What is required is a radical design approach to declining resources. There was an architectural revolution near the beginning of this century, and it now appears that there may have to be another one before the end. It will profoundly affect the way we build and live.

Energy Revolution

Progress is getting a bad name. It led straight to the rape of the environment, and now to the energy crisis. Nowhere is the price of progress more evident than in the twentieth-century city. The architect's and builder's world is completely artificial, sealed, climate-controlled and standardized, totally dependent on enormous energy consumption. Today's structures are people-containers with life-support systems, as if built on the moon. It has been 1984 for a long time, but no one has noticed.

It is being noticed now. With the energy crisis has come realization of the appallingly extravagant overengineering that is a routine part of contemporary construction. Architecture is this country's second largest user of energy, after transportation.

Hailed as man's triumph over the environment, the real triumph of this kind of building is the creation of salable space on a scale that natural air and daylight could never make possible. Engineering efficiency has pushed the profit potential to dramatic limits. The techniques that render the bulk building with huge floor areas habitable have made real estate big business through a profligate use of energy almost beyond comprehension. There has been joy and prosperity among the purveyors of ducts, pipes and plenums and luminous ceilings by the acre.

In pursuit of this dollar-value technology, today's buildings are blatantly unresponsive to human or environmental factors. They are routinely overequipped mechanically to handle heating and cooling loads that are far too high, and they are universally overlit. There are no seasons. Windows never open. And the handsome conceits of the modern architect compound the damage. The glass box stands in pristine esthetic splendor and relentless sun. There has even been an odd architectural pride in flouting the environment, a look-what-we-can-do race to the energy crisis.

In New York's romantically glittering nighttime skyline—now a symbol of conspicuous overconsumption—the towering World Trade Center is a beacon of waste among its equally derelict neighbors. But at the Trade Center, thanks to the kind of technological thinking that masquerades as efficiency, floor lights are on master switches and no one can turn out his own lights unless he has paid for the privilege. The world of the totally absurd has finally been achieved.

The time is long overdue for more rational approaches and practices. To the intense dehumanization of this kind of architecture is added the impact of crisis. The architecture profession itself is beginning to call for change; some schools are stressing energy-saving design; the General Services Administration is developing an energy-saving prototype Federal building. There are suggestions for central cooling systems, heat recovery systems, shading devices, different kinds of exterior walls and more sensitive lighting and controls.

The job is not going to be done by removing light bulbs.