ACID ECOLOGIES
Or The Secret Lives of Spanish Tomatoes
by Curtis Roth

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Abstract

This thesis seeks to unpack the nature of ecology within architecture, not as a neutral science, but a legitimizing construct, building a future and transforming the ethics of the present towards very deliberate ideological ends, and contingent on certain practices of alienation which themselves have historically laid the groundwork for later environmental and social crisis.

The thesis asks the question, what do we mean when we call an architecture ecological, and what sort of reality are we advocating within that practice.

The project is not staged explicitly as a critique of ecology, but rather a challenge to the overwhelming neutrality with which the ecological project is entertained within architectural discourses, under the premise that an ecological awareness must first entail an awareness of the means by which ecology constructs unreal realities in order to work for us.

The project takes place in Almeria Spain, which in the last forty-five years has gone from the poorest region in Spain to one of the richest, through the wide scale application of greenhouse urbanism. Almeria is currently the largest intensive agriculture site in the world (80,000 acres) and supplies the majority of winter produce to Europe.

But Almeria is also, in many ways, an accelerated microcosm of larger contemporary ecological paradigms, what Keller Easterling called an autonomous world, Almeria is a place in which the apparent neutrality of ecological ideologies are consistently leveraged towards technological transformations of the landscape precipitating widespread environmental and social fallout conditions. In Almeria, Ecological ideologies consistently serve as the legitimizing platforms by which transformation after transformation (each promising an ideal future) compound the effects of peripheral disaster all under the guise of a seemingly neutral science.

The thesis argues that within a condition in which neutral ecology is leveraged to legitimize specific ideological and economic positions, it may actually be the task of an ecological architecture to irrigate radical alternatives, not as ideal futures, but as provisional presents, alternate ecological life rafts within contested environmental conditions. This thesis proposes one such alternate present. It interjects itself within the most recent techno-ecological shift from chemically applied agricultural practices which are rapidly being replaced with the promise of a genetically engineered future, a ‘clean’ Almeria in the wake of widespread chemical fallout.

The alternative is formed from a seemingly simple question, what if we merely doubt that Almeria’s genetic turn won’t precipitate alternate forms of fallout equal to its chemically contested state.

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ACID ECOLOGIES
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## Contents

- Introduction 9
- Alternate Almerias 17
- The Mirage Monolith 41
- The Dialogical Dust Storm 57
- The Evolutionary Accumulator 71
- Process Proposals 85
- Appendix A: Thesis Defense 105
- Appendix B: Initial Proposal 113
- Appendix C: Preliminary Hallucinations 131
- Bibliography 153
INTRODUCTION
On Acid Ecologies

2050: The Ecological Age: A Plausible Eco-Future

Crisis never lost, and we moved on, although on what was never clear, but the evolution was certainly televised. Green seas, warmed into breeding grounds for mutations of algae, at first the object of public pandemonium, lead to the green gold rush of the mid 21st century. The previously un-territorialized oceans were parceled into energy producing leviathans. Strange creatures, the products of climatic cataclysm survived too, and while at first, became the poster-children of for Al Gore's 2022 powerpoint sensation entitled ‘I Told You So, Fuckers’, eventually made their way into feature films as the new objects of public hilarity. The emerging industrial de-alienation of the mutant, the monster, and the accident lead us to the discovery of new categories of aberrations, spiders who had evolved to survive on the rooftops of skyscrapers, bacterial parasites operating as configurative mechanisms within our DNA, or urban wildcats, re-inhabiting the abandoned homes evacuated after the housing collapse of 2035. Mutation was put to good use, and the 'happy accident' became the mantra of the age. But this retrospection on mutation also lead us to the realization that while we had been worrying, the ecological (read: enlightenment) engine had been rolling up its sleeves. Air was no longer natural, but a fully-fledged tradable commodity since the 1980s, weather had been synthetically orchestrated over our airports since the 1960s, and 'homegrown' came in single application spray form. The catastrophe wasn't so hard after all, in fact, most of us never even noticed.

But in my own environmental memory, green was only briefly the new green, to be replaced by the more inclusive blue, then the compromised brown and most recently the property elegiac black. But the oddest thing about the way the environment has infiltrated architectural discourse within the last fifteen years is that it does so under the urgency of an absolute apocalyptic imperative, while simultaneously obscuring the most basic questions of an environmental practice, namely what are we protecting and who are we protecting ‘it’ for? ‘X is the new green’ will certainly continue to change, but the prevailing, and unquestioned, environmental logic in both architecture and society at large seems doomed to be perpetually predicated on the idea that (to use Clinton's gem of political wisdom) we're always unquestionably sure what the definition of ‘it’ is.

What sort of implicit positions (political, economic, social, architectural, religious?) are we unwittingly advocating for when we invoke the ‘it’ with cool assurance to claim that such-and-such a color is green (read: natural), and is therefore good.

The neutral ‘it’ is a residue, not of the environmental movement itself, but of the ecological platforms which sustains environmental discourses. Ecology, as a discipline, is in the business of producing the ‘it’ (right under our noses no less), the organizing logic by which reality itself can be systematized and moralized into an alternate unreal-reality and productively acted upon. Ecology instrumentalizes reality by converting it into an unreal version of itself. But if all ecologies, from the techno-utopian to the romantic, function as the meta-constructs which structure debates on nature and society, which entertain environmental discourses in architecture, politics and other social practices, and condition our most basic positions towards the natural, then one must also be suspicious of the overwhelming neutrality with which the ecological-project is undertaken. Or in other words, why have we, a group of well-educated, critically-thinking students, allowed ourselves to be so easily convinced of the force-fed is, without ever asking what this is stands for? Without wondering if the is she’s talking about, or if any contemporary is is merely an is soup of lies isn’t past.

Or in other-other words, what are we talking about when we describe something (anything) as ecological? And aren’t we being a little naive when we invoke that phrase with such authoritative confidence?

"If today, human relationships with the social, the psyche and ‘nature’ are increasingly deteriorating, then this is attributable not only to objective damage and pollution but to the ignorances and fatalistic passivity with which those issues are confronted by individuals and responsible authorities." -Felix Guattari

Slovenian-born cultural theorist Slavoj Žižek points out the problematic (read: insidious) neutrality of the ecological-project, rephrasing Marx’ 1843 edict that ‘Religion is the opiate of the masses’, by calling ecology the masses’ oplate in the 21st century. He goes on to argue that, like Marx’ conception of religion, ecology functions as a neutral oplate precisely by orchestrating the misreading of its ideological platform as reality itself (unreal reality confused with reality). And architectural discourse is certainly not immune to this misreading of ecological ideology as reasonable reality, one merely has to examine even the most ‘cutting-edge’ architectural
discourses and count the number of times the ecological-project is invoked without anyone ever questioning what kind of ecology we’re talking about and what kind of world that ecology is building.

Perhaps a more ornery student than myself might question ecology’s apparent neutrality by putting forth the somewhat simple observation that the 19th century development of ecological thinking has gone hand-in-hand with what Paul Vitolo calls the radical acceleration of an age of ecological catastrophes, and a global “reality” in which a consciousness of often horrific environmental crises has become a daily norm. Or in a review, one particularly frustrated reviewer might bring up the fact that it’s not only the GSD but the National Socialists’ Part (read: Nazis) who published books on ecology and perhaps it’s high-time we begin to ask ourselves for a bit more self-conscious application of this seemingly neutral term.

Ecology as Totalitarian Enterprise

“The notion of ‘environment’ began to occupy public consciousness precisely when it was realized that no human action could count on an outside environment any more; there is no reserve outside which the unwanted consequences of our collective actions could be allowed to linger and disappear from view.” - Bruno Latour

One might begin to examine the properties of this strange neutrality-observation in greater depth by recognizing the operations ecology has to perform in order to maintain its insidious neutrality. As a particular rationalization of the relationship between nature and society for unlocking natural systems to acts of social manipulation, it is perhaps the most basic operation of ecology-as-unreality-construction to resist the presence of pluralities. After all, my own personal fantasies seem painfully implausible only when pulled out of their isolation and made to rub against everyday reality (or worse someone else’s fantasies!) From Haeckel’s cataloging of life post-1870 into its various categories and put into an all-inclusive map, or a 1:1 equation for the future. As Bruno Latour points out, the production of totalities is the messy contamination of reality.

In that mess, the logics of ecology can unfold, uninterrupted, within which the logics of ecology can unfold, uninterrupted. If ecology is the construction of a productive unreality, then its very existence is dependent on being perceived as a totality, not as a construction but as reality itself. Or in other words, uncertainty is inherently un-ecological, and should be avoided at all costs.

But if it can be called the fundamental property of ecology to operate within a total-reality vacuum, then it should also be recognized that the construction of any plausible reality-vacuum is contingent on acts of radical alienation from reality. The stability of any ecological agenda relies on the ability to convincingly erase the monstrosities caught between it’s ruthless categorization of reality. Darwin himself, recognizing the dangers of a vacuumed ecology, argued for a radical incubation of uncertainty, claiming that all life falls into one of three categories, a species, a variant or a monster. These three categories function reflexively, meaning one is only defined through its relationship to the other two, and perhaps most importantly, their definition can only be declared retroactively. Meaning for the present, as Darwin himself put it, “a great door for the entry of doubt and conjecture is opened.” But of course, doubt is any unreal-reality’s worst nightmare.

“The way we approach ecological problematics is, maybe, the crucial ideology of today. And I use ideology in the traditional sense, as Illusory, wrong ways of thinking and perceiving reality.” - Slavoj Zizek

An understanding of ecology’s historic operations of alienation has the potential to expose what I believe to be the crucial paradox facing contemporary ecology in an age of intense ecological anxiety. As Hannah Arendt aptly points out, “progress and catastrophe are two sides of the same coin.” The unreal-realities of ecology make the nature-society duality work towards particular ends, but are contingent on alienating certain forms of reality which never truly disappear and ultimately lay the foundations for eventual ecological catastrophe. It’s worth noting that catastrophe always occurs as unconsidered side-effects of progress itself, it’s not the combustion engine, but the engine’s exhaust which now heats up the atmosphere, it’s not the tractor, but the tractor’s unintended effects on soil erosion that lead to mass desertification. Paul Vitolo’s concept of Grey Ecology reinforces the notion that inherent to the formulation of any ecology of alienation, is the formulation of ecological disaster (environmental alienation = environmental crisis).

Progress produces it’s own catastrophe, the invention of the plane is the simultaneous invention of the plane crash, the invention of the nuclear reactor is the invention of the catastrophic meltdown
and the invention of ecologies of alienation is the invention of the ecological crisis. An alternate ecological approach to architecture must realize that while ecology is perhaps the most effective construct for instrumentalizing our relationship to the environment, it’s also an inherently unsustainable enterprise and of itself. The paradox of ecology is that its promise to save us is contingent on the fact that it will eventually kill us. This thesis seeks to put forth the notion that it is within the radical incubation of contradictory ecological alternatives, accidents, and monstrILITIES, that ecological architecture can not only consciously operate within this ecological paradox, but allow the paradox itself to serve as a platform by which active political choice between contradictory alternate-realities can enter ecological discourse. As Virilio later suggests, “consciousness only survives through the awareness of accidents.” Or as Guattari argues, “The implications of any given negative development may or may not be catastrophic, whatever the case, it tends today to be simply accepted without question.”

**Alienation as Architectural Operation**

Architecture has long been complicit in the erasure of ecological monstrosities, the predicament of the monster’s relationship to society saw it’s most perfect encapsulation in architecture, through the short-lived emergence of a Victorian public institution typology known retro-actively as the Evolutionary Accumulator. The simultaneous emergence of Darwin’s theories on species developments, chemical breakthroughs in the practice of taxidermy and the emerging Victorian principles of a neo-liberal self-governing society lead to the production of a new type of ecological control. Unlike the traditional humanities, in which the stories of civilization were archived and interpreted in the objects of cultural production, the Evolutionary Accumulator allowed for a new archaeological conception of the corpse itself. These Accumulators functioned as cultural memory machines, laying out all geologic time through the bodies of the past to be consumed at a glance. It was through the arrangement of history’s bodies in slow, evolutionary successions that accumulator curators classified a kind of nature which was inherently rational, occurring in glacial progressions from the lowest of creatures to the victorian male (the ultimate instantiation of rational civility). (read: neo-liberal politics mis-recognized as ‘natural’ law)

But the accumulator’s architectural section reveals that behind the scenes, evolutionary progress was never quite so rational. Large archives in the accumulator’s back of house were devoted to the storage and sorting of monsters, mutants who brought crisis to the Victorian social agenda. Monsters were defined as organisms which didn’t fit into the rational presentation of species development. They were aberrations, freaks which deconstructed the rational lineage of civilized nature. The monster, brought the curators a kind of category crisis, and with it, the very real potential for social crisis. In recent years the same processes of alienation have re-infiltrated architectural discourse with a new vigor, not least of which, under the guise of ‘ecological urbanism’ (canonized by the recently published bible for considering issues of architecture and ecology). Felix Guattari’s ‘The Three Ecologies’ (perhaps the seminal text in provoking “ecological urbanism”) rather convincingly advocates for the idea that any component of subjectivity has the potential to create its own alternate reality, developing far beyond their ordinary state of equilibrium. Claiming that a “mental ecology demands rather that we face up to the logic of the ambivalence of desires wherever it is found...that we re-evaluate the ultimate goal of work and human activities in terms of criteria other than those of profit and productivity, that we acknowledge the need to mobilize individuals and social segments in ways that are always diverse and different.” In an ecological urbanist approach, it’s precisely this equilibrium which is maintained. Ecological urbanism downgrades Guattar’s revolutionary disruption of reality (as cognitively perceived, and socially maintained) to what Mohsen Mostafavi describes as, “a set of sensibilities and practices that can enhance our approaches to urban development.” Seen in this light, even the most forward-thinking of ecological urban approaches merely augments existing paradigms of alienation, re-articulating modernity’s nature/society duality while apologizing for the apparent brutality of the duality itself. (read: ecological urbanism = apologetic modernism) If architecture is to engage questions of ecology, it must be willing to re-conceive of the nature of collectivity itself, and be inventive enough to but unpredictable sections through modernity’s nature society duality. Perhaps more hopefully, architecture’s complicit role in ecology as a regime of alienation has not only been recognized but critiqued through the inventive collective. In recent research projects such as David Gessen’s Subnatures which develops a catalog of social/nature hybrids historically erased from architectural discourse. But also in the work of architects like RSEE who have defined their over-arching project, described by Stanford Kwinter as “Eco-Loir” (incidentally, an unacknowledged “borrowing” by Kwinter from literary theorist Timothy Morton), as an attack on the
alienating tendencies of contemporary ecology by developing uncomfortable, oddly productive relationships with ecology's marginalized monstrousities like dust, insects, pollution and infection.

While this work has challenged the alienating tendencies of ecological discourses, it has also done so merely through small scale disjunctures, discomforts and the organization of strange-bedfellows. But an additional conceptual leap from the work of these ecological disjunctures, one this project sees as an absolute imperative, would entail that if ecology pieces together a world through categorization and alienation, it simultaneously excludes an infinite number of alternate possible worlds. Acid Ecologies doesn’t advocate for a ‘return to reality’, ideology’s age-old red herring for legitimizing unreality) instead it argues for the feverish construction of simultaneous alternate realities. Meaning ecological architecture might be framed not merely around the advancement of a particular ecological project, but in the irruption of possible alternate projects, entire eco-systems formed out of the contested monstrousities of status-quo ecology, each championed by its own group of constituents.

Acid Ecologies

"What political ecologists should have done was slow down the movement, take their time, then burrow down beneath the dichotomies like the proverbial old mole. Such, at least, is my argument. Instead of cutting the Gordian knot, I am going to shake it around in a lot of different ways. I shall unne a few strands in order to knot them back together differently." -Bruno Latour

The concept of Acid Ecologies, a simultaneous play on Gregory Bateson’s ‘High Ecology’ and the genre of Acid Westerns sparked by Sergio Leone’s Almerian-filmed westerns (both products of the 1960s) entails, a bit like an acid trip, the re-appropriation of ecological reality’s constituents towards alternate ends. Believing that each piece of reality might be equally at home in an alternate reality, a reality with a radically different future, it relies on Debord’s concept of detournement, along with Koolhaas’ well-worn advocacy that critical architecture can be as much a critique of given systems as it can the fanatical postponement of judgement, and the maintenance, articulation and even nurturing of constant alternatives to any present reality.

The articulation of simultaneous alternate ecological platforms that this thesis is arguing for is both a de-mythification of the ecological promise of perfect-progress, and a re-stating of the ecological task as the perpetual construction of uncertain life rafts away from singular (mythical) ecological ideologies towards ecologies of contested multiplicity. The project is contingent on three interrelated architectural and urban operations.

Articulating the Alternate

Like Paul Virilio’s ‘Museum of the Accident’ which seeks a new consciousness through the awareness of ideology’s alienated side-effects, alternate ecological platforms must re-assemble monstrousity into the foundational elements of their unreal-realities. Alternate ecologies will gain their social and political leverage by re-assembling the aberrations erased by traditional ecologies. This will be, in part, a continuation of Gessen’s Subnatures project or Gilabert’s radical de-alienation, or in other words the re-incorporations and, more importantly, re-instrumentalization of erased natures into architectural, urban and economic scenarios. But it will also require this work to move beyond a mere aestheticization of monstrousity towards new cultural constructs, institutions or technologies which take monstrousity not as an alternative but as a foundational organizing component.

This portion of the thesis’ agenda can be read into the work of architectural projects like Eva Franch I Gilabert’s Ecologies of Excess studio at Rice University which re-conceptualize the excesses of traditional urban scenarios as the foundational grounds for new social and political eco-systems. Franch I Gilabert theorizes an ecological movement for the 21st century in which sociopolitical transformations shift ecology away from the modernist utopian ideals towards the radical incorporation of the monster.

“The Ecologies of Excess movement introduced a radical epistemological change in relation to the 21st-century sustainability movement or the 20th-century Modern movement: there were no principles to follow, no ideals to fulfill. While in the past architecture had been built according to certain ideas, models of efficiency or control systems, Ecologies of Excess provided us with a guide to thinking, designing and building based on what we, as simple human beings, are and produce. excess.”

The Simultaneous Alternative

Unlike Ecologies of Excess however, the thesis does not explicitly seek the grounds for a new ecology, but the continual incubation of simultaneous ecological (read reality) alternatives. Contingent on the concept of the alternative is the concept of the local.
Alternate ecologies will not emerge from the res extensa of modernity’s ecologies but through the fallout of ecology in highly contested localities. It’s precisely at the point where the grand narratives of eco-utopias rub against the messy conditions of everyday reality that ideological platforms can be contested with their radical alternatives.

Bruno Latour theorizes the relevance of the local in reevaluating ecology through actor-networks by claiming “The great paradox of our [Bruno Latour and Peter Sloterdijk’s] two enterprises is that spheres and networks are ways first to localize the global so as, in a second move, to provide more space in the end than the mythical “outside” that had been devised by the nature-and-society mythology.” The thesis will advance the position that ecological alternatives will emerge from the contested particulars of individual, local networks, as opposed to over-arching ideological platforms. Acid ecologies will find happy accidents in hegemonic ecology’s monstrosities, its waste, its disenfranchised ‘natures’, its risks and fears, not as new singular agendas but as multiple, fragmented ecological platforms.

Assembling Non-consensual Constituents

The final component of incubating acid ecologies is the articulation of the alternate as a symbolic political fragment. Alternate ecologies are supported by constituents, both human and non-human, but exist only within a contested landscape. It thus becomes necessary to articulate not an ecological consensus, but the impossibility of consensus as the grounds for an open ecological playing field. In a formal sense, this operation owes much of its thinking to the work of Bernard Tschumi in Architecture and Disjunction, where he attempts to theorize the reconstruction of urban constituencies among a condition he describes as “madness”, or the over-arching disjunction between use and sociopolitical value. (a bit like ecology, no?)

“The fragment of our contemporary ‘mad’ condition inevitably suggests new and unforeseen regroupings of its fragments. No longer linked in a coherent whole, independent from their past, these autonomous fragments can be recombined through a series of permutations whose rules have nothing to do with those of classicism or modernism.”

More recently, the project of non-consensual constituencies has been taken up by Alexander D’Hooghe in his work on the liberal monument, in which the insidiously neutral condition of urban sprawl is re-conceptualized into contradictory groupings of specific ideological enclaves, “screaming their own desires into the surrounding emptiness.” D’hooghe resuscitates Umberto Eco’s concept of the open work, in which multiple, even contradictory political positions are concretized through the open interpretation of multiple simultaneous realities in a shared field.
ALTERNATE ALMERIAS
The Almerian Miracle

In 1964 in an effort to preserve his crops from the inclement winter weather, Almerian former Francisco Fuentes installed a small plastic tarp over his plot. That winter, he reaped 213% more tomatoes, 410% more peppers and 383% more cucumbers. Soon his neighbors followed suit.

Today Almeria stands as the global capital of tomato production, 150,000 hectares of continuous plastic sheeting stretched thinly over the southern Spanish desert, responsible for the vast majority of winter produce to Europe in what essentially amounts to an unprecedented form of urbanism, intensive agriculture at the territorial scale, accidentally inseminated into the landscape entirely through the Fuente’s accidental 1964 invention, in what has since become known by locals and the transnational fruit industry as ‘the Almerian miracle’. A miracle which takes the form, not merely of an added productivity, but in fact the production of a second, miraculous growing season, which sees tomatoes harvested in both the winter, and summer seasons.

A miracle which transformed the landscape from the second poorest in Spain on the morning of Fuente’s invention, into the second richest..
An Accidental Urbanism

Almeria's miraculous turn of events is contingent on two strokes of geographic luck on the part of Almerians. The first, its advantageous location within the vast northern sunbelt, a stretch of highly productive photosynthesis which stretches from northern California to southern China. The second, its nearly unprecedentedly flat topography.

With every 20 meters of elevation above sea level, an additional two weeks of incubation is added to the life cycle of the tomato, once the elevation rises over 70 meters above sea level. Meaning once the topography rises over 70 meters, the miracle becomes an untenable proposition.
But if Almeria's miraculous winter growing season is defined by a transparent tampering of the sun's approaching effects, the very same conditions spell disaster for its alternate season, the summer harvest, where the sun's rays bake the fruit and scorch the desert ground below. In an effort to combat these effects, Almeria puts their miracle in reverse, whitewashing the greenhouse structures in a claustrophobic attempt to de-orchestrate the very circumstances which just months earlier resulted in their miraculous harvest.

But this transformation from transparent tampering to claustrophobic insulation, can be read analogously to Almeria's larger geo-political transformations over the last twenty years. In the 1980s, Almeria tempered with pseudo-transparent border conditions, exploiting cheaper markets to the south for a steady supply of labor, and richer markets to the north for the majority of their fruit exports. But since the inclusion of Spain in the European Union, stricter standards of fruit production have spawned sub-fruit markets in the very same locales Almeria once exploited, while lowering the profit margins of fruit which has become increasingly expensive to produce. A condition which in the last two decades has propagated social, environmental and economic disasters into the miraculous landscape.
But in recent years, Almería has sought salvation through the promise of advanced genetic engineering. With the arrival of six of the world's largest genetic engineering firms into the sea of plastic, Almería has undergone a widespread shift from the chemical dependency which governed the first twenty years of tomato production, to the promise of a 'clean' Almería through techniques of advanced genetic modification.
This promise propagates itself through the immeasurability of the catastrophes it produces. While traces of the chemical can be measured in the soft tissue of tomato consumers worldwide, and traced to an individual desk in an individual laboratory, the modification of the tomatoes genes, while tampering with the exact same biological systems within the consumer, only manifest themselves on the scale of the population, over a temporal period of decades. It’s precisely through this simultaneous magnification and shrouding of catastrophe that Almeria perpetuates a continuing cycle of catastrophe and promise.

The following projects imagine the possibility of doubt within this landscape of ubiquitous change.
Historically, to doubt, has been regarded as an unproductive activity, but what if we were also to imagine doubt not merely as a form of disbelief, but as the production of belief in two, contradictory alternatives. This thesis doubts Almeria’s genetic promise through an investment in three of the continent disasters associated with Almeria’s claustrophobic battles: Overheating, the dust storm and the flash flood, transforming catastrophe into the possible natures of not-yet forms of public within Almeria’s toxic desert.
GREEK EMPIRE CONQUERS THE EL EJIDO VALLEY FOR METAL AND TIMBER RESOURCES

EL EJIDO VALLEY CLEAR CUT FOR ROMAN METAL SMELTING
ROMAN MINES DIG UP TO 300m UNDERNEATH THE SIERRA GADOR RANGE

JULIUS CAESAR'S EXPANSION OF THE ROMAN EMPIRE REQUIRES MASSIVE AMOUNTS OF RAW METAL

EL EHDÓ VALLEY SCORCHED AS A RESULT OF ROMAN MINING PRACTICES

AMERICAN COPPER AND LEAD ORE ARM THE ROMAN EXPANSION
THE UNDER-ARMED ROMAN EMPIRE COLLAPSES, DUE TO LACK OF RESOURCE MANAGEMENT.

ALMERIAN VALLEY, LEFT A SCORCHED WASTELAND AFTER CENTURIES OF ROMAN MINING.
MOORISH EMPIRE SLOWLY CULTIVATES THE EL JERIB WASTELAND

MOORS CULTIVATE THE ALMERIAN VALLEY THROUGH ALTERNATE AGRICULTURAL STRATEGIES

MOORISH AGRICULTURAL TACTICS TRANSFORM ALMERIAN VALLEY INTO A SUB-TROPICAL RAINFOREST

AS THE EUROPEAN CENTER OF SILK PRODUCTION
ALMERIAN RANFOREST BREEDS MORE BEARS THAN ANYWHERE ELSE IN EUROPE.

THE MOORS FORTIFY THEIR SILK EMPIRE.

FERDINAND AND ISABELLA RECONQUER SOUTHERN SPAIN FOR THE EXPANDING SPANISH EMPIRE.

ZEBRAS PROLIFERATE ACROSS THE ALMERIAN VALLEY.
SILK EXPERIENCED ALMERIAN MOORS ARE ALLOWED TO STAY AS SLAVE EDUCATORS BEFORE BEING EXTERMINATED.

SPANISH AGRICULTURE TRANSFORMS THE ALMERIAN VALLEY INTO EUROPE'S FIRST DESERT.
IMPOVERISHED EL EJIDO VALLEY SERVES AS THE CAPITAL OF SPANISH AGRO-ANARCHISM

AGRO-ANARCHISM CRUSHED BY THE FRANCO REGIME AND LEFT DECIMATED

EVACUATED ALMERIAN VALLEY SUBSISTS ON SMALL-SCALE ALMOND FARMING
ALMERIAN GHOST VALLEY SERVES AS A FILMIC SUBSTITUTE FOR THE WILD WEST.
THE MIRAGE MONOLITH
The Mirage Monolith

Almeria's cycles of production and advanced incubation techniques not only facilitate the ideal growth conditions for the tomato, but additionally the perfect ripening conditions for a host of bacteriological infestations. The intensive taxing of the land over the last four decades has facilitated not only an empire of tomatoes, but an empire of infested forms of growth, forcing Almeria into a highly coordinated cycle of fallout production, which sees the cultivation of tomatoes in an increasingly challenged battle with the growth of bacteria, forcing a kind of fallout cycle in which every four to five years, the greenhouses are dismantled, disinfected and left to burn off in the intense Almerian heat.

But this cycle has become increasingly taxed through the arrival of an alternate industry capitalizing on Almeria's sunbelt local, the tourism industry, which over the last ten years has boomed into one of the prime destinations for wintering Europeans, proliferating an intense battle for resources and the inability for farmers to maintain the recommended cycle of burn-off.

But the intense production of heat not only results in the perfect red-hue for both tomatoes and vacationing German's alike, additionally it results in the production of an alternate ocean, burning above the plastic fields in the form of the mirage.

The mirage monolith proposes an afterlife to the dismantled greenhouse, in the form of a structure capable of elevating an alternate form of tourist into the proper perspectival relationship to Almeria's alternate ocean.
Footnote no.2: An Almerian Space Odyssey
The monolith is fabricated by exploiting particular loopholes within standard modes of constructing the greenhouse, which deviates from a pure structural logic in order to facilitate a flat packing of the various greenhouse components, essentially allowing a kind of misuse which finds the possibilities of the monolith within the existing configurative possibilities of the greenhouse.
The Mirage Monolith is occupied through the suspension of a living pod within the empty frame of the Monolith. The pod not only allows the occupant to stage an ideal height relationship to the mirage’s temperamental requirements, but additionally serves as a tuned mass damper, a hanging weight, which allows for the Monolith’s stability to remain during moments of intense wind.
While the greenhouse relies on a relatively standard notion of 'skin', which appropriates the minimum amount of material for the maximum amount of surface coverage, the monolith adopts a logic of excess, which uses the tremendous amount of additional skin to facilitate a kind of loose fit, allowing the occupant to remain sheltered from inclement weather, while permitting the wind to pass through unimpeded.
Designing the Mat

Inherent in process of burning off the greenhouse is the reconditioning of the greenhouse's soil, first through the importing of a layer of clay, which seals the new surface of the greenhouse from the salt-laden groundwater below, followed by a layer of sand, which permits the re-collection and re-application of applied chemicals, and finally a thick layer of manure.

The monolith orchestrates the delivery and staging of these soil layers, harnessing their thermal properties to produce an alternate, air conditioned beach, for mirage travelers.
THE DIALOGICAL DUST STORM
The intense heat developed within the greenhouse structures not only leads to the production of massive amounts of bacteriological incubation, it also results in a kind of urban heat island effect, elevating the temperature of the entire area to over six degrees Celsius over the surrounding region. When this warmer air mixes with the relatively cooler air along the Mediterranean coastline, it results in the production of intense wind vortices along the edge of the Almerian miracle. While this intense wind not only results in the toppling of greenhouses, it also leads to the transplanting of seeds from one greenhouse to the next, a situation which can leave the transplanting farmer charged with trespassing.

The transplanting of seeds has been the intense focus of genetic technologies, which have sought to terminate second-generation seed crop, locking farmers in to cycles of dependence on genetic corporations.

The dialogical dust storm imagines an alternative in which the intense dust storms, an occasional side effect of this excessive wind, are deliberately orchestrated through single wire earth return technology, in order to construct a territorial-scaled air filter. The resulting wind is used to orchestrate a kind of back yard and simultaneous escape valve for the alternate inhabitants of these fields, the migrant laborers who service the landscape.
standard seed transplanting  the terminator seed
the dust storm as electric filter

cations and anions

DUST

SEEDS  PHOSPHORUS  NITROGEN  POTASSIUM  PETROLEUM

the Armenia migrant

UNDOCUMENTED POPULATION: 20,000 (OFFICIAL) 275,000 (UNOFFICIAL)
AVERAGE AGE: 27.5 YEARS OLD
AVERAGE DURATION OF OCCUPATION: 6 YEARS

INCREASE IN ASTHMA

INCREASE IN LUNG CANCER
The proposal entails the arrangement of a series of walls on the un-occupyable terminus of the wind-breaking tunnels which not only harness, but dissect the approaching dust, allowing the migrant to exist within the dust, which simultaneously announces his or her presence within the landscape and facilitates their escape during the perpetual cycles of Almerian racial violence.
1. contain dust flow
2. re-route clean wind
3. occupy clean air corridor
4. launch dust
5. channel escape values
THE ACCUMULATOR
In the mid 1990s, amidst a widespread ecoli infection, Almerians sought to incubate themselves from the potentially catastrophic effects of bacterial incubation through the construction of quarantine zones, partitioned territories paved into the landscape in order to hinder the spread of bacteria across the soil. While these operated on one hand as a means of securing Almeria's supposed cleanliness, they also amounted to declarations of independence for thousands of autonomous chemical and genetic ecologies.

While these ecologies have temporarily contained the spread of ecoli-laced fruit to European markets, the borders of each individual quarantine zone is occasionally trespassed through flash floods, which accumulate and mix individual seed crops, bacteria and plant life, infecting continuous strips of the Almerian landscape.
The Evolutionary Accumulator harnesses this runoff into the slightly unpredictable accumulation of evolutionarily unique tomatoes, offering a moment of choice to consumers who otherwise would never get the chance to experience an uncensored tomato.

The accumulator works through a series of striations carved into the topography which orchestrate runoff into discrete bands, organizing the fallout by volume.
the evolutionary accumulator

flooding trenches

staged flooding

accumulation pools

circulation routes (temporary)
accumulation as propaganda
Constructing The Alternate Consumer

The alternate consumer can slip into the landscape, tracing paths through un-flooded corridors tasting uncensored tomatoes along slopes which range from one to five degrees, orchestrating various levels of sweetness and unpredictable rotting within the fruit.
PROCESS PROPOSALS
APPENDIX A: THESIS DEFENSE 12.15.11
Poison, biologically speaking, of course, is the neutralization of catalyzing behaviors (or the temporary termination of change mechanisms) to coax into existence an alternate present, intrinsic but unseen. To poison is to reveal latent alternative possibilities, hidden within the configurations of the present. Poison discloses constant mutation (misread as consistent reality) and orchestrates consistent reality (to be misread as radical mutation.) Or in Aldo Tambellini’s words, ‘Be static, only movement lasts.’

Remote Controlled Almeria was the unplanned pregnancy of the dromospheric turn from the chemical to the biological, from reduced sperm counts in German vesicular glands to defective infants in France. From planned-poison to sequenced-engineering. If as Sloterdijk once supposed, the atmospheres of democracy construct mechanisms for staging acts of collective waiting, Almeria (an unprecedented provisional-present shifting between disparate environmental contingencies) quite accidentally conceived of the unprecedented potential of a Slow Utopia, an adventitious democracy accidentally inseminated into the Almerian landscape, simply through stubbornly waiting for uncertain futures from a contested present. Unlike the utopias of the past, which began with an epistemological/ideological act of construction, Almeria’s Slow Utopia was born from any utopianizer’s (def. one who constructs utopias) worst nightmare, absolute complacency in the form of two deceptively radical operations: doing nothing while simultaneously trusting nothing.

Terrified Europeans with rapidly enlarging prostates increasingly preferred the unknown-unknown. Almeria’s genetically engineered shift was an inevitability, trading one uncertainty for another: Pyrethroids were replaced with trans-genesis, contaminated groundwater and chemically induced madness among the Moroccans, replaced with the brilliant shine of softball-sized tomatoes and white lab-coats imported from Switzerland. But the genetic-turn also briefly exposed the often concealed totalitarian nature of progress, producing a disjunction amongst the Almerians over the supposed legitimacy of their potentially perfect future, staging a ‘clean Almeria’ in opposition to a ‘poison Almeria’, and multinational plasti-culture franchising versus an additional 10% profit margin bet against emerging cancer research.

It was through this sociopolitical schism that Almeria’s chemically inclined (politically and biologically incorrect) Siamese twin was born, an alternative enclave built from the desire not for a better future, a break with the present, but from the emerging economic, political and social imperative to re-assert the potential future of an embattled present. And the irrational (or ultra-rational) belief that we may already be occupying a magnificently concealed proximate utopia.

The Slow Utopia: Articulating the Alternative
A Chemical Short Story
Almeria’s strange twin took the form of an Alternative-Enclave, an autonomous territory for staging doubt as an operative concept towards the production of alternate realities. The enclave, as a typological/ideological concept, re-emerged in architecture’s ecological-turn at the beginning of the 21st century, both at the scale of the building and the territory, as the naive utopia of the contemporary. If ecological enclaves historically advocated for a future divorced from the problematic practices of the present, while unwittingly embracing their ideological foundations (read: progress) which prescribe the future’s problematic agendas (see: unreal-reality, pg. 22), the alternative enclave instead argued for a politics of uncertain waiting, under the mantra, “progressing towards what?” Remote Controlled Almeria functioned as a holding pattern within a territory in which change itself was leveraged as the instrument par excellence of ideological endurance. If change was the mechanism of standard ecology’s (read: ideology’s) concealed hegemonic supremacy, it was precisely through the act of poisoning (the fanatic championing of the latent possibilities of the present) that Alternative Almeria emerged.

The Slow Utopia leveraged the concept of slowness both explicitly and implicitly. Explicitly through the stubborn maintenance of existing chemical regimes, the promotion of a toxic present in a landscape of blindingly-clean change. And implicitly through confronting the naive enclave with its own alternate pasts. If the eco-enclave-as-naive-utopia traced its lineage through romantic garden cities and vernacular villages (see: Masdar City c. 2006), the Slow-Utopia re-traced its history from a collection of projects which sought the definition of the alternate as the manifestation of contested ideology within seemingly ideologically neutral practices.

The implicit tracing of an alternate lineage to the enclave, while simultaneously explicitly de-masking the red-herring of progress through the concept of doubt were not merely methodological preoccupations for the ever-growing group of Alternative Almerians, but a strategic questioning of the very processes by which the concept of the progress itself, under the guise of ecology, was leveraged towards present re-configurations of reality. Almeria’s Slow Utopia proposed the potential for new sensibilities and configurations within the existing technological and geographic paradigms of the chemically poisoned present, the uncovering of alternate potential realities within Almeria’s problematic contemporary. Staging poison, chemically, spatially and politically towards alternate ends. An enclave of doubt within a landscape of blind-optimism in the (now-standardized) eco-utopian future.

The citizens of Almeria’s Slow Utopia called into question the ecological movement’s ubiquitous deployment of blind-progress, instead, advocating for a hallucinogenic notion of progress, the radical re-reading of the present as an act of perpetual future-re-construction. Ecology no longer functioned as a sensibility, an alibi to dilute the bitter taste of modernity’s seemingly-immortal project with the myth of an ever-balanced, regenerative nature (read: Gaia), instead, the citizens of Alternate Almeria recognized that ecology itself was the very mechanism by which ideology constructs
CHEMICALLY MODIFIED CROPS

GENETICALLY MODIFIED CROPS
unreal-realities in sympathy with its own agendas, and that an alternate ecology was not only a form of liberation from status-quo realities, but a radical re-imagining of what futures their own contemporary unreality may contain. Where political borders were historically (and painstakingly) negotiated on the neutral ground of embassies and conference halls, the Slow Utopians claimed territory ecologically as water-tables soaked up agro-chemicals, dividing the haves from the have-nots, remapping the Almerian landscape and parceling the Alternative Enclave.

Almeria’s Slow Utopia rendered it’s alternate reality not as a preferable future (the standard operation of the enclave) but as a parallel present, by integrating its productive sub-nature within the global tomato market’s existing condition of sub-fruit warfare (‘dumping’ in which low-quality fruit is unloaded into competing ports, driving supply up and demand to near-zero.) Remote controlled Almeria functioned as a sub-nation, a no-woman’s land, occupying the exchange territory of global migration and global agricultural warfare. It’s mass cultivation of sub-fruit (edible fruit, frowned upon by the market) served as a destabilizing economic weapon, exerting influence in both local and global tomato markets. Alternative Almeria became a mercenary for hire in the multibillion dollar world of the tomato, strategically releasing their sub-fruit every season into competing markets under the guidance of the highest bidder.

While the Slow Utopia first emerged from the paranoid permutations of existing political and economic conditions, latent but untapped, and was initially regarded merely as an alternative agricultural faction, its sub-national condition, along with the slow degradation of the genetic promise, soon began to create conditions of diversity in an increasingly oppressive social and environmental landscape. The colonization of Alternate Almeria began to prescribe certain modes of architectural intervention, action (or better, reaction) against historic paradigms of ecological architecture. Ecological architecture within a parallel alternative reality began to function differently, harnessing normative tactics towards alternate ends.

This thesis documents the Slow Utopian road-map, the methods by which Alternative Almeria reinterpreted two crucial ecological operations, redeployed in an alternate landscape towards a politics of uncertain waiting, namely the concepts of seeding (or, how architecture conceptualizes a future), and architectural performance (or, how this future becomes implicit in the values of the present.)

Alternative Almeria, as a strange form of critical realism, maintained identical programmatic and social pre-occupations as its larger mainland twin, namely intensive agriculture, transnational immigration and global tourism but with typologies, and systems radically re-contextualized in an alternate reality catering for a re-definition of the operations and ethics ecological architecture now practices with unquestioned conviction.
The Slow Utopia is scaled based on its ability to strategically position itself within the global tomato market, as the genetic becomes more and more desirable to eco-conscious Europeans, Almeria's chemical holdouts will increasingly be relegated towards a process of 'dumping', an existing practice in which undesirable sub-fruit is unloaded into competing markets as a price destabilising maneuver, a form of agricultural warfare. The Slow Utopia must grow enough fruit to establish itself as a sub-fruit mercenary within the competitive Almerian economy.

Its geographic location is determined by its ability to reside on an autonomous groundwater source. Because the chemical enclave poisons its own water, it must be hydrogeologically parceled from mainland Almeria.
CENTRAL PARK
total area: 643 acres

ALTERATE ALMERIA
total area: 456 acres
60% intensive agriculture
5% migrant dwellings
25% tourism & leisure
10% shipping and cruising
SINGLE PLOT
area: 2 acre
workforce: 6.2 laborers
annual value: 120,000 USD

ALHONDIGAS
area: 230 acre
workforce: 1,300 laborers
annual value: 27.5m USD

ALTERNATE ALMERIA
area: 230 acres
workforce: 1,300 laborers
annual value: 27.5m USD
PRODUCE AUCTIONEER/EXPORTER
area: 3000-5000 acre
workforce: 4,650-7,750 laborers
annual value: 90m usd - 150m usd

ALTERNATE ALMERIA
230 ACRES (PRODUCTION) x 2 =
460 ACRES
The Enclave’s territory currently contains roughly 120 oversized greenhouses and an additional 90 acres of land too toxic to currently seed, a re-mediating green wall (in the form of a golf course) which separates the toxic agricultural conditions from a port resort for sailing Europeans. The port is currently on of the key entry points into Almeria by Mediterranean pirates trafficking Almeria’s illegal workforce into the nation from northern Africa. The Enclave is currently home to an estimated four to five hundred undocumented workers, primarily from northern Africa, currently residing in the toxic interstices of the sea of plastic.
If ecological platforms in Almeria have historically maintained their legitimacy by concealing the fallout of their perfect futures through urban and landscaping deployed to conceal and alienate the negative side effects of what’s been called The Almerian Miracle, The Slow Utopia acknowledges an alternate strategy, not one of blind remediation but dicey construction. By embracing the chemical contemporary, fallout is no longer rendered a side-effect of an otherwise harmonious system, but an untapped, undesigned, component of their collective, uncertain reality. The Slow Utopia stubbornly argues that the grounds for an alternate present may emerge precisely from the concealed side effects of Mainland Almeria’s neutral ecologies, by deploying doubt in two strategic ways.
Unlike the ubiquitous eco-enclaves of the contemporary, which are always dependent on the promise of new technologies and economic practices, to preserve the nostalgic ecological ideals of contemporary discourses (progress always reinforcing the legitimacy of the past's ideologies), the Slow Utopia preserves the existing agricultural and economic practices of the site, as the grounds on which an alternate ideal may be uncovered (designed stubbornness uncovering a different present). The Slow Utopia invests in re-situating the effects of existing practices into an alternate ecological reality. It's concerned with how fallout can be designed in order to produce alternate modes of inhabitation within the enclave, which are in some ways new, but also inherent to the existing configurations and process of Chemical America. The orchestration of side effects is capable of producing an eco-detournment through the radical re-reading of the ecological contemporary. The Slow Utopia suggests not the design of an ideal ecology, but the design of any ideal's toxic fall-out.
APPENDIX C: PRELIMINARY HALLUCINATIONS
Doubt

Perhaps even before doubting Saint Thomas refused to accept the resurrection, the concept of doubt has been rendered as an obscenely immoral position towards an apparent reality, through its misrepresentation as a term synonymous with disbelief. But within the concept of doubt lies an alternate (and perhaps more appropriate) definition of the term, not as disbelief, but as the extension of a moment in which roughly proportionate levels of belief are maintained between two or more contradictory alternatives. Where doubt has become synonymous with disbelief, it might also be understood as a powerfully creative position, leveraging a unique form of uncertainty that invariability requires not merely the rejection of a given reality, but the unearthing of its plausible alternate, a counterpoint between which doubt is suspended. As such, doubt as a constructive concept is not merely disbelief in a given condition, but the active solicitation of that condition’s believable alternatives.

The Alternate

The alternate functions as the missing component which transforms mere disbelief into doubt, functioning as the crucial counterpoint to the apparent reality between which doubt is held. The alternate is distinct from a solution, an answer or the better course of action, instead it actively maintains an antagonistic duality with the given reality. The Alternate is a highly orchestrated equal, never pleasing enough to trump the status quo, but never unbelievable enough to be entirely discounted.
The Tell

Like the poker tell, in which a plausible alternative emerges through a collection of minute details (the twitch of an eye, a drop of sweat, a deep breath), the alternate is articulated through the misuse of a situation's not-yet-totally-exhausted details. The tell is the scale or moment within which an alternative can be glimpsed, never complete enough to entirely override the appearance of normality, but always convincing enough to suspend its viewer between the possible belief in two unreconcilable situations. The tell as an advantageous artifact for constructing the alternate can be seen perhaps most clearly through forms of criticism which attempt to break apart over arching modes of representation in favor of alternate interpretations, Foucault's abandoning of the metanarrative in favor of the historic detail or Zizek's psycho-analysis of Hitchcock which avoids the interpretation of the scene in favor of the scene's dissected and separated components.

Acid

Acid is a mode of operation concerned with navigating the simultaneous requirements of the alternate to be both plausible and contradictory to the given reality it opposes. Like the Acid Westerns of the 1970s, 80s and 90s, Acid composes the alternate using the recognizable components of the given reality (the gunfight, the bounty hunter, the wise native American guide), but like a hallucination these recognizable components are functioning differently (wrongly), out of order and dislocated (cannibalism, happy un-endings, un-native American native American guides). Acid is a way of operating which leverages strategic artifacts ('The Tells') of a given reality's plausibility while opening up the possibility of using these components towards alternate ends. While The Tell is the article of construction (or re-construction) Acid is the act of re-composition of possible Tells.

The Exclave

The enclave, in geographic terms is a territory entirely encapsulated by a larger territory. The exclave, conversely, is a bounded territory which can be read not merely as a constituent of a larger territory but as a contentious disturbance. While the enclave is an exemplary moment in an otherwise undifferentiated field, reliant on the encapsulating territory as its host, the exclave forms a binary with its alternate, charging the border condition between two differing states in a non-hierarchical plurality.
BIBLIOGRAPHY


