

The Evolution of
City Boundaries
in
Western Civilization

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By
Joseph Wunderlich

Introduction

The boundaries of cities have been affected by economic, political, cultural, and technical forces throughout history. Their form serves as a good indicator of the conditions of the times and the architecture and planning concepts being implemented.

The Origin of Boundaries

In the beginning of mankind, only natural boundaries existed. Man was a hunter-gatherer; his only constraints were the natural elements. For five million years he was nomadic;¹ He was at the mercy of the environment, with limited capabilities for altering his surroundings. He was an egalitarian, sharing with the other twenty to fifty members of his clan or even with other clans to survive through feast and famine. If times got really bad, he moved to more "plentiful" lands. There was no need or desire for man-made boundaries.

Man didn't begin to show signs of settling until approximately 11,000 years ago, when he exhibited the first signs of horticulture.² The planting of crops led to an agricultural surplus. This abundance of food allowed people to become more sedentary. However, slash and burn methods of fertilization depleted the soil's nutrients and caused people to have to move every one to three years. There was still no apparent need or desire for man-made boundaries until approximately 5,000 years ago, when man became agrarian.³ Improvements in agriculture led to permanent settlements with a loss of egalitarianism. Cities and towns were dependent upon their hinterlands. This was the beginning of territorial boundaries. *what about Mesopotamia (what? vs Egypt?)*

¹Rae Lesser Blumberg, UCSD USP 10 Lecture Notes, October 1986.

²Ibid.

³Ibid.

During the past five thousand years, many civilizations around the world have developed, but the changes that have occurred in Western civilizations have been the most dynamic. Between the years 700 B.C. and 100 B.C., the Greek culture existed. This civilization lived in small, politically divided city-states but maintained a cultural unity.⁴ The Greek philosophy stressed a balance between man and nature.

All of the natural elements of a very particular shape are manifestations of a natural order and induce a relationship between man and his environment. In interpreting these characteristics the Greeks personified them as gods and any place with pronounced properties became a manifestation of a particular god.⁵

This philosophy suppressed the division between city and country. The country did not exist to be exploited by the city; it provided a symbiotic relationship.

In the year 100 B.C., the Greeks were conquered by the Romans. The rise of the Roman Empire which followed created an age of rationalized thought. Unlike the Greek philosophy of organic unity, the Romans stressed rigid order. The Roman Empire covered a much larger land area than that of the Greek culture; however, almost all of this empire was physically connected by a sophisticated infrastructure of bridges, roads, and aqueducts. Only the boundaries of the empire had walls. Individual

⁴Reader's Digest, World Atlas, January 1982, p. 28.

⁵Christian Norberg Schulz, Meaning in Western Architecture (New York: Praeger, 1978), p. 47.

cities and provinces were single, interconnected parts of a rigidly unified whole.

Between the years 300 A.D. and 400 A.D., the Roman Empire declined and fell.⁶ Most walls and boundaries were destroyed by conquering warriors from the north and east. *of the surface!*

For more than five hundred years, during the early middle ages, no Western cities existed. All of the man-made boundaries were overtaken. Castles and churches were the only major buildings constructed. The closest form of a city was to the east in the Byzantine Empire, a civilization of Greek culture and Roman government.⁷ The city of Constantinople, located on a peninsula in the Byzantine empire, prospered through the dark ages of the West. Constantinople maintained its security as a city by building very strong fortifications at its boundaries.

The city was surrounded by twelve miles of walls; double on the landward side and single along the water, and were punctured by 37 gates and 486 towers.⁸

Visitors from the west brought home wonderful stories, in which truth and fantasy were curiously mixed, for this big city was completely outside their experience.⁹

⁶Reader's Digest, p. 28.

⁷Ibid.

⁸Mark Girouard, Cities and People (New Haven, Conn.: Yale University Press, 1985), p. 4.

⁹Ibid., p. 3.

By the year 1000 A.D. commerce in the west began to be reestablished. Cities began to form along trade routes as silks and spices moved from east to west and woolen textiles moved from west to east.¹⁰ Fortified walls around these cities were a necessity against the pillaging that still existed. These walls were originally built for security purposes; however, they were also used for customs barriers, for policing city dwellers, and to control who came in and out of the city. The walls also became a status symbol of a city's power and prosperity.¹¹ These walls were distinct boundaries which dictated the form of the city.

The cities that were formed during medieval times can be thought of as either chaotic or organically unified, depending on the perspective and design philosophy of the individual. An architect such as Edmund Bacon, who seems to be oriented towards the more rigidly ordered aspects of architecture, would describe medieval cities as chaotic. Bacon's definition of medieval architecture in his book The Design of Cities is: "an imposition of capricious shapes into the environment."¹² Bacon goes so far as to draw parallels between the form of cities and the human's conception of "self"; he uses the pictures in Figure 1 to represent the inward looking city and the inward looking man. He describes this man as endotopic: self-concerned and avoiding exposure to and involvement with

¹⁰Ibid., p. 8.

¹¹Ibid., p. 212.

¹²Edmund N. Bacon, Design of Cities (New York: Penguin, 1985), p. 37.

others.¹³ The underlying inferences of Bacon's analogy could suggest that an introverted but stable person is "closed-minded" and that a city which is self-sufficient but non-expansive is doomed to deteriorate. Are extroversion and expansion necessarily redeeming qualities? A vernacular architect would probably say no, that the limited size, constant human scale, and close community relations of medieval cities would easily justify the organic, self-contained form and that medieval cities seem well-planned even though there was no planning.

good!

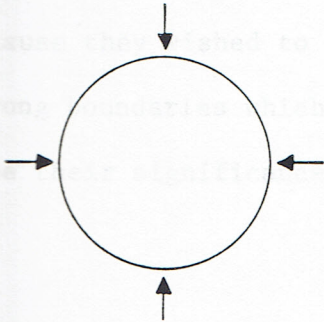
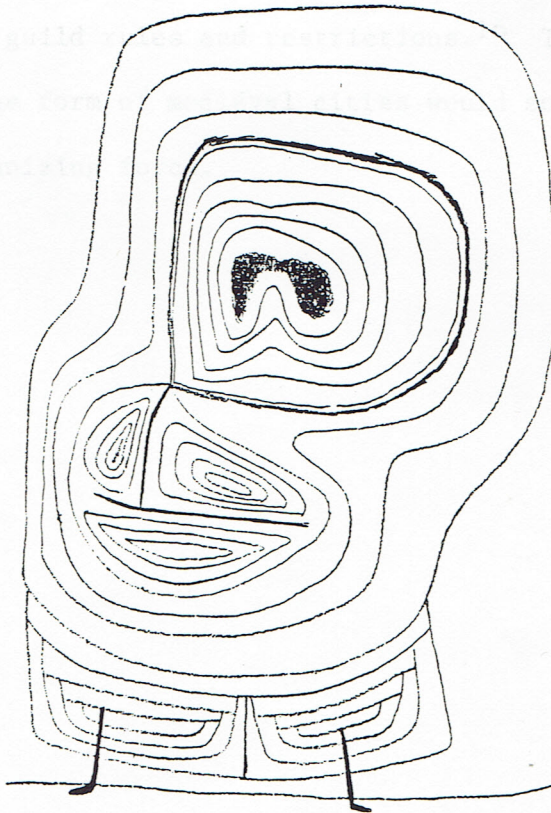


Figure 1



¹³Ibid., p. 38.

In the beginning of the middle ages, only artisans and monasteries were on the outskirts of the city; most activity was in the center. But slowly, activities began to move to the outskirts. Hospitals, almshouses, and pawnbrokers began to appear because of the less expensive land there.¹⁴ By the end of the middle ages, the rich citizens, starved of open space in the center, were beginning to acquire orchards and pleasure gardens in the outer areas within the walls.¹⁵ Also, activity began to appear outside the walls as the wars and pillaging of the middle ages decreased; artisans and small masters were increasingly settling there because they wished to be free of guild rules and restrictions.¹⁶ The strong boundaries which defined the form of medieval cities would soon lose their significance as an organizing force.

¹⁴Girouard, p. 69.

¹⁵Ibid., p. 70.

¹⁶Ibid., p. 72.

The Penetration of City Boundaries

During the fourteenth century, a revival of classical knowledge and a reorganization of Europe began. This renaissance period led to new ideas and discoveries. The philosophy of rationalism from Roman times was being rediscovered and given new meaning. The discovery of perspective by Brunelleschi in 1420 A.D. allowed the comprehension of space to be thought of as a continued relationship of objects. The curvilinear organic streets of the middle ages were being straightened as early as 1320 A.D. in Florence, but the real impact of rectilinear thought on city boundaries did not appear until Brunelleschi's discovery was implemented on the large scale of baroque city planning. In 1585 A.D., Pope Sixtus V introduced a baroque plan for Rome that would tie together the religious elements of the city. This was most likely a reaction of the Catholic Church to the Protestant Reformation (i.e., the counter-reformation). The plan of Sixtus V created a complex network of rectilinear roads through Rome that set the stage for the penetration of boundaries and the outreach into the countryside. The picture in Figure 2 is the plan of Sixtus V. Figure 3 is a representation by Edmund Bacon of this plan. Bacon describes this plan as "outreaching." The picture in Figure 4 is used by Bacon to again draw a parallel between the city form and the

human concept of "self." This picture represents the outgoing man, whom he describes as ebullient, involved, and courageous.¹⁷

Figure 2

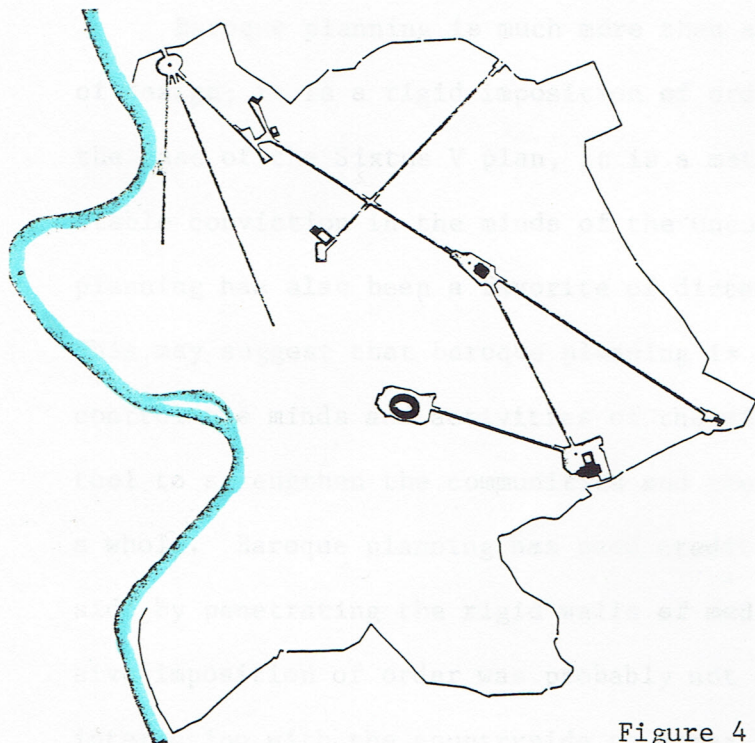


Figure 3

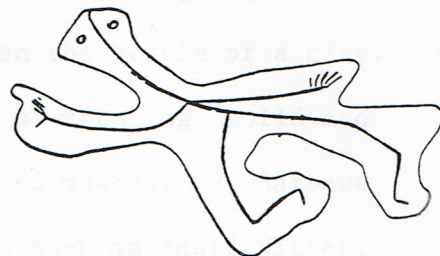
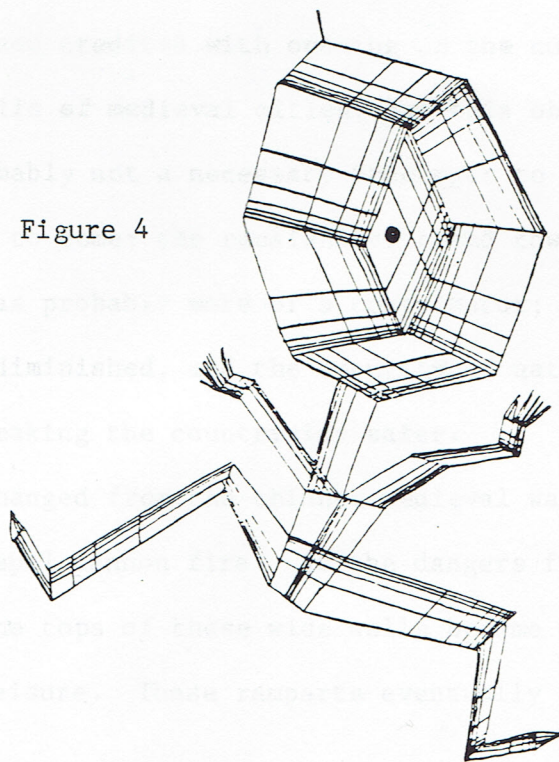


Figure 4



¹⁷Bacon, p. 37.

Baroque planning is much more than a creative, outgoing expression of design; it is a rigid imposition of order on the people of a city. In the case of the Sixtus V plan, it is a method of creating "solid and stable conviction in the minds of the uncultured masses."¹⁸ Baroque planning has also been a favorite of dictators such as Adolf Hitler. This may suggest that baroque planning is more of a political tool to control the minds and activities of the city people, rather than a social tool to strengthen the communities and their relationship to the city as a whole. Baroque planning has been credited with opening up the countryside by penetrating the rigid walls of medieval cities; but this obtrusive imposition of order was probably not a necessary precursor to the interaction with the countryside to come; the renaissance trend towards nation-states from city-states was probably more of a contributor; the medieval wars and pillaging had diminished, and the security of national governments was taking hold and making the countryside safer.

The design of city walls changed from the thinner medieval walls to wider angled walls in order to repel cannon fire. As the dangers from the countryside were lessened, the tops of these wide walls became tree lined and began to be used for leisure. These ramparts eventually

¹⁸Girouard, p. 116.

developed purely into boulevards and greenbelts but maintained their use as fortification, customs barriers, and police supervision points into the eighteenth century.¹⁹

¹⁹Ibid., p. 212.

The Elimination of
City Boundaries

In the late seventeenth and early eighteenth centuries, a period of romantic landscape architecture began to bring the countryside into the city²⁰ and created a feeling of urbanity; urban features were combined with nature.

The architectural crescents designed by John Wood Jr. in eighteenth century England had a significant impact on the boundaries of cities. These semi-circular buildings with their faces open to the countryside brought the country into the city and effectively eliminated any boundary between the town and the country (see Figure 5). This style of design seems to have been very much independent of the influence of any previous baroque planning. Romantic landscape design and the crescent design are subtle substitutions for blunt city boundaries; baroque planning, however, facilitates an aggressive expansion into the countryside by sharply penetrating boundaries.

The strong organizing boundaries of the middle ages were vanishing, except for a few isolated concepts such as the greenbelt city of Ebenezer Howard in the late nineteenth century.

The industrial revolution and rise of capitalism in the nineteenth century resulted in the neo-liberal planning of cities. Urban planning and growth grew out of a cooperation between the public and private

²⁰Ibid., p. 197.

sectors; the public sector would provide the infrastructure and public administration, while the private sector would manage the land. The result of all of this was that actual city boundaries became whatever the infrastructure dictated, and the technical city boundaries became merely geopolitical lines.

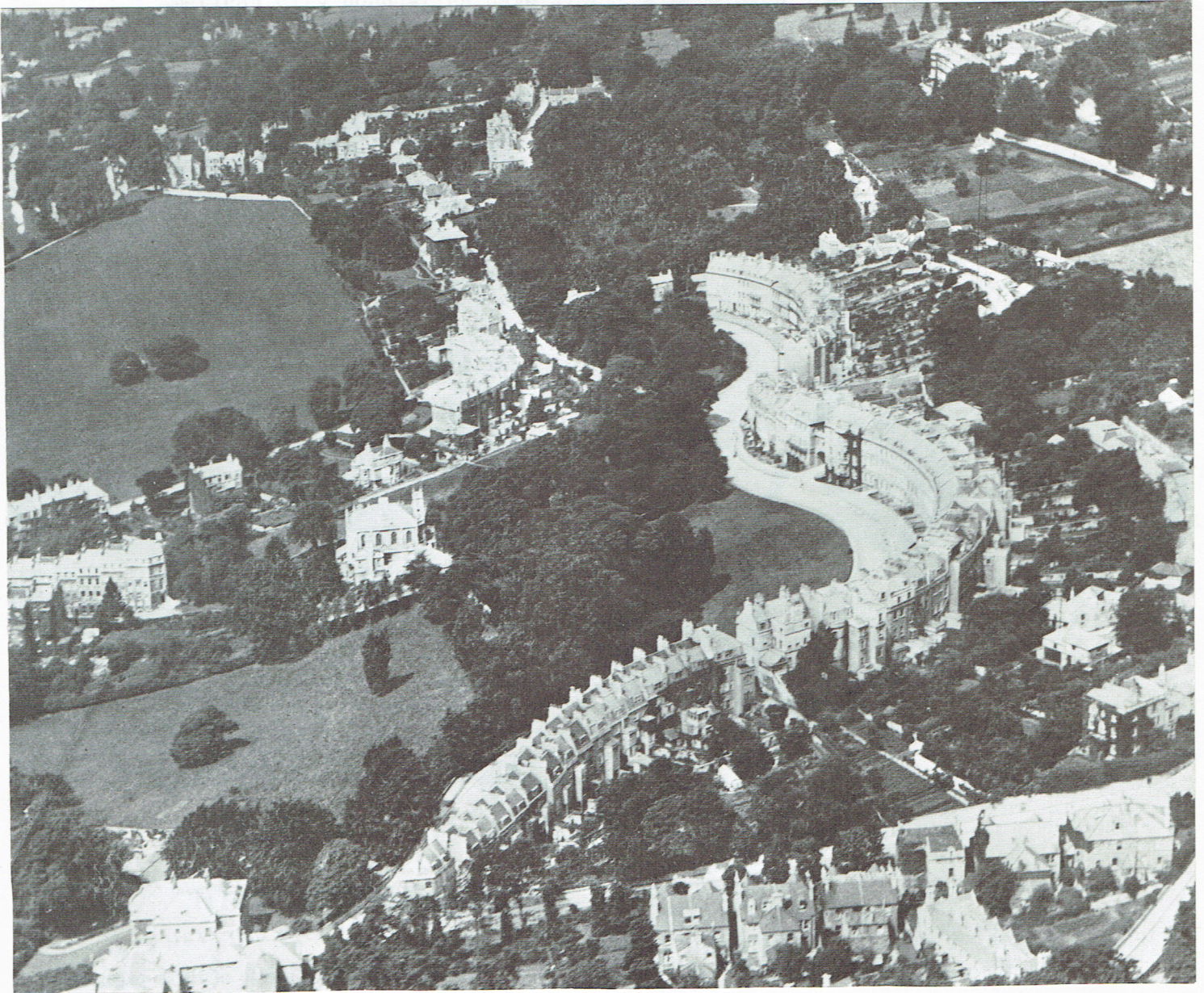


Figure 5

The "Ever-Moving"

American City Boundary

Although early American cities had fortified boundaries, the American city boundary has always been more of a geopolitical line. Despite any classical, medieval, or baroque aspects of American cities, American city boundaries have almost always been open-ended. Boundary lines have been mostly a function of transport corridors, tax base manipulations, and growth accommodation.

Planning problems have moved to a regional scale because of the extension of cities into suburbs; the real concerns should be for the boundary limits of development and infrastructure within a metropolitan region. Regional planning has been attempted several times throughout history. The late nineteenth century "regional-city" plan in Europe by Ebenezer Howard proposed a multi-centered city with specialized uses in different centers, tied together by mass transit. This plan works well in theory but involves too much foresight and totalitarian control to *what B.!!!* work for most American cities; a "regional-city" would have to be built in an entirely undeveloped area or otherwise would require extensive zoning changes and public land acquisition within an existing city.

Most regional boundary issues hinge on growth policies. Present day boundary decisions seem to reflect a struggle between the concepts of growth accommodation and growth management. This struggle seems to depend on the "tenure of the times" and the general attitudes of the

people towards environmental controls and economic growth. During the 1970s environmental concerns were popular, and legislation was passed to protect the environment. In the 1980s the same legislation exists, but the "tenure of the times" is one of economic growth accommodation; the environmental impact documents and policies are often overlooked, underemphasized, or found to be easily mitigated. Despite any utopian concepts of garden cities or progressive concepts of environmental determinism, the form of American cities will always be at the mercy of the national, regional, and local attitudes of the people towards the whole political-economic system of a capitalistic democracy. Apparent apathetic attitudes toward growth in some regions seem to lead to growth accommodation; the magnitude of these attitudes seems to depend on the time, money, and family history which an individual may have invested in an area. The new fast-growing "boom town" regions tend to be composed of many adventurous pioneers eager to capitalize on the success of a region. These people are unlikely to want to inhibit the economic growth that attracted them there in the first place. Unfortunately, these are the regions with the most serious planning problems. Only people with a considerable investment in an area or the dedication to crusade for a cause will implement a growth management policy; only then will city boundaries become stable,

modern
modern?

or more accurately PREDICTABLE, *predictable*
management does not mean no-growth.

I enjoyed your paper as I found it
creative, in the sense that you used
what you learned - class and
reading to look at the issue
of boundaries historically + Legible vs Monopolistic
by Herbert

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CONCLUSIONS

The history of city boundaries has gone in cycles; for five million years boundaries were not needed or desired, until five thousand years ago when agriculture created an abundance of food and man began to settle permanently.

Twenty-five hundred years ago the Greeks did not want boundaries because they stressed a balance between man and nature.

Nineteen hundred years ago the Romans imposed order over a vast empire by means of a sophisticated infrastructure. Only the boundaries of the empire had walls.

Fifteen hundred years ago wars and pillaging destroyed city boundaries for five hundred years until the walled, organically unified medieval cities began to appear along trade routes.

Four hundred years ago baroque planning began to penetrate old medieval walls and to extend the city into the countryside.

Two hundred years ago city boundaries began to be lined with architecture and landscape architecture which brought the countryside into the city.

One hundred fifty years ago the industrial revolution led to a rise in capitalism, a cooperation between the public and private sectors, and a reduction of city boundaries to merely geopolitical lines.

The urban lives of today's American cities have moved to a regional

scale of metropolitan areas with boundaries that fluctuate depending on the economically influenced, cyclical growth policies of the times.

One ideal combination of these historical concepts might be a grouping of organically unified medieval type cities with romantic landscape type boundaries interconnected by a Roman type regional infrastructure and occupied by a Greek-type civilization which views the relationship between city and country as symbiotic. This is an ideal to be striven for, similar to Ebenezer Howard's "regional-city."

The city of San Francisco, a city with a relatively high environmental sensitivity, seems to be striving for something similar to this ideal. The counties which surround the San Francisco Bay area have undertaken a plan to buy private land around the bay, and around each surrounding city, with publicly allocated money. The goal is to create a greenbelt all the way around the bay and around each city. The rapid transit and infrastructure in the bay area is already regionally addressed and ties each city together. If this plan works, it would prove that the regional city is not only worth striving for but is a reachable goal.

Bibliography

Bacon, Edmund N. Design of Cities. New York: Penguin, 1985.

Blumberg, Rae Lesser. UCSD USP 10 Lecture Notes, October 1986.

Girouard, Mark. Cities and People. New Haven, Conn.: Yale University Press, 1985.

Reader's Digest. World Atlas. January 1982.

Schulz, Christian Norberg. Meaning in Western Architecture. New York: Praeger, 1978.