

## Telework and the New Workplace of the 21st Century

---

JOANNE H. PRATT, *Joanne H. Pratt Associates, Dallas, Texas*

© 2000. All rights reserved.

# Telework and Society-Implications for Corporate and Societal Cultures

## Implications for Corporate Culture

## Telework in the Global Economy

"Workplace trends are triggered by social movements and political ideology, as well as by technical advances or change." (Vega and Brennan 2000).

Societal trends are coinciding with the increasing availability of small, powerful and affordable technology and connection via the Internet to the global economy. This has led to adoption of telework as a means to address environmental problems, help balance work/life responsibilities and gain flexibility and quick response to opportunities in the emerging e-commerce economy. This paper first asks, "Is telework an isolated work pattern, or is it part of a larger phenomenon of the reorganization of work?" In the second section the implications for societal culture are addressed.

There are four types of telework:

- homebased telework;
- satellite offices where all employees telework for one employer;
- neighborhood telework centers, which are occupied by employees from more than one organization; and
- mobile workers (Kurland and Bailey 1999).

Of those, satellite offices are in effect the traditional branch offices, which maintain at least a weakened form of the parent organization's culture.

Telework centers have been largely discounted. They have not demonstrated that they are economically viable. Corporations resist paying for additional workspace that may be shared by competitors. They fear the possible loss of proprietary information in a facility shared by several employers (Baglely et al. 1994). The federal telecenter program, too, has "experienced limited success" (Vega and Brennan 2000). This paper examines the first and fourth types—

home office and mobile work.

## The Larger Context of Telework

Telework is a true reorganization of the workplace, both in concept and execution. Telecommuting, or telework, falls under the umbrella of flexible work arrangements. But telework goes further than "flextime," for example. Flextime conceptually reflects Industrial Age shift work with employees taking longer shifts in exchange for additional whole days off. Pilot programs and even on-going telework take place in traditionally organized institutions. In contrast, telework is adopted as one of the fundamental changes in the nature of work and organizational restructuring. Attempts are being made to reconceptualize flexible work arrangements, particularly telework, in terms of dispersed activity patterns that are time-dependent (Van der Wielen 1994).

Today's tasks require leveraging workers' intellectual capabilities, not their brawn. Thus, many authors see teleworking as closely parallel to, or a subset of, the new organizations variously called virtual, imaginary, extended, and collaborative organizations (Cohen 1997). That enlarges the context of telework from the original idea of telecommuting as a trip reduction strategy to save gasoline, decrease traffic congestion and enhance air quality. The bigger picture is that teleworking is just one component of the reorganization of work in response to new business opportunities. Personal computers have freed workers from mainframe computers; the Internet provides a channel to information and world markets. Such fundamental changes in the work process have generated new work/life opportunities.

## Telework Merges into New Organizational Forms

Telework is forerunner of working in a boundaryless organization. As part of the virtual organization, it focuses attention on organizational form, work processes and learning. Working at home has an impact on organizational behaviors and on the individual worker (Sparrow 1999). It may occur on a full-time schedule, or more typically, on a part-time or episodic basis (Pratt 2000). In an hierarchical organization, telework—or virtual teams—may be permitted for a small number of employees. A virtual organization has made the mental leap to accept a new organizational structure. Here, too, telework may take place as a formally implemented program. More likely, telework merges with virtual work, meaning that the leadership endorses taking the work to the worker. Tasks are performed wherever it makes the most sense to do so—at corporate headquarters, on a plane, in the car or from an office in the home. With that degree of integration into the workprocess, the words "telecommuting" or "telework" tend to disappear.

A fruitful approach is to view the new organization as imaginary relative to older forms (Hedberg 2000). Pre-industrial work sites were scattered but not connected. The industrial age brought the labor force into central locations each organized internally as a strict top-down hierarchy. The new post-industrial model sees work taking place in remote, but linked locations. Hedberg and others (Pink 2000, Johansen 1996) view the concept of "job" as changing from a corporate to an individual perspective. Pink recalls the parent-to-child relation expressed in the nicknames "Ma Bell" (AT&T), "Mother Met" (Metropolitan Life) and "Great Yellow Father" (Kodak) that contrast so strongly with the idea of self-actuating adults partnering in several networks of various durations and cultures (Pink 2000). The manager is no longer "mother" but the imaginator and director of a successful performance. He or she facilitates rather than commands.

One implication of the imaginary organization is that a company will have a small core of employees aided by a much larger force of contract workers (Hedberg 2000). The shift to contract work is supported by worker displacement data during the late 1990s (BLS August 9, 2000). Of the 3.3 million workers displaced from jobs they had held for three years or more, from 1997-1999, 2.2 million were reemployed by February 2000. Of those, 6% had changed to self-employed and unpaid family worker status. Probably over half of the new self-employed operate their businesses from a home office (Pratt 1999).

# Developing Corporate Culture through Telemanagement

## Defining and Maintaining the Corporate Culture

How does corporate culture become embedded in the evolving global organization? Virtual global teams represent the extreme example of working at a distance. Analysis of how they function enhances our understanding of telework. The lingering centralized organization is not well suited to participate in e-commerce. The new economy requires telework, that is, distance work. The actual work pattern may be called telecommuting, telework, virtual team, and global team or have no special name: it is just the way the organization does business.

Both individuals in virtual teams and teleworkers work remotely from their coworkers. On average, employees who work at home spend about 70% of their time in the corporate office (Pratt 2000). Members of virtual global teams may meet seldom, if ever. The manager's job is to bring people together for joint performance (Drucker 1994). It is the managers who must define the "values of the organization, its system of rewards and punishments, its spirit and its culture."

The new form of management is characterized by networking small groups that function as self-directed teams —goal-oriented, peer-based, richly linked multi-leadered teams (The Networking Institute 1996-1997). Not only is the team self-directed, but a virtual team works across space, time and organizational boundaries. Webs of communication technologies provide strong links (Lipnack and Stamps 1997). An important caveat is that the virtual organization must provide for learning, that is, for passing the culture and knowledge to new members of the team and to reconfigured teams assigned to new projects (Bjorkegren and Rapp 1999). That may require face-to-face meetings. An academic discipline of "social network analysis" studies these new worker groups, each of which can be viewed as a "sea of social relationships" - not a priority topic for Industrial Age worker groups.

Researchers have pinpointed employee isolation as weakening corporate culture, arguing that casual socializing around the water cooler and the coffeepot helps maintain cultural norms and values (Clancy 1994). Thus, geographic dispersion weakens that culture (Sathe 1983). A more optimistic view cites employees who telecommute as being less stressed, more self-reliant, productive and committed to the organization (Dutton. 1994, Keiser 1994). By default, the convergence of business trends with the new technologies is driving a rapid growth in telework (News & Analysis 2000). The argument is that communication technology will contribute towards maintaining the corporate culture if it is implemented with consideration of telecommuting's impact on that culture as well as on employees (Gainey 1999).

## Managing Cultural Differences

Successful management of global teams requires mutually defining the culture and values applicable to the particular situation. Emerging organizations with multinational and multicultural teams find that cultural and value differences are exaggerated by ethnic differences (Reeves-Ellington 1995). In leading such organizations, the most effective managers were transformational rather than transactional leaders (Church and Waclawski 1999). They focused on managing change and relationships. Transformational management is recommended for telework as well as for other virtual teams.

Diagnostic tools are available for measuring corporate culture in regard to expectations. Integrated with so-called Appreciative Inquiry, they can be used to focus employees' attention on "what is possible" and minimize their dwelling on status quo barriers to new work patterns (Sorensen et al 1996). When training telemanagers, it works well to discuss how employees might have teleworked "last week" (Pratt 1998, 1996). That approach helps alleviate managers' fears of the consequences of managing employees they cannot see. Using "situated design" (Limburg 2000) or game-based training methods, enhances the effectiveness of the team while simultaneously alleviating teleworkers' feelings of isolation (Venkatesh and Speier 2000). Formation of an intercultural organization also can be facilitated by an "evolutionary systems design" framework combined with computer group support. This takes a problem-solving approach to evolve a common culture applicable to situations, that is, a "situational culture," (Shakun 1999), which does not necessarily last beyond the term of the project.

There are fewer occasions for spontaneous feedback in a virtual environment than in the corporate office. Managers must consciously plan recognition and praise of their staff to assure employees they are meeting company expectations (Nelson 2000). Face-to-face meetings and two-way communication (Nelson 2000) are considered a must for telework. However, especially when leading teams that have diverse ethnic and culture groups, the telemanager must be acutely aware that particularly social gatherings designed to promote team esprit may trespass on cultural norms. For example, in Britain, socializing in one's residence is not the custom. Inviting team members into one's home may backfire if team members view the house as "intimidatingly smart ... or deeply klutzy" (York 2000).

### **Bonding Work Teams**

Virtual teams must evolve work relationships bonded by a self-generated group culture based on trust. Virtual teams tend to be geographically dispersed, time-dependent and project-based. They are assembled to work on specific projects. Membership in a team is fluid, often temporary as task assignments change (Townsend 1998). As a consequence, the corporate culture in virtual organizations must embrace a complex, dynamic work pattern.

Global virtual teams have been found empirically to work best if members have learned virtual collaborative skills, virtual socialization skills, and virtual communication skills (Knoll 1998). There has been great interest in theories and empirical studies of managing virtual organizations including telework proper (See, for example, Kugelmass 1995, Jackson 1999). The core point is that managers must shift from monitoring time spent in the office, to managing by objectives or results (Cascio 2000). Or stated differently, to develop a flexible, adaptable organization, control must shift from control of the process to facilitating the effective performance of the process (Davidow & Malone 1992). The manager's role must evolve from that of "enforcer" to that of "coach" or "facilitator" (Vega and Brennan 2000). That requires managing not only people, but relationships within and between teams, work projects, knowledge and technology (Fritz and Manheim 1998).

## **Telework as a Special Case**

Managers still have problems accepting telework. Tasks are performed in the worker's home, which society views as personal, not public space. Fritz and Manheim's strategies for managing virtual work by telecommuters and global project teams are identical in most respects. The differences are revealing:

- The advice for managing global project teams is to:  
"Make it known that group members should be contacted when needed by coworkers and managers.
- Managers of telecommuters are instructed to:  
"Make it known that *remote workers are 'at work,'* and should be contacted when needed by coworkers and managers." [Emphasis added]

Further, managers of teleworkers are advised to schedule a "'bonding day' where all employees work in the office" and use a sign-out board for scheduling remote work. The implication is that members of a global project team are perceived as being adult enough to fulfill their responsibilities but that teleworkers remain suspect.

## **Promoting a Culture of Trust**

Trust "is the defining feature of a virtual corporation" (Davidow and Malone 1992) as it is for telework (Pratt 1997). The principle that it is incumbent on the manager to create a trusting environment underlies all the specific management steps.

A virtual team is boundaryless with participants linked by telecommunications and technology across organizations, functions and geography (Ishaya and Macaulay 1998). There are unique challenges in creating and maintaining trust in a global virtual team. For example, how does a manager assign project roles, create esprit, and provide the feedback essential to building trust when team members transcend time, space and culture? One measure of trust is perceived "fairness" (Hart and Sanders 1997). To be fair and avoid leaving anyone out of consideration for projects, telemanagers

in one federal office assign projects to the next person on a combined alphabetical list of teleworkers and on-site employees (ITAC TeleBytes 2000).

Important factors in maintaining a successful team does not routinely meet face-to-face, include defining clear roles for each member assigned to a task but further, that all team members express enthusiastic attitudes and action orientation in their e-mailed messages to one another (Contu 1998). In some studies, a form of "swift" trust was built that appeared to be fragile and temporary (Jarvenpaa, 1999). That would fit within a rational perspective of trust that sees team members as actors entering into a collaboration with mutual expectations about each other's commitment to the assigned project. In Joanne H. Pratt Associates' own work, we model the trust-building process as being dependent on positive feedback that follows when each task is completed as assigned (Pratt 1997).

We contend that trust depends upon being able to predict the future actions of members of a work team. We use a matrix to illustrate the quality of feedback that is found in different technologies such as e-mail, fax, telephoning and video conferencing as compared with a baseline of face-to-face communication. To differing degrees and in varying combinations, these technologies both help build trust. Simultaneously, they may eliminate barriers to effective communication such as differences in age, ethnicity and gender. Holland emphasizes that virtual organizations are not inherently transient; they provide business stability if they are built on trust: ". . . technology mediated communication patterns and trusted business relationships are the glue that binds together the separately owned companies into dynamic, global and responsive organizations" (Holland 1998). That view brings virtual teams and telework closer in concept.

## **Technology**

The new technologies have forced the reshaping of business, shifting control from the corporation to the individual. "Rather than pushing decisions up through the hierarchy, the power of microelectronics pulls them remorselessly down to the individual. This is the law of the microcosm. This is the secret of the new American challenge in the global economy" (Gilder 1989). That leaves the entrepreneur — or virtual teams with entrepreneurial culture — as "the driving force of economic growth in the quantum era."

The early telecommuters pioneered working at home without the benefit of corporate office technology (Pratt 1984). Teleworking gained in importance—and will probably lose its unique identity—only because technology, and particularly new connectivity is linking all workers, whether at home or elsewhere. Unlike earlier teleworkers, virtual teams cannot exist without technology. As we have described, a dominant form emerging from the reshaping of organizations is the non-hierarchical or at least less hierarchical business that has indeed, transferred responsibility to the individual. The employee is required to be more entrepreneurial, that is, to be a person who, according to the dictionary "organizes, operates, and assumes the risk for a business venture." In the new corporate culture, the worker graduates to self-actuating adult from a past role as child in the authoritarian organization.

Typically, employees of an organization that allows virtual status, that is, working away from the central office, communicate using face-to-face meetings, e-mail, documents, and telephone (Wiesenfeld et al. 1999). The electronic communication serves not only functionally, but also is a determinant of organizational identification in a virtual company. International Data Corporation (IDC) research found that the approximately 4% of employees who had access to company Intranets in 1998 will grow to 64% of all employees by the end of 2000 (IDC 2000). That means the majority of the workforce will rely on Intranets for information sharing and publishing document management and e-mail. Even while working in the on site, corporate office, employees increasingly communicate, by e-mail rather than walk to another office. That implies that employees also will habitually access the corporate LAN remotely from home. Thus, location will become relatively unimportant in a near future world of seamless connectivity provided by technology and telecommunications.

## **Physical Workplace**

Communication within the corporate workplace is increasingly dependent on the Intranet, which can be accessed from anywhere. But it does not follow that the corporation as a physical entity is no longer needed. The on-site office, with

few exceptions, still exists as a location where most employees spend at least some of their time. There have been interesting attempts to redesign the corporate workspace predicated on a work force that will flow in and out of the on-site office (See, for example, Aronof and Kaplan 1995; Steelcase 1997; GSA 1999). If the teleworker or virtual team member's personal space has moved to wherever he or she is at the moment-home, car, client's office — then it is wasteful to maintain an expensive office sitting empty for most of the time. Becker and Joroff envisioned an Integrated Workplace Strategy that incorporated the nature of the physical settings where work is conducted, the technologies used in conducting work, the work process, and importantly, the "organizational culture and management (the formal and informal values, expectations, policies, and behaviors that influence all the other factors)" (Becker and Joroff 1995).

The advertising agency, Chiat Day, put its own vision of the workplace into practice, first throwing out all conventional office arrangements. CEO Jay Chiat dotted the office floor with movable furniture. Employees were expected to reconfigure their work space for each encounter. Personal territory was limited to individual lockers too small to store work materials. Even laptops had to be checked out each morning. Without offices or desks, workers found it difficult to locate other members of their teams, and had no place where they could settle down for longer than the one-day limit to do their work. The two-year experiment ended when the company was sold. The new CEO demanded his own office. The remodeled offices were shaped into "neighborhoods" with an artificial park and basketball court. As Warren Berger in *Wired* magazine pointed out, "If the message sent to employees by the virtual office was, 'Get your assignment and hit the road,' this one is saying. . . Stay a while. Stay all night. Hell, you can live here. Which makes obvious sense in a business that is fueled by twenty-somethings pulling late nighters" (Berger 1999). The moral is that the physical workplace strongly influences the corporate culture and that an individual's need to establish a personal space and territory cannot be disregarded.

## Implications for Societal Culture

E-commerce "is profoundly changing economies, markets, and industry structures; products and services and their flow; consumer segmentation, consumer values, and consumer behavior; jobs and labor markets. But the impact may be even greater on societies and politics and, above all, on the way we see the world and ourselves in it" (Drucker 1999).

## Impact of Telework on Environmental Problems

The initial motivation for telecommuting was to *reduce* mobility, that is to formally establish working at home say two days a week as a regular pattern that would eliminate two round trips to work with the balance of work in the office. That model has proved less viable than task-based teleworking for many organizations. Instead ". . . the home is becoming only one location of an increasingly decentralized, multilocations working environment ... [which] would mean that home-based work is not a means in itself, but only a step on the way towards a complete blur of time-space-restrictions" Gareis (2000). For example, the number of teleworkers in the Department of Labor decreased from 1,685 as of October 30, 1998 to 433 national office and field employees as of January 2000. However the drop "indicates only that workers with formal arrangements have switched to episodic arrangements, providing the department and themselves with the additional flexibility that comes with less formalized work situations" (Vega and Brennen 2000).

Peter Drucker, inventor of management theory, coined the term "Knowledge Revolution" to distinguish the evolving changes stimulated by new technologies. In the Industrial Age, a "new mental geography created by the railroad, humanity mastered distance. In the mental geography of e-commerce, distance has been eliminated. There is only one economy and only one market" (Drucker 1999). Nevertheless, people continue to travel for work as well as for many other reasons such as personal and family trips, school and vacations (Pratt 2000).

As Drucker makes clear the essence of a knowledge society is mobility in terms of where one lives, mobility in terms of what one does, mobility in terms of one's affiliations" (Drucker 1994). Although telecommuting was initially promoted to reduce commuting trips, that goal has backfired in the sense that for sales people and others, it is not a question of

the journey to work but the journey as work (*Economist 1999*). Furthermore, as Niles points out in *Beyond Telecommuting*, telecommunications appears to stimulate travel (Niles 1994).

## Responding to Opportunities in the E-Commerce Economy

Estimates of the number of companies using telecommuting range from 22%, as found in a Computerworld survey, to 42% in 1996, up from 27% in 1995 according to Olsten Corporation polls (Girard 1997). In a survey of Fortune 1000 TM Companies, 92% considered telecommuting to be somewhat or very advantageous to the company; only 7% had considered telecommuting and rejected it (Telecommute America! 1995). Deloitte & Touche Technology's Fast 500 Survey found that of the 500 fastest-growing U.S. technology companies, finding, hiring and retaining qualified employees is the most significant challenge (Langhof 2000). Nearly half (42%) of the CEOs surveyed said they offered telecommuting or flextime job sharing (45%) as an option to their employees. However, 78% said that less than 5% of their employees currently telecommute.

Classic telecommuting as understood by employers, is allowing some employees to work at home one or two days per week. As of 1999, 19.6 million employees and independent contractors, or 10% of U.S. adults, were working at home during normal business hours for one or more days per month (Pratt 1999).

They worked at home an average of 9 days per month. An additional 10.4 million employees would like to work at home if their employers would let them.

Acting in the larger context of telecommuting as a form of virtual work, workers are designing their own versions of telework to enable their lifestyle choices. With priorities switched from earning a living to supporting a life style, the new generations of workers are still engaging in classic telework but also in more fluid versions. Although they do not necessarily think of what they are doing as telework, it is indeed, working at a distance.

Members of Generation X are acting on the new choices available to them. To take an extreme example, couples in long-term committed relationships maintain contact between Moscow and Los Angeles or St. Petersburg and Santa Fe by using cheap Internet phone calls (Personal Communication 2000). Periods of living apart are interspersed with visits or short-term employment in the location in which their partners are building their careers. Women no longer just hold jobs. They, like the men, are gaining experience and recognition as professionals. These couples are looking not for job stability, but for generous compensation time to spend together, employee benefits that cover a non-spousal partner, and combined incomes that pay for education and travel. They are less likely to object to working long hours during the prolonged periods when they are living alone if they receive overtime pay or the additional comp time they use for more frequent visits. These "kids" are making tough, mature decisions. Surprisingly, long-term goals of marriage and family underlie seemingly numerous short-term arrangements. Individual's choices are far more complex than those of earlier generations, who found a spouse, job and place to live by age 30, then lived "happily ever after."

The impact of home office work on the psychological well being of the teleworkers and their families is a complex issue that is difficult to model (Standen 1999). Many studies cite positive and some negative consequences of teleworking (Ellison 1999) but the conceptual framework to project the impacts of remote work on society as a whole is lacking.

## Work/Life in a 24-7 E-Commerce World

*The "Always On "Teleworker"*

In the Industrial Revolution "the factory ... took worker and work out of the home and moved them into the workplace, leaving family members behind" (Drucker 1999). The Information Age is bringing them back carrying cell phones in their pockets and their work in their arms. With e-mail, pagers, laptop computers, mobile phones and access to the Internet, work is no longer confined to one setting; it is pervasive. With workers available 24-7, 24 hours, seven days a

week, the virtual office never closes.

As of July 2000, 100 million people or 36% of Americans owned wireless telephones with 67,000 new subscribers each day (Cellular Telecommunications Industry Association 2000). Mobile phones are having a far greater impact than the PC-which, after all, is just a super fast typewriter that can calculate, combined with a data base. If forecasts are correct that there will be one billion mobile phone subscribers worldwide by 2005, "this will be more than all the PCs and automobiles combined" (Golob 2000). More significantly, the mobile phone combined with the personal digital assistant (PDA) and access to the Internet, puts the power of an office in one's hand. It is equivalent to shrinking the grandfather clock onto everyone's wrist but far more profound. The good news is that technology is allowing workers to take the office everywhere and work anytime. That's the bad news, too.

### *Learning to "Turn it Off ,*

In spite of recognizing that "Cultures where there's too much blurring of home and work lives can be insidious; people have to get lives," the CEO of HQ Global Workplaces stays totally connected to his corporate network, at home as well as at work (Goldstein 2000). He, like other 24-7ers says he needs to "learn to log off." That might have been easier before DSL began to take hold. The "always on, big pipe" Internet can be an addictive presence in a home office. The number of installed DSL lines jumped 59% to 1.2 million in the second quarter of 1999. Of those, about 69% are in homes (Dallas Morning News 2000).

In the Industrial Age, once workers were unionized "they worked specified hours; the rest of the day was their own, which was true neither of work on the farm nor of domestic work" (Drucker 1994). Clearly, it is not true for knowledge workers carrying pagers on their belts and cell phones in their pockets.

The problem is not just being unofficially on-call 24-7, it is also that the world no longer goes to sleep at night. According to a recent Marketplace section in *The Wall Street Journal*, 146 of Home Depot's 1,033 stores are open 24 hours (*The Wall Street Journal* 2000). Around-the-clock shopping and customer service are catering to workers who need the 24-hour day to accomplish family needs. The night owls include those with rotating shifts, couples coping with split-shift parenting and a sizable night labor force estimated at 23 million by Circadian Information Inc.

### *Separating the Public From the Private Domain in the Blurred World of Telework*

Telework brings the public domain into the private domain - one's dwelling. A detailed review of work and life adjustments made within the home by teleworkers is outside the scope of this paper. However, two issues raised by Mirchandani are critical in the context of telework's impact on society and vice versa (Mirchandani 1999). The first is that teleworkers organize their public work and private non-income producing work spheres within the home in order to maintain a boundary between their public and private lives. Second, from a feminist point of view, men and women teleworkers do this in different ways, conditioned by traditional gender roles defined by society.

To separate being "at work," the public domain, from the private, family domain, teleworkers create physical boundaries in terms of where they work in the house and the schedule they follow. One way to create a public/private boundary is to have a separate or shared office within the home, which is becoming more common (Pratt 2000). That conditions the psychological mindset that differentiates work time and place from nonwork. Mirchandani contends that for men, the family is a "temptation" for women, a "responsibility" (Mirchandani 1999). Although very few women do childcare simultaneously with work, the priority for women is still the family; for men the priority is work. Thus, for women, a physically separate home office and a routine schedule provide the psychological separation that helps decrease the stress "associated with simultaneously juggling work and family responsibilities" (Mirchandani 1999).

### *The Need to Legitimize Homebased Work*

Both men and women feel the need to legitimize the work they do at home. Teleworkers must prove to themselves and society that they are professionals in that blurred context and counteract media images of men in bunny slippers and women working at the computer with children in their laps. The interesting point is that "...the need to protect nonwork

from work reinforces the privateness of nonwork, just as the need to protect work from nonwork reinforced the publicness of work. This, rather than the separation of workplace and home organizes teleworkers' lives" (Mirchandani 1999). Teleworkers' attempts to distinguish their work from nonwork is a defensive response to their coworkers, managers and society. The distinction conveys not only the meaning, but also the social and economic value of work, both for society and for themselves. Thus teleworkers "resist the broadening of the definition of work to include domestic work and childcare since they recognize that such a broadening can in fact lead to a devaluation of their paid work rather than a revaluation of their domestic work."

What has happened as boundaries have blurred is that "Teleworkers continue to organize their lives in terms of public and private, although the meanings of these terms shift from workplace-home to work-nonwork. In effect, the division shifts to one Within the home, instead of one between the home and workplace" (Mirchandani 1999).

While the telework debate has focused on establishing public-private boundaries Within the home, equally apparent is the need to set boundaries in public space. As cell phones proliferate, business and personal conversations intrude on bystanders everywhere - in restaurants, airports, concerts and on ski slopes. Bystanders have no escape from the aural invasion of their personal space.

Is it balancing or juggling that is happening in society? Balancing work and life responsibilities by interspersing work and family tasks throughout the day, rings with a positive connotation that workers are coping well and achieving their work/life goals. Juggling, on the other hand, has a negative tone. Keeping all the balls in the air implies a risky, frenetic lifestyle. What happens if you "drop the ball?" The net value judgment may come down to a matter of perception. Some members of society will enjoy the balance, others will weary of the stress of juggling. And of course that judgment may vary from positive to negative according to whether teleworkers are having a "good" or "bad" day. What it may boil down to, as Drucker says, is "the way we see the world and ourselves in it."

## E-Work and Corporate Responsibility

In our society, paternalism is giving way to self-actualization. Popular culture in the form of movies and other popular media offers insights into the relations between culture power and work (Hassard 1998) just as a movie, *The Man in the Grey Flannel Suit*, portrayed the stereotypical organization man of the past (Pink 2000). In fact, the chasm between the early, mainframe information age and today's flexible work world is summed up neatly by two images: The old style IBM of Thomas Watson's uniformly dressed male workforce tied to the corporate office by mainframe computers contrasted with the IBM of casually dressed men and women in sales working from home offices on laptop PCs (which, incidentally, saves IBM millions in real estate costs). Today, however, as Drucker says:

" . . . we are trying to straddle the fence-to maintain the traditional mindset, in which capital is the key resource and the financier is the boss, while bribing knowledge workers to be content to remain employees by giving them bonuses and stock options .... Increasingly, performance in these new knowledge-based industries will come to depend on running the institution so as to attract, hold, and motivate knowledge workers. When this can no longer be done by satisfying knowledge workers' greed, as we are now trying to do, it will have to be done by satisfying their values, and by giving them social recognition and social power. It will have to be done by turning them from subordinates into fellow executives, and from employees, however well paid, into partners" (Drucker 1999).

In the same vein, in what *Business Week* calls the "Creative Economy," "the best that corporations can do is to create an environment that makes the best people want to stay" (*Business Week* 2000). Is that why major employers like Delta Airlines give their employees free or discounted PCs to use at home? How the corporations create that environment raises questions as to their underlying motivations. What does it imply when Ford Motor Company even throws in DSL access? What are the boundaries when Radio Shack Corporation encourages employees to use the Internet at work to accomplish personal business? Is it raising the potential for abuse if employers require homework above and beyond the normal working hours? Whose responsibility is it to make sure that workers use technology - not the other way around?

How will people adapt? In comparison with production work in factories, knowledge work is more diffuse, therefore it is

more difficult to find answers or enact legislation. One principle is clear: "Linking corporate restructuring efforts to work-family concerns enhances the chances for successful change" (Rapoport and Bailyn 1996).

### *Trend Toward Contract Status*

One highly significant change is the trend towards contract status, that is, self-employment. The participation rate in telework is increasing for the self-employed relative to employees (Pratt 2000). Individuals born after 1935 have no memory of long term recession and privation (Pink 2000). The default assumption has changed from fear of privation to expectation of comfort and meaning in their lives. Thus, employees are leaving the corporate work place and reemerging — possibly doing identical work-as-free lancers, e-lancers, techno-cowboys, gurus, info backpackers, lone eagles, and 1099ers. The self-designated labels reveal the independent spirit behind contractor status. Pink sees this trend as the end of America's adolescence. That is, workers no longer need the parent controlling their behavior; they are accountable adults who take responsibility for their commitments. Enabling that independence, are the means of production. Unlike in the Industrial Age, most workers own the tools they need to compete with big business and they are identical to those found in corporate offices. In this time of deep prosperity, why share the profits?

However, for some employees, the shift of work away from full-time, lifetime, on-site employment implies a sense of occupational uncertainty and a need for psychological assistance in dealing with change (Prieto 1990). Not every employee is willing to exchange stability for a life of perceived risk. On the one hand, the contract worker, or free agent, can auction his services to the highest bidder and achieve a higher income (but without benefits) as he could as an employee. But as *Business Week* points out "There is a dark side to free agency. Many feel crushed by the law of the jungle and the pressure of hunting for every gig. Late paychecks, costly health insurance, the distractions of a home office - it's not all cushy" (*Business Week* 2000).

Free agents are predicted to increase to nearly 50% of the workforce in the 21st Century but by no means will all of them start home-based businesses. The less entrepreneurial among them will prefer the relative security provided by staffing agencies who find the work, and provide health insurance and other benefits that employees receive (Kelly Services 1999).

## Telework and Government's Role

What are the implications of telework for the Department of Labor (DOL)? In 1986 the U. S. Small Business Administration (SBA) sponsored the symposium *Working at Home: Challenge or Federal Policy and Statistics* (Pratt 1986). The programmatic interests in home-based business or work were acknowledged to "stem from a responsibility to support or protect a particular constituency." In 1986 that constituency was not yet defined. It is not clear that it has been defined 14 years later.

If the workforce is shifting to increased contract work, one catch is that the freelancers do not consider themselves employed. Asked "Are you employed?," many answer "No." They see their priority needs as being able to obtain affordable health insurance, carry pension investments with them as they change careers, and have home occupation ordinances removed that threaten a homebased business. That requires changing tax laws that were enacted on the perception that homebased businesses were operated as tax avoidance scams. The shift to contract status — a job description that does not officially exist — suggests that the DOL and the SBA should coordinate their efforts. But what kind of problems would that create if both agencies were advocates for the "workers" and for "business?"

Clearly at some point people will object to being always available 24-7, but it is not yet evident what form the resistance will take. As noted above, employers could make that intrusion into personal time more palatable by offering overtime pay or comp time. Or they could offer telework to more employees, which enables them to intersperse personal and family responsibilities with work. Self-regulation on the part of workers seems unlikely except in occupations where the worker has leverage to negotiate hours such as programmers who at the moment are in great demand. They may have the leverage to say "I am not available after formal working hours," but most workers do not. In response to Industrial Age home work abuses, the government stepped in with fair labor standards.

Yet another possibility is greater unionization of these 24-7 knowledge workers including those who are professionals and in sales. It happened in response to long hours in the Industrial Age; it is not farfetched to predict that only in groups will employees gain bargaining power they do not have as individuals. With e-mail and the Internet, unions now have the capability of reaching dispersed workers that they formerly lacked and that at least partly accounted for union resistance to telework. However, as of 1991, the Communication Workers of America, AFL-CIO, were still convinced as they always have been that "the possible abuses and isolation of the workers far outweigh any of the purported benefits. We urge the rejection of any home-based telework that opens our members to workplace abuse" (Communication Workers of America 1991).

Finally, this entire discussion has been in the context of full employment with a female participation rate of 60% and an older population opting to stay at work rather than retire. Typically, teleworkers are better educated and earn higher incomes than most employees. Supplies of talent needed to support the New Economy are expected to remain scarce for the next 29 years, according to *Business Week* (*Business Week 2000*). But what happens at the next recession, whenever it occurs? Will the number of teleworkers drop as it did in the 1995 recession? In that case, the smorgasbord of employment choices may shrink to a maintenance meal of lower paying, on-site jobs.

## Conclusions

Telework is not an isolated work pattern but has pioneered the reorganization of work. The practice has grown as new technologies have enabled working anywhere, anytime in virtual teams. That has necessitated developing management skills even for self-directed global teams. Bringing work into the home highlights societal trends, such as the growing number of women in the workforce. To enable balancing both income-producing and domestic work and childcare, women, and to a lesser extent men, define new public-private boundaries within the home. Telework also affords new opportunities for upcoming generations. Telecommunications and technology have not yet provided seamless connectivity for remote work. Because the full impact of telework on a society in transition is unknown, many questions still need to be answered. Time-use research would help illuminate ways that teleworkers are managing their work and family responsibilities. More research is needed to help guide policy decisions. It is not yet clear what, if any, government action is needed.

## References

- M. Apgar, "The Alternative Workplace: Changing Where and How People Work," *Harvard Business Review*, 76, 1998, pp. 121-136.
- Stanley Aranoff and Audrey Kaplan, *Total Workplace Performance: Rethinking the Office Environment*, Ottawa, Ontario: WDL Publisher, 1995.
- Michael N. Bagley, Jill S. Mannering, Patricia L. Mokhtarian, *Telecommuting Centers and Related Concepts: A Review of Practice*, prepared for the Federal Highway Administration and the California Department of Transportation Office of Traffic Improvement, Research Report UCD-ITS-RR-94-4, Institute of Transportation Studies, University of California, Davis, 1994.
- Franklin Becker and Michael Joroff, *Reinventing the Workplace*, Cambridge, MA: MIT Press, 1995.
- Warren Berger, "Lost in Space," *Wired*, 7, February 2, 1999.
- Charlotte Borgegren and Birger Rapp, "Learning and Knowledge Management: A Theoretical Framework for Learning in Flexible Organizations," in *Virtual Working: Social and Organizational Dynamics*, London and New York: Routledge, 1999.

Bureau of Labor Statistics, <http://stats.bls.gov/newsrels.htm>, August 9, 2000.

Wayne F. Cascio, "On Managing a Virtual Workplace," *Academy of Management Executive*, in press.

Cellular Telecommunications Industry Association, [http://news.excite.com:80/news/r/000818/10\\_bizfeature-wireless-advertising](http://news.excite.com:80/news/r/000818/10_bizfeature-wireless-advertising), 2000.

Allan H. Church and Janine Waclawski, "The Impact of Leadership Style on Global Management Practices," *Journal of Applied Social Psychology*, Vol. 29, No. 7, 1999, pp. 1416-1443.

Sacha Cohen, *Training & Development*, Vol. 5, No. 5, American Society for Training and Development, May 1997, pp. 30-32.

Communication Workers of America, *Telecommuting: Social and Employment Issues: A Background Paper*, 1991.

D. Coutu, "Trust in Virtual Teams," *Harvard Business Review*, 76, 1998, pp. 20-21.

Alan Goldstein, "All Work, No Play," *Dallas Morning News*, September 20, 2000.

Dallas Morning News, Regional Briefs, August 12, 2000.

W.H. Davidow and M.S. Malone, *The Virtual Corporation*, Harper Collins, 1992.

Drucker, <http://www.theatlantic.com/issues/99oct/9910drucker.htm>, 1999.

G. Dutton, "Can California Change Its Corporate Culture?," *Management Review*, 83, 1994, pp. 49-54.

Eric Laurier and Chris Philo, *The Economist*, December 19, 1998, p. 92.

Nicole B. Ellison, "New Perspectives on Telework," *Social Science Computer Review*, Vol. 17, No. 3, 1999, pp. 338-356.

Mary Beth Fritz and Marvin L. Manheim, "Managing Virtual Work: A Framework for Managerial Action," in *Organizational Virtualness*, Pascal Sieber and Joachim Griese (eds.), proceedings of the VoNet Workshop, April 27-28, 1998.

Thomas W. Gainey, Donald E. Kelley, Joseph A. Hill, "Telecommuting's Impact on Corporate Culture and Individual Workers: Examining the Effect of Employee Isolation," *S.A.M. Advanced Management Journal*, Vol. 64, No. 4, 1999, pp. 4-10.

K. Gareis, "Home-Based vs. Mobile Telework - The Interrelationship Between Different Types of Telework," in *Proceedings From the 5th International Telework Workshop*, P. Jackson and B. Rapp (eds.), 2000.

U.S. General Services Administration, *The Integrated Workplace: A Comprehensive Approach to Developing Workspace*, Washington; D.C., 1999.

George Gilder, *Microcosm*, NY: Touchstone, 1989, p. 346.

Kim Gerard, *Computerworld*, Vol. 3, No. 35, September 1, 1997, p. 16.

Thomas F. Golob, "TravelBehavior.com: Activity Approaches to Modeling the Effects of Information Technology on Personal Travel Behavior," resource paper prepared for IATBR 2000, the Ninth International Association for Travel

Behavior Research Conference, Gold Coast Queensland, Australia, July 2-7, 2000.

P. Hart and C. Saunders, "Power and Trust: Critical Factors in the Adoption and Use of Electronic Data Interchange," *Organization Science*, Vol. 8, No. 1, 1997, pp. 23-42.

John Hassard and Ruth Holliday (eds.), *Organization Representation: Work and Organization in Popular Culture*, London, England, UK: Sage Publications, Inc., 1998.

Bo Hedberg, "Organizing in a New Economy: Between Inside and Outside," keynote presentation at the 2000 and Beyond Fifth International Telework Workshop, Stockholm, Sweden, August 28, 2000.

Christopher P. Holland, "The Importance of Trust and Business Relationships in the Formation of Virtual Organizations," in *Organizational Virtualness*, Pascal Sieber and Joachim Griese (eds.), proceedings of the VoNet Workshop, April 27-28, 1998.

Lana Lyons (ed.), *ITAC Telebytes*, August 2, 2000.

Tanko Ishaya and Linda Macaulay, "The Role of Trust in Virtual Teams," in *Organizational Virtualness*, Pascal Sieber and Joachim Griese (eds.), proceedings of the VoNet Workshop, April 27-28, 1998.

Paul J. Jackson, *Virtual Working: Social and Organizational Dynamics*, Routledge, 1999.

Sirkka L. Jarvenpaa and Dorothy E. Leider, "Communication and Trust in Global Virtual Teams," *Organizational Science*, 1999, pp. 791-815.

Robert Johansen and Rob Swigart, *Upsizing the Individual in the Downsized Organization: Managing in the Wake of Reengineering*, Perseus Publishing, 1996.

R.L. Keiser, "Looking Back from the Future: The Seamless Energy Company," *Oil and Gas Journal*, 92, 1994, pp. 62-63.

Kelly Services, "The Free-Agent Workforce Has Grown to More Than 24 Million Workers," <http://www.kellyservices.com/staffnews/papers/990315.html>, 1999.

K. Knoll and S.L. Jarvenpaa, "Working Together in Global Virtual Teams," in *The Virtual Workplace*, M. Igarria and M. Tan (eds.), Hershey, PA: Idea Group Publishing, 1998, pp. 2-23.

Joel Kugelmass, *Telecommuting: A Manager's Guide to Flexible Work Arrangements*, 1995.

Nancy B. Kurland and Diane E. Bailey, "Telework: The Advantages and Challenges of Working Here, There, Anywhere, and Anytime," *Organizational Dynamics*, Vol. 28, No. 2, 1999, pp. 53-68.

June Langhof, *ITAC TeleBytes*, August 2000.

Diana Limburg, "Learning to Telework," presentation at the 2000 and Beyond Fifth International Telework Workshop, Stockholm, Sweden, August 28, 2000.

Jessica Lipnack and Jeffrey Stamps, *Virtual Teams: Working Across Space, Time, and Organizations*, John Wiley & Sons, 1997.

Kiran Mirchandani, "Legitimizing Work: Telework and the Gendered Reification of the Work-Nonwork Dichotomy,"

*Canadian Review of Sociology and Anthropology*, Vol. 36, No. 1, 1999, pp. 87-107.

Bob Nelson, "Long-Distance Recognition," *Workforce*, Vol. 79, No. 8, 2000, pp. 50-52.

The Networking Institute, *The Age of the Network, 4: Reports from the Frontier*, 1996-1997.

"Telecommuting is Becoming a Popular Business Strategy," <http://www.hrhub.com>, June 27, 2000.

John S. Niles, *Beyond Telecommuting: A New Paradigm for the Effect of Telecommunication on Travel*, 1994.

Peter Henderson, personal communication, 2000.

Daniel Pink, "Understanding the Free Agent Nation," keynote speech, International Telework Association and Council (ITAC), The World is Our Workplace Conference, New Orleans, LA, September 17-20, 2000.

Joanne H. Pratt, "Home Teleworking: A Study of Its Pioneers," *Technology Forecasting and Social Change*, 25, 1984, pp. 1- 14.

Joanne H. Pratt, *Working at Home: Challenge for Federal Policy and Statistics*, U.S. Small Business Administration, Washington, D.C., October 28, 1986.

Joanne H. Pratt, *Telecommuting - Checking Into It*, Reverchon Press, 1996.

Joanne H. Pratt, "Why Aren't More People Telecommuting? Explanations from Four Studies," *Transportation Research Record*, No. 1607, Washington D.C.: Transportation Research Board, 1997.

Joanne H. Pratt, "Teamwork, Trust, and Technology," Second International Workshop on Telework, Amsterdam, Netherlands, September 2-5, 1997.

Joanne H. Pratt, *Teleworking - Connecting Through Technology: Telemanger- Teleworker Team Training*, Maryland Department of Transportation, 1998.

Joanne H. Pratt, *Homebased Business: The Hidden Economy*, U.S. Small Business Administration, 1999.

Joanne H. Pratt, *Policy and Travel Planning Implications of Work /Life Changes: Insights from the NPTS and Other Surveys*, Bureau of Transportation Statistics, forthcoming.

Jose M. Preto and Jesus Martin, "New Forms of Work Organization," *Irish Journal of Psychology*, Vol. 11, No. 2, 1990, pp. 170-185.

Richard Ellington-Reeves, "Organizing for Global Effectiveness: Ethnicity and Organizations," *Human Organization*, Vol. 54, No. 3, 1995, pp. 249-262.

Rhona Rapoport and Lotte Bailyn, *Rethinking Life and Work: Toward a Better Future*, a report to the Ford Foundation, 1996.

V. Sathe, "Implications of Corporate Culture: A Manager's Guide to Action," *Organizational Dynamics*, 12, 1983, pp. 4-23.

Melvin F. Shakun, "An ESD Computer Culture for Intercultural Problem-Solving and Negotiation,"

*Group Decision and Negotiation*, Vol. 8, No. 3, 1999, pp. 237-249.

Peter J. Sorensen, Thomas C. Head, Laura A. Gironde, Henrik Holt Larsen, "Global Organization Development: Lessons from Scandinavia." *Organization Development Journal*, Vol. 14, No. 4, 1996, pp. 46-52.

Paul R. Sparrow and Kevin Daniels, "Human Resource Management and the Virtual Organization: Mapping the Future Research Issues," in *Trends in Organizational Behavior*, Cary L. Cooper and Denise M. Rousseau (eds.), Vol. 6, John Wiley & Sons, 1999.

Peter Standen, Kevin Daniels, David Lamond, "The Home as a Workplace: Work-Family Interaction and the Psychological Well-Being in Telework," *Journal of Occupational Health Psychology*, Vol. 4, No. 4, 1999, pp. 368-381.

*Space and Change-Using the Workplace to Promote Organizational Change*, Grand Rapids, Michigan: Steelcase North America, 1997.

Donald Tomaskovic-Devey and Barbara J. Risman, "Telecommuting Innovation and Organization: A Contingency Theory of Labor Process Change," *Social Science Quarterly*, Vol. 74, No. 2, 1993, pp. 367-385.

A.M. Townsend, S.M. DeMarie, A.R. Hendrickson, "Virtual Teams: Technology and the Workplace of the Future," *Academy of Management Executive*, Vol. 12, No. 3, 1998, pp. 17-29.

J.M. Van der Wielen, T.C. Taillieu, J.A. Poolman, J. Zuilichem, "Telework: Dispersed Organizational Activity and New Forms of Spatial Temporal Coordination Control," *Analise Psicologica*, Vol. 12, No. 1, 1994, pp. 103-116.

Gina Vega and Louis Brennan, *Managing Telecommuting in the Federal Government: An Interim Report*, The Price-Waterhouse-Coopers Endowment for the Business of Government, June 2000.

Visawanath Venkatesh and Cheri Speier, "Creating an Effective Training Environment for Enhancing Telework," *International Journal of Human-Computer Studies*, Vol. 52, No. 6, 2000, pp. 991-1005.

*Wall Street Journal*, Marketplace section, September 28, 2000.

Batia M. Wiesenfeld, Sumita Raghuram, Raghu Garud, "Communication Patterns as Determinants of Organizational Identification in a Virtual Organization," *Organization Science*, Vol. 10, No. 6, 1999, pp. 777-790.

Peter York, "They Know Where You Live," *Management Today*, July 2000, p. 89