

# Anti/Room

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**EAT IN THE LIVING ROOM  
READ A HARD-COVER BOOK IN THE BATHTUB  
PLAY BALL IN THE HOUSE**

## What?

The room as we know it is becoming extinct, but that very same room is far from dead. In today's world, the distinctions between public and private, home and office, inside and outside blur continually at a rapid rate. With the advent of "de-designated" spaces and a blurring of the distinction of pre-programmed spaces, the literal and figurative barriers between rooms are being systematically broken down, resulting not in new room types but rather as a move toward a sort of "*anti-room*." While the idea of using one room for multiple purposes is by no means a new one, doing so by design rather than from necessity is a more recent phenomenon. Even the most isolated room of the house, the bathroom, is losing its walls. In an age when we want one gadget to do everything, it is not surprising that we are placing similar demands on the spaces in which we live, play and work. Soon the only architecture to speak of will be the mobile homes, storage containers and closets in which we keep all of our *stuff*.

Traditionally, Architecture has been the primary container for formalized interior spaces, but as our living rooms adopt a more liberal admissions policy and give way to spaces that can actually be *lived in*, architecture as a formal container of interiorized function becomes increasingly eroded. In the contemporary City for example, public space has assumed many of the characteristics formerly associated with interior space, while with interior space, the opposite is true. The traditional bifurcation of space into "*interior*" and "*exterior*" no longer holds any real meaning, except in the sense that there is becoming an inversion of this respect. Add to this that contemporary architecture and communications media are nearly transparent to surveillance technology, and one comes to the conclusion that the behavior within our private sphere might as well be conducted in the streets of The City itself. And increasingly, it is. *Safety* has supplanted *Privacy*. In this newly

emerging world, architecture as a discreet, monolithic practice increasingly finds itself in jeopardy of being marginalized and even subsumed by the various other domains of professional practice.

## Why?

The places not shown on maps were once known as the "Wilderness." Wilderness, once subjugated and controlled, became "Nature." Avoided and expelled by Architecture, Nature has now become "Scenery." Places no longer exist mysteriously beyond human knowledge. We have long grown unaware of boundaries and the worlds beyond them, and live in a world of *Scapes* that extend endlessly without interruption. A concern for maintaining the unknown and the unexplored in our world is missing in our attempts toward the development of new environments.

Architecture at one time stood in resolute opposition to the Wilderness not as master, but as subject. Mastery of the Wilderness, either by hunter, hermit, or wanderer has almost always led to the appearance of anti-social characteristics in the individual. Urban Architecture has followed suit. Urban Architecture stands in opposition to nothing other than Urban Architecture. The current architectural gestures that comprise most contemporary cities are rarely cooperative, and on most occasions, behave antagonistically towards one another, transfiguring both the field and the fabric of the city into an artificial environment of logic-dominant construction.

## When?

In the 19th century *Interiority* (the sphere of the "private") is discovered, leading to the invention of Interior Space. Characterized by the subtle shift from "semi-public" space to "semi-private" space (as evidenced by the invention of restaurants, health clubs, libraries, and museums), from the end of the 19th century to the present a process occurred by which private,

interior space reached saturation and inevitably overflowed into public, exterior space. Whether by explosive burst, or slow, leaking accretion, it remains that interior space filled all space evenly, both interior and exterior. In its desire to “liberate space,” glass and steel (i.e.: Modern) Architecture ratified this process of interiorization. The exterior spatial environment became uniformly interiorized.

### How?

As both Theology and Humanist Theory did before it, Science serves to legitimize the world. Science constructs the belief systems around which our social and physical world is constituted. While scientists actively engage in the use of metaphor to describe the world they see, the public has, historically, appropriated these metaphors as reality and lived their lives accordingly.

The “Interiorized Landscape” is the analog of the tropes that affect contemporary scientific theory. As scientific processes developed early in the Renaissance, the manifestation of nature in the physical world continued to be characterized as an “indissoluble whole.”<sup>03.0</sup> Living and dead matter could be transmuted; Nature could not be understood by “taking it to pieces,” because by doing so the thing that is essential to it is ultimately destroyed. The ensuing scientific revolution, begun by Copernicus and Galileo, expanded by Kepler and Bacon, then crowned by the publication of Newton’s *Principia*, changed everything. This revolution had an almost instantaneous impact on the wider culture, well beyond the world of physics. Its very ethos, methodology, values and vast new technology to which it gave rise became the engine of the cultural High Renaissance of the western world. Locke’s individualism, Marx’s determinist laws of history, Darwin’s reductionist biology, Freud’s dark psychical forces, even Le Corbusier’s “machines for living” all owe a large debt to Newton’s description of the universe as a vast machine, determinedly driven by the laws of cause and effect. Today, we have become so used to this atomistic “machine view” of the world that we have forgotten that it is only a metaphor. We no longer think, as Descartes did, that the world is like a clock. We think it *is* a clock.<sup>03.3</sup> This expansion of the mechanically hierarchical “top down” ordering of nature ultimately led to the “ideology of biological determinism” and our current fixation on the *Gene* as the primary descriptor of any living organism. Except for a brief period of unpopularity precipitated by Nazi activities during the middle part of the 20th century, biological determinism has been (and continues to be) the mainstream commitment of biologists.<sup>04.0</sup>

With the publication of the essay “What is Life?” in 1943, the physicist Erwin Schrödinger made his transition from the then-separate fields of relativity theory, particle physics and quantum field theory to the emerging field of contemporary biology,

bringing along with him the reductionist scientific methodology that now pervades all of the physical sciences. In his description of the gene, Schrödinger employed the metaphor of a *Code*, in which life itself becomes reduced and identified with the simple act of translating genetic sequences. Life is no longer situated in the privacy and protection of the organism’s sovereign interior. This relocating of life from the interior had a startling effect: Instead of the dissolution of the interior, it is the constituents of the exterior that were, in fact, demobilized. The uncontrollable “wilderness” of environment, history and even anatomy are relegated to effectual events, distinct in the development of the organism only in their role as filters for genetic instructions to arrange. In this atomistic model, “Life” became dislocated, no longer localized in a body but dispersed through the narratives and networks that make up the interpretations of genetic databases.<sup>05.0</sup> By placing all of the power in the genetic code and none within the development of the organism, the reductionist ideas of cause and effect became firmly rooted in the contemporaneous world view. This atomized view of nature was matched by a new view of both society and culture, in which the whole may only be understood by “taking it to pieces.”<sup>03.5</sup> By extension, individuals became the “atoms” in this new culture. Primary and independent, this “Social Atom” was free to move from place to place and role to role. The displacement of “Life” outside the boundary of the individual’s anatomy, coupled with this new-found mobility, allowed for the development of the various tropes necessary for the final subjugation of nature through pervasive interiorization.

### And?

Now, the new sciences of biological theory mark a radical departure from the world of classical physics. The current thinking in the field is not reductionist, determinist, causal or objectivist; even the observer no longer stands apart from the observed. Instead, the observer is part and parcel of what they observe; both the act and the tools of observation effect the observation made. Quite unlike the Newtonian model, contemporary biological theory describes a world where a whole system may have emergent properties that are in no way deducible from the properties of its constituents. Biologists now describe a world composed of entities that have two levels of being: potentiality and actuality. What we observe is only one aspect of what a system is. In this strange new world, there is no linear cause and effect relationship between gene and environment. While genes may indeed effect how sensitive one is to the environment, at the same time the environment effects how relevant one’s genetic differences may be. This return to the 15th century notion of *Coincidentia Oppositorum* (the coincidence of opposites), first noted by the philosopher Nicholas Kusa, describes a profound shift from a binary world where a thing is either this or that, to an analog world where a thing is simultaneously both this *and* that, besides. Instead of linear, serial relationships, organisms are now understood to operate in

a vast, parallel, cooperative array, ordered by dynamic, local relationships.

### So What?

Within these new scientific ideas lies a rich repository of language, metaphor and allusion – a whole new set of images with exciting applications in the realm of daily experience. The underlying complementary reality of a biological organism will in fact harbor a better image of ourselves and the world we inhabit than the predictable and rather bleak determinist view portrayed by the science of the last three centuries. In the tropes that govern our understanding of this new world, we will no longer be interested in genetic differences, as they become relegated to the realm of the arbitrary. Instead, we will be concerned with the differences in our ability to carry out socially constructed tasks in socially constructed space.

According to Hannah Arendt, the social territory produced in the modern age obliterated the public territory that once guaranteed freedom.<sup>99,6</sup> In this new world of emergent, collective practices, society ultimately becomes one large interior where everyone must be “at home” constantly engaged in social dialogue. Architecture, having once served to give borders to public and private territories, most certainly declines with the rise of social territory. Hereafter, Architecture’s only function is to ornament the dominion of interiorization. Theodor Adorno states that “not to be at home in one’s home is part of morality.”<sup>100</sup> If this morality is to be worthy of our recognition, then Architecture must abandon its now-mythical function of protecting the Interior from the Exterior and seek rather, through its only current function as an edge, to protect the nearly extinct exterior from the overwhelming pervasiveness of the interior.

### MARGINAL DIGRESSIONS:

#### 01.0 What is Life?

In order to move, organize, be aware: there must first be a self, a subject, or at least a system that does something “by itself.”

#### 01.1 Life is Information.

The environment provides a framework for the vagaries of evolution: not everything is possible under evolution; bodily form puts certain historically conditioned constraints on the forms that may appear in the future. Evolution does not take place according to a globally optimized “design,” but rather by the principle of tinkering.

#### 01.2

Optic activity is intimately connected with life.

#### 01.3

Most scientific criteria used to ascribe the attribute of “life” to matter is unable to incorporate the intuitive knowledge we have that makes it evident to us what life is and what it is not.

### 02.0 The Key Properties of Life

1. Life is a pattern in space-time (rather than a specific material object). In other words, life is a distinct form of organization. We are, after all, more than what we eat. The molecules in our bodies and the cells in our tissues are renewed and exchanged innumerable times during our lifetimes.
2. Life loves self-reproduction.
3. Life is associated with information storage and self-representation; that is, a partial description of itself (or of certain components necessary for production of the remainder under the system’s continual self-organization).
4. Life thrives with the aid of metabolism.
5. Life enters into functional interaction with the environment (that is, organisms can adapt, but they can also create and control their respective local environments). Organisms have the ability to selectively respond to external stimuli (what physiologists call “irritability”).
6. Parts of living things have a critical internal dependency on each other (which mean organisms can die).
7. Life exhibits a dynamic stability in the face of perturbations (it can maintain form and organization up to a certain limit of stress).
8. Life, not the individual but its *lineage*, has the ability to evolve.

### 03.1 The Functions of Science

First, Science provides us with new ways to manipulate the material world. Second, but perhaps more importantly, science is engaged in the act of explanation. Science is constantly explaining the “way things are.” These theories about the world must be produced in order to ultimately change the world through practice.

### 03.2

Before the eighteenth century, individuals were seen not as the causes of social arrangements, but as their consequence. Society is now thought to be the consequence, not the cause, of individual properties. Today, it is individuals who make societies.

### 03.4

In modern science, there is a clear distinction between cause and effect. Things are either one way or another. The outside world has its own laws that are independent of organisms and so cannot be changed by those organisms. In Darwin's view, organisms are acted on by their environment; they are the passive object and the external world is the active subject. In this model, organisms find the world as it is, and they must adapt or die. This is an impoverished view of the actual relationship between organisms and the world they occupy, a world that living organisms by and large create by their own living activities. The world cannot be broken down into independent autonomous domains. Internal and External. Cause is no longer either internal or external; there is a mutual dependency between the domains.

### 04.1 Genes

We are not determined by our genes, although we are surely influenced by them. While the difference between lions and lambs are almost entirely a consequence of the difference in the genes between them, variations among individuals within a species are a unique consequence of both genes and the developmental environment in a constant interaction. A third factor is involved that is caused neither by genetic or environmental differences: the random variation in growth and division of cells during development, or **developmental noise**.

The contrast between *genetic* and *environmental* is not a contrast of *fixed* and *changeable*. In this symbiotic relationship between gene, environment and the historical organism, changes in the environment (either physical or cultural) can change the organism's ability by many orders of magnitude. Differences between individuals may even be abolished by cultural or mechanical inventions. Differences that can be ascribed to genetic differences and that appear in one environment may completely disappear (or even become advantageous) in another.

### 06.0 DNA

DNA does not contain the key to its own interpretation; there is no simple relationship between the DNA-encoded messages

and the construction of the organism. Biological information is inseparable from its context; it has to be interpreted in order to work.

### 7.0 Schrödinger's Cat

The riddle of the cat begins with Heisenberg's Uncertainty Principle:

*A particle is always thought to have both position and momentum. Any given particle should always be somewhere (have a location) and is always traveling at a certain speed, but we can never know both.*

The reason is this: the most precise measurement we could ever make would be to shoot one photon of light at a moving object. But even so delicate a peek will change the position and motion we are trying to measure. It is the same with any of the *Complementary Pairs* of which quantum reality consists: waves and particles, energy and time, continuity and discontinuity. Fixing one member of any pair in place always makes our knowledge of the other member become fuzzy. At best, we always measure with some uncertainty.

This is easy enough to accept. But an awesome mathematical subtlety turns it into a profound tenet of scientific faith. It makes precise measurement unthinkable. By inference, this means that we no longer have reason for thinking the world has any ultimate precision to measure. So we take the last terrible step. We admit the world is *indeterminate*. We admit that electrons have fuzzy edges. When one collides, it may bounce one way. It may bounce the other.

The Physicist Erwin Schrödinger said that if that is indeed the case, let's seal a cat, a Geiger counter, a fragment of radioactive material, and a bottle of poison gas into a box for one hour. There's a 50-50 chance that radioactive decay will trigger the Geiger counter, activate a mechanism that breaks the bottle, and poison the cat. Schrödinger then asks if we will find a live cat or a dead one when we open the box.

This proposition sounds like the old riddle of "The Lady and the Tiger;" but it is actually much worse. In the riddle, the man who has to open either of two doors knows that a lady is behind one and a killer tiger behind the other. He does not know which door leads to the tiger, but the answer is *knowable*. Radioactive decay occurs on the level of indeterminacy. As an extended function of Gödel's Theorem, no knowledge of the system inside the box will ever let us predict the fate of Schrödinger's Cat. Whether it lives or dies is absolutely unknowable—until we open the box.

Physicists agonize while that Cheshire Cat sits and smiles. Scientists try to write wave functions for cats and gamma

radiation. They conclude goofy things: Maybe the cat in the unopened box is both alive and dead at the same time. Steven Hawking, the physicist who writes about the universe from his wheelchair, throws up his hands and cries: "When I hear of Schrödinger's cat, I reach for my gun."

In the end we have to look inside the box to learn whether the cat is alive or dead. So it is that the *observer* determines the truth. This makes an odd commentary on *objective* science. We are left to wonder if scientists aren't far more deeply interwoven with the world they observe than they would like to be.

### 06.1 Narrative Structures

Organic evolution is narrative rather than law-like, and if quantification is desired, it should be searched for not at the level of genetics, but at the level of the constrained thermodynamic system framing organic evolution.

### 08.0 Mapping and Storytelling

Mapping and storytelling are both central elements in the long human tradition of knowledge and information transference. We may describe the new practices of architectural work as engaging in a sort of "conversational drift." The telling of the story causes this drift; after the story is told, images are seen differently. These images construct a future in which the Earth is treated as a vast sculpture. While such an idea may strike many as absurd, humans are clearly modifying the ecosystem and changing the fragile biosphere of the planet. In many ways, the Earth already is a vastly artificial construct. . . .

There comes a moment (though not always) in research when all the pieces begin to fall in place, as in a jigsaw puzzle. But unlike a jigsaw puzzle, where all the pieces are near at hand and only one figure can be assembled (and thus the correctness of each move be determined immediately), in research only some of the pieces are available, and theoretically more than one figure can be made from them. In fact, there is always the risk of using, more or less consciously, the pieces of the jigsaw puzzle as blocks in a construction game. For this reason, the

fact that everything falls into place is an ambiguous sign: either one is completely right or completely wrong. When wrong, we mistake for objective verification the selection and solicitation (more or less deliberate) of the evidence, which is forced to confirm the presuppositions (more or less explicit) of the research itself. The dog thinks it is biting the bone and is instead biting its own tail....

Carlo Ginzburg and Adriano Prosperi,  
*Games of Patience*

### REFERENCES

- 01.1 Claus Emmeche. "What is Life?" in *The Garden in the Machine* (Princeton: Princeton University Press, 1994), p. 24.
- 01.1 Emmeche, pp. 28-29.
- 01.2 Emmeche, p. 33.
- 01.3 Emmeche, p. 34.
- 02.0 J. Doyne Farmer, and Aletta d'A. Belin, attributed in: "What is Life," in *The Garden in the Machine* (Princeton: Princeton University Press, 1994) p. 38
- 03.0 Richard C. Lewontin. "A Reasonable Skepticism" in *The Doctrine of DNA: The Biology of Ideology* (London: New York: Penguin, 1993), p. 11.
- 03.1 Lewontin, "A Reasonable Skepticism," p. 4.
- 03.2 Lewontin, "A Reasonable Skepticism," p. 11.
- 03.3 Lewontin, "A Reasonable Skepticism," p. 14.
- 03.4 Lewontin, "A Reasonable Skepticism," pp. 12-13.
- 03.5 Lewontin, "A Reasonable Skepticism," p. 12.
- 04.0 Richard C. Lewontin. "All in the Genes?" in *The Doctrine of DNA: The Biology of Ideology* (London: New York: Penguin, 1993), p. 26.
- 04.1 Lewontin, "All in the Genes?" pp. 26-31.
- 05.0 Richard Doyle, "The Sublime Object of Biology" in *On Beyond Living: Rhetorical Transformations of the Life Sciences* (Stanford, California: Stanford University Press, 1997)
- 06.0 Jesper Hoffmeyer. "Biosemiotics: Towards a New Synthesis in Biology" in *European Journal for Semiotic Studies* Volume 9, number 2, 1997, p. 367.
- 06.1 Hoffmeyer, p. 369.
- 07.0 Adapted from John H. Lienhard's essay *Schrödinger's Cat*, broadcast on "Engines of Our Ingenuity" radio program, KUHF-FM, Houston, Texas.
- 08.0 Marja Bijroet. "The Artist as Ecologist" in *Art as Inquiry: Toward New Collaborations Between Art, Science and Technology* (Peter Lang Publishing, 1997) p. 148.
- 09.0 Hannah Arendt. *The Human Condition* (New York: Doubleday, 1959).
- 10.0 Theodor Adorno. *Aesthetic Theory*, translated by Robert Hullot-Kentor (Minneapolis, Minnesota: University of Minnesota Press, 1998).