"URBAN GARDEN": (20th cent.)
(1) urban site of cultivation, as, windowbox, rooftop, community garden, fire escape, terrarium, atrium, park. (2) myth. Hanging Gardens of Babylon (3) buildings that are cultivated, ex: “green architecture” (4) meta. the cultivation of a community or sense of place.

What is a garden?
A place of work, where one is focused in doing, which can become a meditative doing; the act, a moment of nothing, a space for one’s self. It is one of these places that gives back to you; it thrives under your nourishment. It is time manifest, energy manifest; an embodiment of yourself.
A garden is vulnerable, and depends on its keeper, but is very forgiving with respect to its needs. It is a calm quiet place which is exciting, full of rewards and small challenges. It is most important, a place to pay attention. A place to focus on, because it is still.

What is urban?

streets, soil, buildings, water, fire escapes, seed, water towers, plants, windows, cells, public transportation, smells, flowers, colors, fruit, bugs, textures, sidewalks, bugs, concrete, worms, space, shovels, mass, travels, money, hoe, retail, clothes, shoes, grocers, street vendors, people, homeless, stakes, pollution, trellis, trash, pots, monotone, color, planters, hard, bear, moss, caverns, beer-can-slug-traps, hollow, flowers, people, mulch, fire, nutrients, art, edges, darkness, fields.
The frame of reference for this analysis is the urban environment. The city is an enormous importer of raw materials and exporter of pollutants; rarely does the city take responsibility for its impact on the rural setting that "supports" it and is simultaneously destroyed by it. Today, the parasitic city continues to grow due to population increase and urban migration. This work aims to alter urban dependence by establishing a product philosophy, which encourages cyclic rather than linear design. The study focuses on the relationship of the built environment to the natural environment. Having studied the work of urban designers and architects who share concern for this relationship, this work attempts to capitalize on mass market distribution to support a stance of change by the choice and empowerment of the individual, in this case, the consumer. By providing an opportunity for the consumer, through responsible product design, change can occur at the source across a broad band of influence rather than through regulation or specific sites.

Thinking of the city as a garden seems to be an appropriate filter for arriving at opportunities to develop new products for urban ecology. The two seem incongruous at first sight, but people have long been working to resolve the desire for the natural within the context of the manmade. Ecologists have shifted their focus from natural ecological systems to manmade ones, urban planners have always looked for ways to include natural oases in cities, and architects have recently begun to conceptualize their buildings as living entities. Horticulture therapists have long recognized the necessity of a healthy relationship between man and the environment.
Urban designers have explored the relationship of the natural in the built environment. Ancient cultures planned their cities geomorphically, within and around the natural landscape. Their cities were not entirely dictated by natural form, as cardinal axes and astrological alignments worked into the plans are rational constructions not natural phenomenon. The size of these communities was initially limited by their ability to sustain themselves. In Europe and China, some of these communities still exist in balance due to the physical limitations of natural landscape or built structures, such as river, mountains, and walls.

As populations grow and settlements became more dense, planners tend to formalize the inclusion of natural spaces in the urban environment. In the 1800’s, the city of London was expanding into the natural countryside and filling in the vast estates of the upper class. In Bloomsbury district, builders began leaving open "squares" surrounded by houses. These commons, similar to Italian piazzas, were initially open to the public but due to litter and squatters they eventually became gated isles of pristine green. Such parks were established at a neighborhood scale rather than the scale of the urban whole and therefore seem irrational examined as a whole. It is also interesting to note, that the definition of "the square" in 1887 in a Dictionary of Architecture, "is a piece of land in which is an enclosed garden, surrounded by a public roadway, giving access to the houses on each side of it." There is no mention of a specific shape for a square. Whereas in later times, more literal translations of the idea of a square are based on rational geometries, such as in Oglethorpe’s plan for Savannah, Georgia.
With industrialization, plans developed to build new settlements to marry town and country. Ebenezer Howard’s Garden City plan attempted to outline a settlement for 20,000 people. His plan allowed for an industrial area, a commerce district and housing all surrounded by open prairie or woodland. His diagram for the settlement is often misunderstood as a literal plan. But Howard actually hoped his plan would meld into different landscapes based on natural form rather than strict geometries. In response to Howard’s Garden City, both Frank Lloyd Wright and Le Corbusier proposed solutions for urban planning. Wright took sides with the individual and his belief in the right of every man to have his own land in his Broadacres City scheme. Wright’s plan depends on individual transportation, which at the time was not perceived of as a negative factor. Le Corbusier’s La Ville Radieuse solves the urban conditions using the opposite extreme of density. There is much debate among planners today about approaching planning from a centralist or a decentralist perspective.

There are other precedents for the inclusion of landscaped areas in urban environments. In the 19th century, planners preserved a green ring or belt around the city of Vienna to contain urban growth and to provide recreational and agricultural support for the urban center. Today, the majority of modern Chinese cities are sustainably supported by their own farm belts.

Most sustainable plans are proposals for new cities. Such plans are appropriate for developing cities, which are growing at an average annual rate of 5-6 percent. However, urban growth rates in the United States and western Europe are lower, at 1-2 percent, but consumption and waste rates are significantly higher (nearly 1 kilo/capita/day).10
In most developed cities, provision of the natural has become the responsibility of the architect. Architects approach this issue from a broad range of perspectives; some concentrate on building "intelligent" buildings, which operate efficiently, others work toward "green" architecture, ranging in scope from sustainable material use to the inclusion of indoor natural landscapes.

Norman Foster’s Commerzbank in Germany, a purportedly green and intelligent building, designed and built under the political arm of the Green Party, is actually a technological greenhouse with limited moves towards reuse and recycle in the building. Each garden terrace is home to varietals representing three ecosystems from around the world. Similarly, Nicholas Grimshaw’s proposed project “Eden”, a museum of worldwide “biomes”, is a sealed environment (to protect the “jungle” biome from South England’s natural climate). "Eden" openly addresses itself as an artificial re-enactment of "nature," an eco-zoo of sorts. It’s form, circulation, and operation begin to address and respond to an integration with the organic model, not unlike Buckminster Fuller’s geodesic domes.

Renzo Piano’s work combines his values of urban place making, energy conservation and connecting with nature. By counterpointing technological solutions with natural materials, Piano creates proactive and era-appropriate solutions for sustainability. At the Building Workshop outside of Genoa, Italy, investigations of materials provide constant development of new strategies. The workshop building itself epitomizes Piano’s innovative synthesis of the manmade and the natural, combining vernacular form with an experimental cladding system.
There are a number of contemporary designer’s (Emilio Ambasz, John Outram, Bill McDonough and Zion+Breem) whose work seems to address, or aspire to, an integration of organic life adapting and growing on its own terms; an intermingling of the fabric of the natural and built worlds. The movement of the relationship from inside toward the outside and outside toward the inside between nature and building gives a living quality to the mass of the building. Paley Park in New York City offers a small space of natural materials woven into the fabric of the city. The sound of water mingles with the sounds of the street, making music of what was before noise. Trees grow up between pavers and ivy covers the walls. John Outram’s work is similarly intriguing in the way the building is simultaneously in a state of growth and decay, with organic life waxing between giving way to the worked stone and taking over the abandoned ruin. It’s as if the project resides in the dynamic parts of the cycle of life, or is nonconcordantly cycling through at various phases throughout the life of the project.
At the 1990 national symposium “The Role of Horticulture in Human Well-Being and Social Development” many scientists presented studies of the importance of providing natural environments in the urban context. Such studies proved that mere visual exposure to greenery improved psychological well-being and reduced stress and feelings of hostility. This conference, a meeting of horticultural therapists and researchers, brought forward proof that visual exposure to plants was a positive physical and mental health benefit. Further, their work also supports that direct interaction with plants can further contribute to human well-being.

In addition to the benefits of visual contact with plants, there are other physical health benefits of plants in the immediate environment of humans. Dr. B. Wolverton, in work for NASA, has proven the efficacy of plant life used as a natural filter for both indoor air and wastewater. Wolverton’s studies focus primarily on common indoor houseplants and measure the filtration of toxins associated with Sick Building Syndrome (SBS), specifically from the off-gassing of building materials and natural human bioeffluents. The leaves of many plants absorb airborne toxins and deliver them to their roots. Microbes in the root environment transform toxins into nutrients. The plant roots then absorb waste (as nutrient) contributing to the growth of the plant as well as its ability to convert carbon dioxide into oxygen.

Wolverton’s work scientifically proves that natural methods, using soil and plants, are actually cleaner and more efficient than our current methods for cleaning water and air. The use of natural filters instead of synthetic filters results in less energy use and the conversion of toxins rather than the concentration of toxins (in synthetic, “disposable” filters, a solid waste product). All natural filtration systems utilize the waste being absorbed, as in the example of microbes and airborne toxins above or with reeds in a swamp. Synthetic systems concentrate the toxins, such as in filters or air scrubbers, which then must be discarded. These concentrated toxins are actually more unhealthy than the same toxins dispersed over a larger field.

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12 Dr. B. C. Wolverton. How to Grow Fresh Air: 50 Plants that Purify your Home or Office. New York: Penguin, 1996.