The Future of Post-Human Urban Planning

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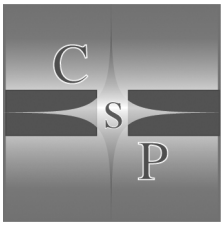
A Preface to a New Theory of Density, Void, and Sustainability

By

Peter Baofu



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To Those in the World Beyond Sustainability

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FOREWORD

For readers who are encountering Dr. Peter Baofu for the first time with this volume, it may come as a surprise to learn about the range of subjects he has addressed in preceding works. He has an insatiable curiosity for questioning theoretical frameworks and takes a disciplined approach to examining what other researchers have said on a subject.

In the present volume he questions the tenets of existing thinking about urban planning and posits a new approach to the subject. His ideas are insightful, fresh and value laden. They present a new challenge for city planners, legislators and community action groups. They present a blueprint for better living in a city of tomorrow.

Dr. Baofu prods the reader to move forward with an urban planning process and offers some helpful guideposts to lead the way.

Sylvan Von Burg
School of Business
George Washington University

ACKNOWLEDGMENTS

This book, like all previous ones of mine, is written to challenge contemporary wisdom, this time, on density, void, and sustainability—and then to propose a new theory to understand the subject matter better.

Because of this political incorrectness, this book receives no external funding nor help from any formal organization or institution.

The only reward that I receive is the wonderful feeling to discover something new to say in a way not proposed before.

There is one person, however, whom I deeply appreciate for his foreword, and he is Sylvan von Burg at George Washington University School of Business,.

In any event, I bear the sole responsibility for the ideas presented in this book.

ABBREVIATIONS

ALD = Peter Baofu. 2007. *The Rise of Authoritarian Liberal Democracy: A Preface to a New Theory of Comparative Political Systems*. Cambridge, England: Cambridge Scholars Publishing, Ltd.

BCIV = Peter Baofu. 2006. *Beyond Civilization to Post-Civilization: Conceiving a Better Model of Life Settlement to Supersede Civilization*. NY: Peter Lang Publishing, Inc.

BCPC = Peter Baofu. 2005. *Beyond Capitalism to Post-Capitalism: Conceiving a Better Model of Wealth Acquisition to Supersede Capitalism*. NY: The Edwin Mellen Press.

BDPD1 = Peter Baofu. 2004. Volume 1. *Beyond Democracy to Post-Democracy: Conceiving a Better Model of Governance to Supersede Democracy*. NY: The Edwin Mellen Press.

BDPD2 = Peter Baofu. 2004. Volume 2. *Beyond Democracy to Post-Democracy: Conceiving a Better Model of Governance to Supersede Democracy*. NY: The Edwin Mellen Press.

BNN = Peter Baofu. 2006. *Beyond Nature and Nurture: Conceivng a Better Way to Understand Genes and Memes.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

BWT = Peter Baofu. 2007. *Beyond the World of Titans, and the Renaking of World Order: A Preface to a New Logic of Empire-Building.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FAE = Peter Baofu. 2007. *The Future of Aesthetic Experience: Conceiving a Better Way to Understand Beauty, Ugliness and the Rest*. Cambridge, England: Cambridge Scholars Publishing, Ltd.

FC = Peter Baofu. 2007. *The Future of Complexity: Conceiving a Better Way to Understand Order and Chaos.* London, United Kingdom: World Scientific Publishing Co.

FCD = Peter Baofu. 2002. *The Future of Capitalism and Democracy.* MD: The University Press of America.

FHC1 = Peter Baofu. 2000. Volume 1. *The Future of Human Civilization.* NY: The Edwin Mellen Press.

FHC2 = Peter Baofu. 2000. Volume 2. *The Future of Human Civilization.* NY: The Edwin Mellen Press.

FIA = Peter Baofu. 2008. *The Future of Information Architecture: Conceiving a Better Way to Understand Taxonomy, Network, and Intelligence.* Oxford, England: Chandos Publishing (Oxford) Limited.

FPHC = Peter Baofu. 2004. *The Future of Post-Human Consciousness.* NY: The Edwin Mellen Press.

FPHCT = Peter Baofu. 2009. *The Future of Post-Human Creative Thinking: A Preface to a New Theory of Invention and Innovation.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FPHE = Peter Baofu. 2009. *The Future of Post-Human Engineering: A Preface to a New Theory of Technology.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FPHG = Peter Baofu. 2009. *The Future of Post-Human Geometry: A Preface to a New Theory of Infinity, Symmetry, and Dimensionality.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FPHK = Peter Baofu. 2008. *The Future of Post-Human Knowledge: A Preface to a New Theory of Methodology and Ontology.* Oxford, England: Chandos Publishing (Oxford) Limited.

FPHML = Peter Baofu. 2008. *The Future of Post-Human Mathematical Logic: A Preface to a New Theory of Rationality.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FPHMM = Peter Baofu. 2009. *The Future of Post-Human Mass Media: A Preface to a New Theory of Technology.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FPHST = Peter Baofu. 2006. *The Future of Post-Human Space-Time: Conceivng a Better Way to Understand Space and Time.* New York: Peter Lang Publishing, Inc.

FPHU = Peter Baofu. 2008. *The Future of Post-Human Unconsciousness: A Preface to a New Theory of Anomalous Experience.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

FPHUP = Peter Baofu. 2009. *The Future of Post-Human Urban Planning: A Preface to a New Theory of Density, Void, and Sustainability.* Cambridge, England: Cambridge Scholars Publishing, Ltd.

• PART ONE •

Introduction

CHAPTER 1
INTRODUCTION—THE LEGACY OF URBAN PLANNING

> [W]e have gradually come to see planning as a much broader set of human activities, encompassing the physical world and also the realm of public and social services. While retaining technical analytical and design components, planning has come to be seen also as intensely political and value laden.
> —M. Wachs (1995)

The Obsession with Sustainability

Why should urban planning in our time be obsessed with the issue of sustainability? Or differently put, is sustainability really as desirable and possible as its proponents in urban planning (and other related fields like economics, political science, environmental studies, architecture, and so on) would like us to believe?

Contrary to the conventional wisdom held by many since the modern era, the concern with sustainability has been much exaggerated and distorted, to the point that it is fast becoming a new intellectual fad, so that its dark sides have been unwarrantedly ignored or downgraded.

This is not to say, however, that the literature on sustainability in urban planning (and other related fields) hitherto existing in history has been full of nonsense. Indeed, on the contrary, much can be learned from different theoretical approaches in the literature.

The important point to remember here, however, is that this book provides an alternative (better) way to understand the nature of

sustainability in urban planning (and other related fields), which learns from different sides of the debate but in the end transcends them all.

The urgency of this inquiry should not be underestimated, as it concerns not only urban planning (as a case study here) but also other highly related yet very serious challenges in our time (e.g., ecological, economic, demographic, technological, moral, spiritual, political, and the like).

Therefore, if true, this seminal view will fundamentally change the way that we think about the issue of sustainability, with its enormous implications not only for understanding the future of urban planning, in a small sense—but also for predicting the relevance of sustainability in relation to the entire domain of human knowledge for the human future and what I originally called its "post-human" fate, in a broad sense.

A Metamorphic History of Urban Planning

A good way to start is to define the words "urban planning," with the issue of sustainability as the main focus.

Firstly, the term "urban" refers to a city, which, as A.E. J. Morris (1972) once put it, is "a community of substantial size and population density that shelters a variety of nonagricultural specialists, including a literate elite…by adding a number of other requirements: production of a surplus of food by one section of the society; existence of some form of writing; social organisation to ensure continuity of supplies to the urban specialists; and technological expertise to transport and store materials and to undertake civic works."

Of course, this definition does not mean that the "transition from village/town to city" is "a clearly definable process. Even a primitive tribal compound has many of the elements of a city in embryo form." (D. Engwicht 2009)

And secondly, the term "planning" is often contrasted with something which is "organic," with its "chaotic street pattern that has resulted from ad hoc placement of buildings, streets being defined by the placement of buildings over time." (D. Engwicht 2009)

By contrast, a "planned" (not "organic") city has "a recognizable pattern to the street network, usually a gridiron. In these cities, the streets define where the buildings are placed, and not vice versa. (D. Engwicht 2009; A. Morris 1972; C. Cunningham 1992)

Of course, this distinction should not be taken too rigidly, since "it is possible that the so called organic cities were also planned to some degree or another." (D. Engwicht 2009)

This definition of the words "urban planning" aside—the next business to do is to introduce a brief history of urban planning, which is metamorphic enough through the ages, that is, in different stages of development from antiquity to our time.

Good examples in this brief history include, say, (a) the "grid plan," (b) the "fortress" model, (c) the "star-shaped city," (d) the "garden city," (e) the "modernist city," and (f) the "post-modernist" model—as briefly summarized below.

The "Grid Plan"

In antiquity, a well-known example of urban planning in its earliest stage involves what is now known as "the grid plan or gridiron plan," which "is a type of city plan in which streets run at right angles to each other, forming a grid. In the context of the culture of Ancient Greece the grid plan is called Hippodamian plan." (WK 2008c; K. Jackson 1985)

The "Hippodamian plan" (for the "grid plan") is named after the Greek urban planner known as Hippodamus of Miletus (498 B.C.—408 B.C.), who is often regarded as the "father" of urban planning in the Western world. (WK 2008e)

The grid plan dated from antiquity also existed in different cultures. For instance, in India, by "2600 B.C., Mohenjo-daro and Harappa, major cities of the Indus Valley Civilization, were built with blocks divided by a grid of straight streets, laid out in perfect right angles, running north-south and east-west. Each block was subdivided by small lanes." (WK 2008c)

In Babylon, by the 17th century B.C., when "Hammurabi…was a king of the Babylonian Empire who made Babylon one of the greatest metropolises in antiquity. He rebuilt Babylon, building and restoring temples, city walls, public buildings, and building canals for irrigation. The streets of Babylon were wide and straight, intersected approximately at right angles, and were paved with bricks and bitumen." (WK 2008c)

In ancient China, "from the 15th century B.C. onward…[g]uidelines put into written form in the *Kaogong ji* during the Spring and Autumn Period (770-476 BC) stated: 'a capital city should be square on plan. Three gates on each side of the perimeter lead into the nine main streets that crisscross the city and define its grid-pattern. And for its layout the city should have the Royal Court situated in the south, the Marketplace in the north, the Imperial Ancestral Temple in the east and the Altar to the Gods of Land and Grain in the west.'" (WK 2008c)

And in ancient Rome, the grid plan was further developed, this time, with the focus on "military defense and civil convenience," in that the

Roman grid plan "is a central forum with city services, surrounded by a compact rectilinear grid of streets and wrapped in a wall for defense. To reduce travel times, two diagonal streets cross the square grid corner-to-corner, passing through the central square. A river usually flowed through the city, to provide water, transport, and sewage disposal." (WK 2008b)

The "Fortress" Model

But in Medieval Europe, urban planning was shifted to a different focus, this time "on a fortress, a fortified abbey, or a (sometimes abandoned) Roman nucleus,…'like the annular rings of a tree,' whether in an extended village or the center of a larger city. Since the new center was often on high, defensible ground, the city plan took on an organic character, following the irregularities of elevation contours like the shapes that result from agricultural terracing." (WK 2008b; S. Giedion 1941)

A distinctive feature of these medieval fortresses involves castle towers, which "were usually made of stone or sometimes (but rarely) wood. Often toward the later part of the era they included battlements and arrow loops. Arrow loops were vertical slits in the wall where archers from the inside shot arrows through at the attackers, but they made it extremely difficult for attackers to get many arrows through back at the defenders." (2008e)

But the medieval urban planning was much limited in further development, because of "the juridical chaos of medieval cities (where the administration of streets was sometimes hereditary with various noble families), and the characteristic tenacity of medieval Europeans in legal matters, prevented frequent or large-scale urban planning." (WK 2008b)

Another reason for the decline of the medieval "fortress" model has to do with the invention of cannons in the battlefields, which made the medieval fortresses vulnerable to cannon fires.

It was not until "the Renaissance and the enormous strengthening of all central governments, from city-states to the kings of France, characteristic of that epoch," that a new model of urban planning emerged. (WK 2008b)

The "Star-Shaped City"

By the time of the Renaissance, there was the new model of urban planning for the "star-shaped city."

When contrasted with the "fortress" model—the "star-shaped city" was conceived to confront the threat of cannon shots, which came to

dominate the battlefields at the time, since "[b]y that time, the medieval walls [in the "fortress" model] were no longer secure against a serious threat from an army as they were not designed for resisting cannon shot." (WK 2008e)

In other words, the "star-shaped city" was constructed "during the age of black powder, when cannons came to dominate the battlefield, and was first seen [during the] mid-15th century in Italy. Passive ring-shaped (enceinte) fortifications of the medieval era proved vulnerable to damage or destruction by cannon-fire, when it could be directed from outside against a perpendicular masonry wall." (WK 2008f)

By contrast, "the star fortress was a very flat structure composed of many triangular bastions, specifically designed to cover each other, and a ditch. Further structures such as ravelins, hornworks or crownworks, and detached forts could be added to create a complex symmetrical structure." (WK 2008f)

For instance, "Florence was an early model of the new urban planning, which rearranged itself into a star-shaped layout adapted from the new star fort, designed to resist cannon fire. This model was widely imitated, reflecting the enormous cultural power of Florence in this age; '[t]he Renaissance was hypnotized by one city type which for a century and a half—from Filarete to Scamozzi—was impressed upon utopian schemes: this is the star-shaped city.' Radial streets extend outward from a defined center of military, communal or spiritual power." (WK 2008b; S. Giedion 1941)

The "Garden City"

Then came the "garden city" in the 19th century and later, when the Industrial Revolution reached its more advanced stage.

It is Sir Ebenezer Howard in the United Kingdom, who was inspired by Edward Bellamy's utopian novel titled *Looking Backward* (published in 1888) and, subsequently, proposed the idea of the "garden city" in *To-Morrow: A Peaceful Path to Real Reform* in 1898 (which was "reissued in 1902 as *Garden Cities of To-Morrow*"). (WK 2008g)

Each of these "garden cities" was "to be planned, self-contained communities surrounded by greenbelts, and containing carefully balanced areas of residences, industry, and agriculture." (WK 2008g) And each greenbelt "is an undeveloped area neighbouring an urban area, often protected from development by planning law." (WK 2008h)

This new model of urban planning is not surpirsing, since, by then, the "control of building was largely held by businesses and the wealthy elite.

Around 1900, there began to be a movement for providing citizens, especially factory workers, with healthier environments." (WK 2008h)

In fact, some of the well-known models of the "garden city" were later constructed, and good examples include "Letchworth and Welwyn Garden City, the world's first garden cities, in Hertfordshire, UK. However, these were principally small scale in size, typically dealing with only a few thousand residents." (WK 2008b; P. Hall 1998)

The "Modernist City"

By the 1920's, there emerged the "modernist city"—especially though not exclusively for the building of "skyscrapers," partly because of the increase of population.

Modernism, in this sense, was "[b]ased on the ideas of Le Corbusier and utilising new skyscraper building techniques," to build "the modernist city [which] stood for the elimination of disorder, congestion and the small scale, replacing them instead with preplanned and widely spaced freeways and tower blocks set within gardens. There were plans for large scale rebuilding of cities, such as the Plan Voisin (based on Le Corbusier's Ville Contemporaine), which proposed clearing and rebuilding most of central Paris." (WK 2008b)

An exemplary model of the "modernist city" is undoubtedly Brasilia in Brazil, which "was planned and developed in 1956 with Lúcio Costa as the principal urban planner and Oscar Niemeyer as the principal architect. In 1960, it formally became Brazil's national capital. When seen from above, the main planned part of the city's shape resembles an airplane or a butterfly." (WK 2008i; GL 2008)

Brasilia became "a world reference for [modernist] urban planning. The locating of residential buildings around expansive urban areas, of building the city around large avenues and dividing it into sectors, has sparked a debate and reflection on life in big cities in the 20th century. The city's planned design included specific areas for almost everything, including accommodation—Hotel Sectors North and South." (WK 2008i)

But the ideal of the "modernist city" did not survive long, as it "was expressed in high crime and social problems within many of these planned neighbourhoods. Modernism can be said to have ended in the 1970s when the construction of the cheap, uniform tower blocks ended in many countries, such as Britain and France." (WK 2008b; E. Morris 1997)