



DIAGRAM: ENACTING ALIVENESS

#### 

## Introduction: The Crisis of Decay

To consider decay in architecture is typically to consider the physical deterioration of building materials. It is a familiar residential concern: every flickering light bulb, cracked tile, and loose floorboard demands an engagement with the inevitable degradation of physical matter. Buildings are, indeed, big babies—constantly in need of caregiving.

It is no wonder that we typically think of the built environment as *alive*. Buildings "stand"; landscapes are "fertile"; cities are "healthy." Building systems are colloquially imbued with physiological significance: "skin" to describe building envelope, "bones" for structure, "lungs" for mechanical air distribution. Buildings "stand," marking the ground with their "footprint." An idea of aliveness is embedded in the very language used to describe architecture.

But aliveness is not something with which buildings, cities, and landscapes are endowed permanently. Rather, aliveness is constantly being enacted in a race against time's alternative: decay. Despite the ease with which we describe buildings as alive, maintaining that state is anything but easy. Indeed, the word decay comes from the Latin *de*-(from) *cadere* (fall). If buildings must *stand* to be alive, then how can we make sense of their *fall*—the inevitable process of decay?

The unavoidable threat of decay means that the built environment is always in a state of crisis. I use *crisis* here in its primary definition which is from the field of pathology: *the point in the progress of a disease when an important development or change takes place which is decisive of recovery or death*<sup>1</sup>. The etymology of crisis emphasizes its definition as a decision point—from the Greek *krisis* meaning decision. The "crisis of decay," as I term it, marks a turning point between recovery or death in the built environment.

"Recovery" and "death" in this case have consequences that are both material and epistemological. Materially, recovery includes physical repair and maintenance, which may be mundane—changing lightbulbs, replacing tile, fastening floorboards. The common term for such recovery— "upkeep"—implies a race to *keep up* with decay which is always one step ahead, threatening death. Death may be likewise understood as a material condition—physical deterioration to the point of becoming waste, resulting in abandonment, demolition, or desuetude. Epistemologically, recovery and death construct a way of understanding architecture as alive or inert. Alive, a building is worth maintaining.

Understood as a crisis—a decision point—decay is a matter of value. The way in which decay is identified, acknowledged, and addressed—leading to recovery or death—is determined by the economic, cultural, and social values of the context. Like the semantic boundary between a flower and a weed, decay can operationalize qualities of aliveness or inertness towards recovery or death. Different stakeholders uphold different indicators of "aliveness" such as structural robustness, real estate market viability, 1 "CRISIS, N.1". OED ONLINE. SEPTEMBER 2021. OXFORD UNIVERSITY PRESS. historical significance, cultural capital, to name a few.

Decay is therefore an epistemological apparatus through which the built environment is valued. Decay is value-laden not because the Second Law of Thermodynamics is a matter of value, but because the state of decay marks a decision point between recovery and death—a decision made by human actors. The crisis of decay necessitates drawing a line between living and nonliving.

This essay will explore those values which shape the built environment by operationalizing decay. My aim is twofold: first, to bring decay, understood as a crisis or a decision point, to bear on multiple scales of the built environment in order to demonstrate its epistemological role in ordering knowledge about space; second, to suggest that decay may be reclaimed as a methodology for building a new vocabulary with which to work in architecture.

#### Scales of Aliveness

The material processes of decay are commonly encountered—from rotting wood to spalling concrete. Designing for the avoidance of such decomposition, it goes without saying, is part of the work of the architect. In the 15th century, Leon Battista Alberti outlined the risks of decay and their design solutions in his *Ten Books of Architecture*:

"We should therefore consider that as iron, brass, and the like hard metals [...] will at last crack and break; so other bodies, if wearied with a repeated change of injuries, will spoil and corrupt inconceivably; [...]. I therefore lay it down as an indispensable rule, that all the first course of work from the level, should be composed of the hardest, soundest, and largest stones, to secure it against the frequent assaults of contrary injuries..."<sup>2</sup>

More recently, Stewart Brand demonstrated the "different rates of change" which characterize building components, leading to the conclusion that "a building is always tearing itself apart."<sup>3</sup> In other words, Brand argues that the crisis of decay occurs at multiple rates simultaneously. These are just two examples to demonstrate that decay, in the Western

- 2 LEON BATTISTA ALBERTI, THE TEN BOOKS OF ARCHITECTURE, THE 1755 LEONI EDITION, TRANS. JAMES LEONI (NEW YORK: DOVER PUBLICATIONS, 1986), 48.
- 3 STEWART BRAND, HOW BUILDINGS LEARN: WHAT HAPPENS AFTER THEY'RE BUILT (NEW YORK: PENGUIN, 1994), 13.

DESIGNING RESILIENCE

architectural tradition, is understood to be part of the design problem and therefore part of an architect's responsibility.

For Stewart Brand, a building's structure is the most static (though still dynamic) of all its layers of change—and for good reason. The decomposition of a building's structure, of course, poses a high risk to human safety. What structural decay brings into focus, though, is that structures are designed to withstand a building's loads and to prevent failure—which is to say, to prevent a building's death.

Despite the aliveness with which architecture is typically imbued, it is actually death—failure, collapse—for which buildings are designed. Standard practices for the design of reinforced concrete beams, for example, call for the concrete to fail before its embedded steel reinforcing bars yield. This method is designed to prevent sudden failure because, should the beam begin to fail, its deflection would be observable, allowing time to make the necessary repairs.<sup>4</sup> Structural engineers are not just designing for a building's death, but for its slow (and safer) death. Since architecture's coherence is dependent on its epistemological aliveness, it is significant that its most materially permanent element—its structure—is in fact designed with the building's death in mind.

I have suggested that architecture's insistence on life—its natalism, as Stephen Cairns and Jane M. Jacobs term  $it^5$ —finds its flip side in structural engineering. The epistemological relationship between structure and death has quantifiable outcomes, such as the sizing of structural members. But we can also look to the more qualitative use of metaphor and its history in architecture, which too produces real built outcomes.

The bodily lexicon used in architecture — "bones," "skin," and so on, as discussed earlier — had a moral meaning in Colonial America. For the New England Puritan, the house corresponded to the human body — windows were understood as eyes, the door as a mouth; the hall (the central space of a cross-passage house) was even called the "housebody."<sup>6</sup> And the body — made in God's divine image — was

4 DANIEL L. SCHODEK, STRUCTURES, 5TH EDITION (UPPER SADDLE RIVER, NEW JERSEY: PEARSON EDUCATION, 2004), 288.

5 STEPHEN CAIRNS AND JANE M. JACOBS, BUILDINGS MUST DIE: A PERVERSE VIEW OF ARCHITECTURE (CAMBRIDGE: THE MIT PRESS, 2014).

6 ROBERT BLAIR ST. GEORGE, CONVERSING BY SIGNS: POETICS OF IMPLICATION IN COLONIAL NEW ENGLAND CULTURE (CHAPEL HILL: UNIVERSITY OF NORTH CAROLINA PRESS, 1998), 127. an object of perfection. As the art historian Robert Blair St. George describes, "A house possessed 'being' if, in its bodily form and articulated 'conformity of parts,' it invoked the divine beauty of Christ's figure."<sup>7</sup> The house-body was an emblem of the perfect divine body.

Native Americans, then, whose bodies and behavior did not suit the white Puritan worldview, were considered monstrous, deformed, and ungodly. The perversion of the body was thus of moral concern, and such moral decay was ascribed to bodies of color. This historical legacy relied on architecture's aliveness and its cleanliness for spatial and moral coherence. Decay had no part to play; not only was it conceptually excised from the "house-body"—an architectural artifact and its white embodied corollary—but it was projected elsewhere, onto the bodies of Native Americans. By seeing the relationship between the Puritan "house-body" and decay, the necropolitics<sup>8</sup> enacted by this architectural epistemology are brought to light.

The deterministic view that spatial cleanliness facilitates and produces the moral purity of the occupant is also a view that motivated urban renewal in the 1950s and 60s. Here, the inertness of the built environment is operationalized in order to demolish so-called unclean neighborhoods. This lack of cleanliness was a material condition coded for a racial one, as many scholars have identified. As Reinhold Martin summarizes in The Art of Inequality, the demolition of "blighted areas" was construed as being able to "solve the social, economic, and public health problems of the people living therein." This act of clearance suggested that new clean space would make room for new clean infrastructure which would in turn create new clean lifestyles. Despite the fact that few of the people displaced ever became residents of the new buildings, this "physical determinism" held sway.<sup>9</sup>

As urban renewal was predicated on the inertness of these blighted neighborhoods—described as slums, diseased, abandoned, decayed—it also signaled that the residents of such slums were likewise ontologically dead—that is, inhuman. Katherine McKittrick suggests that racialized 7 ROBERT BLAIR ST. GEORGE, CONVERSING BY SIGNS: POETICS OF IMPLICATION IN COLONIAL NEW ENGLAND CULTURE (CHAPEL HILL: UNIVERSITY OF NORTH CAROLINA PRESS, 1998), 145.

8 ACHILLE MBEMBE'S SEMINAL ESSAY DEFINES NECROPOLITICS AS THE "SUBJUGATION OF LIFE TO THE POWER OF DEATH." SEE ACHILLE MBEMBE, "NECROPOLITICS," PUBLIC CULTURE (VOL. 15, NO. 1, WINTER 2003).

9 REINHOLD MARTIN ET AL., ED. THE ART OF INEQUALITY: ARCHITECTURE, HOUSING, AND REAL ESTATE: A PROVISIONAL REPORT (NEW YORK: TEMPLE HOYNE BUELL CENTER FOR THE STUDY OF AMERICAN ARCHITECTURE, COLUMBIA UNIVERSITY, 2015), 61.

assumptions of nonexistence "came to organize difference in place and to regard this differential process as a commonsense or normal way of life. This normal way of life is rooted in racial condemnation; it is spatially evident in the sites of toxicity, environmental decay, pollution, and militarized action that are inhabited by impoverished communities.... Life, then, is extracted from particular regions, transforming some places into inhuman rather than human geographies."<sup>10</sup> McKittrick implies that decay orders 10 KATHERINE MCKITTRICK, knowledge about both identity and place, operationalizing the inertness of both to enact violence.

The state's use of eminent domain to implement such demolition is written into the Fifth Amendment of the Constitution. The Fifth Amendment guarantees a number of rights—one of which, incidentally, is the right to silence under interrogation (also known as Miranda rights)including the right to private property. The Amendment states: "nor shall private property be taken for public use, without just compensation." In the postwar period, which saw a rising interest in slum clearance, litigation on the term "public use"-until then, understood as architectural and infrastructural public projects (schools, roads, and so on)-allowed for the interpretation of "use" as "public purposes."<sup>11</sup> The new synonym made room for projects based on new kinds of *value*—the clearance of slums and blight.

The associated building code revisions that circumscribed these new architectural plans foregrounded the values of "decency" and "sanitation." These values were enacted by new requirements for access to light and air, minimum room dimensions, open space, and others.<sup>12</sup> With its aliveness threatened by the asphyxiating slum, this new architecture razed "disposable lives"<sup>13</sup> in order to respire deeply. While sufficient light and air are beneficial, to be sure, it is important to note the rhetoric which undergird them. As Ruha Benjamin writes about carceral technologies, but which I quote here as it applies also to urban renewal, "These [techno-corrective] interventions come bubble wrapped in rhetoric about *correcting*, not just individuals, but social disorders such as poverty and crime... Could it be

"PLANTATION FUTURES", IN SMALL AXE, 42 (NOVEMBER 2013), 7.

11 DORCETA TAYLOR, TOXIC COMMUNITIES: ENVIRONMENTAL RACISM, INDUSTRIAL POLLUTION, AND RESIDENTIAL MOBILITY (NEW YORK: NEW YORK UNIVERSITY PRESS, 2014), 228.

<sup>12</sup> SEE INTERNATIONAL BUILDING CODE, 1202.5, 1202.5.1 AND 1204.1-2.

<sup>13</sup> SAIDIYA HARTMAN, "VENUS IN TWO ACTS", IN SMALL AXE, 26 (JUNE 2008), 5.

that we don't need technocorrections to make us secure, that we need social insecurity to justify technocorrections?"<sup>14</sup>

The racist motivations for such clearance projects were not (and are not) only enacted visibly through demolition, but also invisibly through economic systems, particularly real estate. The speculative nature of real estate development is premised on the idea that land value is expected to appreciate over time. That (theoretically) appreciating the value of a piece of the earth's crust is determined by the invisible workings of the real estate market. "The most tangible and real form of property"—the land itself—has "become the most fungible"<sup>15</sup> instrument of value through this process of exchange.

During the 2009 mortgage crisis, these "exchange values" of land began to plummet, proving just how fungible the system was designed to be. The loss of housing wealth from the market crash disproportionately affected low-income homeowners.<sup>16</sup> The system of homeownership that had been pitched to low-income communities as a solution to inequality became the very reason for inequality's further instantiation.

Not only does property value affect individual wealth, but the value of land and buildings determine the assessed property taxes to be collected, which in turn are the most significant contribution to municipal revenue for supporting public services. It follows that "local real estate values—and not the overall wealth of a city, state, or nation—are one of the clearest predictors of the quality of education, amenities, and safety in U.S. neighborhoods. In turn, the quality of those public services is often the strongest predictor of real estate prices."<sup>17</sup> This relentless feedback loop inscribes inequality into urban space through the decay of property value—a decay that is actively perpetuated by the hegemonic principles of real estate development.

15 REINHOLD MARTIN ET AL., ED. THE ART OF INEQUALITY: ARCHITECTURE, HOUSING, AND REAL ESTATE: A PROVISIONAL REPORT (NEW YORK: TEMPLE HOYNE BUELL CENTER FOR THE STUDY OF AMERICAN ARCHITECTURE, COLUMBIA UNIVERSITY, 2015), 21.

16 IBID., 22.

17 IBID., 30.

<sup>14</sup> RUHA BENJAMIN, ED., CAPTIVATING TECHNOLOGY: RACE, CARCERAL TECHNOSCIENCE, AND LIBERATORY IMAGINATION IN EVERYDAY LIFE (DURHAM: DUKE UNIVERSITY PRESS, 2019), 2.

### Radical Alternatives: Decay as Methodology through Vocabulary

By understanding the crisis of decay in the built environment, we can begin to "undermine the *givenness*" to use Kathryn Yusoff's words—of decay as "an innocent or natural description of the world."<sup>18</sup> Though decay may seem "innocent or natural," operating only at the scale of material decomposition, I have argued that it plays an epistemological role in ordering knowledge about the built environment at all scales.

If, as I have argued, the deterministic rhetoric of "aliveness" and "cleanliness" distorts an understanding of the interplay between decay and the built environment, then a commitment to justice may be able to redesign this relationship towards productive futures. Rather than only serving as an indictment of architecture, decay itself can become the thing from which we derive new, just architectures.

I would suggest that such mobilization may be possible through the practice of decay as a dynamic methodology of design. What would it mean, for example, to decay capitalism? To decay injustice? We know what it means to design them; this text has touched on some of the ways capitalism and injustice are designed. The epistemology of decay—where it operationalizes death—has been a part of that design.

Decay is a precondition for systems of injustice, but it may also be their undoing. Its disruption of distinct categories of life and death, artifact and waste, is precisely what is threatening to systems of injustice. Understanding the saliency of this position, then, how might decay be practiced as a methodology? Rather than attempt to dismantle unjust systems from the outside, decay can work from both within and without to upheave, overturn, metabolize, and wear away at the ground on which such systems operate.

I draw on Gautam Bhan to suggest that building a new vocabulary around decay may be a start. Bhan asks, "How can a new body of thought give us ways of moving and 18 KATHRYN YUSOFF, A BILLION BLACK ANTHROPOCENES OR NONE (MINNEAPOLIS: THE UNIVERSITY OF MINNESOTA PRESS, 2018), 10.

9/11

modes of practice as well as theoretical formulations? I contend that building a vocabulary is a way to begin such work."19 I offer the below entries to initiate a vocabulary that takes decay as its starting point.

# **Compromise (v.)**

Etymology: Latin *com*- (together) + *promittere* (put forth, promise)

The first definition of compromise (noun) - a mutual promise—is now obsolete. Instead, it is nearly its opposite which is the standard definition—a coming to terms by concessions on both sides; partial surrender of one's position for the sake of coming to terms.<sup>20</sup> This latter definition invokes the inertness of a decay epistemology; both sides are seen experiencing loss. What if compromise invoked aliveness instead? Understanding compromise as a co-promise may realign its meaning and potentials with abundance and aliveness.

## **Redundancy** (n.)

Etymology: Latin redundantia (superfluity, excess, abundance)<sup>21</sup>

Daniel Abramson, in his book *Obsolescence*, advocates for "resilience thinking" as a non-capitalist alternative to sustainability. He writes, "Different than sustainability, resilience thinking does not seek efficient, optimized control of an equilibrium state, but rather emphasizes redundancy and expects disaster, a series of constant crises throwing systems out of balance. Resilience thinking thus incorporates dramatic change much more than does sustainability."<sup>22</sup> Rather than seeing redundancy as a failure, 22 DANIEL ABRAMSON, OBSOLESCENCE: it may actually promote aliveness precisely by accepting death and disaster.

# **Repair** (v.)

Etymology: French réparer (to restore [something damaged] to good or proper condition, to make good, put right; [of a sick person] to recover) $^{23}$ 

**19 GAUTAM BHAN, "NOTES ON A SOUTHERN** URBAN PRACTICE," ENVIRONMENT AND URBANIZATION, 31, NO. 2 (JANUARY 28, 2019), 3.

20 "COMPROMISE, N.". OED ONLINE. SEPTEMBER 2021. OXFORD UNIVERSITY PRESS.

21 "REDUNDANCY, N.". OED ONLINE. SEPTEMBER 2021. OXFORD UNIVERSITY PRESS.

AN ARCHITECTURAL HISTORY (CHICAGO: THE UNIVERSITY OF CHICAGO PRESS, 2016), 155.

23 "REPAIR, V.2". OED ONLINE. SEPTEMBER 2021. OXFORD UNIVERSITY PRESS.

10/11

Gautam Bhan advocates for diffusing the distinction between *repaired* and *new*, "allowing repair to hold a sense of endurance but also one of aspiration and renewal."<sup>24</sup> Repair, for Bhan, is cyclical. As I have suggested, the crisis of decay is also ongoing and cyclical, requiring repeated recovery. By seeing repair as part of a continual process of recovering the aliveness of the built environment, its critical role in the practice of architecture—understood more broadly than new construction—may be unlocked.

24 GAUTAM BHAN, "NOTES ON A SOUTHERN URBAN PRACTICE," ENVIRONMENT AND URBANIZATION 31, NO. 2 (JANUARY 28, 2019), 8.