, disability scholars Do and Geist have noted, "Society encourages those with undamaged bodies to speak."

One of the ways in which "society" encourages those with undamaged bodies to speak is through the implementation of technological innovation. Interfaces for accommodation of disability have been added on to computer technologies, to be sure, but they do not promote facile use in most workplaces. Arthritic fingers struggle to keep up with those of the acrobatic Xers. Bifocaled eyes squint at screens that are too dim and low-resolution to read in one's 50s. Youth can speed down the Superhighway. This is one highway on which *lack* of speed kills.

Disability is framed by its constraint on one's experience of the world. Many of the people who talked with me as I prepared to write this book spoke of their encounters with computers in the workplace as occasions in which their disobedient bodies—crimped by advancing age—restricted their ability to enjoy the freedom that younger colleagues and relatives could exercise. Whereas opening a sophisticated application, such as an Internet browser or PowerPoint, seemed to be akin to opening the throttle on a motorcycle for these young folks, it could be a stultifying, even painful one for less experienced, slower-reacting, less confident, sensory-impaired elders. "Humiliating," "emasculating," and "public loss of my competitive edge" were some of the descriptors I heard about this event. One woman in her 60s told me that performing such operations in front of more adept young colleagues made her feel as if she were going to fall. "Fail," she corrected herself. A Freudian slip, I wondered. All too commonly, injuries from falls precipitate elders' withdrawal from public life and shunt them toward a lifestyle of inactivity. Fear of falling and fear of falling are often, for many elders, essentially the same feeling.

It is this awkwardness toward computers that defines many older people's response to technological change, but, again, this phenomenon is not to be overgeneralized. Many of the woman I talked with told me that the moment their offices moved on-line and incorporated word processing programs was a liberating experience for them that allowed them to spring up the career ladder in the 1970s and continue to enjoy the fruits of those successes today. Growing up in a sexist society, they had been trained as typists in high school, unlike their male counterparts, and, fortunately for them, they did not suffer from arthritis in their fingers during their 50s and 60s, as so many women do. On the other hand, many of the men I talked with in their 50s and beyond felt awkwardness toward computers. They might ably operate the mouse, but they had no idea how to type and were so either left to "hunt and peck" or enlist the support of a secretary ("office wife") or wife at home. For these men, encounters with the computer made them feel slow, ignorant, irrelevant—old. The luckier ones among them had forged relationships with support staff that made them champions of the machinery. They brought slide shows to meetings that someone younger and female had produced, for example, and they received congratulations for yielding research results from the Internet with unproblematic alacrity. For men in this age group, especially, gender has its benefits, and one of these means that you are more likely to be the boss.

But having been the boss for some time, even for a man otherwise well qualified, does not ensure continued success in a changing technological war zone, where younger men in their early 30s come into the shop spouting the vernacular of the Internet. As several of the men who spoke with me complained, they

were not simply replaced but their jobs rendered "obsolete" by "young Turks" who were brought in to make their operation more relevant to a company that had begun not to resemble itself. As one man said to me: "The speed was dumbfounding." The speed at which the "Turk" could operate his machine, and the speed at which the gray-haired man subsequently was on the street. "I'm used to being more careful, more purposeful in my work," the man later said. "What I took to be care in my work got me accused of behaving like a senior citizen. Moving too slow."

Accommodating disability theory and a phenomenological approach to consider elders' encounters with computers at work is not meant to underscore stereotypes of the aged as decrepit. It is useful to point out, however, that a computer-equipped lifestyle is readily accessible to people who are more comfortable with quickness, multitasking, and instability. Research continues to demonstrate that advancing age brings a preference for just the opposite: deliberateness, purposefulness, dependable routine. That the machines we find in office spaces have been designed by young people with young people's bodies and senses in mind only complicates the encounter for older workers. It is logical to see why, the older workers are, the more likely they might be to feel like fish out of water.

I take up the experience of aging not simply as elderhood or old age. I am interested in what it is like to feel that one is aging in the workplace and how one might experience older age relatively. For example, a popular stereotype of Silicon Valley is that it is populated by young, white men in their 20s. I attended a talk by a man in his early 50s who works in one of these stereotypical software shops. He reported being twice as old as any other employee—older than most of their mothers!—and he felt positively ancient. I met another woman who is the same age as this man, and her circumstances are completely different. She works as a nursing assistant in a residential home for the elderly. At the end of her shift, she reports, she cannot wait to out, among "young" people. "I'm so tired of old people, I don't know what to do," she remarked.

In order to understand aging and what it means to inhabit an aging body, we must acknowledge the "plasticity of biology and its interdependence with culture." The clash of cultural categories that inform the experiences of aging must be taken into account in order to understand the complexities of the social milieux. Place, as Kontos argues, is integral to the experience and construction of age and the aging body. Kontos focuses on home as the site of much of that experience and construction, but I am arguing that the workplace, wherein so much of our social experience unfolds, is of near equal importance, and for some is of greater importance. A place, as Kontos argues, is so much more than a setting. The dialectical process in which body, meaning, and place coincide colors the experience of aging in the world. The place of work, where much of self-identity is achieved, bears heavily on this process.

In my work, I present the stories and images of people who are in their 50s and beyond, not to muddy the waters about old age's complexity but to underscore the point that, as the longevity revolution lengthens life, there are greater differences among elders themselves to explore. As I've already noted, people in their 50s, and most people in their 60s, at least in first-world societies, are unlikely to think of themselves as old (even if that's what many Generation Xers and most Generation Yers think of them). It was about three decades ago that sociologist Matilda W. Riley established parameters around categories they identified as "young-old" (ages 65-74), "old-old" (75-84), and "oldest-old" (85 and over). 45 But just as the cutpoints between generations are being reallocated by demographers, new issues about work and technology are being raised for discussion.

_

¹ Paul Wallace, *Agequake: Riding the Demographic Rollercoaster Shaking Business, Finance and Our World*, London: Nicholas Brealey Publishing, 1999.

² Tom Brokaw, *The Greatest Generation*, New York: Delta Books, 2001; Jimmy Carter, *The Virtues of Aging*, New York: Ballantine Books, 1998; and Betty Freidan, *The Fountain of Age*, New York: Simon & Schuster, 1993.

³ U.S. Bureau of the Census, *National Vital Statistics Report*, 47:28, December 13, 1999.

⁴ U.S. Bureau of the Census, *Sixty-Five Plus in the United States*, www.census.gov/publications/socdemo/statbriefs/agebrief.html.

⁵ David A. Wise, editor, *Advances in the Economics of Aging*, Chicago: University of Chicago Press, 1996.

⁶ David A. Wise, editor, *Advances in the Economics of Aging*.

⁷ Paul Wallace, *Agequake*.

⁸ Richard A. Disney, Can We Afford to Grow Older?

⁹ Angus Deaton and Christina Paxson, "Health, income, and inequality over the life cycle," in David A. Wise, editor, *Frontiers in the Economics of Aging*, Chicago: University of Chicago Press, 1998.

¹⁰ Harry R. Moody, *Abundance of Life: Human Development Policies for an Aging Society*, New York: Columbia University Press, 1988.

¹¹ Harry R. Moody, Abundance of Life.

¹² Rose Rubin and Michael O. Nieswiadomy, *Expenditures of Older Americans*, Westport, CT: Praeger, 1997.

¹³ Robert N. Butler, Why Survive?: Being Old in America. New York: Harper, 1975.

¹⁴ Bill Bytheway, "Youthfulness and Agelessness: A Comment," *Ageing and Society, 20:6*, November 2000, 781-89.

¹⁵ Julie Ann McMullin and Victor W. Marshall, "Ageism, Age Relations, and Garment Industry Work in Montreal," *The Gerontologist*, 41:1, 111-122.

¹⁶ Robert N. Butler, p. 3, in Robert N. Butler and Herbert P. Gleason, eds., *Productive Aging: Enhancing Vitality in Later Life*, New York: Springer Publishing Co., 1985.

¹⁷ Robert N. Butler and Herbert P. Gleason, *Productive Aging*.

¹⁸ Carroll L. Estes and Associates, *Social Policy and Aging: A Critical Perspective*, Thousand Oaks, CA: Sage Publications, 2001.

¹⁹ Chris Carlsson, "The Shape of Truth to Come: New Media and Knowledge," in James Brook and Iain Boal, eds., *Resisting the Virtual Life: The Culture and Politics of Information*, San Francisco: City Lights, 1995 (pp. 235-244), p. 238.

²⁰ Pippa Norris, *Digital Divide: Civic Engagement, Information Poverty and the Internet Worldwide*, Cambridge University Press, 2001.

²¹ Pippa Norris, *Digital Divide*.

²² Neil Charness, Denise C. Park, and Bernhard A. Sabel, eds., *Communication, Technology and Aging*, New York: Springer Publishing Co., 2001.

²³ Such critiques proceed from both structuralist and poststructuralist/postmodern positions, with theorists acknowledging that the technological forces of patriarchal capitalism both contain some element of stability and are subject to multiple and complex revisions.

 $^{^{24}}$ Juliet Webster, Shaping Women's Work: Gender, Employment and Information Technology, London: Longman, 1996 .

²⁵ Cynthia Cockburn and Ruza Fürst-Dilic, editors, *Bringing Technology Home: Gender and Technology in a Changing Europe*, Buckingham, UK, and Philadelphia: Open University Press, 1994.

²⁶ Lynn Spigel, Make Room for TV: Television and the Family Ideal in Postwar America, Chicago: University of Chicago Press, 1992.

²⁷ Carolyn Marvin, *When Old Technologies Were New: Thinking About Communications in the Late Nineteenth Century*, New York: Oxford University Press, 1988.

²⁸ Carol Ann Meares, John F. Sargeant Jr., et al., *The Digital Work Force: Building Infotech Skills at the Speed of Innovation*, Washington: U.S. Department of Commerce Technology Administration, Office of Technology Policy, 1999.

²⁹ Peter G. Peterson, *Gray Dawn: How the Coming Age Wave Will Transform America—and the World*, New York: Random House, 1999.

³⁰ Peter G. Peterson, *Gray Dawn*.

³¹ Paul Wallace, Agequake: Riding the Demographic Rollercoaster Shaking Business, Finance, and Our World, London: Nicholas Brealey Publishing, 1999.

³² Larry Naylor has grappled with this question similarly in his edited volume, *Problems and Issues of Diversity in the United States*, Westport, CT: Bergin and Garvey, 1999. Naylor notes that scholarship is increasingly consumed with issues of diversity but pays only scant attention to elders.

³³ Many scholars have addressed the lack of old age as a salient identification for most people. See, for example, Andrew Blaikie, *Ageing and popular culture*, New York: Cambridge University Press, 1999.

³⁴ Margaret Clark, "The Anthropology of Aging, A New Area for Studies of Culture and Personality," *The Gerontologist*, 7, 55-64.

³⁵ Kathleen Woodward, *Aging and Its Discontents: Freud and Other Fictions*, Bloomington, IN: Indiana University Press, 1991, and Kathleen Woodward, editor, *Figuring Age: Women, Bodies, Generations*, Bloomington, IN: Indiana University Press, 1999.

³⁶ U.S. Bureau of the Census, 2000.

³⁷ S.M. Keigher, "The limits of consumer directed care as public policy in an aging society," *Canadian Journal on Aging*, *18*:2, 182-210,1999.

³⁸ See, for example, the Xer backlash literature recorded in Richard D. Thau and Jay S. Heflin, eds., *Generations Apart: Xers Vs. Boomers Vs. the Elderly*, Amherst, NY: Prometheus Books, 1997.

³⁹ See, for example, J. Walker Smith and Ann Clurman, *Rocking the Ages: The Yankelovich Report on Generational Marketing*, New York: HarperBusiness, 1997.

⁴⁰ Drew Leder, *The Absent Body*, Chicago: University of Chicago Press, 1990.

⁴¹ See p. 4, Thuy-Phuong Do and Patricia Geist, "Embodiment and Dis-Embodiment: Identity Trans-Formation of Persons with Physical Disabilities," in Dawn O. Braithwaite and Teresa L. Thompson, editors, *Handbook of Communication and People with Disabilities: Research and Application*, Mahwah, NJ: Lawreance A. Erlbaum, 2000, pp. 49-66.

⁴² Juliet Webster, *Shaping Women's Work*, p. 118, invokes the role of secretaries as "office wives."

⁴³ Pia C. Kontos, "Resisting Institutionalization: Constructing Old Age and Negotiating Home," in *Aging and Everyday Life*, Jaber F. Gubrium and James A. Holstein, Eds., Malden, MA: Blackwell Publishers, 2000, pp. 255-72.

⁴⁴ Pia Kontos, Resisting Institutionalization.

⁴⁵ Matilda W. Riley, "Aging and Cohort Succession: Interpretations and Misinterpretations," *Public Opinion Quarterly*, *37:1*, 35-??, 1973.