architecture, an instrument of super-vision?:
identity is constructed through power

shari r. rethman
university of cincinnati

Last June, after commuting from Dayton to Cincinnati for 9 months, I received a survey from the Ohio Department of Motor Vehicles. They explained that my car had been recorded traveling on I-75 Southbound near the Franklin interchange on May 19 at 8:43 AM. The enclosed questionnaire was concerned with my highway travel patterns. Where had I been coming from, where was I going, how often did I make this trip, and how many people were traveling in my car? Through the use of technology, the state of Ohio was able to limit their search of prospective survey respondents to just those vehicle owners which actually traveled on the route of their research. Although the questions they asked were not of any particular concern to me, I found myself thinking about whether they could extract additional information about myself from their knowledge of my vehicle being at that particular location, on that particular date, at that particular time. Had I been on time to my classes that day? Was I, as usual traveling alone or was my daughter with me, to be dropped off at grandma's house before class? This tale is of interest because it is one example of how technology has begun to extend the notion of what it is to "be seen."

In George Orwell's 1984, the future of electronic surveillance and society is described. "The telescreen received and transmitted simultaneously. Any sound that Winston made, above the level of a low whisper, would be picked up by it; moreover, so long as he remained within the field of vision which the metal plaque commanded, he could be seen as well as heard." In David Lyon's book, The Electronic Eye, The Rise of Surveillance Society, he links this idea with the model for discipline generated by Jeremy Bentham's Panopticon, as described by Michel Foucault. Control and discipline are based on the gaze. Foucault describes Bentham's Panopticon, as

an annular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside, corresponding to the windows of the tower; the other, on the outside allows light to cross the cell from one end to the other.'

The idea is that people can be controlled by isolating them from each other, and putting into place a means of observation which allows an observer to intermittently view these isolated individuals. At any given moment the inhabitants of the cells of the Panopticon cannot tell when they are being watched or not, and therefore must conduct themselves appropriately at all times. Bentham believes that this model of observation can be beneficial to many of society's institutions including the prison, hospitals, schools and factories.

This paper is concerned with the panoptic model, both as a physical and conceptual model, in relation to the current cultural shifts which can be understood through the reality of the virtual office. Although the physical traces of Big Brother and the Panopticon may not be evident, technology and information management have, in some ways, brought the conceptual frameworks of both to fruition.

Lyon presents the argument that Orwell's "Big Brother is watching" future has, in some respects, become reality. He explains that through technology, and particularly information management, most Americans are under surveillance in the 1990's. Bar codes allow careful tracking of consumers purchases. Credit card companies have programs which can detect unusual spending patterns of their customers. The kinds of books an individual checks out of the library can be studied. For that matter the camera which caught my car on I-75 in May, could be eliminated and I could have still received the same questionnaire based on records at University of Cincinnati which would show my class schedule and my residence, in Dayton.

The differences from the reality of the current surveillance and Orwell's version in 1984 are important. In 1984, the observer was a police state. The discipline created by the "panoptic" machinery was a political act. The surveillance which actually occurs in 1996 is commercial. Control is not held by one power, but rather by infinitely multiple commercial powers. The capitalist motive to become constantly more efficient, is the driving force for collecting, analyzing and
The monitors in 1984 were visible reminders of the surveillance, and as such had the ability to control behavior. The information management surveillance of the 1990's is virtually invisible. The attempt to control behavior still exists, but it is more subtle. For example, consumers are targeted to receive advertisements of promotions based on their typical spending habits. The company soliciting their business is trying to modify their behavior. The company can save money by only soliciting those potential consumers which suit a particular profile as likely customers. But, the disciplinary model of Big Brother and the Panopticon required participation of those people it controlled. The "inmates" changed their own behavior because of the knowledge of possible observation, not simply because they were being subtly coerced by an institution which knew more about them than they did themselves. One way to reflect on these differences may be to understand issues of supervision within capitalist production.

In the book, Corporate Cultures: The Rites and Rituals of Corporate Life, Terrence Deal and Allan Kennedy describe the success of American businesses as related to the strength of their corporate cultures. Deal and Kennedy describe that corporate cultures consist of values, heroes, rites and rituals, and communications. This criteria for describing corporate culture closely reflects the means in which societal control is maintained. Foucault states, power has its principle not so much in a person as in a certain concerted distribution of bodies, surfaces, lights, gazes; in an arrangement whose internal mechanisms produce the relation in which individuals are caught up. The ceremonies, the rituals, the marks by which the sovereign's surplus power was manifested are useless.

Are then the physical marks of power, the corporate office building and the symbolism it represents also useless?

Corporate culture is an outgrowth of what R.C. Edwards describes as bureaucratic control. Bureaucratic control is a method of maintaining production which grew out of scientific method, or the Taylorist model and became particularly well suited for service rather than manufacturing aspects of a corporation. This type of control is becoming more prevalent because manufacturing jobs are diminishing and service jobs are increasing. Taylor's model separated the thinkers from the doers. This worked well on the assembly line where the product was a physical object, which could be measured and inspected. Bureaucratic control became the means of managing the thinkers. It is characterized by job descriptions, regular reviews, and most importantly a promise of a lifelong career. The vertical mobility within the corporation creates the basis for the commitment of the employee. This commitment involves the way employees dress, where they live, what church or social groups they belong to, and other aspects of how they spend both their work and leisure time.

The Narkomin project for collective housing as cited by George Baird in The Space of Appearance provides a built-form example of this concept. He describes, the project comprised a series of quite standardized, compact dwelling cells with only minimal internal cooking facilities. Instead, provision was made for meals to be taken collectively in dining facilities forming a part of the extensive communal facilities of the complex, including a gymnasium and a child care center.

This resembles a description of Proctor and Gambles new office building in Cincinnati. "When planning its new building, the company specifically designed in a dry cleaner, a shoe repair shop and a cafeteria that prepares food that employees can take home at night." The Narkomin project intended to exert control of the workers through the physical arrangement of the structures, an idea which derives from Bentham's concept of controlling behavior through built form. The intent at P&G was to provide useful services to the employees and thereby make them more efficient. This is an exercise in control, as well.

As an employee rises in the corporate ladder, their job evaluations become more concerned with the employee's behavior and attitude than with their actual job performance which becomes more difficult to measure. The supervised become the supervisors, and as agents of the corporation they must be consistent, or do they? Foucault suggests that the organization creates power and those who wield it become homogenous.

As in prisons and the military, one way of exerting corporate control is by depriving employees of their individuality, by forcing their physical appearance to conform to the model of those in control. Corporate culture believed that stripping individuals of their identity or characteristics of themselves, leads to greater complacency. This is interpreted in physical terms by the armed forces where the induction process actually attempts to create a homogenized physical image. In business the attempts are more subtle, but still exist. Dress codes, even if "business casual," business letterhead and forms, and standardized office cubicles are methods of forcing uniformity and efficiency. Office cubicles are often arranged along a standardized grid, which compartmentalizes and classifies the occupants.

In the 1980's, research began to focus on the relationship between productivity and personalization by employees, an idea founded in architectural behavioral determinism. For example, office furniture manufacturers began creating panel systems which allowed individual employees to personalize their space. Most of these concepts were based on the premise that employees could be both individuals and part of the group. Herman Miller's "Ethospace" had clear panels which were marketed as a place for employees to personalize. Their own corporate headquarters demonstrated this concept. The rows of system panels were peppered with these half-size glass frames which were filled with personal objects of the person occupying the cubicle beyond. Some employees
placed miniature train collections inside, while other "decorated" with their children's artwork. The importance of this exercise was to encourage employees to invest a part of themselves with the firm. But, each panel was always the same size, the frame colors were uniform and the placement of these panels was controlled by someone else. The result was individuality within the rules of the group. Although the cubicles themselves were personalized the open arrangement which allowed supervision, and control remained. By personalizing their workspaces, employees are actually allowing more of themselves to be placed within this gaze. Aspects of their personal lives, through their own compliance are now physically revealed to those in power.

But according to Foucault, instilling the notion of individuality, or singularity in subordinates is another subversive means of maintaining power. Singularity is maintained by classifying and separating apart, through recording any deviation from the norm. This is where bureaucratic control and corporate culture have reached their conceptual limits. It is also the place where the traditional more panoptic model of office design becomes unnecessary. The physical gaze is replaced with the more subtle, fragmented supervision which is the result of the growing changes in technology and information management.

The term virtual office refers to the various alternatives to the traditional workplace, which are based on the idea that the "office" is defined by the location of the computer and employee. Since the emergence of "laptop" or portable computers, the concept of workplace now encompasses a variety of places, including home, hotels, airports or virtually any space that can be occupied. The employees participate in their supervision by recording their activity on time sheets. But transparent supervision occurs as well. Computers can track the number of keystrokes, the files accessed, the number of telephone calls placed and to whom. Supervision is no longer dependent on the physical gaze characterized by the foreman pacing above the shop floor. Rather the gaze has been replaced by information management technology.

Corporate America is increasingly adopting the idea of the virtual office, partly because company organization is changing. The evolution of corporate change is described in Charles Handy's The Age of Unreason. This change is partly caused by shifting economic conditions. The contemporary version of Big Brother is commercial rather than political. Firstly, organizations are flattening, and part-time or contract employees are the key. The core employees of a firm are continuing to shrink, as are traditional hierarchies. Second. Handy describes that decentralization is occurring. Smaller divisions perform the tasks necessary for the business of the core, and the core no longer controls all aspects of this business. The core maintains the strategic planning for the cluster, and in fact must act on behalf of the parts. The entire organization has become more nebulous, with little distinction between working for the center or a division, decision making happens in both places. The third shift is in adding value through the pursuit of quality, this is accomplished through intelligent workers. Many companies are creating intelligent workers by shifting aspects of the decision-making processes to those people performing the tasks. Like the businesses that review consumers spending habits to ascertain their particular preferences, this decentralization of supervision yields a transparency to the surveillance. The virtual office has become the next logical step in the evolution being described.

Bentham was astounded by the efficiency of the Panopticon. The arrangement of the spaces provided control, which meant that in the case of a prison, the physical materials necessary to secure the structure could be reduced. Expensive heavy masonry construction and security systems could potentially be eliminated. The architecture could dematerialize because of the strength of the arrangement or organization. A system starts to replace a building.

Baird makes the argument that Taylorism is diminishing in the factories of the 1990's. The new assembly line depends on team work, responsibility has been given back to the average worker. He suggests that modern architecture has been based on instrumentation and Taylorism and that architecture will therefore, change as a result of the demise of Taylorism. Baird states,

it seems to me that it is in examining such detailed aspects of the role of information technology today, rather than in such generalized ethical observations as those of Baudrillard, Jameson, et al., that architects will find helpful strategies with which to attempt to formulate a de-instrumentalized and reinstated architecture appropriate to our time."

Baird's argument does not address the role of bureaucratic control. Manufacturing changes which have placed knowledge and responsibility on the assembly line have also transcribed aspects of bureaucratic control to the assembly line. This type of control developed as a means of maintaining supervision with knowledge workers where scientific control did not work. It seems likely that it could replace scientific method on the assembly line as well. Supervision does not cease to exist it merely becomes more transparent. Technology allows this.

As panopticism allows the building to dematerialize, technology allows the gaze to dematerialize. Foucault described the efficiency of the panoptic institution. He writes, "by this very fact, the external power throws off its physical weight; it tends to the non-corporal; and, the more it approaches this limit, the more consistent, profound and permanent are its effects: it is a perpetual victory that avoids physical confrontation and which is always decided in advance."**

The corporate office tower is no longer needed to provide a means of corporate control. Workers do not need to sit in standardized workstations within sight of supervisors to be directed. Following, Foucault, any symbolic reference to power is also rendered meaningless. Foucault writes,
'Discipline' may be identified neither with an institution nor an apparatus; it is a type of power, a modality for its exercise, comprising a whole set of instruments, techniques, procedures, levels of application, targets; it is a 'physics' or an 'anatomy' of power, a technology.13

The corporate office tower as a building is a metaphor for the ceremonies and rituals which provided monarchs with power. These spectacles and symbols are no longer necessary or useful.

Economic efficiency is spearheading the adoption of virtual offices in the United States. Real estate is expensive, it is a corporation's second highest expense, following personnel costs. Computer technology allows the corporation to maintain an adequate degree of control to these dispersed office workers, and the corporate office tower is becoming less useful. As Alfredo Andia writes, the architecture profession "will not change that much only with the integration of technology inside the office, but that major changes will occur only when architects begin to reflect on the consequences of technology in buildings and the city."14

The corporate office tower, as a building type may succumb to the economic pressures of capitalist survival. The continued acceptance of the virtual office by corporate culture is one example of this possible shift in the typological make-up of American cities. Discipline, power and control are no longer dependent upon a physical gaze, information technology allows surveillance.

NOTES
9 Ibid., p. 191.
13 Ibid., p. 215.
14 Alfredo Andia, "Are computers really "revolutionizing" the discipline of Architecture?" draft paper presented at the Graduate Research Colloquium, University of Cincinnati, Nov 12, 1996.
The architecture of supervision—how we define the allocation of supervisory powers to different policy institutions—can have implications for policy conduct and for the economic and financial environment in which these policies are implemented. Theoretically, an integrated structure for monetary policy and supervision brings important benefits arising from better information flow and policy coordination. Aggregate supervisory information may significantly improve the conduct of monetary policy and the effectiveness of the lender of last resort function. As long as the process towards an in The Architecture Vision is one of the TOGAF deliverables you can create with the TOGAF tool. It is created early on in the project lifecycle and provides a high-level, aspirational view of the end architecture product. The purpose of the vision is to agree at the outset what the desired outcome should be for the architecture, so that architects can then focus on the critical areas to validate feasibility. Providing an Architecture Vision also supports stakeholder communication by providing an executive summary version of the full Architecture Definition. Step 1: Define the Problem and Identify Key words: E-Supervision, Education System, E-Supervision Architecture 1. Introduction. Nowadays, ICT investment has become essential for almost every organization. The technology is for making more work with less efforts but not too complex. The Portfolio Supervision System Portfolio Instrument can be defined as the constructive instrument of assessment to evaluate the teaching portfolio which systematically includes teaching plans, written and oral reports, student assignments, teaching dairies, student counseling records, and students grades (Kuo, 2000; Thomas et al., 2004).