Home on the Range: Planning and Totality

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In his modernist manifesto, *Towards a New Architecture*, Le Corbusier says: "To make a plan is to determine and fix ideas . . . . It is so to order these ideas that they become intelligible, capable of execution and communicable. It is essential therefore to exhibit a precise intention." A plan will incorporate its ideas into that single precise intention. We are familiar with the kind of total plans that Le Corbusier himself produced, and with their astonishing beauty, and their deadly offspring.

In another book, *The City of Tomorrow and its Planning*, Le Corbusier explains: "A town is a tool. Towns no longer fulfill this function. They are ineffectual; they use up our bodies, they thwart our souls. The lack of order found everywhere in them offends us." But who are we? He continues: "A city . . . is the grip of man upon nature. It is a human operation directed against nature." For us "geometry is the foundation" and "today our enthusiasm is for exactitude. An exactitude carried to its furthest limits and raised to an idea: the search for perfection." Such planning will make for us a home that is clear and secure.

There was an earlier thinker who was also fascinated by the play of clear shapes and who saw those shapes as the grip of the Idea on nature. According to Plato, anything which we can treat as a unity or a whole will be composed of an element that is relatively formless or unlimited, plus some principle of limit that gives this unlimited stuff the shape and identity of a whole. A clay pot is the standard example. But note that what is "unlimited" still has its own character. Clay is not stone or wood; it cannot support every possible shape. This "unlimited" is already definite and limited in some way, but remains unlimited with respect to a higher level of form.

So a city might be composed of its citizens who are discrete individuals but, taken as a crowd, relatively formless. The city as a social unit would be made when this unlimited mass is organized by the political arrangements and constitution that impose limits and form. The city as a physical unit could be analyzed in similar fashion, with the unlimited element the available space, as well as people's daily activities and movements. In a city there are a great many intermediate partially formed levels with their own systematic and unsystematic articulation.

Those intermediate levels complicate planning and resist the clarity of vision and will. The goal of Corbusian-Platonic planning is that there be only one system of connections and separations operative throughout. The many levels and sub-systems are to be brought into hierarchical ordering. Le Corbusier declares in his book on planning that

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3 Plato's view is much more complex than this and the *Timaeus* reveals that the unlimited is not so passive nor so simply oriented to form as it might seem. I am also passing over the question whether Plato (or Aristotle) believed in an ultimate principle of fully unlimited potentiality.
"We must build on a clear site" (220). Here is the wish that the material to be organized be as uniformed and homogeneous as possible. The various sub-systems are to be only parts, quietly operating within the confines of a clearly ordered whole. Ideally the whole should make a clean start; the historic center of Paris would be razed then rebuilt. Space should become a pure expanse to be shaped. Into that space are to be inserted human lives envisioned as composed of basic functions (work, recreation, sleeping, cooking, and the like) that have been cleared of their historical and social specificities.

A total idea, with parts subservient to the whole finding their proper places: this is the modernist planning ideal of a zone for everything and everything in its zone. Our home will be orderly and clean.

Of course real people and cities are messy and unruly, and when he dealt with actual sites Le Corbusier found ways to subtly inflect his designs with gestures toward historical and social complexity. But he never let go the Idea, and most of his followers lacked his subtlety. We live with the results. The emblem of this is Brasilia, the capital city raised on an empty plain, with its sweeping Corbusian vistas that forbid traditional Brazilian street life, which has nonetheless found ways to make the city more a home by infecting the interstices of the plan and exceeding its bounds.

Le Corbusier loved the machine as metaphor. A machine embodies one unique system of interconnections and separations that define the identity and purpose of each part. Like a machine for living, the city has its parts, and they should operate neatly separated from one another. On an ocean liner you don't have the passengers eat breakfast in the engine room. Machines run smoothly and clearly, and do not tolerate grit and interstitial life.

Such separation of functional areas sterilizes city life; the postmodern reaction to Le Corbusier's plans echoes the public outcry against a rationality that seems inhuman. Jane Jacobs voiced the classic complaints against our cities and the argument for mixed-function areas and unpredictable street life, with its corresponding economic unpredictability. But how can the messiness she wants fit into a totality? Is the creative

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4 In his book on planning, Le Corbusier reports a conversation with an objector at a meeting: the objector said "'You trace out the straight lines, fill up the holes, and level up the ground, and the result is nihilism.' I replied, 'Excuse me, but that, properly speaking, is just what our work should be.' (This incident is authentic)" (275).

5 The modernist ideal of discrete zones resembles what Heidegger calls the "standing reserve"--a world envisioned as a reservoir of materiel and items to be neatly arranged and mobilized for use and efficiency. However Heidegger's Gestell has connotations of indefinite and unlimited usefulness which somewhat go against the Corbusian-Platonic desire to have all functions clearly and systematically defined in advance. In some ways the indefinitely reusable open spaces of Miesian planning better embody the condition Heidegger describes.


7 Jane Jacobs' basic critique and proposals are found in her The Death and Life of Great American Cities (New York: Random House, 1961); its economic implications are followed up in her Cities and the Wealth of Nations: Principles of Economic Life (New York: Random
untidiness of life to exist at the edges of a massive articulated plan? Or can it have its own place in the plan? Or does it violate plans?

A step away from the machine totality for planning would be the metaphor of an organic whole. Organisms seem messier and more flexible than machines, and yet the organism is judged even more of a totality than the machine, for organic parts are less external to one another and the organism seems to seek its own development rather than some external instrumental purpose. But what does the organic metaphor mean for plans? Too often this metaphor sanctifies as home what is either machine-like separation, or enforced unity based on nostalgic ideas of an uncontested culture.

We could revise the organic metaphor by changing its scale. While a biological system does have the differentiated organs that are the standard point of the metaphor, on a smaller scale there is massive reduplication of functions in repeated local units. Cells have their own completeness and relative autonomy, and they work together in a more unruly way.

These are not so separable as machine parts and not so hierarchical and zoned as the traditional metaphor of the organism. Consider the bloodstream: there we find flow and receptors. Everything is jumbled together. In the bloodstream there is no neat separation of paths or zones for food, oxygen, hormones, immune system cells, and so on. All are jostling one another on the streets of the body. Each has its receptors waiting, like street vendors looking for customers. The unexpected can result, as when two medicines meet in the bloodstream and interact in novel ways. It sounds rather like Jane Jacobs' prescription for a disorderly mixture of levels of marketing, children playing, multi-use spaces, private/public interactions: real street life that doesn't fit neatly into a zoned system.

But messy street life and space for the unexpected go beyond any of the totalities we have considered so far. Street life is not merely a mixed functionality. Street life and its analogues can develop new functions. Those streets full of bustling economic and social

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8 Frank Lloyd Wright has a great deal to say about "organic architecture" in a single building, and shows it in his designs' subtle proportions and continuities. But in city planning he champions an individualism and democracy which does not fit well with organic metaphors.

9 It is tempting in this context to think about fractal images such as a plot of the Mandelbrot set: some parts of the image will be clear and zoned while others descend into infinite complexity. The picture will have wildly varying densities of detail, and interstitial areas that develop in unpredictable ways. This provides a seeming visual analogue to the interstitial life that escapes the overall plan. However, though a fractal image cannot be exhausted by a single sight it is still generated by a single mathematical formula. The difference from the Corbusian intention is that although fractal parameters can be set, there is no predicting the resulting shape without working it out in infinite detail. But in the end the fractal image could reinforce the modernist plan, for it still offers an determined overview ruled by a single intention and available at any desired level of detail.
life are not a new kind of functional zone; they are energy flows in which functions can change and new kinds of functions emerge. Such activity is not subordinate to a clearly defined whole. It lives on the edges, sometimes parasitical, sometimes penetrating and challenging the whole, as when new economic actors or patterns emerge in the market. The separation and connection of parts may change; several different "systems" may be in competition at the same time. In an organism this would bring disease or cancerous development. In a city it can bring life and vitality.

"MDNM"Talk of energy flows, unexpected new functions, and multiple systems suggests that perhaps the operative metaphor should not be the organism but the ecology. This is the free range of messy energy flows and new developments. It is where change and evolution happen, where parts and borders and functions are redefined. It, not the restrictive city, seems to be our true home.

The ecology metaphor will occupy the rest of this essay. I want to point out ways in which any totality is vulnerable, and especially the ways in which the ecology metaphor fights against itself. The interstitial life that we cited to loosen up Le Corbusier's planning cannot be confined; it loosens the identity of even an ecological totality.

There is an ambiguity at the heart of current talk about the ecological site of planning. The ambiguity can be seen in the phrase "the ecology." This suggests there is one larger system, with its own functional divisions and zones, of which we are part and which we are in danger of unbalancing. If we want to protect our home, we need to take heed of these larger balances and live more in harmony with the whole. But I just claimed that the ecology metaphor is more flexible because an ecology is not a system with a fixed identity. An ecology allows new functions to develop. It allows its own contours to be redrawn. It is not a stable home where we can rest assured.

But is not the ecosphere by definition a total system? Not in the relevant sense. It is a single planetary agglomeration, but the identity of a system depends on its form, the way it partitions things into parts and the chains of interactions it involves. The identity of the system is not fixed by the stuff of which it is made, which could be supporting many rival partitions and sets of interactions. Things might serve multiple purposes so there was no single intention. Borders and divisions can be contested and shift, so that there is no "the" system.

An ecology is not the imposition of a single limited form on indefinite stuff. It is not a balanced system made out of lower level unities that apart from that form fall away into the unlimited. It is a mass of flows and adaptations and interstices used in new and contested ways. It adapts and changes phase.

There is a myth of the ecology, a myth of harmony. This only superficially opposes the Corbusian total plan. The faith involved in ecological harmony (most obviously in the Gaia image) is akin to faith in providence (and to faith in the invisible hand of the market). But the ecosphere is Darwinian and excessive.  

10 Here I am cheerfully riding over enormous controversial questions whether evolution (or economic activity) tends to a maximizing stable equilibrium or to a series of locally stable satisficing arrangements that are apt to be disturbed.
Here are some words that echo in and around current discussions of planning our ecological home: balance, health, unity, total systems, harmony, keeping this or that from being too dominant, keeping things where they belong in their proper relations. All these are concepts that current attacks on totality go after when they appear in discussions of texts or buildings. Proper places and harmonious arrangements. Authoritative interpretations of the whole. Plato and Le Corbusier.

But an ecology is a "place" where things and energies developed for one use, or left over from other uses, develop new functions and new uses. We generate new wastes and new parasites move in; the butterfly wings assume the color of the trees and walls stained by pollution; the virus mutates and resists the drug. Available energy will be used in new ways, unexpected systems and sub-systems will develop. No single intention aligns the whole. This home has no stable ideal identity.

The determination of just what a system is and what it does is always contextual even in biology. An organ or structure is not just a part of the system. Traces remain of earlier uses, and newer uses cannot be forestalled.

Even parts seemingly well established are not stable. Things develop through performing one function that allows them to be selected for, then are adapted for other functions. Their proper use can change. Unsuspected new functions become possible and systems take on new identities. For example, insect wings probably developed as flat temperature regulating devices and were selected for on that basis; then as they reached a certain size they offered advantage because they made possible a valuable unexpected new action, gliding jumps, and were selected for on that basis; then as they got larger still they became means of flying and changed their function and selection criterion yet again. In the process they were detached from the temperature regulation system they originally belonged to.

For an architectural example, consider city parks. There once were aristocratic estates and their tracts of land. Opened to the public these changed their function as they were incorporated into the life of different classes of people and different economic activities. In the nineteenth century large American urban parks were planned to provide relief for crowded city folk and to provide an ordered natural environment that might exert a civilizing influence on the tumultuous lower classes. Today, with the tourist industry and suburbanized life, parks are inserted into other systems and have altered their function again. What new uses are we creating, or finding that we have unknowingly created?

Of course biological changes (usually) occur on a slow enough time scale that they can be handled by alert balancing. However, the same kinds of flows and changes occur, much more rapidly and more unpredictably, at the other borders which pervade our home.

The planned city or region must maintain its identity within several kinds of borders. Biological borders because the city is surrounded by the larger energy flows and evolutionary adaptive movements of the biosphere. Economic borders because the city is surrounded by the international flow of capital and commodities. Cultural borders because the city is surrounded by a flow of images, metaphors, narratives, values, and practices.
The city may develop economic structures and patterns for one purpose and find that they are being used in other ways. Or that structures the city grouped together are being separated off and used by outside systems. "Our" crafts people are now sub-contracting to firms in another city. Organized crime has inserted itself and remodeled the money flows in the city. Our carefully orchestrated economical balance has been upset because a larger system has colonized us and is changing our priorities.

Culture is the internal border, defining who the citizens are. There is no wall that can keep out new metaphors, unexpected behavior and values that challenge internal lines and divisions. We may plan symbols and values, but find they are being reread and reused. Our ecological ideals may be twisted into a fascism we did not expect. Symbols of our city or national identity may be deployed by factional groups to support divisions in the very structures the symbols were supposed to legitimate. New practices may develop new social functions and goals.

Despite the shared dream of univocal planning, there is no fixed hierarchy of ends that provides us a stable home. There is no permanent totality of goals around which a stable system can be constructed. The identity of the system cannot be assured, even in functionalist terms, because there is no fixed list of functions.¹¹

There is danger in assuming there is one uncontested system, or that we know what the system is or what it is capable of becoming. There are phase changes and adaptive reuse and new resources. The parameters may not stay the same, and the borders are not fixed.

In discussions of ecology, one of the most powerful images of our fragile planetary home is the "spaceship earth" metaphor. But the image is misleading: we envision a spaceship as a machine with fixed parts and pre-set functions. The metaphor suggests that in the ecology we know what all the sub-systems are, and that their functions are stable within a single large system. The image also presumes a fixed set of goals for the ship and its journey, and it forgets that the crew's identity mutates.¹²

What I have been saying about ecological totality is analogous to what deconstructive textual analysis finds as the permanent possibility of textual rereading, and of internal self-transgression and self-contamination, of unexpected undecidable uses and

¹¹ Some very general functions (described by economics or systems theory) might be discerned in all systems. But because they amount to criteria for locating and individuating systems they say nothing about the details of this or that system's arrangements and goals.

¹² In this regard, see Gregory Benford's continuation of Arthur C. Clarke's novelette about Diaspar, the city at the end of human history, Beyond the Fall of Night (New York: Ace/Putnam, 1990). In Clarke's original story humanity retreats into a balanced technologically managed cocoon, then later emerges into a lonely world. In Benford's continuation, the world is hardly empty; when humanity reemerges it discovers that life elsewhere has developed wildly into unexpected new forms and integrations, with interchange on larger and larger scales. Humanity finds that its place has changed. Any planned unit works within a larger context that can question its identity.
interpretations. Not just other interpretations of the text, but other identities; it is not clear just what belongs to the text and what is an extra supplement. Half of this book and half of the other.

Yet we are at home. We do live on this range. We need have a care for health, harmony, proper relations. Even if the site cannot be cleared, we must to some degree "reinscribe" harmony and totality within the wilder ecology.

But to do so we should beware of thinking in terms of imposing a unified limit on the multiple unlimited. Balance is not enough. That Platonic ideal presumes all determinate forms can become harmonious; any disharmony results from excess or deficiency that can be corrected. What I have been suggesting is that planning has trouble, not because there is some excessive formless energy threatening to unbalance the natural or civic system, but because the identity of the system is itself being contested and redrawn. The problem is restructuring, re-division, parasitic systems, reinterpretation. Not chaos but different orders, different identities. The limited itself refuses unity.

Planning can respond to this by envisioning multiple uses and reuses. But it cannot be open enough. It cannot encompass all the unexpected, and blank receptivity saves nothing. "Anything goes" is not an acceptable strategy for survival in a Darwinian world, or in its economic and cultural analogues. If some changes would damage what we need or cherish, then planning must be choice and exclusion and repression, not balance. This necessity should not be hidden under a rhetoric of ecological harmony.

We do plan, react, create, metaphorize, but not necessarily with a single project. We accept, we repress, we reread, without a fixed set of axes and parameters. Like any organism we try to sustain ourselves within a whole that is larger than any plan, a whole that does not make a totality. We need to care for the whole as best we can. But we are not the whole, nor its representatives, for it has no single voice."

13 Christopher Alexander’s *A New Theory of Urban Design* (New York: Oxford University Press, 1987) can be helpful in this regard. He proposes a communal intention for wholeness, but not a single overall vision. In an attempt to reproduce the feel of the Italian hill towns and other cities which had grown without any overall plan but maintained a feeling of wholeness, Alexander conducted an experiment re-planning a section of San Francisco. In the experiment successive incremental changes were each to create a new whole on some level, without an overall plan stretching over time. Local areas were to be constantly reread; the next intervention might bring unexpected organization on different levels. There was a changing balance as local buildings or areas were related in new ways to other local wholes with harmonious or conflicting intentions. A variety of flexible rules and procedures were developed to guide this process. The city resulting from such plans would have a variety that Le Corbusier’s lacks. There would be some conflict of intention, and buildings could be read as parts of many-layered patterns, some of which had been changed by later rereadings. But the process was never to get out of hand. The aim was still continuity and a hierarchy of wholes throughout the city. Though Alexander proposes a more incremental and sophisticated vision he still presupposes a single overall system. Still, his strategies might be adapted to a more contested planning that joined him in avoiding both Le Corbusier’s total plan and the individualism of the isolated monument, but attempted to allow wilder readings of city to
coexist.