ATLAS SAFETY & SECURITY DESIGN, INC.

DESIGNS FOR A LAND OF BOMBS AND GUNS

As published in the **New York Times**, May 1995

By Patricia Leigh Brown

America acquired an eerie new national symbol last week. As if the blownout Federal office building in Oklahoma City wasn't enough, barricades - some masquerading as outsized pots of geraniums - arrived at 1600 Pennsylvania Avenue. Though President Clinton called the latest security move "necessary to preserve our freedom, rather than a tiny step to remove it," it was hardly a pretty picture. In contrast to Europe, where palaces come fortified, America's openness and accessibility have always been by design.

Defensible Space

Barricades and bollards have become the newest accessory on this country's psychic frontier. But to many architects and designers who specialize in security planning, their presence merely confirms an evolving design esthetic that has changed everything from courthouses to parking garages. You might call it the architecture of paranoia. They call it "defensible space design."

"To keep the openness, we need to redefine our open spaces," said Oscar Newman, the architect who coined the term "defensible space" in 1972. Mr. Newman advises communities on the principles known as Crime Prevention Through Environmental Design (CPTED). "We've realized," he said, "that the price you pay for a democratic and culturally varied society is vulnerability."

In the latest issue of Architectural Record, the editor, Stephen A. Kliment, lamented the seemingly inevitable fortification of public spaces and buildings in the wake of the Oklahoma bombing. He argued that American design has already suffered a symbolic shift. State-of-the-art courthouses sacrifice some traditional democratic openness for corridors that isolate judges, defendants, and the public via doors controlled by a security operator. Becoming more bunkerlike, American embassies now require a perimeter of thick, reinforced concrete. Mr. Kliment wondered whether a new style might be in the offering: terrorism as a determinant of architectural form.

After the World Trade Center was bombed in 1993, the principles of defensible space design were put into place there. In addition to concrete planters (will they become yet another ubiquitous design icon ?) parking is no longer open to anyone. Tenant parking is tightly controlled and includes a hydraulic barrier - a latter-day drawbridge - lowered by a guard only after proper credentials are shown and capable of stopping a truck at 50 miles an hour.

Even before the bombing, commercial parking in the country was being reviewed to prevent the 1,400 violent crimes that occur daily. The new garages favor fewer columns, larger spans, and high ceilings. They have flat floors, instead of sloping, blind ones and glass elevators to observe occupants and high lighting brightened further by painted ceilings. Perhaps the loopiest but most charming application is a theme gimmick to help people remember where they parked. At the Franklinr-Van Buren Self Park in Chicago, the Elvis floor plays an Elvis tune, the Johnny Mathis floor plays Mathis.

If some of this seems reminiscent of Disney World, it's intentional. There, Randall Atlas, a Miami architect and criminologist, points out: "Parking is effortless. You can always see the dancing bear or the magic castle, and you're under observation but don't know you're being manipulated."

Natural surveillance

Much of the movement toward safeguarding public spaces centers around rethinking them. Compare the Washington Metro, wide open for surveillance, to the New York City subway, closed-in and dim. The premise is that design can help reduce crime and the perception of it. Unlike high-tech security systems, Mr. Atlas says, successful design minimizes the opportunity for predatory crimes like burglary, robbery, rape, and murder, as well as terrorism, through more natural methods of surveillance and controlled access and design that fosters a sense of ownership in a given area. Building costs increase - perhaps as much as 200 percent for an embassy - but the savings in human life, insurance, and breakage offset the rise, Mr. Atlas said. Street closings, like the one on Pennsylvania Avenue, are appearing in places as dissimilar as

Coral Gables, Fla., and Bridgeport, Conn. City planners and law-enforcement officials there use techniques to restrict access to blocks where drug deals and prostitution are rampant. They are trying to reduce traffic and create cull-de-sacs that local residents can monitor.

In high-risk security situations, more sophisticated tools are needed. Ronald J. Massa, an engineer who is president of Lorron Corporation in Burlington, Mass., has developed BombCad, a software program designed to help architects and engineers determine whether a building will collapse from a bomb. The program takes analytical three-dimensional drawings of a building and simulates a bomb's effect, providing detailed estimates of injury and accidents. "Almost everyone goes out and buys an explosive detector," Mr. Massa said. "The whole problem is our country is unwilling to accept realistic alternatives to getting blown to smithereens." Mr. Massa, who may be frequently found on the next plane to Bogota, said his clients include multinational corporations in the Middle East and South America, "people who are susceptible to bombing 20 or 30 times a year." Among other things, he says, he advocates 10- to 20-foot "stand-off areas," or buffer zones around buildings and well-policed traffic "choke points," like barricaded checkpoints in London's financial district.

Even little things can sometimes make a difference between life or death, he said. The number-one source of property damage and injury in a bombing is falling and flying glass from the immediate building as well as from those nearby. Mr. Massa predicts an increase in the use of laminated windows, in which soft plastic is bonded to a two-piece sandwich of glass to prevent shattering.

Rethinking Town Square

The barricades and the wave of fear that has permeated the country in recent weeks will probably set off a spirited debate on the basic idea of public space. The buildings we build are in the hearts of communities, the town green, the civic square," said Edward A. Feiner, the chief architect for public buildings for the General Services Administration. "They're not military installations. Whenever anything of this magnitude happens, we try to have an appropriate, careful response, not a knee-jerk reaction."

But Peter Ringenbach, a partner in Ferry Dean Rogers & Partners of Boston, the architectural firm which designed the United States Embassy in Amman, Jordan, sees change afoot, in part foreshadowed by the architecture of that compound in which imposing walls are offset by grillwork and bright trellises and awnings are inspired by Bedouin clothing. "I think buildings are going to be much less public," he said. "It doesn't mean they won't look nice from the street or be pleasant places to work. But it means buildings will be less open and inviting, which creates a certain formality. Corporations have been much more rigid about access. I think public buildings are

going to catch up."

(from The New York Times, May 28, 1995)