



Molecular  
Pizza Microdosing



Virtua Pizza



Autonomous Solarpunk  
Pizza Trucks



Fully Automated  
Luxury Pizzeria Communes

# PIZZA FUTURES



What if Pizza Disappeared?



30 hours or Dead  
Wasteland Delivery Service



Neo-Dustbowl  
Balenciaga Delivery Suit



Roving Woodfire Drones



Pneumatic  
Margherita Systems



In-Home Aeroponic  
Pizza Garden



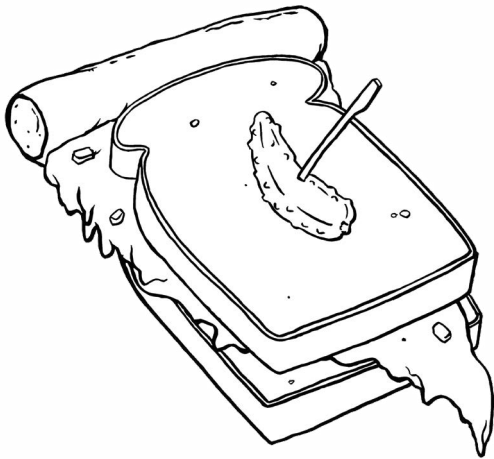
Worst Case Scenario  
Chuck E. Cheese's



Unexplained  
Pizza Events



# WHAT IS PIZZA?



It's wheat, salt, and sugar, nightshade, basil, and oregano. Pizza is movie night. It's comfort on demand after a long, hard day. It's your most favorite birthday. Ever. It's the casein inside the cheese that triggers your dopamine receptors while you're getting down at your neighborhood block party. It's how smell interacts with memory, it's pure molten melted mozza sensuality.

It's the joy of the maiden bite, a mouthwatering medley of cheese, sauce, dough, and toppings. But it's so much more than that too. It's an ongoing culinary narrative, an epicurean epic—each slice a chapter, each ingredient a character—that tells a story of how we cook, share, and savor our food.

As it journeyed from one continent to another, pizza shed its uniformity, mirroring the fingerprints of the locales whose lips it had graced. It's an edible tapestry of global gastronomy,

effortlessly uniting people from New York to Naples, Nairobi to New Delhi, evolving with every bite to sing a song of local palates.

Its precursors can be traced back to the fragrant cuisine of ancient Persia. Today, pizza stands as a benevolent symbol of globalization, readily available and delivered hot to your door in 30 minutes or less. Any time, anywhere. Greenland and Iceland. Tierra del Fuego and Kalamazoo.

Pizza is an economic juggernaut. In the United States alone, \$38 billion worth of pies get sold every year. From family-owned pizzerias tucked into neighborhood corners to vast, multinational chains, the humble pizza, while delighting taste buds, also turns the cogs of commerce with relentless vigor.

Pizza is agriculture by way of its ingredients. Love and happiness by way of the people who make and eat it. The social nature of it embodies our innate need for connection, uniting us over slices in celebration, commiseration, or simple camaraderie. It's a megacosm of society that connects macroeconomics to your microwave.

Pizza is also a bellwether for climate change. The culinary in the coal mine. Wheat, tomatoes, and cheese are all deeply susceptible to the effects of climate change in their own unique ways. And thus, so is the nature of pizza.

Wheat is the crusty cornerstone that demands precision. For it to grow strong and plentiful, precipitation, temperature, and CO2 levels need to be just right. Meaning extreme weather events pose a significant threat to global supply.

Tomatoes, the quintessential sauce base, also require delicate conditions to prosper, and excessive heat can impede pollination, reduce yield, and change their taste and texture.

And then there's cheese. Not merely a topping, it's that glorious high note offering resolution, carrying your favorite brick oven ballad to its satisfying ooey-goozle conclusion. It faces perhaps the most daunting of challenges: dairy production being a major contributor to greenhouse gas emissions, while dairy cattle are highly vulnerable to elevated temperatures and high humidity.

Each of these ingredients, crucial to the creation of the world's most beloved dish, is inextricably entwined with the impacts of global warming.

So when the climate changes, pizza changes, and it's just a matter of deciding how exactly it will change.

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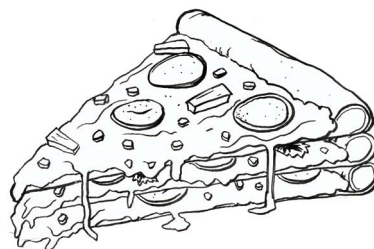
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# PIZZA FUTURES

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# A NOTE FROM NOBELL FOODS

We make animal-free cheese that melts. We made this magazine because, as a company that makes animal-free cheese that melts, we are naturally quite obsessed with the future of pizza.

Being humans, we're also quite obsessed with the future of the planet.

Barring some sort of intergalactic relations incident, the main threat to our planet is and will be climate change. But tackling climate change is relentlessly difficult, routinely exhausting, and often plagued by a sense of futility.

So we wanted to try something different.

That something is the magazine you're currently holding in your hands, the collective effort of artists, designers, food writers, and futurists who have all come together to examine a range of climate scenarios through the lens of the world's most beloved dish: *pizza*.

You might wonder why we embarked on such a seemingly absurd endeavor. First, we wanted to create the world's first-ever documented instance of "pie-fy." So there's that.

But more importantly, we did it because envisioning a range of climate futures isn't just speculation—it's a potent creative exercise that stretches the imagination and fosters proactive thinking. It makes the abstract more tangible, especially when rooted in something as universal as a hot and melty pizza pie.

It prompts us to ask, "What kind of world do we want to build?" and "Do I really want a future where pizza is a luxury item, or worse yet, hard as a rock and sprinkled with dried up clumps of Swiss Chard?"



nobell

# Pizza Futures

PIZZA  
FUTURES

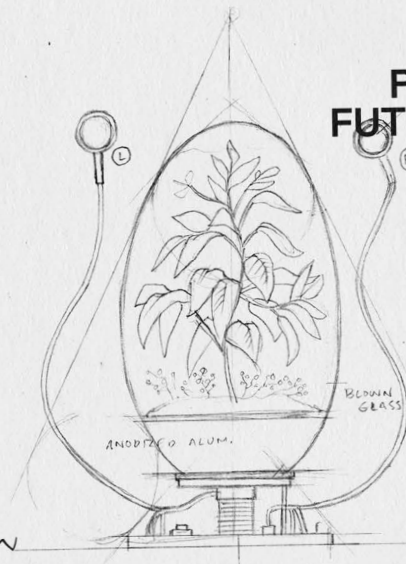
SOLVE CLIMATE CHANGE **Y/N**

## ACTION:

ENHANCE CARBON SEQUESTRATION

## PATH TO ACTION:

THE SUREST WAY TO ENHANCE CARBON SEQUESTRATION CAPABILITIES WOULD BE INCREASED INVESTMENT IN PLANT SCIENCE RESEARCH WITH MORE FUNDING. RESEARCH CAN FOCUS ON UNDERSTANDING AND IMPROVING THE CARBON SEQUESTRATION POTENTIAL OF VARIOUS PLANT SPECIES, INCLUDING PIZZA-RELEVANT SPECIES SUCH AS BASIL.



01

## POTENTIAL RESULT:

DEV OF ADVANCED PLANT SIGNAL BIOSENSORS. BY INTERPRETING THE SIGNALS EMITTED BY PLANTS, WE COULD DETERMINE THE CONDITIONS UNDER WHICH PLANTS MOST EFFICIENTLY ABSORB CARBON DIOXIDE DURING PHOTOSYNTHESIS. BY MANIPULATING THESE CONDITIONS ON A LARGE SCALE IN OUR FORESTS, AGRICULTURAL SYSTEMS, AND EVEN URBAN GREEN SPACES, WE COULD DRASTICALLY INCREASE THE AMOUNT OF CARBON DIOXIDE CAPTURED FROM THE ATMOSPHERE.

## LONG-TERM FUTURES SCENARIO: HYPERFLORA

IN THE HYPER-FLORA FUTURE, ADVANCED PLANT TECHNOLOGIES HAVE MITIGATED THE EFFECTS OF CLIMATE CHANGE BY OPTIMIZING CARBON SEQUESTRATION. SIMULTANEOUSLY, ENHANCED PLANT GROWTH AND PRODUCTIVITY HAVE SIGNIFICANTLY BOOSTED GLOBAL FOOD SECURITY AND EXPANDED THE ROLE OF PLANTS LIFE IN OUR DAILY LIVES.

## BYPRODUCT OF SCENARIO:

A DEVICE THAT ALLOWS HUMANS TO HAVE CONVERSATIONS WITH A BASIL PLANT

@NOBELL FOODS

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PIZZA  
FUTURES

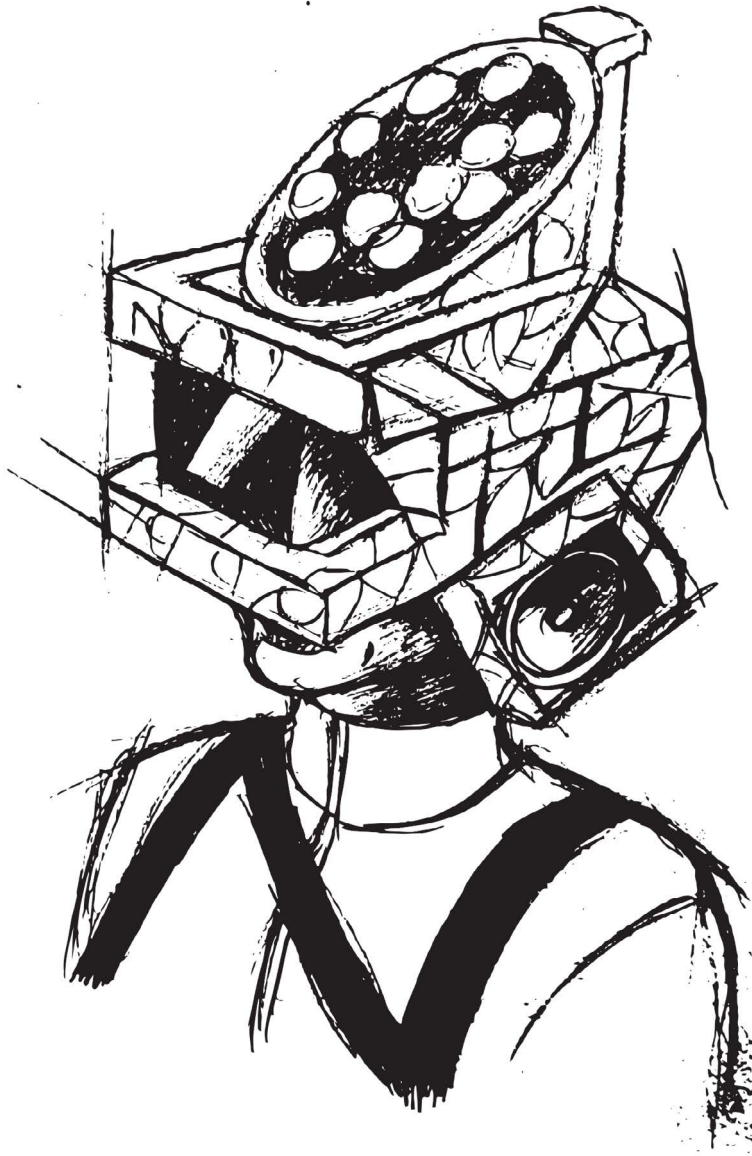


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# METHODOLOGY

Our method for creating the scenarios featured in this magazine hinged on a collaborative and interdisciplinary approach. We combined the insights of futurists, artists, and designers and incorporated the capabilities of generative artificial intelligence.

Each scenario stemmed from an answer to a simple question:



**What happens if we solve the problems presented by climate change, and what happens if we don't?**

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# OF CRUSTS AND DRONES

By Drew Austin

In the opening minutes of the prescient 1995 thriller *The Net*, the movie's protagonist, played by Sandra Bullock, demonstrates the nascent internet's potential by doing something that was not yet possible at the time: She orders a pizza online. The scene evokes one of pizza's defining characteristics: It is the quintessentially modern food, having evolved from its traditional origins into a ubiquitous and infinitely adaptable product. When a new technology emerges—like the internet itself, or robots, or Bitcoin—pizza delivery tends to be an early application.





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The contemporary diet is as much a product of supply chains as culinary tradition and craft, and few foods have benefited more than pizza has from innovations in last-mile logistics and production techniques. Long before the present era of food delivery apps and 15-minute grocery services, pizza had become synonymous with on-demand delivery. In 1979, Domino's codified that reputation by guaranteeing deliveries in 30 minutes or less—a marketing ploy that became a widely-understood benchmark for the speed of local food transportation. As the 20th century progressed, pizza was increasingly the default menu choice for gatherings ranging from parties to professional events, because it was usually just a phone call away.

Pizza, in other words, travels well. It is food that can go anywhere. As a result, 13 percent of Americans eat pizza on any given day. The simplicity and flexibility of pizza's ingredients and preparation have contributed to this, as have developments like frozen pizza and insulated delivery bags. And if pizza is the enduring avatar of last-mile food logistics, then the square cardboard pizza box is the equivalent of the shipping container, standardizing and streamlining its form as it traverses the urban supply chain just as the 30-minute guarantee standardized temporal expectations.

Even Apple found the pizza box to be an irresistible design problem, patenting its own round version for use in its headquarters. Moving pizzas within office buildings is a different challenge than transporting them along city streets, though. "Like all Apple products, the proprietary standard of the box makes it incompatible with third-party products," William Turton writes for *The Outline*. In other words, Apple's box did not threaten the supremacy of the square cardboard version (although it probably did not intend to).

Pizza has evolved over time to fit its distribution systems: It is flat, round, and stackable, with measurable and predictable dimensions—perfect for bulk transportation. Pizza is also modular, denominated in consistent units: pies and equally-sized slices, ideal for reliably feeding any specific number of people (another reason it became the ideal party food). A pizza is such a comprehensible quantity of food that Amazon famously used it as a benchmark for the size of its internal teams.

If pizza is to remain the food of the future, it must continue to adapt to changing conditions—particularly climate change. In Neal Stephenson's 1992 sci-fi novel *Snow Crash*, set in the following century, he writes that there are only four things the United States does better than anyone else: music, movies, software, and high-speed pizza delivery. In contrast to Stephenson's dematerialized information landscape, pizza remains strikingly physical, still an object of society's logistical prowess.

The future that we actually face today, of course, is all too physical, with the 20th century's techno-optimism now tempered by the need to decrease fossil fuel consumption. Just as pizza delivery helped illustrate how we would use the emergent internet thirty years ago, it can demonstrate a different kind of innovation in food logistics today, helping us to reduce our collective resource footprint and inhabit the earth less intrusively.

As a representative product of food supply chains—both local and global—pizza is perfectly positioned to help accomplish those goals, and is already anticipating the broader shift toward transportation modes that are more energy efficient and less carbon intensive. The supply chain's inefficient "last mile," where short-haul urban food delivery occurs, offers significant opportunities for such improvement, including a departure from

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one of pizza delivery's most familiar tropes: the delivery person shuttling pies around town in a gasoline-powered, greenhouse-gas-emitting automobile. From an energy consumption perspective, using a full-sized car to transport a single pizza is undeniably overkill.

Beyond the straightforward shift toward delivery via bicycles, scooters, and electric cars, a growing share of pizza delivery will be conducted by robots and other self-driving vehicles. The industry's perennial pioneer, Domino's, is already testing driverless curbside delivery in Houston with compact, electric cars from robotics company Nuro. Domino's delivers 1.5 million pizzas each day and its U.S. drivers travel 10 million miles per week, so expansion of that pilot program could have a non-negligible impact on car usage. The prospect of 3D-printing pizzas at home, meanwhile, could reduce the distance that pies need to travel at all. For all the foresight Stephenson displayed in *Snow Crash*, it's possible he overestimated humans' long-term role in slinging pizza.

At the global scale, climate change imposes constraints that will require dietary adaptation. Pizza's flexibility is a perfect match for this challenge: No single ingredient is essential and creative substitutions often enhance the finished product. Given red meat's notorious carbon footprint, foods that work well without it will be staples of a climate-resilient future.

Cauliflower crusts increasingly accommodate gluten-free diets, while vegan pizza has also flourished alongside plant-based meat options. Pizza thus benefits from futurism in the broader food industry, as it always has.

Perhaps unsurprisingly, it is already possible to order a pizza in the metaverse. Just as unsurprisingly, the incentive to do so is real pizza, not a virtual representation of it. For the foreseeable future, we will continue to need food in the physical world, and that will be where we keep seeking our pizza, however digitally-mediated the process becomes (as *The Net* anticipated in 1995). Pizza's history demonstrates how it pairs well with a wide array of technologies that improve its production and distribution. For much of that history, improvement has simply meant more pizza, delivered more efficiently, but climate change dictates new goals that will require new approaches. Pizza remains eminently adaptable, though, and is perfectly suited to continue evolving accordingly. One hundred years from now, we should still expect to find pizza everywhere, whatever novel forms it may assume.





**SCENARIO 1:**

**PYROSCENE**



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**Wildfires are a devastating reality of our global ecosystem under the duress of increasing temperatures and decreasing precipitation. Year after year, entire regions of North America, Siberia, and Australia go up in flames like clockwork. Forests, park lands, homes, even entire towns. And every year the wildfire season lasts longer and burns brighter.**

**The incineration of vegetation from these infernos releases massive amounts of carbon dioxide, intensifying climate change and worsening drought conditions. It's a dangerous, self-perpetuating cycle with disastrous consequences.**

**Left unchecked, we'll be living in an increasingly fire-scarred future. By 2050, the United Nations foresees a potential 30% rise in wildfires, with certain fire-prone regions facing a very harsh reality. Forests, which act as vital carbon sinks, could begin emitting more carbon dioxide than they absorb. And in terms of tipping points, that one's a doozy.**

**If we happen to reach that tipping point, it would bring about a new age of relentless fire—an era characterized by the countless ways wildfire fundamentally rattles and reshapes our lives.**

**How we make, get and eat pizza would become unrecognizable. Heat stress would slash crop yields, reducing the quality and quantity of essential ingredients. Water scarcity could escalate threats to ingredient growth, and supply chain disruptions would make the journey from farm to pizzeria to doorstep increasingly fraught and uncertain.**

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# 30 HOURS OR DEAD

If we can't wrangle our way out of the combustion feedback loop, our future will be shaped by an era of relentless mega-fires.

Needless to say, our daily lives would be drastically altered. Every aspect of existence reshaped, distorted, and warped into something other, stranger, smokier, cough-ier.

A typical day dawns not with the rooster's crow or the smashing of a snooze button but the persistent hum of air purifiers, their white noise a constant reminder that the air outside no longer simply sustains but also constantly threatens.

Your house? Fire-retardant. Your clothes? Fire retardant. Any time you interact with the world, you'd need to build a fire-retardant fortress against the relentless blaze.

Most people wouldn't bother. Choosing instead to bunker down amidst all the cladding and calcium silicate. And while humans are incredibly adaptable, there will always be an aching desire for just the tiniest nibble of normalcy. And what could be more nibble-worthy than pizza delivery?

Pizza delivery would remain a shining beacon of convenience, embodying everything good about pre-Pyroscece instant gratification. Hot and tasty sustenance brought directly to your doorstep, negating the need to even step outside.

But given "stepping outside" would become an act of selfless bravery in the Pyroscece—who would actually dare to do it?

Pulling off pizza delivery in the Pyroscece would be a monumental task. Requiring meticulous planning, innovative thinking, and unyielding resilience.

While protective gear and fire-adapted vehicles would provide some defense, the peril would remain. Delivery personnel would need to predict fire behavior, have a second-nature understanding of the factors that drive spread, and be able to consistently identify safe paths through the chaotic inferno to reach their customers. GPS would be mostly useless, so instinct would be critical.

Beyond the physical and mental demands of the job, the emotional toll would be equally grueling. The constant threat of danger, with loss and devastation visible everywhere you go, and the high stakes of each delivery would be utterly exhausting. Support systems and mental health resources would be crucial to help delivery personnel manage this stress and trauma.

Given the scarcity of resources, especially those that go into making a good pizza, the job would undoubtedly pay well. But the actual value would lay well beyond just satisfying hunger. It would be the little victory each delivery provides, the reminder of shared humanity and resilience, and that one fleeting moment of comforting normalcy when that doorbell rings.



# WASTELAND PIZZA EXPRESS

SINCE 2043



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ARTISTES DOORAS WDA SANDARI.



Dear Valued Customers,

The Wasteland Pizza Express strives to serve you in these extraordinarily challenging times. Our mission, fueled by our unwavering commitment to bringing you a good pie for a reasonable price, is encapsulated in our motto: "30 hours or dead".

Given the realities of the March-November fire season, traditional delivery times simply aren't feasible. The unpredictable nature of wildfires necessitates a new approach to time and patience. Therefore, from the moment you place your order, our delivery team has a window of 30 hours to deliver your pizza.

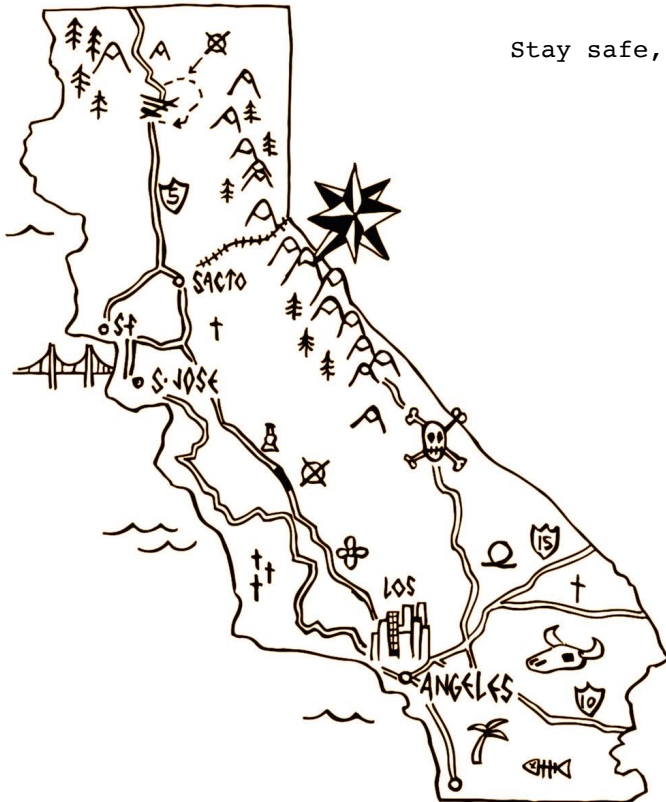
Rest assured, the "30 hours" is not an average or an estimate - it is a commitment. Our dedicated delivery persons, equipped with heat-resistant all-terrain vehicles, stand ready to traverse fire and brimstone to ensure your pizza reaches you as fresh as our mobile ovens allow.

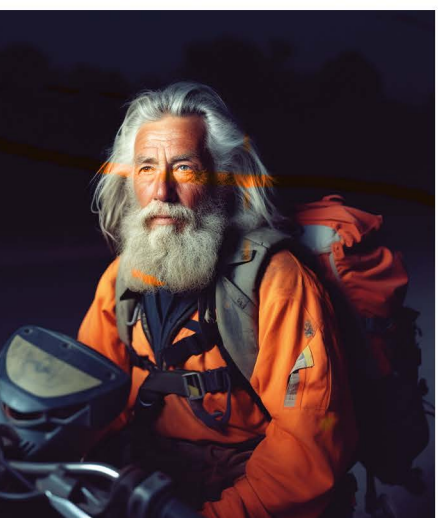
As for the "or dead" portion of our slogan, we assure you it is a testament to our resolve and a reflection of the potential hazards our employees willingly face to fulfill your orders. It is, by no means, a literal guarantee but rather a pledge that speaks to our tenacity amidst the challenging, ever-changing circumstances we find ourselves in.

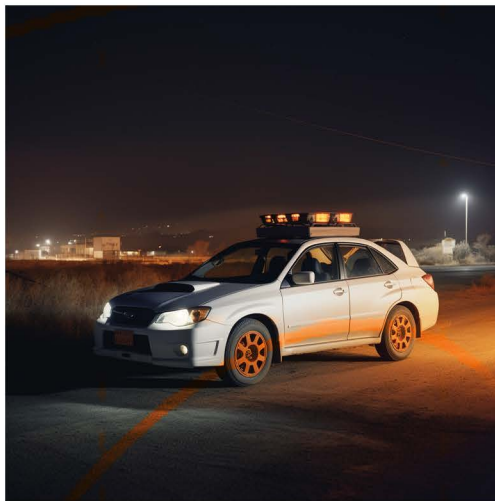
Your hunger for a slice of comfort amidst the flames is what inspires us. Your safety and satisfaction remain our top priority. We thank you for your patronage and continued faith in our service.

Stay safe, stay hungry.

Yours Sincerely,  
The Wasteland Pizza Express Team





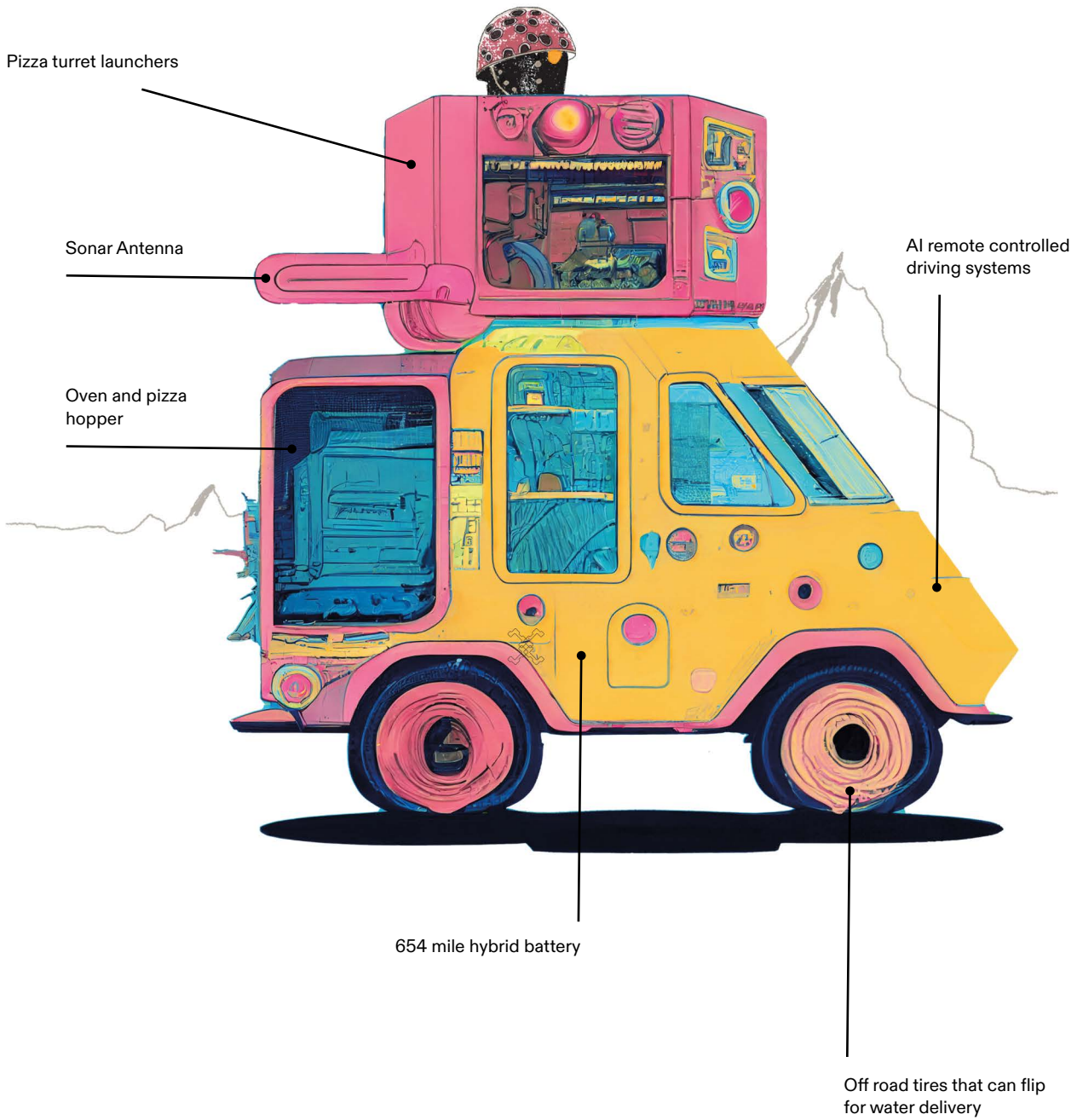




## CHALLENGE PATCHES

Wasteland Pizza Express's challenge patches are tokens of honor, each symbolizing a particular triumph against Pyroscene's adversities. These patches are not just fabric and thread; they're woven with tales of bravery, resilience, and tenacity. Employees adorn them like badges of honor, physical testaments to their daring spirit and unwavering commitment to maintaining a sense of normalcy in a world forever changed.





## DELIVERY VEHICLES

Wasteland Pizza Express vehicles are engineering marvels, designed with the utmost precision to withstand the harsh Pyroscene. The exteriors are constructed from advanced, fire-retardant alloys that can resist extreme heat. Reinforced heat-resistant rubber is used for the tires, providing stability and durability on the heat-warped roads of California. The linchpin of the design is the integrated, insulated oven. This crucial component ensures that pizzas maintain their desirable heat during delivery. The oven uses thermal technology to counterbalance the exterior heat, ensuring the food's integrity.



**SCENARIO 2:**  
**HYPERFLORA**

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Plants are the lungs of the Earth. They isolate carbon dioxide and release oxygen, which plays a vital role in keeping climate change in check. Protecting and expanding these natural carbon sinks is critical to maintaining our planet's delicate ecological balance.

But what if, instead of just attempting to preserve the dwindling presence of plants on our planet, we fully committed to enhancing their role?

By investing more heavily in research and development focused on plant sciences, we might discover innovative methods to amplify plants' natural carbon absorption capabilities, making them an even more potent ally in our fight against climate change.

If humanity were to make a dramatic, civilization-grade pivot towards plants, we could unearth innovations so groundbreaking they'd make the Agricultural Revolution look like a backyard gardening project. This could bring us to the edge of a new era of omnipresent hyperflora, where humans and plants aren't just roommates on planet Earth but best buds sharing a fruitful future.

The ensuing boost in biodiversity could not only transform pizza toppings with a host of fresh flavors and textures, but crucially, it could reinforce food security worldwide.

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# A USER'S MANUAL TO YOUR REGENERATIVE PIZZA VENDING MACHINE

## STARTING YOUR MACHINE

### STEP 1: INITIALIZATION

Locate the power button on the lower right side of the machine. Press it for five seconds until the interface lights up, indicating the machine is ready for use. Upon the first power-up, the machine will conduct a self-check. This process will take approximately 2 minutes.

### STEP 2: INGREDIENT LOADING

Open the ingredient compartments located at the rear of the machine, using the key provided. Each compartment is labeled according to the ingredient it is designed to house (e.g., cheese, tomato sauce, etc.). Load fresh ingredients into their respective compartments. Please note that the machine is designed to use organic, locally sourced ingredients whenever possible.

## OPERATING YOUR MACHINE

### STEP 3: ORDERING A PIZZA

On the digital touchscreen, customers will be prompted to select their desired pizza type and size. Customizations are easy and intuitive, with visual aids guiding the customer through every step of the pizza-creation process. Once a selection is made, payment can be made through cash, card or digital wallets.

### STEP 4: PIZZA CREATION

Once the customer has placed an order, the machine will automatically gather the correct amount of each ingredient. It will mix, knead, and roll out the dough, spread the sauce, add the toppings, and then bake the pizza. The entire process takes roughly three minutes.

## MAINTAINING YOUR MACHINE

### STEP 5: CLEANING AND SERVICING

The machine is designed to self-clean its food prep areas after every pizza using high-temperature steam and UV light, ensuring the highest standards of hygiene. However, it is recommended that you manually clean the ingredient compartments every week to maintain optimal freshness. A warning light will appear on the control panel if there is any servicing needed.

## GENERATING LUSH BIODIVERSITY

### STEP 6: WASTE RECYCLING

All food waste produced by the machine, including unused dough, topping remnants, and customer leftovers placed in the provided bins, are collected in a recycling compartment. This compartment can be accessed at the base of the machine.

### STEP 7: WASTE REPURPOSING

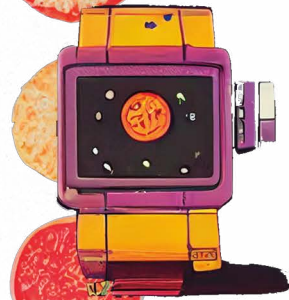
Every month, or when the recycling compartment is full, the organic waste should be transferred into the integrated composting module. Over the course of several weeks, the module will transform this waste into nutrient-rich compost.

### STEP 8: BIODIVERSITY CULTIVATION

Distribute the compost in the area surrounding your machine. This will encourage the growth of local flora, transforming once urban and barren spaces into lush, biodiverse micro-environments.



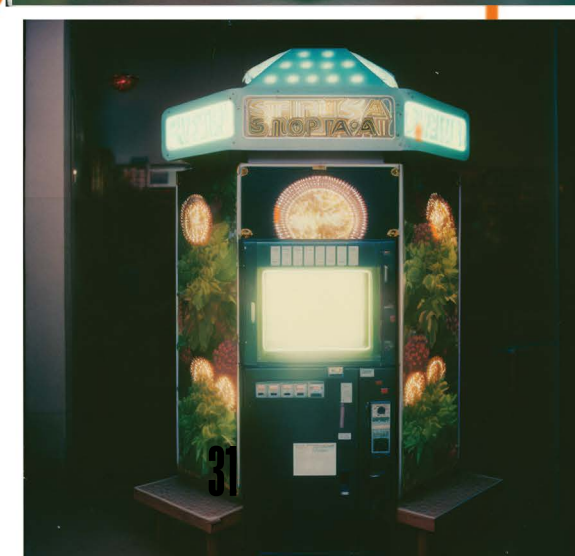
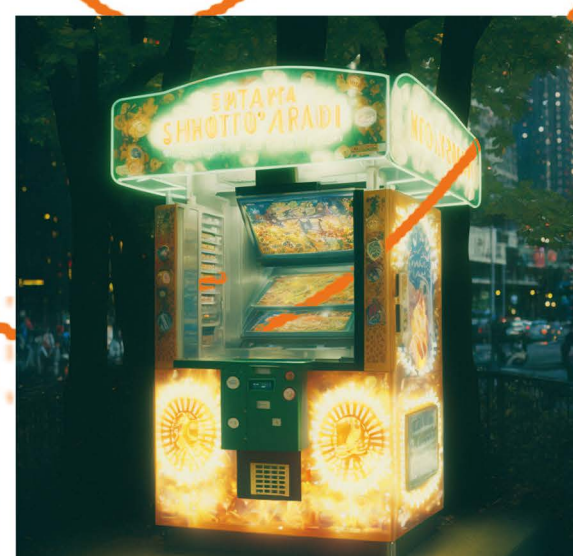
**Thank you for choosing our regenerative pizza vending machine. By following these instructions, you can serve delicious pizzas while actively contributing to local biodiversity. Enjoy your eco-friendly pizza experience!**











# IN-HOME AEROPONIC PIZZA GARDEN

In a future where plant-tech becomes a focal point of the economy, the pizzas of tomorrow could be growing in our living rooms, bedrooms, and balconies. With the advancements in aeroponics, a soil-less, space-efficient form of indoor gardening, it could be possible to pluck every ingredient needed for a fresh Neopolitan without leaving the comforts of your home.





Coupled with countertop devices that turn wheat kernels into flour and passively culture plant-grown cheese, the quality of one's home-grown pizza experience would depend on effort, care, and curiosity.



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Vertical text on the left side of the image, possibly a menu or price list, including words like "SPECIALS" and "DAILY".

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# TALK TO YOUR PLANTS

We have long known that certain vibrations, such as sound waves, can influence plant gene expression, germination rates, and growth. But our ability to communicate with plant life has always been a one-way street.



Sure, you might personally enjoy playing a Stevie Wonder record to your houseplants, and you might tell yourself that they can appreciate Stevie's pioneering use of Moog synthesizers, but you'll never really know if they truly dig it or are just being polite.

Enter PlantChat, a device that is set to revolutionize human-plant communications.

PlantChat uses an array of microbial sensors to detect activity in plant physiology and translates this activity into speech. This includes measuring fluctuations in the plant's electrical potential, changes in leaf or stem pressure, and detecting alterations in the chemical composition within plant cells.



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These raw signals are then fed into an integrated PLM (Plant Language Model) trained on extensive plant response datasets. The PLM correlates the detected responses to various stimuli or states, essentially ‘decoding’ what the plant may be trying to convey.

It then processes this interpretation into a coherent sentence outputted to the user via a voice of their choosing, facilitating a dynamic and ongoing conversation between humans and plants.



Beyond finally understanding your plants’ taste in music, what’s exciting about PlantChat is the practical application of this technology when it comes to cooking. Imagine knowing if your basil needs more sunlight or your fennel feels emotionally neglected—straight from the source.



# SCENARIO 3: PLANET DUST



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Drought happens when it's too hot for too long. Climate change amplifies the frequency, duration, and severity of droughts through higher temperatures, altered precipitation patterns and glacial melt.

If current trends continue, we risk transforming a naturally recurring cycle of wet and dry into an enduring state of barrenness. Forecasts suggest that a heatwave akin to the one preceding the 1930s Dust Bowl is now 2.5 times more probable due to current greenhouse gas emissions.

If that scenario materializes, it would be marked by widespread crop failures and food shortages. Even a 1°C increase in temperature could lead to a dramatic decrease in corn, soy, and wheat yields. The outcome? A Neo Dust Bowl, with the potential to outdo its predecessor both in scale and impact.

Extreme droughts and dust storms become as mundane as a day-old slice on a Sunday morning. Laying waste to our agricultural landscape, and morphing our relationship with food into a high-stakes game of chance.

Making and eating pizza would become a luxury—and that luxury would be a hardened, course and cabbage-ridden version of its former self.

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# **BITING THE DUST**

In a world where every breath draws in the persistent dust of environmental neglect, the architecture of pizzerias undergoes a radical transformation. The open-plan designs, outdoor patios, and airy interiors, once the hallmarks of bustling pizzerias, are no longer viable. The threat of omnipresent dust necessitates airtight constructions and sophisticated air filtration systems.





Say goodbye to the kitschy Italian bistros of yore, and hello to the hermetically sealed, air-locked pizzerias of the future. Imagine a series of pristine, dust-free domes, like an early concept sketch for a Mars colony, with a hint of pizza aroma in the recycled air. Each table encased in its transparent, protective bubble—the perfect setting for dust-free selfies and contemplative gazes into the dusty beyond.



As for the pizza, let's be honest: we'll miss the heirloom tomatoes and the basil that tasted like a summer's day. Welcome to the reign of prickly pear and mesquite bean pizza, topped with the sharp bite of scorpion pepper.

Water, that shy, retreating deity, will become more precious than ever. Pizzerias will be recycling water like there's no tomorrow, because in this scenario, who knows? The cherished Neapolitan dough, once so reliant on the purity of water, will morph into a more resilient, dust-hardened version of itself.



*Please  
Wait  
to be  
Bubbled*

# NEO-DUSTBOWL BALENCIAGA DELIVERY SUIT

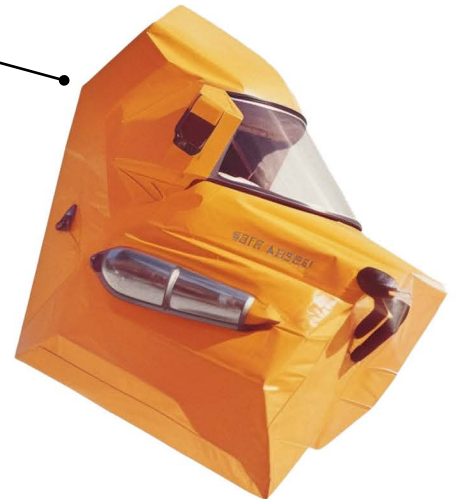
A neo-dustbowl would have a crippling impact on the economy, with small businesses and mid-sized corporations being especially vulnerable. Moreover, this chaos could pave the way for large corporations, with their vast resources and adaptive capabilities, to consolidate power, leading to the emergence of massive corporate monopolies.

Luxury fashion brands, with their robust financials and global reach, would be well-poised to take advantage of this scenario. Their mastery in design and material innovation could be redirected toward apparel with more immediate utility, such as practical, durable, and dust-proof pizza delivery uniforms.

Balenciaga emerges as a strong candidate for the pizza delivery uniform supplier of the future, given the brand's proven capability to redefine fashion norms.

Balenciaga's approach to dust-proof helmets combines cutting-edge filtration technology with a sleek, aerodynamic design, providing optimum protection and visibility for the rider amidst dust storms.

Their pizza delivery super bikes are equipped with advanced dust-resistant mechanisms and high-torque engines, ensuring reliable navigation in harsh conditions while safeguarding the precious cargo.



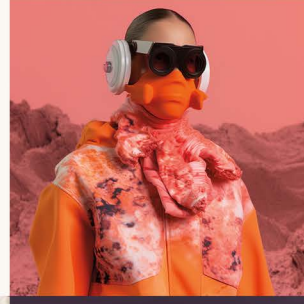
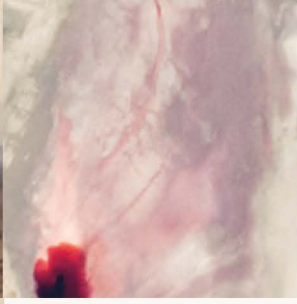
The vibrant pink and orange colors, aside from being a nod to Balenciaga's fashion-forward ethos, are also a practical choice. The striking contrast against the dusty landscape enhances the visibility of the delivery riders, promoting safety amidst the swirling dust storms.





Balenciaga delivery bags come in two striking silhouettes: the high-end Stacked Carrier and the stylish Pizza Purse. The Stacked Carrier, a marvel of practicality, can hold up to three pizzas. Its unique vertical stacking system, coupled with advanced stabilizing technology, ensures the pizzas remain upright and intact. The Pizza Purse blends function with high fashion. Its slim design keeps a single pizza vertical, preventing any mess, while its stylish exterior adds a touch of elegance to pizza delivery, transforming the humble delivery bag into a trendy accessory.







BALENCIAGA

BALENCIAGA

# LE

2086 PIZZA DELIVERY SEASON









**SCENARIO 4:**  
**AGE OF FLUX**

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While our dependence on fossil fuels persists, the shift toward renewable energy is accelerating. Challenges like enhancing storage, optimizing distribution, and increasing efficiency are ongoing. But we're at a pivotal moment—the cusp of an energy revolution that could reshape our world from the bottom up.

Utopian visions of virtually free and abundant energy are not the far-fetched dreams of free-energy fanatics they once were. They're edging closer to reality, grounded in tactile technological advances and within grasp.

Should we choose to seize this opportunity, it would usher in a new era when the lines between technology and nature blur, powered by the infinite energy of the world around us. It's a future no longer defined by labor or survival but about thriving in equilibrium with our environment.

Thus, the labor of growing pizza ingredients, preparing, and serving it would all disappear, letting us fully enjoy the social aspects of pizza.

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# HOW TO BUILD A FULLY AUTOMATED LUXURY PIZZA COMMUNE

By Anonymous

In a world blessed with boundless energy, and where decentralized living and ecological consciousness are the ethos, the possibilities of how one might produce or procure a pizza pie are limited only by our imagination.

Say you like making pizza. Which means you probably also enjoy sharing it. Why not completely reorganize the structure of society based on this love for shared pizza?





#### STEP 1

## CONCEPTUALIZE THE DREAM

Begin by fully conceptualizing your vision of what a fully automated luxury pizzeria commune should be. Then, take the time to explore and articulate your ideas to yourself or your loved ones, allowing your imagination to soar as you consider the possibilities.

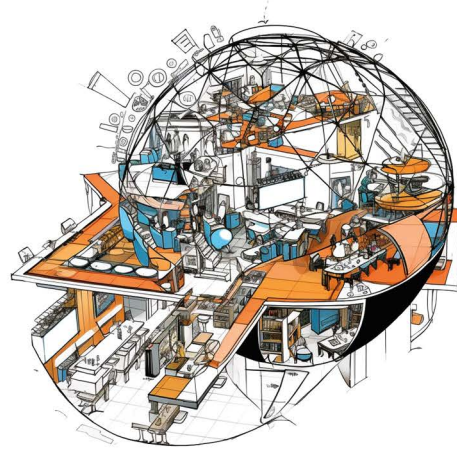
Envision the layout, design, and functionality of the commune. Consider how your automation technology will be integrated into the overall interior design motif. Most importantly, meditate on the patron experience and reflect on what you want them to take away from a visit to your pizza commune (aside from a great slice).



#### STEP 2

## RESEARCH AND GATHER KNOWLEDGE

Immerse yourself fully in geodesic knowledge and best practices. A great place to start is Buckminster Fuller's *The Critical Path*. It won't equip you with practical construction knowledge but it will help your psyche marinate in the possibilities. Acquire an understanding about the latest advancements in soft robotics, augmented organic intelligence, and regenerative energy sources to inform your decision-making process.



#### STEP 3

## SECURE A SUITABLE LOCATION

Identify a suitable location for your fully automated luxury pizzeria commune. Look for a spacious area that allows for the construction of a generously-sized dome with ample access to sunlight and natural resources. Consider proximity to an energy source, such as a solar spring or geothermal river. Also, ensure not to encroach on the territory of any other fully automated luxury pizzeria communes.



#### STEP 4

## DESIGN YOUR DOME

Collaborate with architects and designers and draft a comprehensive plan. Incorporate biofabricated materials, such as mulcrete or mycelium composites, and optimize the building's energy efficiency with passive solar design and insulation techniques. Ensure the layout accommodates communal eating areas, automated food preparation zones, and ample space for leisure, relaxation, and naps.



STEP 5

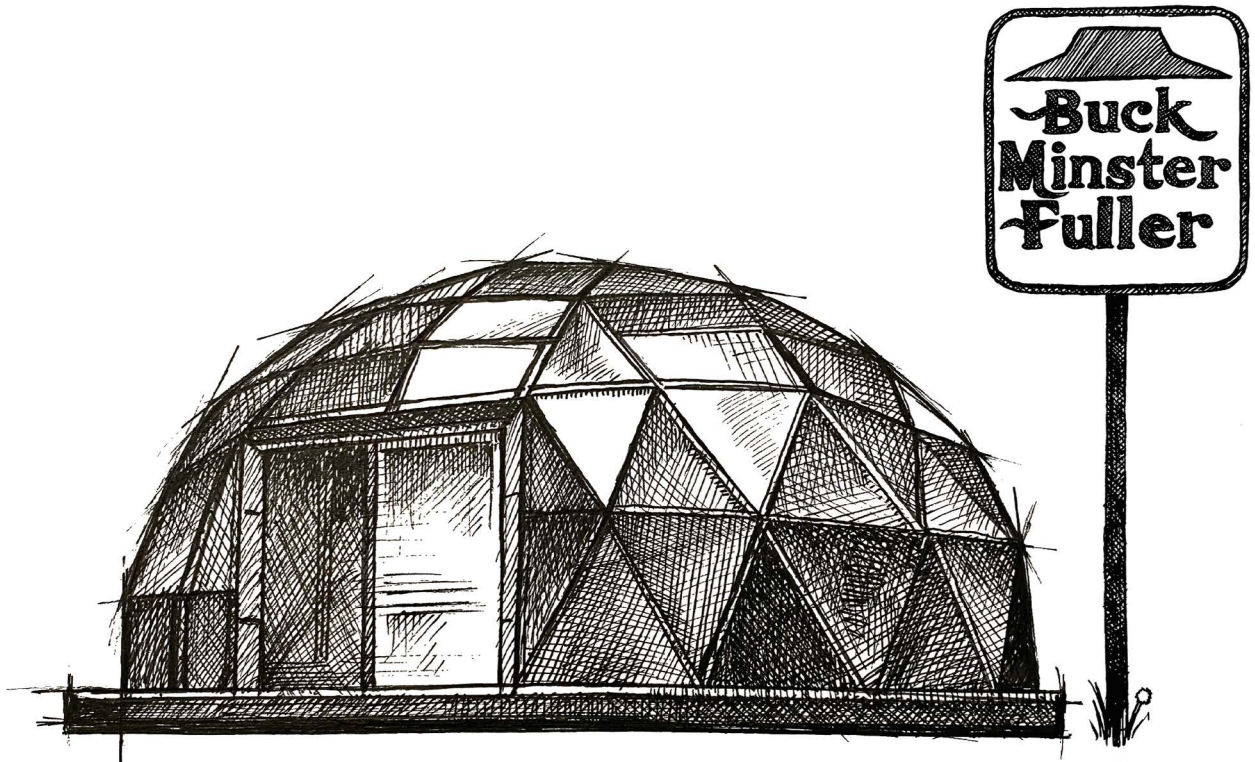
## AUTOMATE FOOD PREPARATION PROCESSES

Research and acquire advanced food preparation technologies to automate the pizza-making process. Invest in the appropriate aerobotic appliances, self-actualizing dough mixers, and intelligent ovens that can precisely measure ingredients and cook pizzas to perfection.

STEP 6

## ESTABLISH SUSTAINABLE FOOD SUPPLY CHAINS

Broker partnerships with nearby farmers and suppliers who prioritize produce of a singular quality. Given the exponential growth of the luxury dining commune sector, the competition will be stiff. Perhaps you could emphasize micro-seasonal vegetables, or create an in-house Apiary Residence for traveling beekeepers.



STEP 7

## GROW YOUR GARDEN

Your dome interior should be lush and edible so your patrons can pluck toppings at their leisure. Precision aeroponics can cultivate traditional toppings like tomatoes, basil, oregano, bell peppers, chilies, olives and so forth. While a section dedicated to fungiculture would add to the variety. A miniature plant dairy housing signature yeast blooms would be great for producing on-demand fresh mozzarella.

STEP 8

## FOSTER A SENSE OF COMMUNITY

Design communal areas to foster a sense of togetherness. Create cozy seating areas, organize social events, and encourage interaction among guests. Set up a trivia night, or a singles night, people love those. Incorporate green spaces and gardens where people can relax and enjoy their meals in harmony with the soothing sounds of automated pizza-making.

By following these eight steps, you'll be well on your way to realizing your vision of a fully automated luxury pizzeria commune.



1. ВНЕШНЯЯ ФОРМА ИЛИ ФУНКЦИОНАЛЬНЫЕ  
 ОСОБЕННОСТИ СТРУКТУРЫ  
 2. ФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ  
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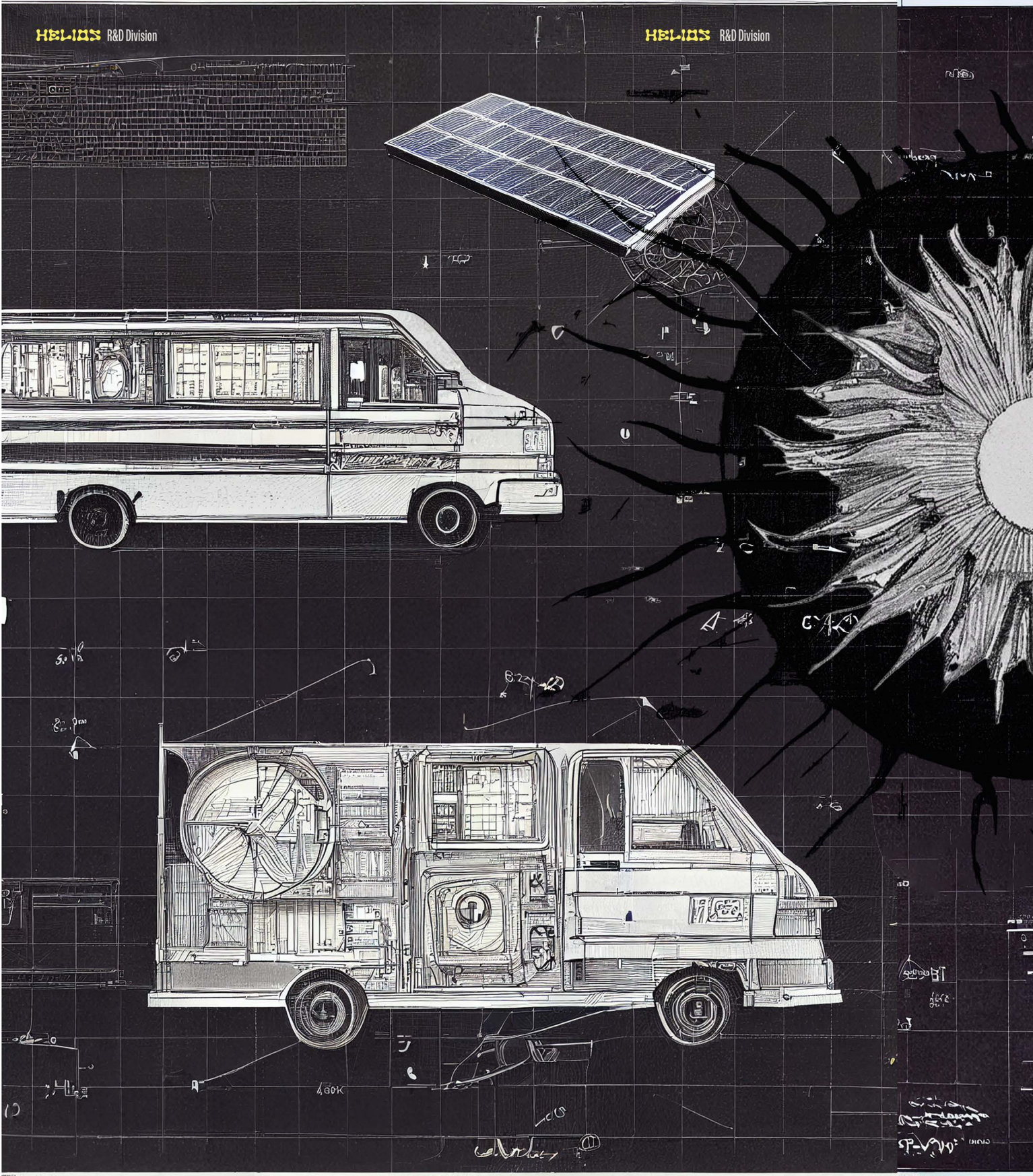
ЭЛЕМЕНТЫ СТРУКТУРЫ

- 1. ВНЕШНЯЯ ФОРМА ИЛИ ФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ
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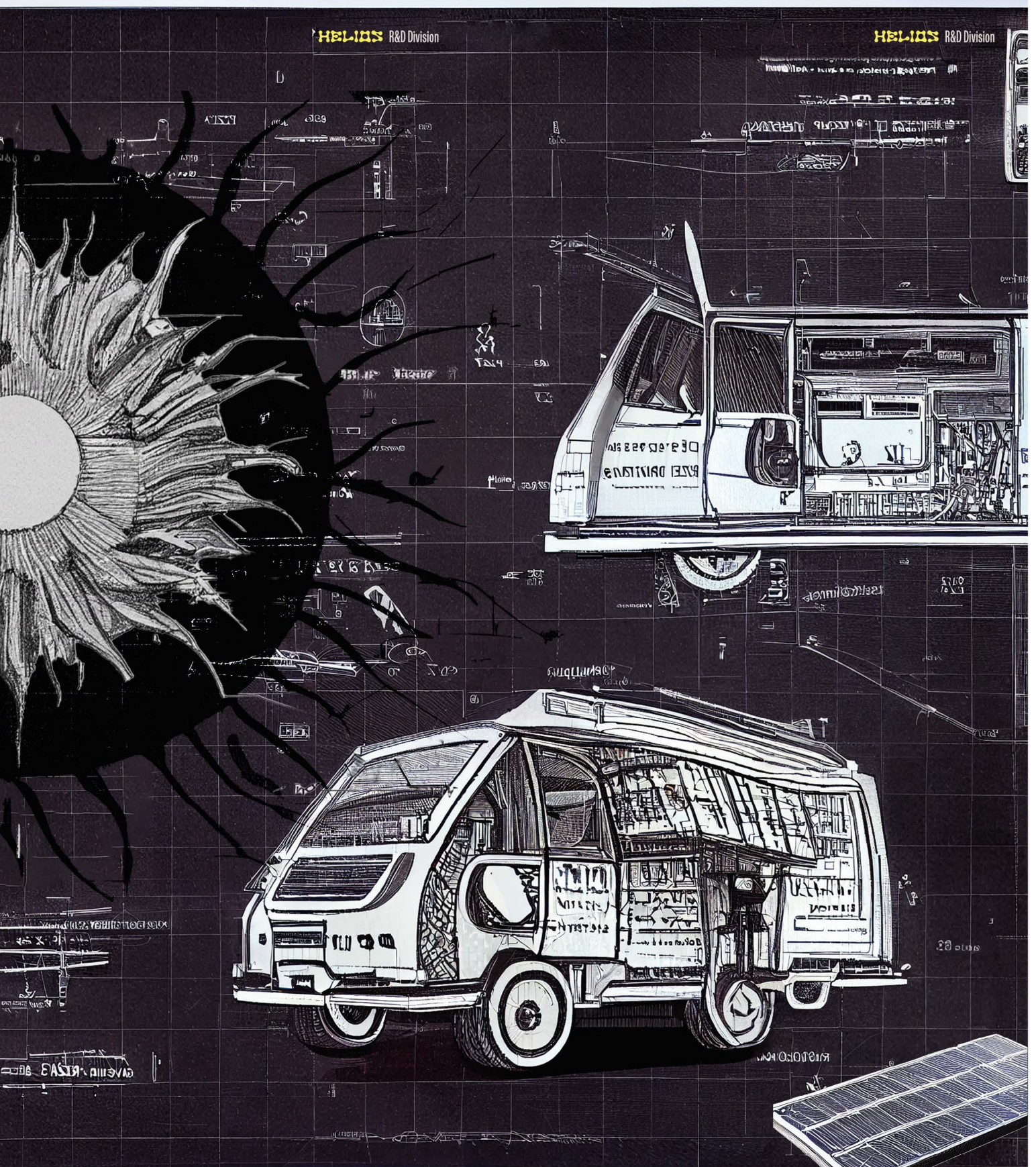
ИСКУССТВО ДЕЙСТВИЯ И ОБЩЕСТВО  
**STIPOLA**

# SOLARPUNK PIZZA TRUCKS



This solar-powered pizza truck boasts a rustic yet modern aesthetic, melding reclaimed wood and brass with lush greenery, solar panels, and a green rooftop garden. The garden doesn't merely serve as eye-candy but contributes to the menu, supplying fresh herbs and vegetables. Inside, a wood-fired oven—fueled by locally sourced,

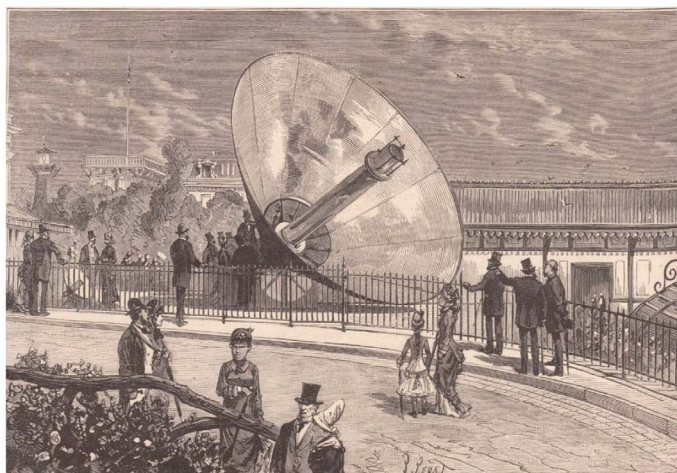
responsibly harvested wood—brings artisanal pizzas to life. A sophisticated energy storage system ensures the truck operates at peak efficiency even under cloud cover. Water usage is optimized with greywater recycling systems, and all waste is composted or responsibly recycled.



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# THE DAWN OF SOLAR PIZZA

By Elvia Wilk



Pizza-like foods have been around for centuries—at least as long as the means for baking bread have been available. The quintessential Italian pizza as we know it today didn't emerge until sometime after the early 1500s, when Spanish conquistadors returned from the Americas to Europe with tomato seeds. But an enormous oven for baking round flatbreads that suspiciously resemble pizza has been found in Pompeii—an ancient city near pizza-haven Naples—which was buried by a volcano in 79 CE. Italians, it seems, have been perfecting the recipe from the very start.



Traditional pizza ovens are wood-fired, and aficionados argue that this remains the best technique. Yet by now, delicious pizzas worldwide are produced by all sorts of appliances, including gas and electric ovens. However, the future of pizza depends not only on the continued availability of pizza's bare-necessity ingredients (flour, water, yeast, tomato, cheese) but on the continued availability of the energy needed to transmute these raw ingredients into a crusty, melty, sweet-savory, disc-shaped masterpiece. As the planetary climate changes, so too will the foods we hold dear, and we'll have to adjust our methods—and our tastes.

What will happen to cooking and baking when wood runs out? Or when gas runs out? Or when the energy needed for converting sand into silicon—the primary material used to build solar panels—is no longer at hand? Even our most renewable energy strategies require energy to manufacture them. On Earth, every resource is finite except for the sun and wind.

Fear not, pizza lovers: a solar oven can be built by hand from leftover materials. And it's not a novel design. As is often the case, in order to look to the future, one need only glance at the past. The design for an efficient solar oven has been in existence since at least 1865, when French inventor Augustin Mouchot released his model for a solar-powered engine that could be used to heat water to a boiling point, creating

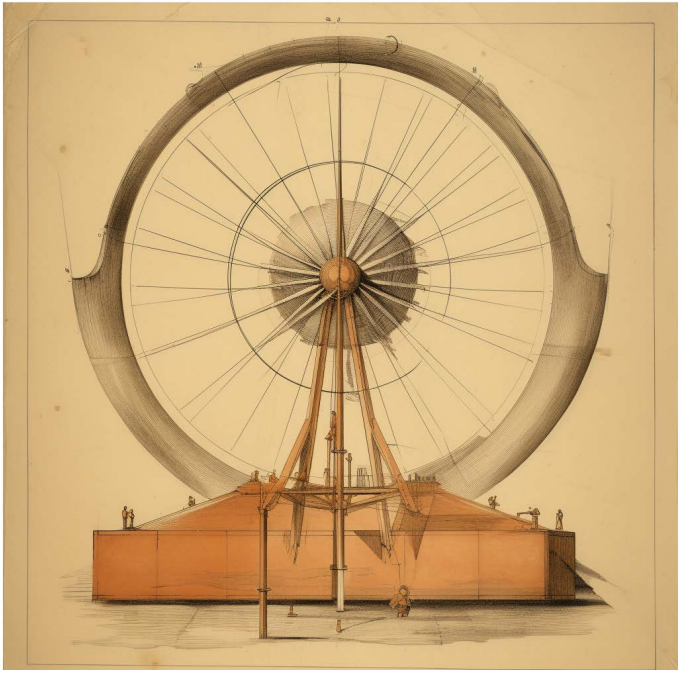
high-pressure steam. The solar steam engine was most obviously applicable in trains and factory machinery, but he also showed how it could be used as an oven to heat food.

Mouchot's oven is a conical device with a cylinder protruding from the center—like a flower opening and reaching toward the sun. The “flower” of the cone is a parabolic mirror plated with highly reflective silver, and the “stamen” is a copper cylinder boiler with a glass dome at its top. As a whole, the device couldn't look more like a space-age laser or retro-futuristic satellite.

Steampunk, meet solarpunk. Solarpunk is an aesthetic and an attitude that draws on past inventions and art forms to create the new frontier of open-source, renewable, practical, accessible green tech. Solarpunk is inspired by past engineering and its attendant aesthetics to imagine a nature-inspired, sustainable, green, and blossoming future—not only despite the increasing heat of global warming but actually aided by the sun's rays. The best thing about Mouchot's engine might have been that, using extremely concentrated solar heat, he was able to produce ice. What could be more (solar)punk than that?

Mouchot had trouble testing his inventions in France or other parts of Western Europe, which were not (yet) sunny enough to power his devices. In 1877 the French ministry gave him a grant to test his inventions in Algeria, then a French





colony, where he was thrilled to find out how well they worked given the proper conditions.

Of course, Mouchot's expedition was just another facet of the colonial expansionist project, and the goal of the French government was to solar-power train lines that could connect different parts of the empire.

So the legacy of solar engineering is bound up in the imperial quest for domination, and its repurposing today must keep this legacy in mind and be repurposed for local uses determined by those in places who need it.

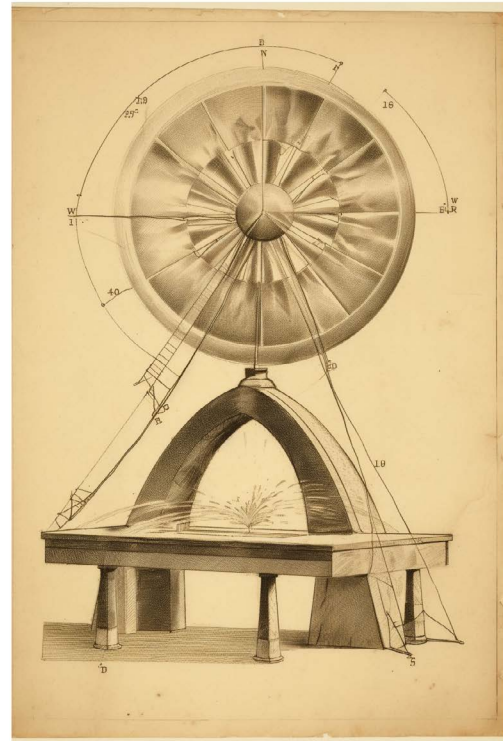
The solarpunk ethos is that the plans for any such technology be shared with everyone who needs it and not held in the hands of those who intend to employ it for the continued concentration of power. While global warming will affect the Earth's populations unequally, solar power should be shared.

Mouchot, along with some of his contemporaries like the prominent Swedish-American engineer John Ericsson, were rightly convinced that in the near future fossil fuels would run out and there would be a great need for technology such as theirs.

Ericsson's inventions were possibly even more sustainable (and more relevant for baking pizza), given that they relied on heating air rather than water. Yet both men's ambitions were soon cut off, when the price of coal fell due to increased mining and free trade agreements—and by the time war in Europe broke out, scientific advancement that didn't immediately benefit the war effort ground to a halt.

Now, we have little choice but to pick up where they left off. And today, parts of Europe may already be hot enough to power a Mouchot engine.

To continue to experience the joys of traditional and long-beloved foods like pizza, people will begin experimenting with their own retro-futuristic cooking techniques. And like the ovens used to bake them, the ingredients of pizza will begin to morph with the times. Likely, tomatoes will start to taste different, as the terroir in which they are able to grow changes. Small-scale permaculture may take the place of the global grain trade, and non-GMO ancient grains may turn out to be more resilient to climate change. And as farming practices change and people recognize the need for ethical consumption, in many places cheese will no longer be an animal by-product.



**Luckily: as long as the cheese melts, it will still be pizza.  
Or maybe an updated version: *solarpizza*.**



# CHOKING

Ask "Are you choking?"  
If person can't speak or breathe

## Person is awake

Make a fist  
Place it above the person's belly button, well below the rib cage.

Pull sharply, forward and upward.

Continue until the food comes out or the person can breathe.

## Person stops responding

Open the mouth. If food is there, take it out. If food is not visible at the person's head back.

Pinch the person's nose. Place your mouth over the person's mouth and give two breaths.

Push hard repeatedly in chest center for 20 seconds. Check breathing. Repeat from step 1.

# Food allergies can be serious

Even a tiny amount of the allergen, crossing that can be harmful.



Call 911 if the customer has an allergic reaction.

GRUBHUB  
PICK UP HERE







# SCENARIO 5: SADAPTATION

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Humanity is facing a cascade of climate change emergencies. It's a colossal battle to lessen the impacts through cleaner technologies, sustainable practices, and courageous conservation efforts. And it's situation critical. If we don't step up in a big way, these actions might be too little, too late.

If we fail to stop climate deterioration, we may be forced to retreat from the natural world into artificial indoor environments, sacrificing the joys of nature just to survive.

It would be a gloomy future punctuated by the creature comforts of advanced technology and the general weirdness of a species seeking solace in mostly artificial surroundings—a dull dystopia where we've surrendered to climate change and its implications.

Pizza, a culinary emblem of communal joy and simplicity, would either adapt to our new reality, transitioning from fields under open skies to the confines of technologically advanced condominium cities, or it would stand as a poignant symbol of what we've lost—a delicious reminder of a time when our sustenance was harmoniously intertwined with nature's bounty.

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# REGIONAL PIZZA STYLES OF THE NEAR- DISTANT FUTURE

By Alex Beggs

In the near- and far-distant future, when all the possible versions of your name have been claimed on Gmail, there are some certainties amidst the foggy unknown. Our climate will never be the same, well, duh. And pizza will definitely still exist. No vitamin-filled milkshake or chewy nutrient pill can compete with hot lava rivers of cheese and puffy, leopard-spotted crust. But as our regions transform with the doomed weather patterns, how too will our regional pizza styles? A look into our pepperoni grease-covered crystal ball...



CONFRONTO



OXNARD



MALIBU



SANTA MONICA

# SUBMERGED MIAMI-STYLE PIZZA

When Miami is slowly submerged by rising Gulf waters, the view will still be too beautiful to leave. All of the new luxury high-rises, designer retailers, and fine dining establishments will install submarine infrastructure to keep their vibrant city alive and bumpin' underwater. Submerged Miami-Style Pizza will be renowned for its waterproof crust made from locally sourced kelp flour, lobster pepperoni, and solar-powered slow-cooked sauce. Like everything about the submerged Miami lifestyle, this pizza is extremely expensive—and delivered by domesticated dolphins.



# OFF-THE-GRID-STYLE PIZZA

In the rough and tumble years after the devastating Tesla Wars, communities will flee their rental homes owned by tech monopolies and form new communes in the wilderness of Vermont where there is no WiFi, but plenty of puzzles. Off-the-Grid-Style Pizza is a humble pie with an imperfect oval shape made with regenerative ancient grain dough (it has a speckled look and nice chew), organic dandelion greens, and foraged mushrooms of questionable poison content, which adds an air of mystery—and umami. It's served in a handwoven jute pizza box that can be repurposed as a bathmat.



# SANTA ANA WIND-STYLE PIZZA

As desert conditions and drought intensify in California and the western states, and water imports become prohibitively expensive, a new style of low-moisture pizza will emerge like a cactus in a foundation crack. Santa Ana Wind-Styled Pizza will have a thin, cracker-like crust made from tumbleweed seeds and old Amazon boxes (edible in small amounts, high in fiber), topped with powdered mozzarella (eat quickly before it flies off during wind gusts), spent wine grape balsamic drizzle, and spicy coyote jerky. Some locals like to sprinkle on crushed longhorn beetle flakes for added crunch and protein. But that'll cost extra.





## DETROIT BOWLING ALLEY-STYLE PIZZA

When the electric car market finally takes off and property taxes decrease in the temperate city of Detroit, a new pizza style will reflect the region's burst of optimism. Detroit Bowling Alley-Style Pizza is still square, like Detroit-style pizza, but it's only available in crowded bowling alleys, an old sport that will be renewed in popularity when communities realize how damn fun it is. The sauce is made from local greenhouse organic tomatoes grown by one of the thousands of community farms in the state, the cheese is imported from Wisconsin in exchange for good Michigan beer, and the pepperoni is either sustainably-hunted venison or soybean-based (and quite tasty). After spending years as a contentious political and ideological battleground, Bowling Alley pizza will be the thing that unites this once-divided state, and when the pizza's popularity spreads, maybe even the entire country.

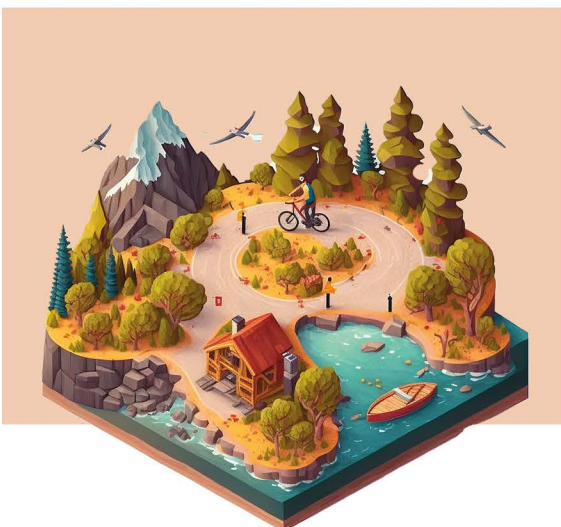
## PATAGONIA-STYLE PIZZA

We're foretelling that the makers of cozy fleece pullovers will inspire a generation of idealists who will form a new political party (called the Good Guys), and Patagonia-Style Pizza will take the nation by storm. Not only is the pizza made with entirely sustainable, kind of fuzzy vegan ingredients, but it's delivered by bicyclists whose pedaling charges portable heaters that keep the pizza warm and powers speakers that blast the Grateful Dead. Every pizza ordered sends another pizza to a person in need, even if they don't like vegan pizza or the Dead.



## META-STYLE PIZZA

Pocket-sized and actually tinned, Meta-Style Pizza will be a unique invention, really a last straw, from the tech company that once tried to take over the world. In a final grasp for relevancy, their personal-sized pizza will be designed to be as addictive as possible, with toppings acutely targeted to the eater based on blood reports the company bought from your primary care physician in a legal loophole. The crust tends to shatter when it comes into contact with surfaces, any surfaces, but its blend of 14 cheeses and flavor powders is almost irresistible and definitely not FDA-approved. Those who purchase a two-week warranty can replace it once consumed, while others will learn to miss it when it's gone, but only just barely.



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# AUTORITÀ PIZZAIOLI DI NAPOLI

By Chloé de Ruffray

In the year 2040, a world first: Italy has closed its borders to tourists to mitigate mass tourism's impact on global warming. By doing so, they also intend to better protect the biodiversity of the peninsula.



Despite efforts to promote a different kind of tourism over the last years—such as slow tourism, agritourism, and cycle-tourism—results have not matched expectations. And while 81% of Italians are in favor of more drastic measures to meet the challenges of global warming, the government has decided to implement harder measures.

However, there will be one exception that reinforces the idea that *culinary arts are a real soft diplomatic weapon* at the dawn of 2040: Italy will only afford territorial entry to those individuals who hold a new type of visa, the *Culinary Visa*.

The *Culinary Visa* is intended for those who wish to train in Italian cuisine and thus become certified ambassadors of Italian cuisine abroad. Only one specialty is available now: *Neapolitan pizza*.

How will this measure affect Italian society and gastronomy? And what will be the consequences for the rest of the world, the vast majority of which will no longer be able to come and enjoy a *Neapolitan pizza* on Italian piazzas?



### **THE ITALIAN ASSOCIATION OF PIZZAIOLOS PILOTS THE CONTENT OF THE FIRST CULINARY VISA ENTITLED: *ARTE DELLA PIZZA NAPOLETANA* (THE ART OF NEAPOLITAN PIZZA)**

The program includes the creation of *Italian Pizza Institutes* throughout the country where workshops for culinary tourists will be held. From now on, *Pizza* is a protected designation and the profession of *pizzaiolo* can only be practiced if one is certified by an *Italian Pizza Institute*.

There will be massive investments in new sensory experience spaces built around *pizza* to familiarize participants with *pizza* culture and its richness—as well as financial support for those who wish to open an *Italian pizzeria* abroad.

Worried about an increase in the demand for *Italian pizza* abroad, the main stakeholders of the Italian gastronomy want to create think tanks to reflect on the creation of low impact *pizzas*, from the sourcing of ingredients to cooking:

- Breeding of a new type of tomato resistant to global warming led by the scientific teams of the European project TomGem
- The initiation of passive cooking with a 3D-print-connected-oven that allows for the reduction of its energy consumption.

This will allow Italy to continue to export ingredients and tools typical of Italian *pizzas* with a carbon footprint reduced by 70%.

Abroad, Italy-lovers are still shocked by this news. Many pizzerias have temporarily closed. *Neapolitan pizza* is becoming a luxury product because of its rarity, thus losing its convivial aspect associated with sharing and togetherness. However, stupefaction gradually gave way to new initiatives, especially online where *pizza* fans wanted to capitalize on this feeling of nostalgia around Italian food.



**IN JUST A FEW WEEKS, DOZENS OF NEAPOLITAN PIZZAS XNFTS HAVE BEEN CREATED. THEY WILL GIVE ACCESS TO HOLOGRAMMATIC MASTERCLASSES WITH CERTIFIED PIZZAIOLOS AND TO A WEBSITE DROPPING LIMITED, LOW-IMPACT INGREDIENTS TO MAKE PIZZAS AT HOME.**



**AS FOR AVATAR CREATORS, THEY WILL SOON BE ABLE TO BUY NEAPOLITAN PIZZAS DIGITAL ASSETS CERTIFIED BY THE ITALIAN PIZZA INSTITUTE. THE INSTITUTE IS ALSO CURRENTLY WORKING ON A VERSION THAT WILL BE AVAILABLE TO FANS OF THE PIZZVERSE IN 2041.**

Although flourishing, *virtual pizzas* already have their detractors who see it as another way to deprive humans of gustatory emotions, a valuable vector of pleasure and aliveness. A pressing issue that requires further scrutiny, as the world becomes more isolated and increasingly complex to explore.



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# PNEUMATIC MARGHERITA SYSTEMS

In the face of a deteriorating natural world made inhospitable due to unchecked climate change, humanity may choose to show its ingenuity not by addressing our existential challenges—but by retreating from them.

We could enclose ourselves in architectural marvels—sprawling, high-tech apartment complexes that offer sanctuary from the ravages of a melting, burning, flooding world. A self-sustaining universe of cold comfort convenience complete with air conditioning and cable TV.

But how to replace the experience of strolling to the market and picking up some fresh ingredients to make yourself a home-made pie? *Pneumatic Margherita Systems*.

Within one's apartment tower, climate-controlled "Sauce Hubs" would store vast quantities of carefully prepared Margherita sauce.

Each hub networked to hundreds of living units through a complex series of tubes, allowing the sauce to be hygienically delivered directly to homes on demand.

Unit kitchens would be outfitted with a sauce port—a specially designed faucet that connects to the pneumatic system.

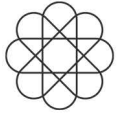
Residents would place their orders through a kitchen-integrated interface, customizing their sauce's ingredients, spice levels, and quantity to their liking. The system then draws the required sauce from the hub, pressurizes it into a reusable, sanitized capsule, and propels it through the pneumatic tubes directly to the awaiting unit.

A process that once involved hours of legwork and painstaking preparation would be achieved in a matter of minutes.





Once the order is received, the Margherita sauce capsules will be loaded into a specialized capsule carrier at the central preparation area. Then, the capsules are carefully guided along the network of tubes toward the designated apartment kitchen. Upon reaching the desired destination kitchen, the sauce capsules safely land in a designated receiving station. All stations have sensors to ensure proper alignment and prevent spills or mishaps.

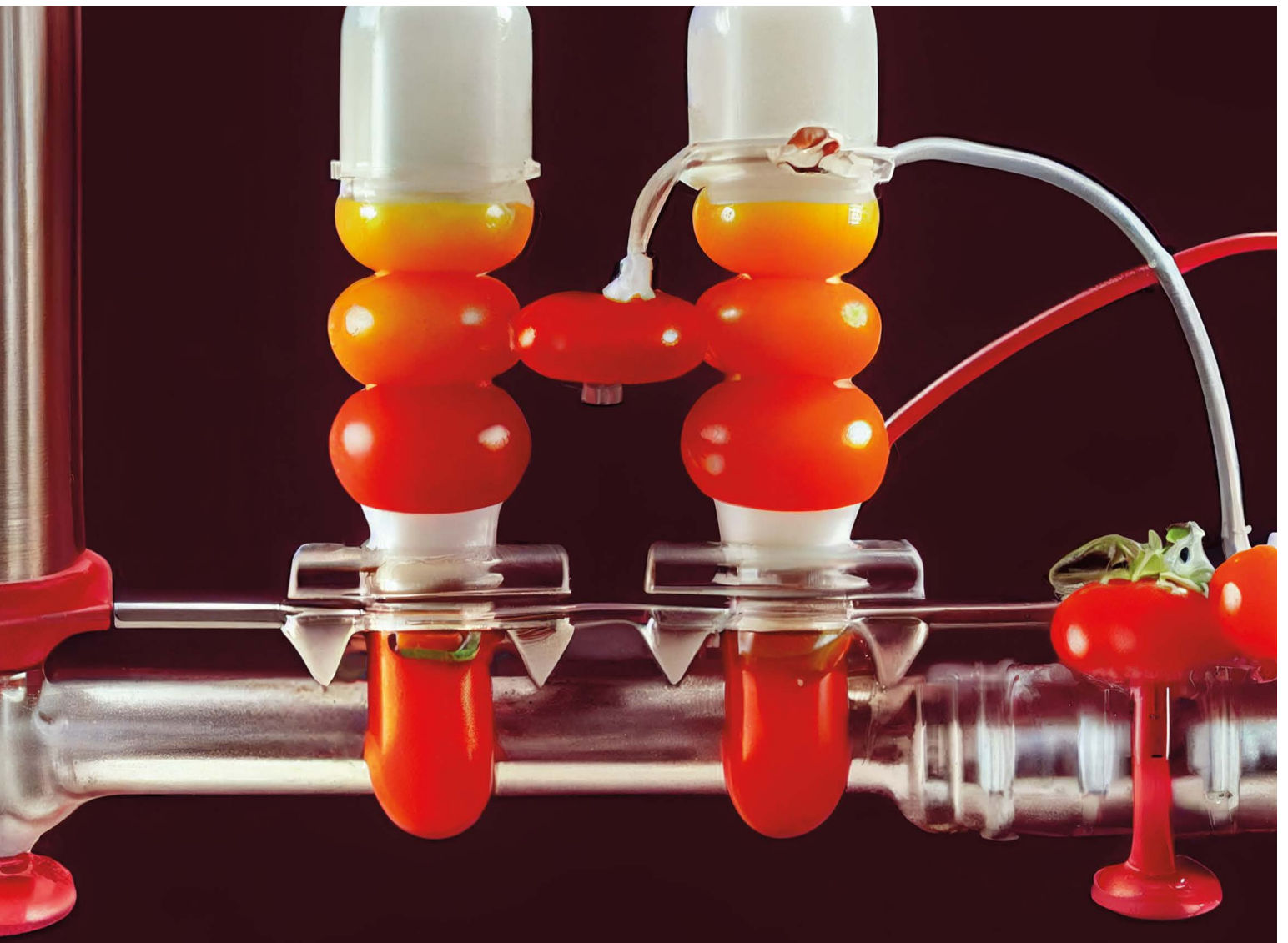


Extra Spicy

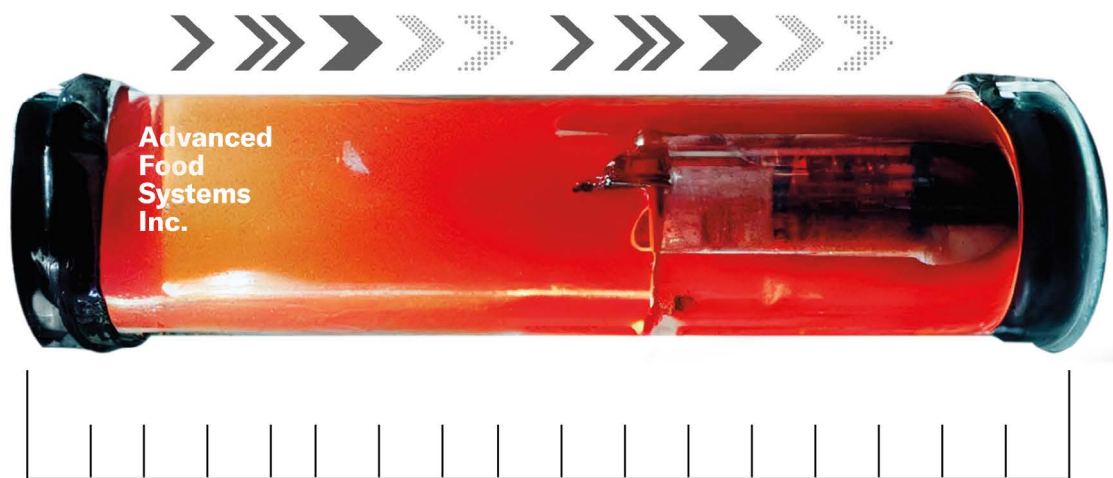
Extra Basil

“Tex Mex”





Sketches developed from AI artists. Over 3000 iterations using different technologies for various pizza trips



Advanced  
Food  
Systems  
Inc.



**MARGHERITA PIZZA SAUCE SYNTHESIZER**

Neoprene material made to repel harsh environments while keeping subject cool





Extra Cheese  
Large  
Ball

Mushroom  
Pepperoni  
Peppers

Onions  
Anchovies  
Customer

Special  
Other





# SCENARIO 6: DISAPIZZA

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If we fail to take real action to mitigate or control the impacts of a changing climate, we'll live as though permanently dazed and hung over, a quality of life eroded to the point that we won't be able to order, or even make a decent pizza.

Changing weather patterns could cripple key ingredients' production—parched wheat fields could yield an inferior crust, while erratic temperature spikes could wreak havoc on tomato crops, stripping the sauce of its comforting familiarity. Even cheese, the melty crown of any decent pizza, could become a convoluted and costly affair, nudging pizza from a global comfort food to a rare indulgence.

Once a pinnacle of global culinary culture, the role of pizza in our lives would gradually fade and ultimately be forgotten altogether. Pizza would become little more than a relic put on view at museums for people to gaze upon, where they desperately try to imagine the good old days.

The warm, inviting scent wafting from a freshly baked pie, the sight of cheese stretching with each slice, and the collective anticipation of that first bite. These experiences, commonplace today, could become elusive memories of a time when food was not just about sustenance but also about togetherness. Pizza parties, informal gatherings, or simply a street slice grabbed in a hurry—all could be narratives of the past, whispered amongst us like old folklore, as we navigate an existence devoid of such simple pleasures.

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# PIZZA MONOLITHS

The uncertainties shrouding the timeline of pizza's extinction, coupled with the unpredictable evolution of future languages and technology, make the task of preserving pizza-making knowledge a complex and daunting challenge.

Consider this scenario: we compile an extensive guide on cultivating the necessary ingredients for making pizza, complemented by video tutorials explaining the pizza preparation process. We meticulously translate all this material into every conceivable language. Yet, we face a fundamental question: will future generations speak a language that bears any resemblance to ours?

Additionally, we cannot predict if they will possess technology akin to our computers, or even

if they will possess the literacy skills necessary to read written instructions. These uncertainties underscore the complexity of preserving and communicating the art of pizza-making to the future.

Only one approach truly guarantees durability against the ravages of time: A universally understandable pictographic system that visually articulates the cultivation and preparation of pizza engraved onto sturdy stone monoliths.

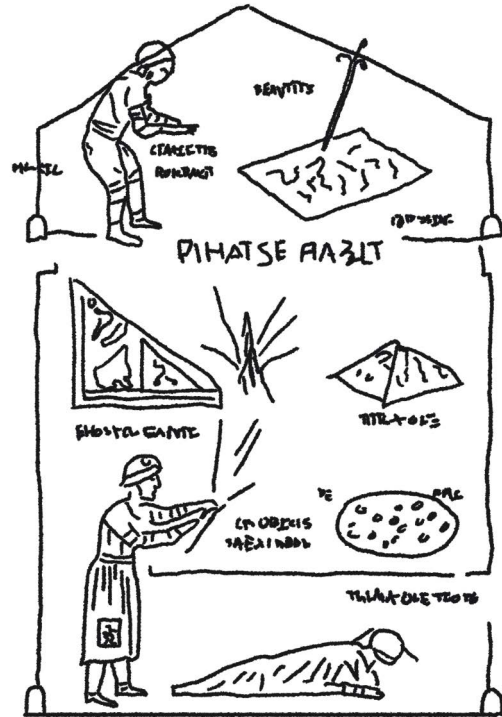
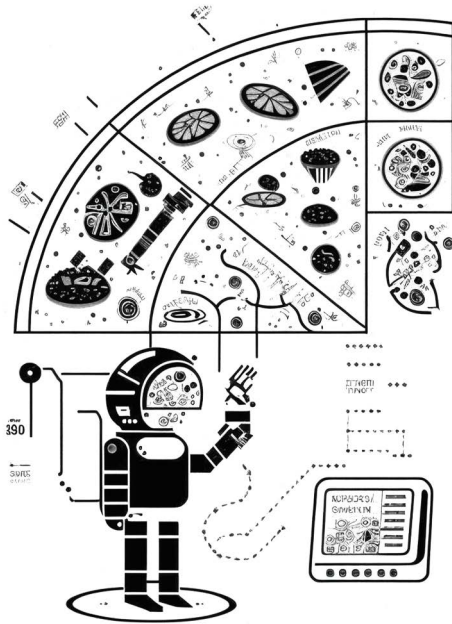
Like a generous sprinkling of parmesan on a delicious slice of pizza, these monoliths should be dispersed liberally across the globe, ensuring the preservation and transmission of pizza-making knowledge for future generations.





# LOCATION

The placement of these monoliths is equally crucial, ensuring a high likelihood of discovery by future generations. They would be strategically located across various geographic



# MATERIAL

Stone, a material that has stood the test of millennia, is an ideal medium for our message to the future. Stone monoliths, in particular, offer longevity and visibility. Their size and durability allows them to resist weathering and potential cataclysms, ensuring the preservation of the engravings.





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# EAT HERE

By David Zilber

If you've read this far, you can tell that a fair bit of ink has thus been spilled on pizza. So many words communicated about such an ostensibly simple food. Odes and prophecies, diatribes and histories. Words written by avid fans, eaters, and slingers of pizza (myself included), but not by all of pizza's stakeholders. If you'll forgive me a Seussian aside, "Who speaks for the tomatoes? Or the wheat, yeast, or cheese?"

Human exceptionalism would have us think ourselves masters of communication, the sole arbiters of speech. But we're not special. The whole of the living world speaks.

To a single cell of *Saccharomyces cerevisiae*, endowed with chemosensitive genes to differentiate concentration gradients of simple sugars in its surroundings, an "Eat Here!" sign and the eats themselves are one and the same. **(1)**

In both nature and advertising, the medium IS the message. Marshall McLuhan's commentary on human artifice proposed that the communication mediums themselves, not the messages they ferry, ought to be the primary focus of our attention.

With that in mind, ask yourself the following: "what is pizza?"



Is it a convenient meal both beloved and devoured 3 BILLION times over in the US alone, every year? **(2)** Is it a vegetable by congressional decree? **(3)** Or, as Italy's national dish, is it as big a cultural export as the Beatles are to Britain? While these may all be fun musings on 'za, from McLuhan's point of view, none of them speak to the heart of the beast. What message does pizza convey? Insofar as it could be considered

a medium, what is pizza a medium for?

Well, in the biological sense as a meal entire, to us humans, pizza is an energy source. But unlike wheat or yeast, planted wherever chance might find them as they wait patiently for the sun to shine or fruit to ripen, we do not passively pull pizza's chewy-greasy-crunchy nutrients through the self/world boundary of our cellular membranes.



No, we must seek out its ingredients. But beyond just a grocery list, for pizzas to exist on Earth in the billions year after year, we must coax multiple branches of life into mutual cooperation. Luckily, we've been doing just that for some while.

All of the so-called "pristine" civilizations were founded on grain crops: Mesopotamia, Egypt, the Indus Valley, the Yellow River, the Mayans, and the Inca. Wheat, barley, millet, rice, and maize acted as both food sources both for individual laborers, but also as a currency for burgeoning societies; taxable and storable by states for redistribution in times of famine, with the surpluses helping to feed priests, craftsmen, officials, and other non-agricultural workers. (4)

But how were these botanical pillars of civilization actually consumed? Crude porridges may fill you up, but without the action of bacteria and yeasts, after some time, you might find yourself nutrient deficient, your vital organs compromised.

With the simple addition of time, the fermentation of grains and water transmutes a thick gruel into a dough that can then be baked in an oven, fried, grilled, coal-fired, or griddled. While the art and science of baking can constitute whole PhDs describing a pantheon of forms, in its essence, bread wants to be flat.

Flatbreads are the simplest, most satisfying, and most versatile type of bread. They go by dozens of names and can be found in almost every culture on Earth. They can be eaten fresh, dried and rehydrated, frozen and thawed. It's

for this reason that archeologists posit that flatbread was probably firstbread.

Among the earliest evidence for it were crumbs found at a site in Jordan dating back to 12,400 BCE, predating widespread agriculture in the region. (5) With this knowledge in hand, if you afford yourself the right historical perspective shift, there's an angle through which we can view flatbread—a triumvirate pact between grasses, fungi, and mankind—as a requisite preadaptation for the ecological evolution of a clever ape and its interspecies consorts, into a eusocial, planet-shaping force majeure.

For at least 14,000 years, we've been milling, mixing, kneading, yeasting, pulling, rolling, and cooking flatbreads into existence, all to the great satisfaction of our own tastes but also to the tastes of the grains and yeast used in the recipes. (Does a blade of grass not yearn for unfettered sunlight? Do ascomycete cells not bubble with effervescent excitement when well fed?)

To be sure, not Delicio, nor Chicago deep dish, nor even pizza napolitana, have been around anywhere near that long. The medieval Latin *Pizze* first pops up in the historical record in the "Codex Diplomaticus Cajtanus" in 997 CE. As a dish, it would have been more similar to a round focaccia, baked with toppings, than the pizza we know today.

The roots of its name are thought to be linked to the Greco-Assyrian pitas that Gaetanean archbishops would have been well acquainted with through Mediterranean trade. Before them,

North African Bedouins had their own name for it. Which is the point. Whatever you call it, as long as there has been flatbread, people have been dousing it in toppings to enjoy it.

As a child, home from school, I'd make pizza out of bagels, Triscuit crackers, or even English muffins. As an adult, I've slow-fermented rare, imported flours, caught wild yeast on the wind for sourdough, and labored for days over Chad Robertson's recipe. But whatever route I've taken, in the end, it's always been deeply satisfying. A perfect meal. Not just as a biochemical energy source to keep my cells dividing but as thousands of years of human culinary history, refined, honed, and distilled.

Flatbreads, while delicious on their own, are the original medium for the message of flavor. So perfect a vessel could have only been born out of the needs of prehistoric man. Requiring so little to craft, (you could not strip anything away to make it simpler) yet it gives back so much. It is the meal, and the plate, begging to be adorned by whatever preserved meats, cheeses, greens, oils, or sauces one might have on hand. It is both the medium and the message, no cutlery required.

In his work, Swedish food historian Richard Tellström writes of "taste chords." As an idea, taste chords constitute the harmony that comes from several flavors that, like the standing waves

of plucked guitar strings, resonate to live for a very, very, long time should they carry sufficient importance to the cultures that produce them.

Language resonates in the same way. The Proto-Indo-European root word for bread—*bhreu*—dates back some 6000 years. Over that time, it's traveled through dozens of tongues and billions of mouths to today, all the while remaining largely steadfast. And that's because its meaning "to bubble, effervesce, char, and burn" is still as important to us now as it was to the ancients.

Fermentation and cooking are still as important to us now as they were to the ancients. We don't know what the prehistoric Jordanians called their flatbreads. But we know they loved them, because we still love them.

What is pizza today could be called something else tomorrow, but it will still have a tomorrow. The fidelity of humanity's longest-standing recipes transcends the words we use to describe them, because such recipes don't belong to humanity alone. Grasses and fungi (not to mention tomatoes and cows) are as invested in the delicious medium of flatbreads as we are, because it's their medium, their message too. "EAT HERE! EAT US!" Whatever the world looks like 14,000 years from now, assuming there are still beings capable of crafting recipes, then "pizza" will still be on the menu.

- (1) Sugar Sensing and Signaling in Plants, Filip Rolland, Brandon Moore, Jen Sheen  
The Plant Cell, May 2002
- (2) We eat 100 acres of pizza a day in the U.S., Lenny Bernstein, Washington Post, 2015
- (3) Is pizza a vegetable? Well, Congress says so, Lizz Winstead, The Guardian 2011
- (4) Against The Grain, James C. Scott, 2017
- (5) Stone Age Bread Predates Farming, Barras, New Scientist, 2018



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# MOLECULAR PIZZA MICRODOSING

The experimental byproduct of a collaboration between desperate chefs and bored food scientists, molecular pizza microdosing ingeniously resurrects pizza from its untimely demise in the form of a compact one-sip-serving vial.

Based on historical evidence of how pizza tasted, the process involves carefully calibrating doses of synthetic molecules corresponding to the myriad of pizza-adjacent flavors. These microdoses are then consumed, tricking our brains into perceiving the fullness of the pizza experience. A precisely balanced cocktail can recreate the robust tanginess of tomatoes, the creamy comfort of mozzarella, and even the yeasty goodness of baked dough.

The flavor experience, though potent, is fleeting, given the minute quantities. The initial burst of familiar flavors can be disturbingly intense but fades quickly, leaving a persistent longing for the tangible texture and warmth of traditional pizza.

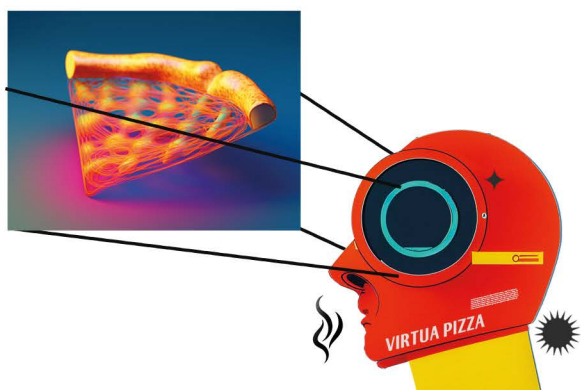
Despite its limitations, molecular pizza microdosing provides a cherished, albeit ghostly, echo of the extinct epicurean delight that was pizza.







# VIRTUA PIZZA



You'll find yourself exploring surreal vistas with hills of pizza dough, rivers of molten cheese, and trees blossoming with various pizza toppings.

Navigating this landscape is generally effortless. The device picks up on your neural commands, letting you glide, leap, or even swim through these pizza-themed panoramas. The graphics are crisp and immersive, but it's the added sensory elements that really make this device stand out.

In the twilight of the Age of Mozzarella, where the whisper of the pizza slicer has long since faded into memory, human beings still experience a profound yearning for pizza.

Therein arises the spectral solution—the Virtua Pizza—rekindling nostalgia for that bygone world of savory tang and ooey-goopy goodness.

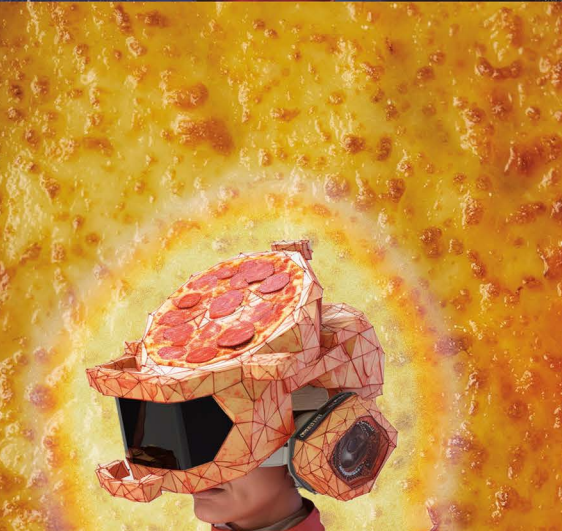
Upon unboxing, one finds the Virtua Pizza helmet, an impressive piece of technology that comfortably fits all head sizes thanks to adjustable straps. In addition, it's surprisingly lightweight, making the prospect of prolonged use a lot more appealing.

Once the helmet is on, the journey begins. The immersive 360-degree olfactory-induced visuals subsume your senses into a delicious landscape reminiscent of a psychedelic pizza-themed dreamscape that was typical fodder for early 21st-century “memes.”



The smell of baking dough, melting cheese, sizzling garlic, and fresh basil fills the air as you move through the landscape, making the experience surprisingly visceral.

The sound design complements this sensory immersion, with ambient noise perfectly capturing the bustling energy of a pizzeria kitchen from a historical era of your choosing.



# PIZZA MUSEUMS



Long after the sizzle of a pizza slice hitting a hot pan has faded into oblivion, children will wander inquisitively through grand halls dedicated to this culinary relic. Here, in the historically inaccurate pizza museums of the future, they will encounter peculiar, half-baked recreations of what was once a universal symbol of comfort and joy.

Walking through these hallowed halls, the air will be heavy with nostalgia and the murmur of speculative histories. This is a world where pizza is no longer a tangible delight, but a fragmented memory pieced together from the rubble of a past civilization's culinary legacy. Statues of forgotten pizzaiolos stand tall in the marbled corridors, eternally frozen in the throes of kneading dough, sliding a slice, or taking a break from a long day of pizza-making.



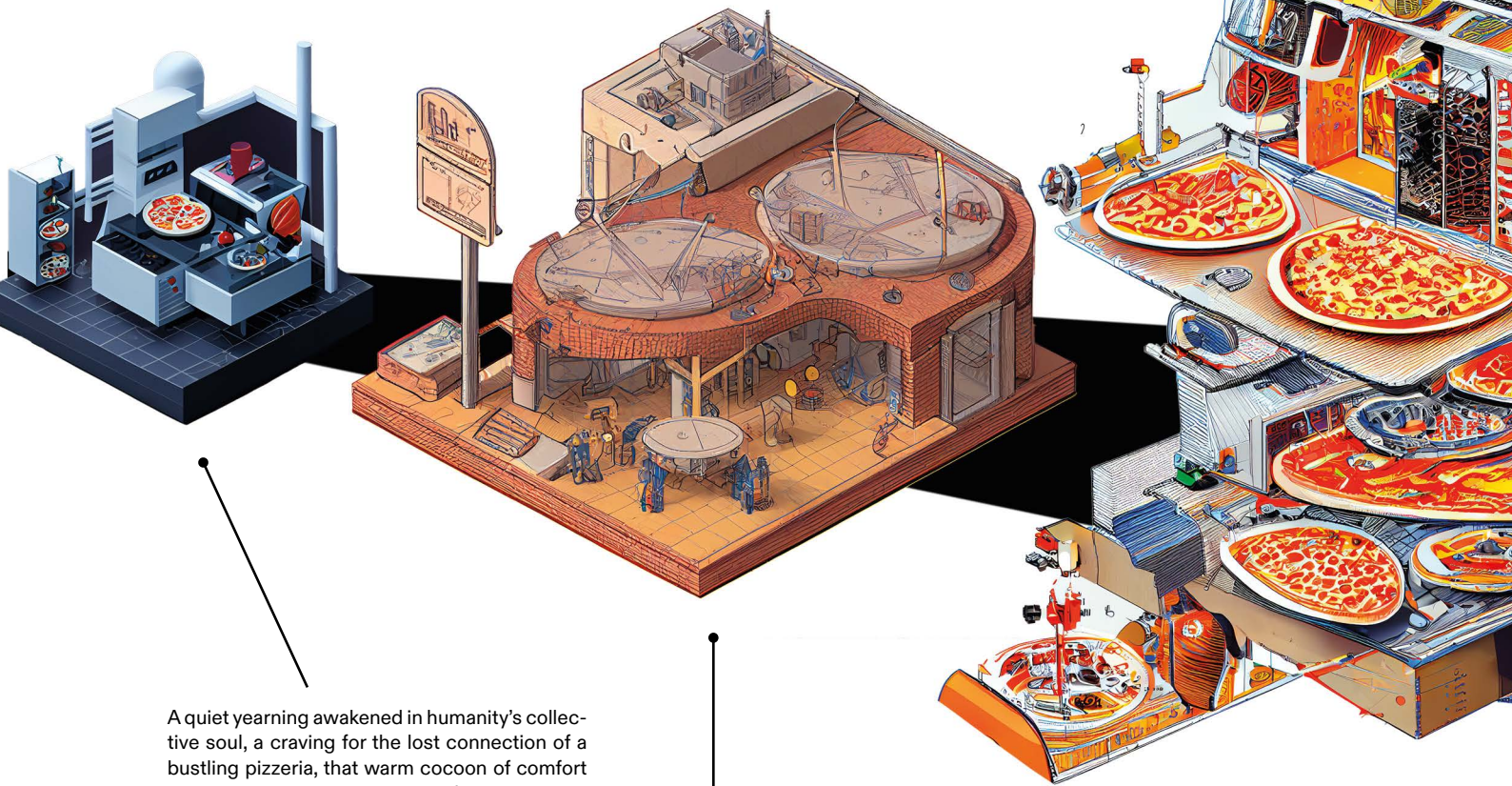
The histories they present are fragmented at best. “Pizza”, they’ll say, “was a creation of the ancient Romans, who cooked it on the shields of fallen enemies” or, “It was a breakfast dish, commonly enjoyed with a side of maple syrup”.

Through it all, the spirit of pizza—the shared slices, the comfort of a hot meal, the silent understanding between cheese and crust—is lost in translation. These pizza museums, though historically inaccurate, will serve as poignant reminders of what was once taken for granted, and the culinary delight that future generations will never truly experience.



# QUANTUM QUATTRO

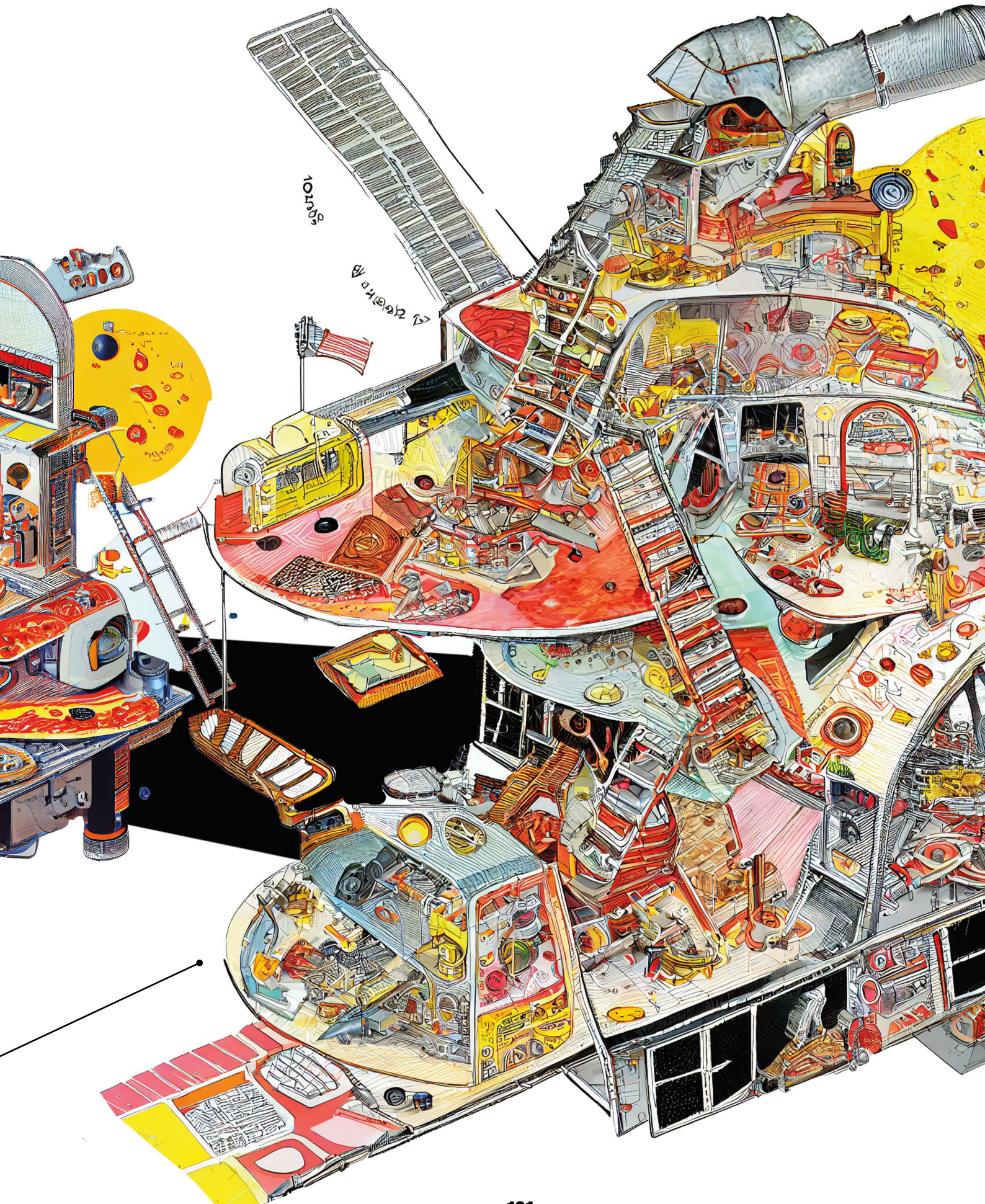
Humanity upgraded the PizzeriaSim into PizzaForge, a replicator capable of materializing any pizza they could imagine, bringing into existence delicacies that tasted like the warmth of a microwave sunset, yet somehow, the longing persisted.



A quiet yearning awakened in humanity's collective soul, a craving for the lost connection of a bustling pizzeria, that warm cocoon of comfort scented with the earthy allure of baking dough and bubbling cheese.

This led to the creation of PizzeriaSim, a virtual reality that mimicked the feel of a busy pizza parlor.

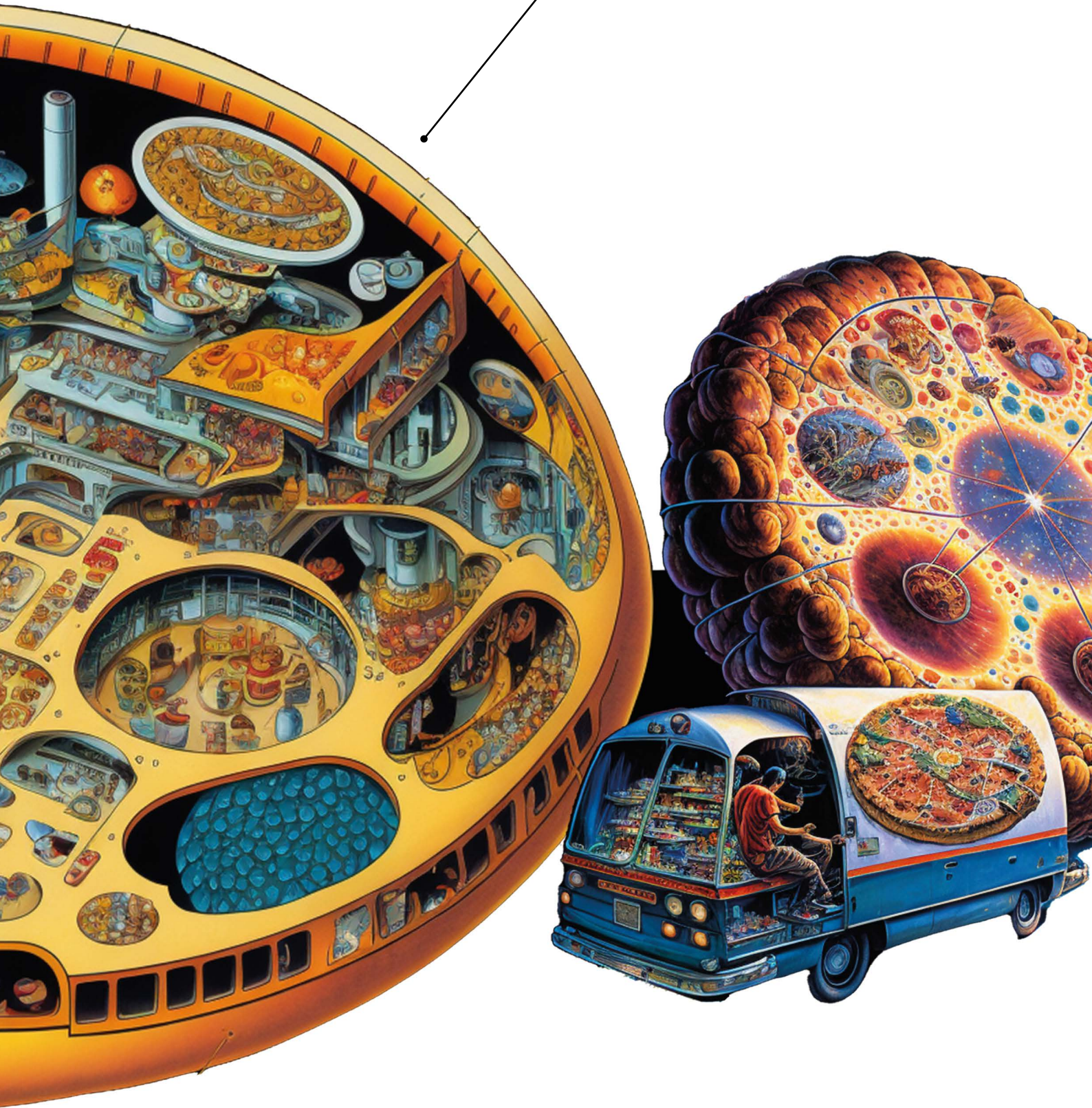
A strange hypothesis took hold—that the yearning wasn't merely for pizza, but for the universe's ultimate pizza, a dish that captured the essence of all existence, and thus, mankind's vision expanded from their own small planet into the cosmos.



101010

△ 266710

The Intergalactic PizzaCraft was born, a vessel designed to sample the flavors of galaxies.





Humanity stumbled upon a phenomenon, a Pizza Black Hole, a cosmic entity that seemed to devour all in its path, yet emitted an aroma reminiscent of the perfect day-old slice.

On the other side of the Pizza Black Hole, they found it—the Universe's Pizzeria, an ethereal space where pizzas were born from cosmic collisions, ingredients were stellar remnants, and every slice held a galaxy's worth of flavors, fulfilling humanity's craving not only for the ultimate pizza, but also for the ultimate connection with the cosmos itself.



Braving the unknown, the PizzaCraft ventured into the Pizza Black Hole, the crew guided by the tantalizing scent of interstellar marinara and quantum cheese.







Molecular  
Pizza Microdosing



Unexplained  
Pizza Events



Virtua Pizza



Autonomous Solarpunk  
Pizza Trucks



Fully Automated  
Luxury Pizzeria Communes



What if Pizza Disappeared



Neo-Dustbowl  
Delivery Suit



30 hours or Dead  
Wasteland Delivery Service



Pneumatic  
Margherita Systems



Roving Woodfire Drones



Worst Case Scenario  
Chuck E. Cheese's



In-Home Aeroponic  
Pizza Garden

*nobell*