

(n)everlasting

Impermanence in Design Culture

The Student Publication • Volume 37
North Carolina State University

Table of Contents

The articles featured in Volume 37 represent a combination of Research, Reflection, Creation and **Process**. This constellation maps each theme throughout the book, showing how every article connects and leads to the next.

9

The Arrogance of **Permanence**

By: Aly Khalifa

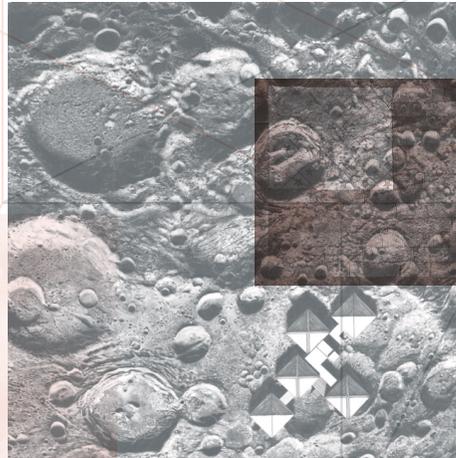
"We should be focusing on building a code for design that will help our species survive."

21

What Does Planting Tomatoes Have to do With Fashion?

By: Natalie Chanin

"I realized that here in my community, activities such as sewing, gardening, cooking and quilting have never just been tasks."



53

Blur

By: Diller Scofidio + Renfro

*"Blur is an architecture of atmosphere — a fog mass resulting from **natural** and man-made forces."*

61

Remember

By: Steven Matijcio

*"Yet as the interface between mankind and the book continues to move through time, the centuries-old relationship between man, material and **memory** is redrawn in, and by the digital era."*

401 Oberlin Road + 520 S Person St.

By: Erin Sterling Lewis

"I've seen a tremendous amount of change since moving here in 2002 - some exciting and some devastating."

87



12

One on One

with Dan Gottlieb
(continued on pages 24, 34, 46, 58, 66 & 84)

"...memories are built by sort of a collection of bits and pieces. Some are of a place that doesn't change very much, and others are of something that sparks and it comes and it goes and it's extremely impermanent."

43

Hopscotch

By: Grayson Currin

"This was the first Hopscotch I'd ever attended as a mere listener, the first time I'd ever been able to hear actual sets by the loud legions emptying into the city at the start of every September."



31

Terra Incognita

By: Catherine D'Ignazio

"We imagine ourselves to be citizens of the world because of our unprecedented, privileged access to information."



77

Against Search

By: Lev Manovich

"Using search is like looking at a pointillist painting at a close range and only seeing colour dots, without being able to zoom out to see the shapes."

Foreword

By: Marvin J. Malecha, FAIA, DPACSA
Dean, NC State University College of Design

Typically a student of design moves quickly from one project to another honing skills and learning the value of the multiplicity of ideas. Little thought is given to what is permanent and what is transitory. Each project presents a challenge to be met and a grade to be achieved. This is a **process** that is repeated in the context of a busy design office with compensation and design awards programs substituting for grades. Time for reflection is often overlooked in this sequence from one project to another. At first each project is treated preciously until a body of work accumulates and it is the sum of work that begins to define the designer. A routine develops from one project to the next. In a professional setting this flow of work often leaves little time for greater thoughts and a routine develops that becomes formulaic. It is the interruption of the routine that provokes reflection. The passion for making that is shared among all of the design disciplines slows the **process** and it is often the necessary interruption to what is otherwise a frenetic **process** of doing. To make is to experience the sense of **permanence**. But the experience of making can also be misleading in itself.

There is a moment in a design student's education, frequently first realized on a study abroad trip, when the overwhelming idea of **permanence** is first contemplated. It is the interruption that provokes a student's reflection. The experience of coming face to face with an ancient sculpture bridging more than 2000 years is inspirational. Standing among the gargoyles of a Gothic Cathedral from 1000 years ago is humbling. It is a reflection upon the connection between contemplation and making, upon the relationship between ideas and representation and upon what is made and what survives to tell the story of a culture. Every designer becomes immersed in the intensity of the **process** to realize the artifacts that represent their thoughts in relationship to a challenge issued either through a program to

be addressed or message to be conveyed. Even a cursory visit to a studio reveals that time is suspended in pursuit of this objective and whatever gets in the way of this journey is sacrificed. Through experience the designer matures and realizes that the world does not end with one project. One project leads to another and ultimately to a way of thinking. Ultimately from the study of history, travel, case study analysis and experience the realization comes that those things that at some time seemed to be permanent, from massive structures to delicate jewelry, now lie in ruin or are often discovered by chance in a remote archeological excavation. Conversely the ideas that seemed to be the most ephemeral and fragile in fact comprise the rock upon which cultures are formed. The pursuit of an education in a design profession is a combination of the study of the past and the relationship between the artifacts that resulted and the predominant ideas guiding the culture. In this way the designer is a mediator and communicator on behalf of culture. The individual who has taken the time for this meditation will continue to grow as a designer and transform his or her work from simple programmatic responses to insightful innovations.

There is an ancient Roman expression roughly translated reads "there is nothing new, yet, it is new." The ever-increasing **cycle** of technological enhancements of human thought and ability make this expression relevant to our notion of that which is everlasting and that which is neverlasting. The **cycle** of evolution from the pursuit of the permanent to the **impermanence** of artifacts that never reach fruition beyond what is realized in a digital environment is no different from the earliest experiences first encountered in the study of ancient civilizations, only faster, much faster. Every aspect of scientific, humanistic and design inquiry are sped through learning **cycles** from awareness to deep understanding to incremental notions of truth and understanding utilizing not only new forms of technology but taking

“Just as there is an acceleration of the processes leading to concepts there must be a deceleration of the measures by which a path is chosen.”

advantage of concepts from crowd sourcing to collaborative commons. The very notion of truth itself has become iterative and incremental. Today's medical breakthrough is superseded by knowledge collected from every part of the globe. Teenagers working on science projects can contribute to this **process** just as can Noble Laureates. Content is overtaking coursework in every form. This is new, yet the experience of new ways is in itself timeless.

In this rapid evolution of knowledge and insight is a caution. Within the landscape of new technologies and social media concepts can come and go without leaving a trace. The search for **permanence** is depending on these traces for it is as important to know where you have been as to pursue new leads. Ideas form from the concepts that have both succeeded and failed. Just as there is an acceleration of the **processes** leading to concepts there must be a deceleration of the measures by which a path is chosen. The everlasting and the neverlasting are mutually dependent on each other.

The Ancient Roman Forum can be experienced as a distinct **memory** place not only because of what remains but because we also know what is missing. Rome is a place of ideas. The laws of the Western world were born there among the politicians and philosophers who paused to consider the **nature** of the human community. The extensive letters of the nineteenth century graphically illustrate the brutality of war as well as the delicacy of human emotions. In both cases it is the trace of ideas and artifacts that gives us the necessary context of the time when ideas were born. What if we no longer have such traces? What if we have only the last thought in a string of thoughts? Will we be able to understand the essence of the roots of ideas? Will we be able to **remember** what has come before?

There is no question that the evolution of design thought and **processes** are accelerating. However, it is best that these issues not be confused by

technology. Perhaps the advice of the ancient Roman philosophers is in fact the answer to this question. First the expression “there is nothing new, yet, it is new” reminds us that the dilemma of **permanence** and **impermanence** has always been with us. A second ancient Roman expression translated as “hurry slowly,” reminds us that reflection is the necessary ingredient for the evolution of ideas. This emphasizes the role of the designer as a generator, developer, recorder and conveyor of ideas. Ultimately it is ideas that will be the measure of what is either everlasting or neverlasting.

This issue of *The Student Publication* addresses the continual flow of reinvention through the lens of rapidly advancing media. Perhaps the most interesting proposition posed by the editors is that the designer will be challenged to more immersed in society and relevance to the great challenges of culture as never before. In this way, it follows; the designer becomes an arbiter of what will become everlasting. To pose such a proposition to a constituency of students, academics and design professionals is to invite a vigorous discourse. Perhaps this is the invitation to each of these constituencies to be bold in thought and action. This is an invitation to interrupt the flow and consider the ideas that shape our understanding of design.

The challenge that is issued to every generation is to be the purveyors of ideas rather than captives of the latest technology. In the words of Louis Mumford in the first Bulletin of the School of Design “We cannot and should not return to the traditional limitations of the past: we must rather conceive a program of education which make our technology a supple instrument of human development.” Looking through the lens of the temporary only has meaning if we understand the context of the exercise. This context is comprised of the essential ideas of a time and place. These ideas, although not permanent by any means, have morphed and evolved from long threads of experience. This is as close to **permanence** as we can achieve. ●

Editorial Letter

By: *Jedidiah Gant + Mirtha Donastorg*

You will change your socks tomorrow, update your phone in the next six months, and in the next few years all of the appliances in your home will need replacing. Your empty milk cartons will end up in a landfill. In the Fall, a brand new wardrobe will replace your gently-worn clothes from 'last season.' *Impermanence* is a fixture in our lives. For Volume 37 of *The Student Publication*, we wanted to foster a conversation around the concept of *impermanence* within design culture.

In design culture, ideas flow in and out on a daily basis. The hope, through discussion, multiple iterations, and brainstorming is to *create* a lasting product. Whether that product is an elegant building, a stunning poster, or a revolutionary concept for a smartphone application, the goal is still the same — to make a permanent impact through design. But, tides shift and trends dictate the products that make it to market. A smartphone app that seems revolutionary at the time may be outdated in a few months. A new trend in façade construction or typeface can make a particular design seem obsolete in almost no time. The only thing that lasts from these discarded artifacts are the ideas. If fostered, these ideas can last for several generations, they can make a movement, they can define

a generation. These ideas can help *create* multiple products throughout time, tied together by the bond of design *process* and thinking.

The Student Publication was started in 1950 as a tribute to Matthew Nowicki, a former professor whose life was cut short by a tragic plane crash. In only a few years he made a lasting mark on the College of Design. Through the creation of the first bulletin advertising the newly founded School of Design, Nowicki set a standard for how the college would frame itself as a design school. With a foreword by fellow professor Lewis Mumford dense in design thinking terminology and an outline for the college's organizational structure, the bulletin was a very progressive statement on how to frame architectural education in the mid-20th century.

The ideas set forth in this bulletin inspired the creation of the first volume of *The Student Publication*. The shape, the feel, the aesthetics, and the philosophy of design thinking have been crucial in the development and organization of the publication over the past 64 years. *The Student Publication* has changed organizational and curatorial shape over this time, from being student curated to a faculty based publication and back again. But, despite these changes in the product, the framework and ideas shaped

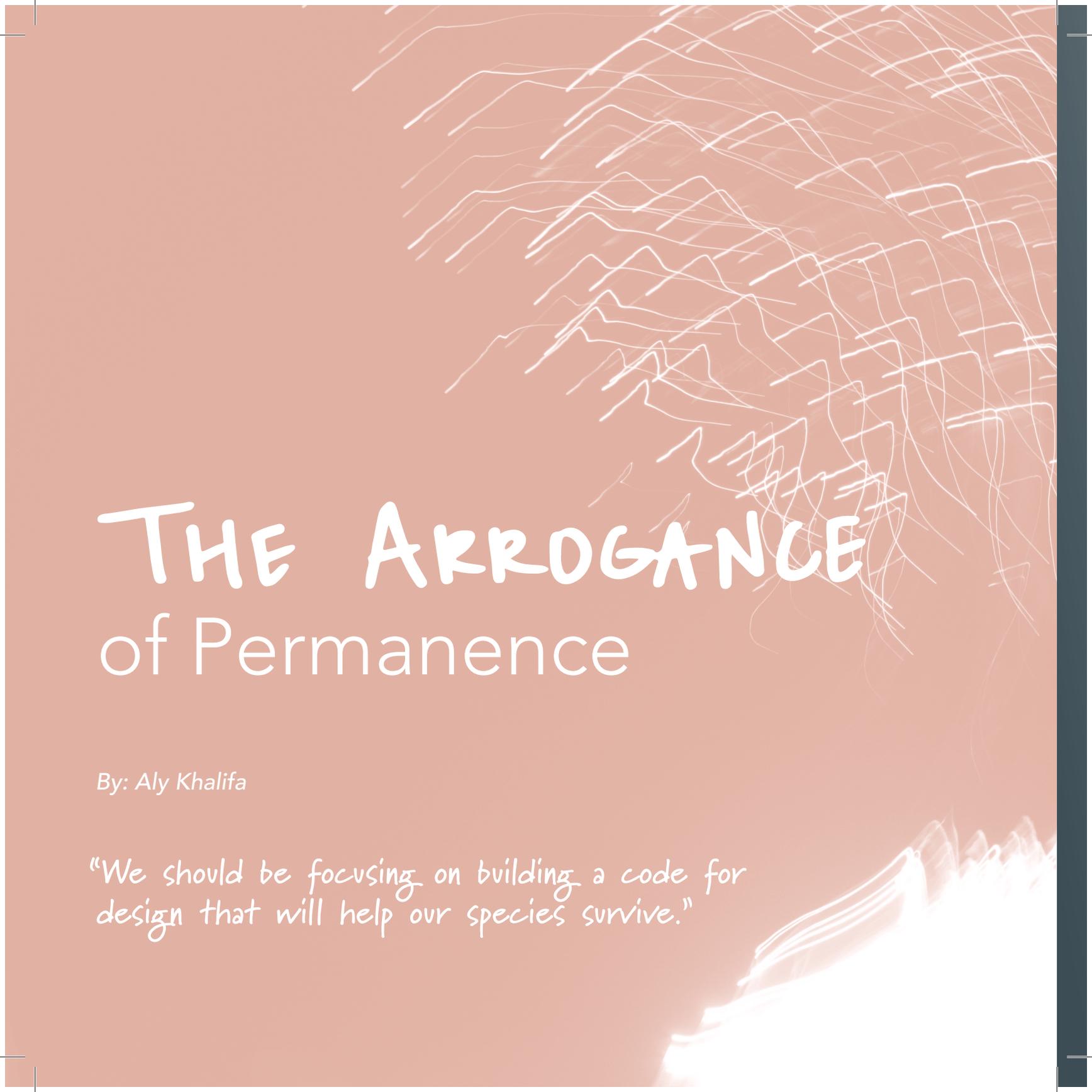
“The irony of discussing impermanence in something as temporary as a collection of bound papers does not escape us.”

by Nowicki have remained. It is now, as much as it ever has been, a dedication to the idea of design thinking and what Lewis Mumford referred to in that original bulletin as each generation finding “its own appropriate forms and expressions.”

As we approached the creation of Volume 37, we considered this history and the **permanence** of ideas within the publication. When digging through ideas for the theme, **impermanence** seemed to be prevalent within many aspects and genres of design today. From technology to fashion to architecture, the dichotomy of **permanence** and **impermanence** is a topic of discussion on a daily basis. Designers **create** objects, artifacts and experiences, but the lifespan of these designs vary. Some may last for generations, while others last no longer than a few days. As editors from two different backgrounds, design and biology, we sought out a similar variety of contributors that could speak on these topics both personally and professionally. As well, they could speak to the idea of **impermanence** from different angles relating to the design discipline. Creating a temporal experience for Hopscotch Music Festival with lasting effects on the local community is just as important to us as lifestyle brands in the fashion

industry. The short life span of Diller, Scofidio + Renfro’s *Blur* Building has as much weight as the concept of the ever-growing mounds of trash in landfills across the country. Applications like Snapchat that, seemingly, make technology disappear in our hands have as much impact as the curation of the art collection at the North Carolina Museum of Art. Some of these contributions made Volume 37, others did not. But, throughout the editorial **process**, the ideas of each of these proposals helped develop this publication.

The irony of discussing **impermanence** in something as temporary as a collection of bound papers does not escape us. But, it was never our goal to be everlasting nor outlasting. No, we wanted to embrace the inevitability of the neverlasting and frame a current snapshot of design culture through the contributions that are published in this volume. This idea of **permanence** is in flux, but the ideas that come with this conversation will outlast the products. Even the ideas pushed forward by the original bulletin and the first volume of *The Student Publication* will surely outlast this volume, the 37th edition of the first student design publication in the country. ●



THE ARROGANCE of Permanence

By: Aly Khalifa

"We should be focusing on building a code for design that will help our species survive."

We are taught in design school that the best designs have a lasting quality. We see beautiful commercial objects in venues like New York's Museum of Modern Art and are led to think it represents the ultimate achievement of a design project. Designers are then inspired to **create** solutions that might one day be next to Raymond Loewy's Studebaker Avanti or Henry Dreyfus' Bell Model 302 telephone.

Design artifacts are important for scholarly work, but by definition, museum pieces have been removed from their context. By preserving them, their existence is isolated from the regenerative **processes** that dominate the earth and the universe.

Yet is a Woolly Mammoth proud to have her bones in a natural history museum? She would have liked it better if she was still using those bones, and more importantly, that her DNA got passed along and her species adapted to this changing world.

Establishing a **permanent** place in history is what so many of us unconsciously strive for: to **create** a design fossil. Instead we should be focusing on building a code for design that will help our species survive.

It's Complicated...

It is essential to designers that we recognize our place in history. In fact, it is essential to our development. Buckminster Fuller recognized that in order for society to progress, children must learn more than their parents.¹ If we cannot build upon the ever-evolving revelations of success and failure in culture and the making of things, we are denying the human drive for a better future.

Building relevant expertise is an exceptionally complicated task at this point in time, for we find ourselves in the throes of globalization. Whereas previous generations of designers would have had little choice but close proximity to their material sources and how they were fashioned, a modern work of architecture might span the globe for components as simple as a screw. This gives us a lot more latitude to make decisions that we may regret.

Designers are now expected to be aware of conflict minerals in Africa, labor practices in Asia, transportation effects in our oceans, greenhouse gases in our atmosphere, and mountains of undefined trash. These are pressing and important issues. As local communities become less integrated in providing for itself, today's designer is forced to make up the difference and become ever more connected with complex issues around the rest of the world. Meanwhile, supply chains are being optimized for massive scale, and social media regularly spurs enormous demand with furious spikes of commerce. Small decisions can have multiplying and unintended effects. Simply put, ignorance is more dangerous than ever.

We see a drive towards design complexity driven by a fractal-like expansion of technologies. We challenge traditional know-how by cutting wood with a 5-axis Computer Numerical Control or growing Monocrystalline Photovoltaic Cells. These technologies combine ever more materials and processes together in new ways, challenging a designer's control of the process and the final product.

We live in an environment filled with man-made composites. Apple's iPhone embodies an immense amount of materials and processes compared to the Bell phone just a few decades ago. With this added complexity, there is expanded responsibility of the designer to steward a process of increasing unknowns. Today's designer cannot afford to be a stylist but must be part engineer, part manufacturer, part psychologist, and part biologist. Thus there is a building reintegration of the professions. As they stand on uncertain ground, designers must seek a unique foothold in this new paradigm.

Even Designers Have to Obey Thermodynamics

The Law of Conservation of Mass is not a suggestion. Antoine Lavoisier taught us that "Nothing is lost, nothing is created, everything is transformed."² The same building materials that made up our world four billion years ago are still here today. With every breath, we inhale about five billion of the same air molecules that Leonardo DaVinci exhaled centuries ago.³

What if designers took this to heart and designed accordingly?

All a designer can really do is temporarily change the state of selected matter. A building may require sand to be transformed into glass, or iron ore turned to steel, but these molecules will far outlive the building and the designer herself. What we are left with is the realization that our designs are simply a temporary configuration, even if it is as old as the Pyramids of Giza. An elegant design must take the long view on the sources and destinations of these materials. Despite the desire for many designers to leave their mark on the world, most don't want it to be in the form of a landfill.

Ironically, landfills are probably the best place to preserve our design fossils. The highly compacted, anaerobic environment of our waste sites prevents life from digesting and transforming man-made materials into a more naturally usable state. So while our designs might not last, as discarded waste they will not effectively go away either. Landfill is an increasingly expensive and toxic option for our growing global community and the accelerating design cycles we are producing. Designers can no longer afford to focus on the temporary manifestation of their realized design, but must also now care for where their materials came from and where they are going.

Only once we realize that we are not creating designs, but are temporarily transforming materials within a bigger system can we find our place in this world. Fortunately, Mother Nature is a fantastic teacher.

“Only once we realize that we are not creating designs, but are temporarily transforming materials within a bigger system can we find our place in this world.”

You Are What You Eat

From soil to stem to leaf and back to soil, nature has designed ecosystems that elegantly flow matter from one temporary state to another. The efficiency of these systems not only minimizes the entropy (second law of thermodynamics), but incorporates organizational growth to counteract the entropic forces of chaos. So how can the designer, burdened with the responsibility of globalization, apply nature's lessons?

We learn from Fritjof Capra that living systems are comprised of a circular network defined by dissimilar but complimentary parts, and that the output of one neighbor becomes the input of another.⁴ To be a viable member of the system, it means that you not only need to “eat another's garbage,” but that you need to find who will eat your garbage afterwards. The more we can define material flow in this system, the more likely we are to define a circular economy. That is to say, good design can stabilize our economic and ecological future as a single pursuit.

For a designer, this means we are not just designing a product. To do it right, we must design the whole material flow system — pre-product and post-product — to make sure each part of our “creation” has a place to go after its tempo-

rary state as our designed product. We learn from William McDonough and Michael Braungart's work that a Cradle to Cradle approach means finding sustainable sources of healthy materials and then creating products that are easily upcycled into future high value products.⁵

This means avoiding typical one-way processes that create monstrous hybrids of undefined materials and adhesives. Instead the designer should be thinking about how each material can be easily harvested and recirculated within the same defined system. This process becomes highly efficient when we close a tight loop on the material flow and make our next design from the same materials of the previous one. Companies like Shaw Industries are already leading the way on this type of manufacturing with their “closed loop” carpet tiles.

Design Beyond the Third Dimension

Of course, reduced component products like carpets are simpler to utilize closed loop approaches. Most designers are now working with a highly diversified bill of materials. If designers are intending for these materials to be recirculated within a defined system, she must build it into her design from the outset. *continued on page 14*

ONE ON ONE: DAN GOTTLIEB

Shelley Smith: I'd like us to just start with a general who you are and how you came to be here. You mentioned that you were a fine artist, so — that's quite a career path.

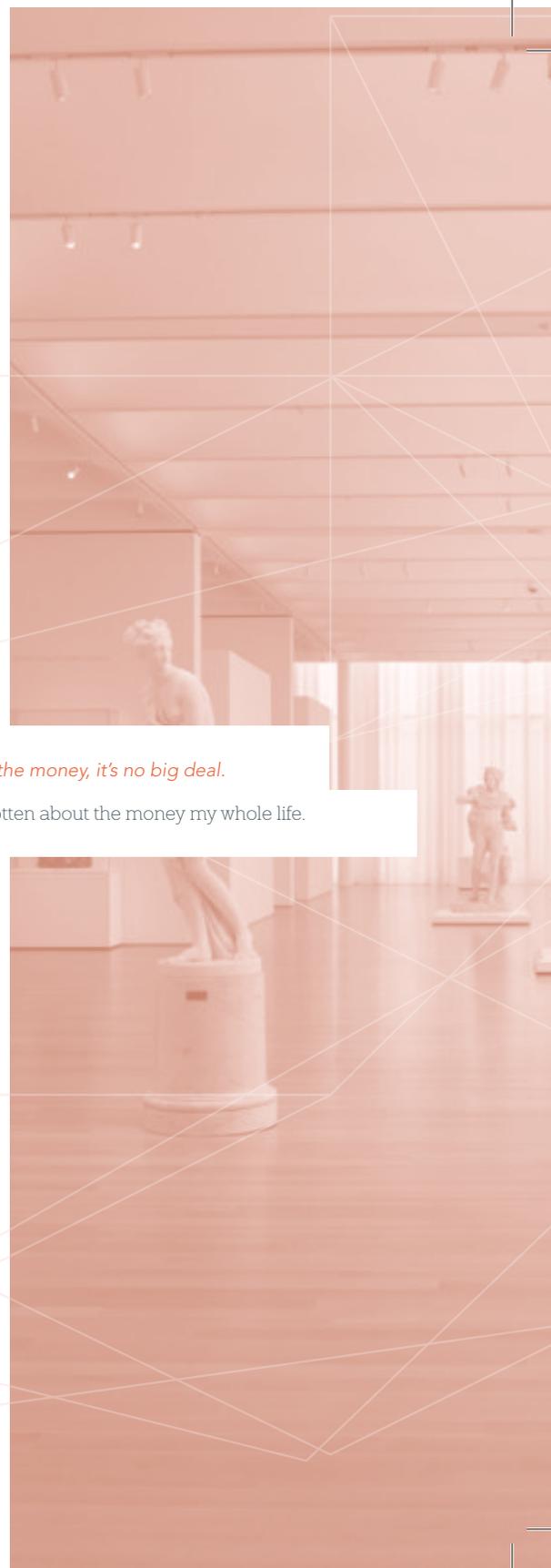
Dan Gottlieb: Yes, well, in retrospect, it feels like it's very linear, but it didn't feel like that along the way, all the time. So, I started out in undergraduate school as a double major, in fact. I was a fine arts major at the University of New York, Buffalo, and I chose that school because it had — one, it had a great art department, but, two, it had a great biology department, and I was totally interested in both at the time. So I was a double major in art and biology for two and a half, three years.

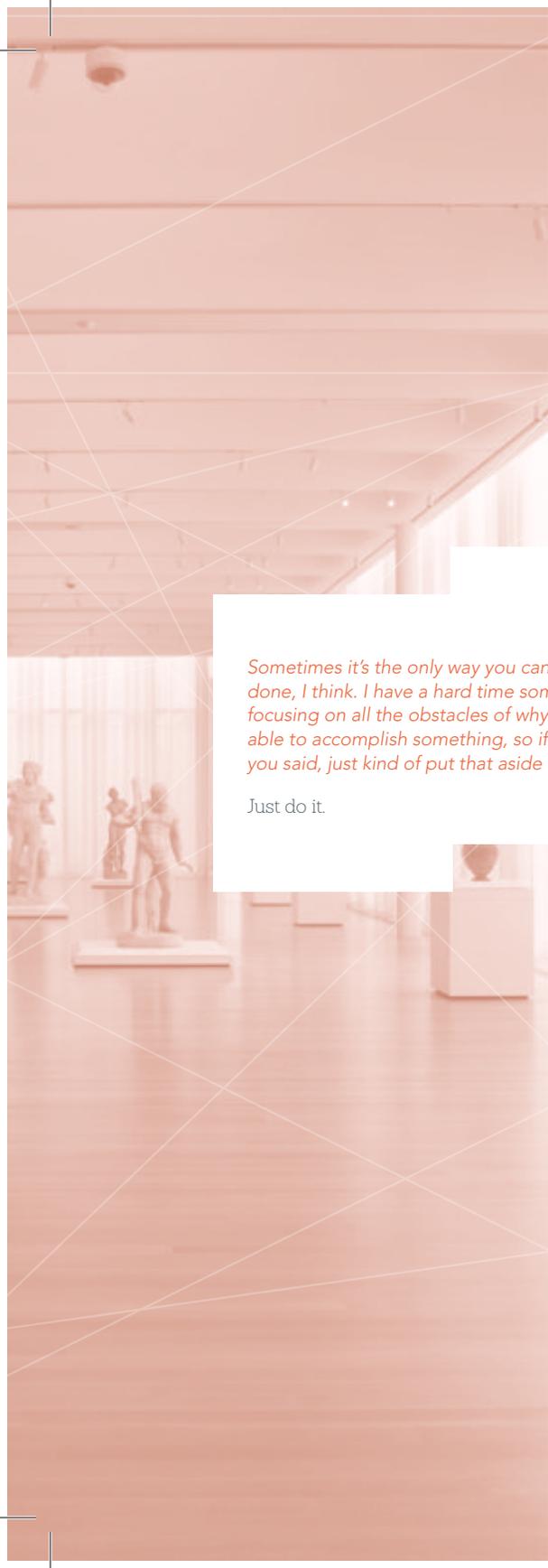
That's an interesting combination.

I always thought that it was complementary, and still to this day see them as complementary. We're all just kind of trying to figure out our universe, emotionally and scientifically, and I see that kind of aesthetic magic in the natural world, in pattern recognition and just, sort of, just the beauty of the dendroid form, or whatever it is, and a lot of that is — hello!

Just forget the money, it's no big deal.

I have forgotten about the money my whole life.





Sometimes it's the only way you can get things done, I think. I have a hard time sometimes focusing on all the obstacles of why I won't be able to accomplish something, so if you just, like you said, just kind of put that aside and then —

Just do it.

It is very personal.

Yeah, and it's a nice complement to the sort of public side of my life here, where it's making a public place that involves many people and many different kinds of public experiences, and inviting people to enjoy a more communal experience that goes with art at the heart of that.

Yeah.

So, at any rate, yeah, it's always been a part of my, um, at least feeling of not thinking that later became deeply embedded in, certainly, my design thinking. So, yes, I still make art, so I'm still kinda connected to that very personal side of sort of the making and design decisions and object making.

● *continued on page 24*

“Design for disassembly” is an unintuitive, highly challenging but essential puzzle. How can a designer who has been trained all her life to make something durable be simultaneously working towards making sure it can come back apart?

Most of the disassembly we see in nature is via biological processes. Chemically, we see bacteria acting as a multitude of disassembly and assembly machines. Applying biomimicry principals, we can create objects that are simply and efficiently deconstructed after their use period has passed.⁶

The traditional Japanese Shinto Temple is designed with disassembly in mind. The structures are held together without nails, screws or glue. A precise set of geometrically intersecting members allows the puzzle-like structure to be stable and even become stronger with vibration. However, if environmental conditions change, the temple can be disassembled and moved elsewhere. The key to doing so is to know which components can be moved first to start the process. That is to say that the key to the temple is knowledge.

Taking A Step Forward with Shoes

The more creative a person becomes, the more responsive they are to their environment. How can you be a creative person if you can't perceive things that need solving? And once you turn that skill on, it becomes quite difficult to turn it off. The trick for a designer is to keep their heightened senses alive and their discontent constructive.

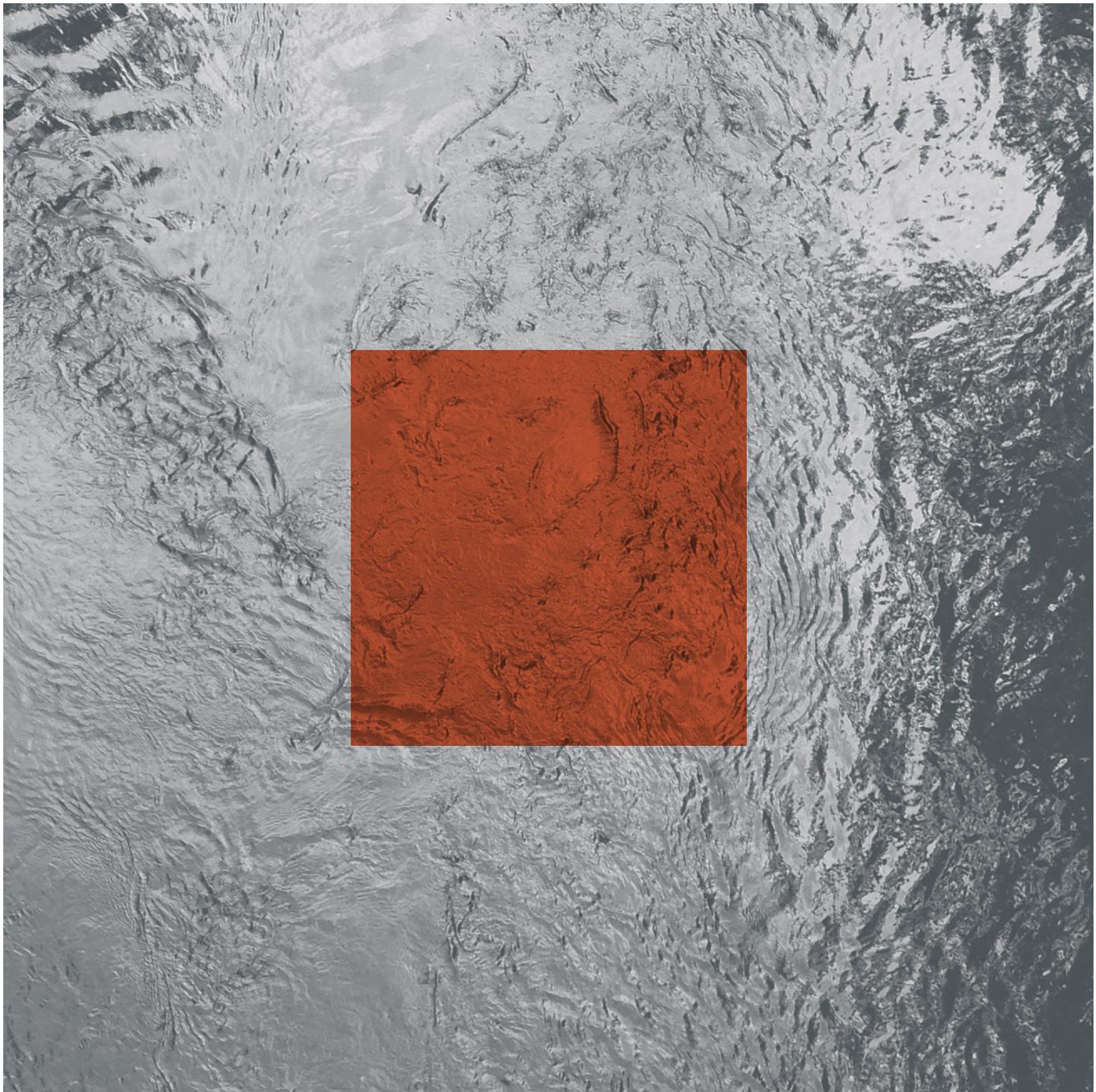
Upon my first visit to a shoe factory, I became aware of my own contributions to a system I did not like. I watched the cycling shoes I designed glide down the assembly line while hundreds of workers were being exposed to a world of unde-

finned rubbers and leathers lasted together with toluene adhesives and cured in giant ovens. I was horrified by the toxicity and intensity of modern shoemaking.

After years of research and innovation, I launched Lyf Shoes to explore how to make shoes according to my own values – which boils down to a production system I would be happy for my own children to work in. What has resulted is a shoe that does not use glue, and, to reinforce our transparency, is assembled at the shoe store on-demand — right in front of the customer.

Building on our work in the creative community, we have invited people to fully design their own all-over prints, while incorporating open source computer chips that can track your footwear performance however you program it. Each component is made from sustainably sourced single-material components, allowing us to upcycle the shoes at their end-of use into a new pair.

After many years of refining the product, we have come to realize that most of our work hasn't been about shoes at all: it is about supply and reuse systems. The shoe might be the thing we focus on, just like we may focus on a single leaf of a tree, but the leaf cannot exist without the many other miraculous components embodied in that tree. To do sustainable design, we must focus on the whole organism and circular path of healthy and thoughtful materials. But to do this we need to add another element to the design toolkit — being a cheerleader for change.



Inside-out Innovation

As an independent design consultant, I am often hearing corporate clients ask us to innovate “outside of their corporate walls.” It turns out that these walls which were built to insulate the company from the enemies of mistakes and uncertainty also separate them from the market and local ecosystems. First hand experience is replaced by focus groups, global market assessments, and supply chain logistics. What we see time and again is that there is simply too much structure for a creative mind to innovate in a meaningful capacity.

Information has become so interconnected that creative entrepreneurs can leverage their small size with a nimbleness to “fail fast” and iterate often. The result is that motivated designers are now uniquely poised to truly *change* the world.

In October of 2012, our small creative team at Designbox

produced a prototype, video and campaign about an inventive new coffee press that conveniently makes excellent coffee without the need for paper filters or plastic pods. We launched it on the crowdfunding website, Kickstarter. Thirty days later we had well-exceeded our expectations and were suddenly in the coffee maker business. Six months later more than 2,500 people were using our product and giving us great feedback. Six months beyond that we were growing our business and distributing the product in several countries. After another six months had passed, our coffee maker business had been acquired by a major international brand. It was headspinning for us. During our transition meeting with our new partners, I asked how long it usually takes to take a product from concept to just an approved design. They responded: more than 18 months!

[1] *Thinking Out Loud* (?) Buckminster Fuller (movie ref to be defined, quote to be verified for wording) [2] The Law of Conservation of Mass, Antoine Lavoisier [3] <http://www.bigsiteofamazingfacts.com/how-is-it-possible-that-we-consume-some-of-the-atoms-breathed-by-leonardo-da-vinci-every-time-we-inhale/> [4] *The Web of Life: A New Scientific Understanding of Living Systems* by Fritjof Capra [5] *Cradle to Cradle and The Upcycle*, by William McDonough and Michael Braungart [6] *Biomimicry: Innovation Inspired by Nature*, by Janine M. Benyus (Author)

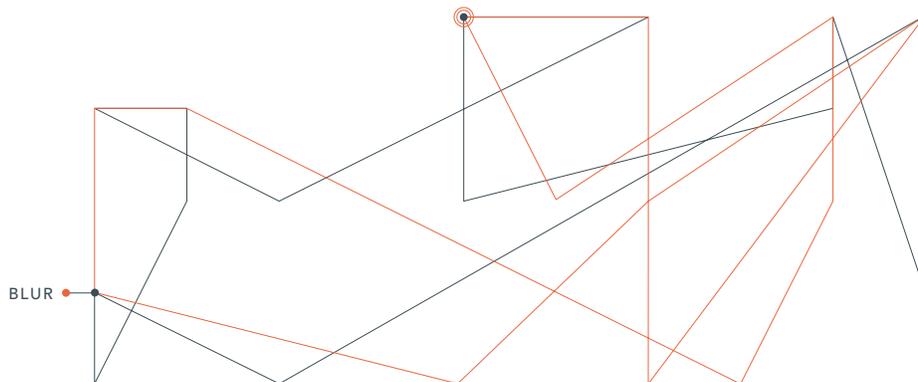
Passing on the Code

With the ability to swiftly make powerful **change**, designers need to be focused on the days ahead. If we value **nature** than we must truly learn from her. If we find ourselves in new product ecosystems, it is our responsibility to take on not just the product, but the whole material and energy flow. The more elegantly we flow, the better our design will be.

Nature has also taught a few things about passing on information. The products we design must be imperma-

nent and move fluidly through future use **cycles**. Meanwhile, the genetic code of design must continue to be refined and represent the very best surviving solutions to our current environment.

Collaborative constructions like open source hardware systems allow us to not only build on the great innovations of our predecessors, but to also tackle bite-size pieces of complicated projects as a team. Our work ahead in sustainable design is nothing short of a massively technical and vitally important project. ●



Next Intersection

Read about similar themes in *Blur* on page 60.

“Contrary to immersive environments that strive for visual fidelity in high-definition with ever-greater technical virtuosity, Blur is decidedly low-definition.”





*"With the ability to swiftly make powerful change,
designers need to be focused on the days ahead.
If we value nature then we must truly learn from her."*

What does planting tomatoes have to do with fashion?

By: Natalie Chanin

Originally published in *Future Fashion White Papers* by Earth Pledge Foundation, 2008

"I realized that here in my community, activities such as sewing, gardening, cooking and quilting have never just been tasks."



The Alabama tomato is truly a wonder. It takes on the color of the deep red soil, and the taste borders on sweet and tart. I grew up eating these tomatoes straight out of my grandparent's garden in Florence, Alabama, and after having lived in Europe for more than 20 years, I still think Alabama tomatoes are the best in the world. So when I moved back to my hometown in Florence, to a place called Lovelace Crossroads, I was eager to have a garden and grow my own.

I quickly realized I could not remember the details of how to plant a tomato, so I consulted Mr. Jay Arnet, an 87-year-old family friend who has the most beautiful kitchen garden. He taught me how to lovingly remove the bottom branches from the seedlings, dig a hole that seemed too big, fill it with compost and water the plants. They produced the tomatoes that filled our stomachs all summer and became the basis for our soups in the winter. Thanks to Mr. Arnet, the plants thrived and our cupboard was filled with cans of stewed tomatoes.

I was a little shocked that I had lost this very basic knowledge of how to grow my own food. On its most immediate level, growing food literally connects you to roots and earth, but it also connects you with the skills and traditions that farmer families have used forever as they tilled the land to

produce fruit, vegetables and — in this area — cotton.

Planting a garden after coming back to Alabama was more than just a way to celebrate my homecoming; it was also a way to immerse myself in the “domestic arts,” which I prefer to call “living arts.” I realized that here in my community, activities such as sewing, gardening, cooking and quilting have never just been tasks. They're artful endeavors that allow for independence, a way to take direct responsibility for quality of life, and simultaneously they create a bond between individuals and community, between past and present.

In our community, one of the many ways women bonded was at quilting bees. These gatherings tapped into the region's long, rich history of textile work and celebrated skills that were passed from generation to generation. Unfortunately the value of these skills has diminished and often they are no longer passed on.

That's one reason why I returned home to Alabama — to create a collection of clothing that preserved and reinvigorated those unique hand-sewing traditions, which I learned at the feet of grandmothers, mother, and aunts. I also wanted to use recycled materials and employ age-old production techniques.

I never imagined that this idea would receive so much attention from the fashion and business worlds, especially during a time when U.S. textile production was moving in the opposite direction. Instead of going overseas, I worked with about 200 skilled artisans who became revered by fashion insiders for their elaborately embellished, hand-sewn garments that are sold in more than 60 stores around the world.

Alabama Chanin is still inspired by local sewing traditions. I was recently reminded of how precious these techniques are when I stumbled upon a piece of handwork made by my grandmother. It was a pillowcase with intricate needlework sewn onto a flour sack. I could just make out the company's imprint as a shadow on the fabric, and as I examined this lovely piece of work, I thought: It's incredible. She spent hours and hours — probably over the course of months — making something from a piece of fabric that today would be thrown into the garbage.

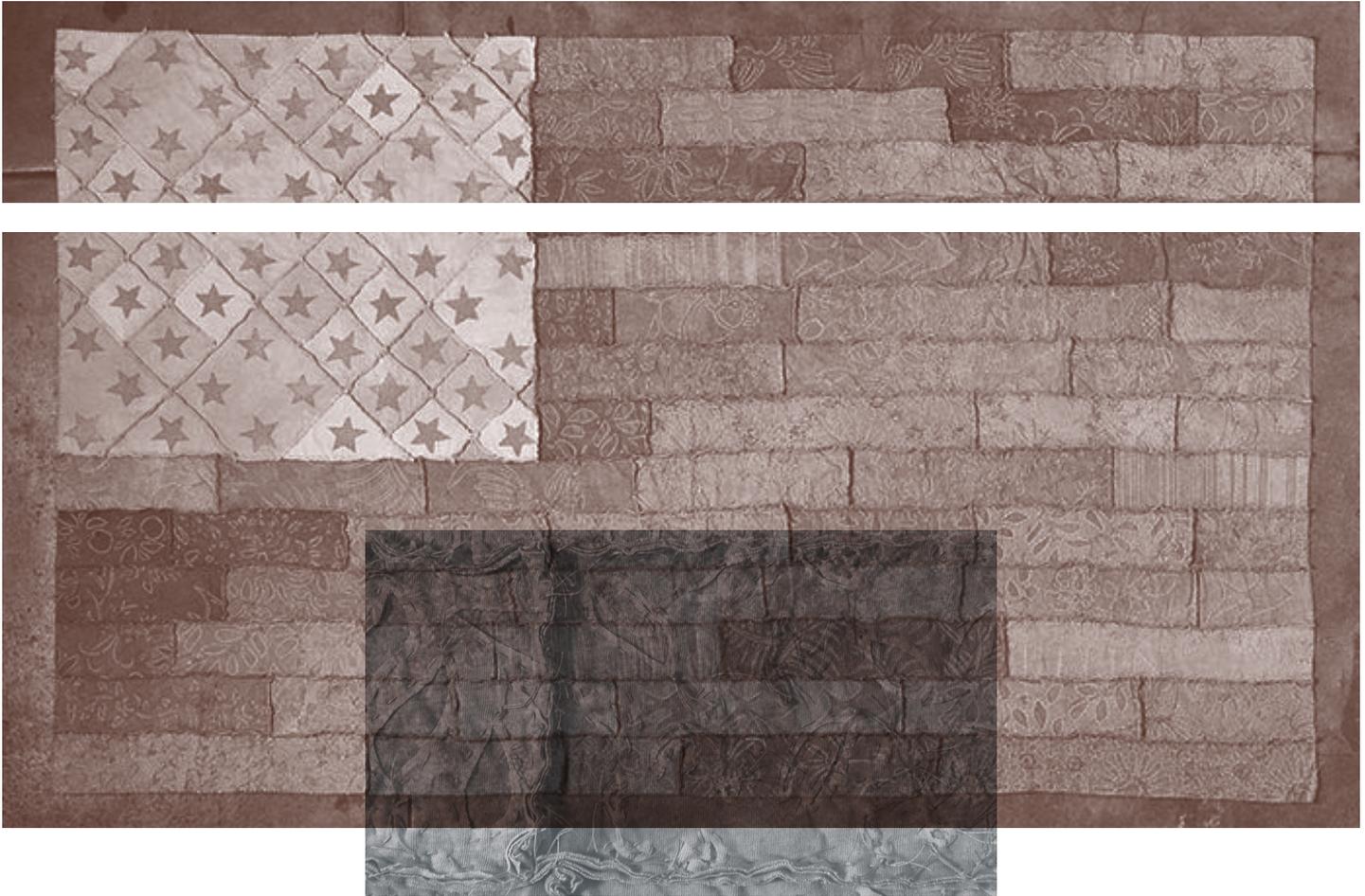
The men and women who raised me were artisans who used readily available materials to **create** objects, both decorative and functional, which enriched our lives. These items were never considered anything extraordinary, and the people who made them were humble about their work. Unfortunately, there are fewer and fewer people who can make such heirlooms. Most of those who stitch for us grew up learning to sew from family members, so it was no surprise when at one point we had three generations of the same family working together.

By encouraging these handwork traditions, Alabama Chanin is also hoping to sustain the identity of this stretch of land at the foot of the Appalachian Mountains. While most

people talk about sustainability in reference to chemicals or materials and their effect on the environment, I also think sustainability depends on nurturing the skills necessary to manipulate local materials into well-designed objects. I believe it's essential that we respect the sanctity of our traditions and the skilled workers who keep them alive.

Whether planting a tomato or embroidering a napkin, staying connected to their traditions allows us to also cherish them. Handwork requires respect for everyday materials and helps us imagine their potential. It also forces us to use our resources wisely. The people in my community learned to use what they had on hand and make the most of it, especially during The Great Depression. One of my favorite examples of this ethic is the way women used to find the red thread that they used for quilting. At the time, red thread was costly and hard to come by. After the men had smoked or chewed the contents of their Red Man Tobacco pouches, women would take the coarse cotton tobacco bags, unravel the red thread and use it in their sewing projects. This attitude that all things have potential continues to inspire me. It's an ethic that I try to **remember** every day as I build my company and design my collections. *continued on page 26*

Flag Quilt by Alabama Chanin
PHOTO FROM ALABAMA CHANIN



● continued from page 13

ONE ON ONE: DAN GOTTLIEB

Shelley Smith: The topic, or the theme of this year's publication, is impermanence in design culture. We came to that topic through a series of exercises in class and discussions. One of the things that we thought would be interesting from your perspective, working in this community environment, is how do museums deal with the idea of an exhibition, like what we just saw outside, that is, you spend so much time planning and orchestrating —

Dan Gottlieb: And it comes and goes.

Exactly, yeah. And is that something that, like, the impermanence, the natural impermanence that's part of it — is that part of the planning, or do you not even think about that when you're planning the exhibition?

Well, when you stop for a moment, and back up and think about what are any programs about, period, in a place like this that is quite physical, that is all about place, it comes down to...It's an interesting set of questions, with people's experience of the place and the resultant **memory**. So, memories are built by sort of a collection of bits and pieces. Some are of a place that doesn't change very much, and others are of something that sparks and it comes and it goes and it's extremely **impermanent**.

And the challenge of a visual arts institution like this, particularly one that has an important — lowercase word — important, **permanent** collection, meaning that it has really significant holdings that have sort of world-wide cultural values, and it's the museum's core value and purpose, *raison d'être* to collect and protect and present those things as **permanent** objects. It's called the **permanent** collection.

Right.

So it's the opposite of the ephemeral kind of experience you're talking about: at the core of what any collecting institution is is to protect this permanence.

Yeah.

But how do you do that and stay relevant? And that's balanced, then, with the kind of environment that you build for it, which is experientially — based; it says a lot about your identity, which is built over time. And the kind of things that you do in it, in the kinds of — and more importantly, the kind of things that, I think, all museums are recognizing now is the way that you invite people to do things in the institutions and participate. So —

It's more than just coming here to visit — how do you mean changing the way that you invite people to do things?

Well, you heard someone come in here a moment ago to talk about a certain thing that's part of a much larger conversation that we are having about kind of the completion of our campus and what kind of values we want to have embedded into it to invite people to this campus to participate not only in the more traditional ways of engaging the permanent collection and even exhibitions, which are now a traditional part of art museums, but to come closer to the way that people live in their everyday lives and to make it into a special place which has a certain meaning and yet their experience is ephemeral.

Right.

● *continued on page 34*



“Beauty Everyday” book by by Rinne Allen, Kristen Bach, Rebecca Wood PHOTO FROM ALABAMA CHANIN

Like my original tomato garden, my company has grown. In addition to garments, we now make home furnishings and jewelry. I’m still able to pursue the original vision of working with outstanding artisans and recycled materials to make beautiful products, but we’re also trying to do more than just sell things.

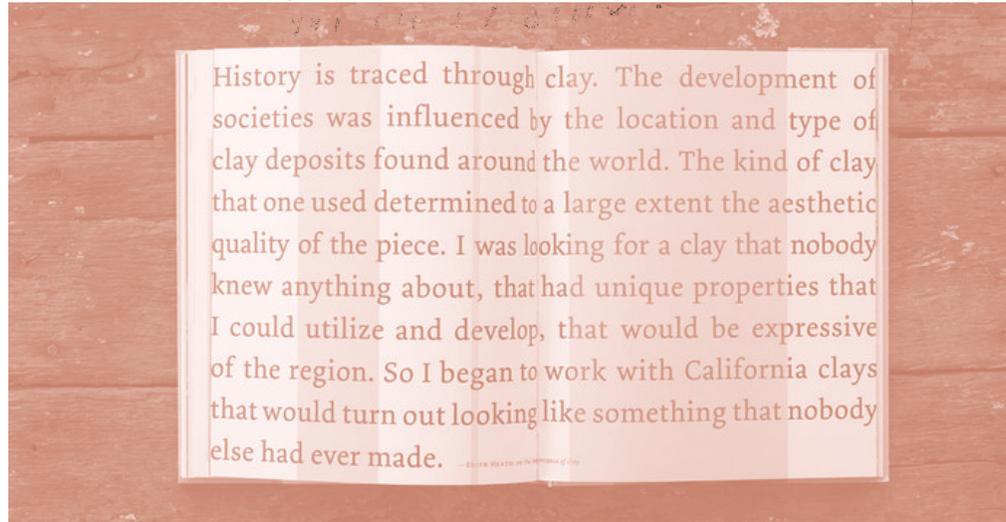
A big part of our mission is to make sure these wonderful skills get passed on. We try to spend as much time focusing on workshops and lectures as we do on producing products and garments.

These are just a few small ways that I’m hoping to teach more people about the living arts. When we think about

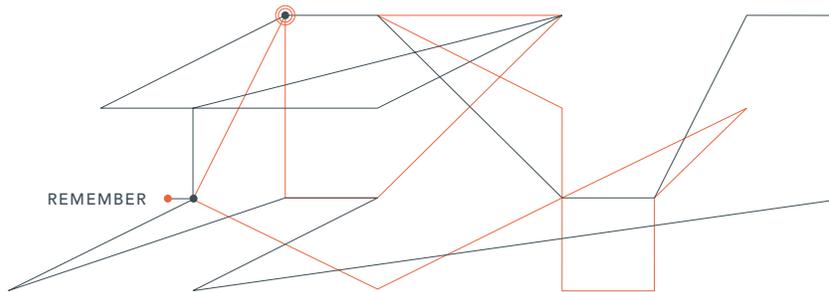
how to make a bowl, a dress, or a chair, the **process** is often shrouded in mystery. Instead we buy one at the store. But that simple purchase has much bigger ramifications. It **creates** more distance between us and the power we have to **create** for ourselves.

It’s my hope that these craft traditions, like planting those tomato plants, will allow us to reap the fruit of our labor and talent while helping us participate more deeply in the rhythms of our everyday lives. Ultimately, I hope the living arts will also re-establish our communities as sustainable, dynamic and inspiring places to live. ●

WHAT DOES PRINTING
WITH DOGS PRINTING
TOMATOES HAVE TO DO
WITH CERAMICS?



“Heath Ceramics: The Complexity of Simplicity”
PHOTO FROM ALABAMA CHANIN

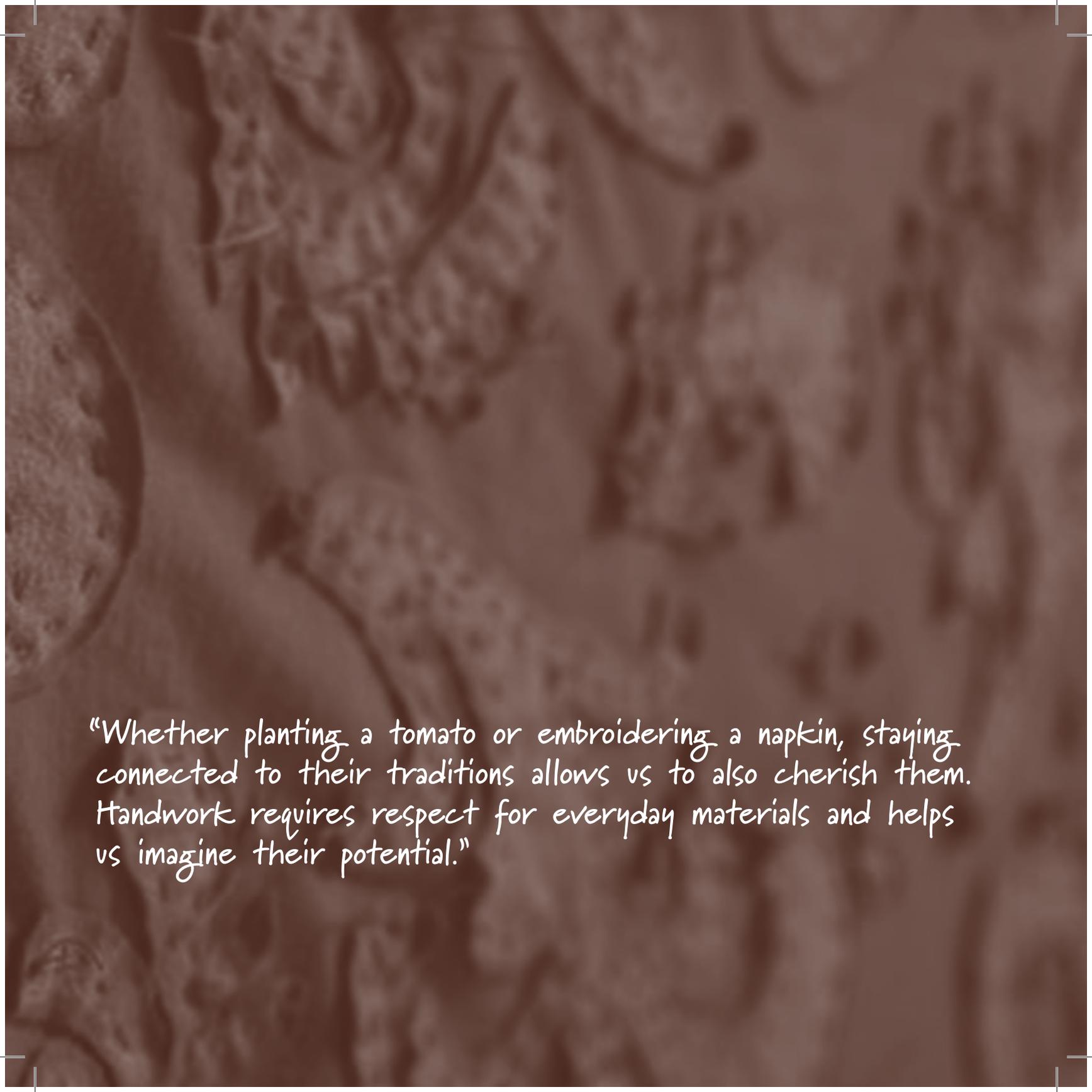


Next Intersection

Read about similar themes in *Remember* on page 60.

“Yet as the interface between mankind and the book continues to move through time, the centuries-old relationship between man, material and memory is redrawn in, and by the digital era.”





"Whether planting a tomato or embroidering a napkin, staying connected to their traditions allows us to also cherish them. Handwork requires respect for everyday materials and helps us imagine their potential."

TABVLA TER

RE NOVE

~~FERRA INCOGNITA~~

Terra Incognita

By: Catherine D'Ignazio

"We imagine ourselves to be citizens of the world because of our unprecedented, privileged access to information."

Her terra cum adiacentibus insulis inuenta est per Columbū
ianuensem ex mandato Regis Castellæ

TERRA INCOGNITA

Tropinis Capitiuorum

'Terra Nova' (the Americas) by
Martin Waldseemüller, 1513.

Quælibet hæc
semper gnetur

Terra Incognita was a Latin term used on maps from the Age of Discovery to denote unexplored territories. It's a perspectival term. Because, of course, there were people like the Tupinambá actually living in those seemingly unexplored lands on Martin Waldseemüller's map. The places the Tupinambá knew intimately — where they fished or hunted or celebrated or slept — were not *Terra Incognita* to them. But to the Europeans embarking on their voyages each new cove and settlement was a curve or mark to be made on a map. It was a matter of perspective. A matter of technology. Some small matter of hubris.

It remains a question of all of these things in the Information Age. The optimism and hubris of Big Data appear to be unrivaled - What don't we know in the age of Big Data? By tapping mystic rhythms with our fingers and staring into squares of light we traverse great oceans of distance. As we zoom around global networks on a variety of devices, there is the common perception that we could go anywhere, learn about anything, connect with anyone.

Except we don't.

Ethan Zuckerman calls this "Imaginary Cosmopolitanism". We imagine ourselves to be citizens of the world because of our unprecedented, privileged access to information. But there are a couple of things working against our cosmopolitanism. The foremost is our very human impulse towards

"homophily". Social scientists like Zuckerman, Fiore and Donath, and McPherson, Smith-Lovin and Cook show us how homophily — the tendency for us to group ourselves with those most like us — is as alive and well on the World Wide Web as it is in physical space.

Google search, 2014.

The other half of the Imaginary Cosmopolitanism equation is technological. The technologies that most enable our informational selves (powerful search algorithms like Google, social sharing sites like Facebook and recommendation systems like Amazon) are the ones that reinforce our homophily by giving us what we want, what our friends want, and what people like us want. From a design perspective these information systems follow consumer logic which is based on criteria of similarity and promotion of the popular.

This works great most of the time. I want something. I tell Google. Google gives me the thing.



What this does not work well for is the discovery of difference, the surfacing of minority opinion, and the engagement of perspectives other than our own. We might imagine ourselves to be citizens of the world but in fact live in informational gated communities talking only to our little pockets of humanity.

Civic Logic vs. Consumer Logic in online information systems

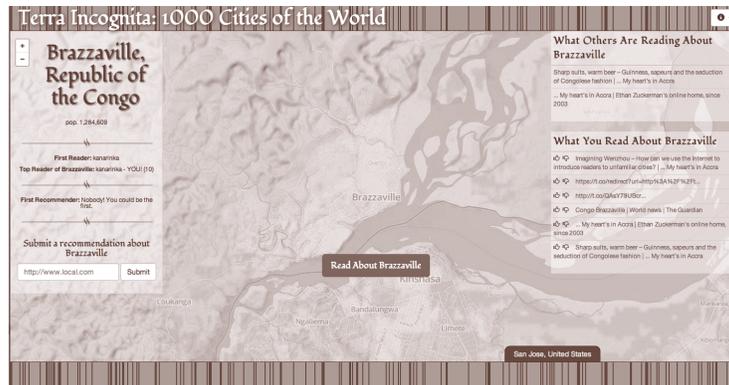
- Posit and enact alternate relationship between individual and collective
- Experience challenges notions of self
- Productive disorientation
- Experience promotes "engagement behaviors" like reflection, exploration, open-mindedness to new ideas
- Surfaces dissent, minority opinion
- Challenges stereotypes
- Measure of success is behavior shift, attitude shift or engagement shift

- The individual is the base unit of experience; Attention is the base unit of economics and value
- Experience is targeted towards preferences & tastes
- Experience reinforces notions of self as a unique autonomous "free" individual
- Experiences designed to extract maximum data from individual
- Attention/popularity maximising
- Surfaces trends, popular, sensational
- Measure of success is clicks, views, eyeballs

Imaginary cosmopolitanism and informational gated communities.

Civic Logic: Information Design for Encountering Difference

How can we engineer information discovery systems for openness, risk-taking and exploration? What would it mean to emphasize civic logic rather than consumer logic as a design criteria for information systems?



Terra Incognita: 1000 Cities of the World, screenshot. Users arrive at an unexplored city in Terra Incognita each time they open a new Tab in their browser.

Terra Incognita: An Experiment in Cosmopolitanism

What might civic logic look like in action? Together with Ethan Zuckerman and Matt Stempel at the MIT Center for Civic Media, I have been building an information discovery system with civic logic in mind. In our case, we are particularly interested in the dimension of geography. What cities and countries in the world do we read about? Which do we systematically ignore? When we do read about faraway places - like Syria - mainstream news coverage tends to be oriented towards conflict and violence. How can we surface interesting, stereotype-busting information about remote geographies? How can we connect people to parts of the world where they never previously had interest?

Terra Incognita: 1000 Cities of the World, screenshot. Users arrive at an unexplored city in *Terra Incognita* each time they open a new Tab in their browser.

Terra Incognita: 1000 Cities of the World is a global news recommendation system and game. It has three goals: 1) To provoke reflection on the geographic dimensions of your Internet browsing in relation to others; 2) To seduce you into an explorational mindset and privilege exploration over "what you want"; 3) To encourage the discovery of geographically diverse information on the Internet.

The main user experience of *Terra Incognita* is an intervention into your Internet browsing experience. Technically, it is an extension for the Chrome browser, a liminal space for software operation where you have options which are not typically available to regular websites. Each time you open a new Tab, *Terra Incognita* shows you a city that you have not yet read about and gives you options for reading about it. Chelyabinsk (Russia), Hiroshima (Japan), Hagåtña (Guam) and Dhaka (Bangladesh) are a few of the places where you might end up. *continued on page 36*

● continued from page 25

ONE ON ONE: DAN GOTTLIEB

Dan Gottlieb: So, if you think about, well, if you think about it from a phenomenological perspective, say — so, these memories are built on a multi-sensual experience in a place. We happen to have, here, at the North Carolina Museum of Art, a unique set of assets that's not only the permanent collection, and professionally run programs with educational programs and exhibition programs and all the rest of the things we do — we also have a killer site, we have a hundred and sixty-four acres which is... I won't say unique, but it is extremely unusual; and not only that, but it comes with a strange and checkered past that becomes part of the DNA of what it is, but when I think about the opportunity that we have, here, to complete this campus, it's not just a matter of putting the rest of the roads and the parking and — it's how do we invite people to come and have a multi-faceted experience or a collection of experiences or a collage of experiences, if you will, that add up to a larger memory?

Some of them are ephemeral, some of them are based on these fixed assets, and it's that mash-up of embracing the ephemeral — yes, some of it is based on social media, but, you can't even talk about that because it's gonna change tomorrow and it'll change the day after that, so you have to be open to those portals, and certainly our marketing people and others are deeply engaged in that and we need to be wide, wide, wide open to that, remotely and here on the site, but also flexible in terms of the way that we allow people to create their own experiences here, that are designed by me and others here, only in providing a framework for a personal performance, if you will, to create those kind of aesthetic and sensory moments. So, the site gives the opportunity to interject an experience that's connected to, obviously the outdoors but also to the living world.

I won't call nature out there because that's been just highly disturbed by a prison and by prison farmers and NC State's vet school grazing on this property out here, so it's highly disturbed, and so we're not talking about necessarily healing the landscape in a traditional way but healing it towards a purpose, and our purpose is towards engagement.

Shelley Smith: So, if you're talking about providing an opportunity for an experience, then, how do you, in a sense, gauge whether or not you've been successful in that? It's gotta be through more than just ticket sales, or how many people you think come to the park. I feel like an experience itself is completely subjective and ephemeral, so how do you present that to the people that are donating money to keep it going and to make it bigger and better?

Very difficult problem. That's a good question, and it's, and it's one that we're all struggling to answer because yes, we can count bodies — although it's not so easy to count bodies outside. We think we have X-number of people. We know how many people walk through the doors because you can click, but we're rather porous in the campus, and so the number of people that come and go and how they come and go is a deeper analytical problem that we're actually working on.

We've got a good team working on that now. But even that will only tell you so much. Understanding what people's experiences are and how it affects them, eh — I don't claim expertise in this, but we've learned a lot. And, one thing we've learned is that you have to talk to people to really find out, and it's a very refined set of skills that can elicit that kind of information. Even then, it's going to be subjective and open to interpretation. So, how do you gauge success?

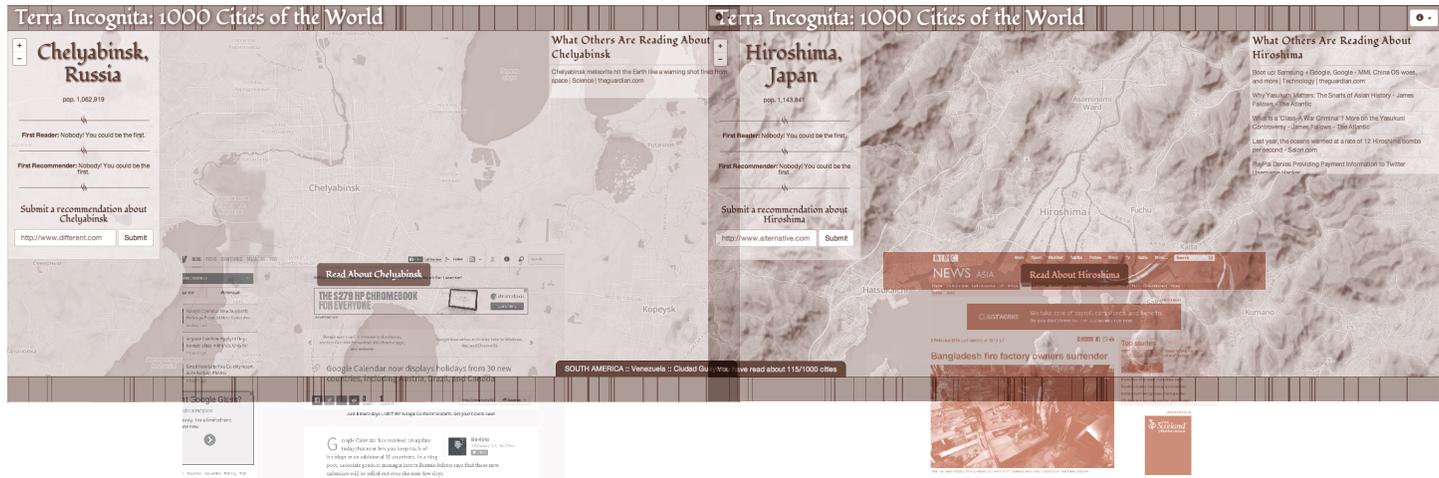
I don't know it. It's — I don't think we'll ever be completely empirical about it, because we each have our biases and we're all looking for the answers that we want, and much of the evidence is anecdotal, the kind of feedback that we get, both positive and negative, and we try to learn from that, so it's rather organic, and I suspect that despite social science's good work, it's always going to be somewhat intuitive and organic, which is okay with me. It's ac—it's really okay with me. Yes, we want to engage people to

join the museum and become members and all of those good things, and we want them to love the place so that they feel a part of it, and so that their kids will be a part of it, all of that, and that is ultimately how you kind of measure one kind of success. You can also measure some of that by looking at who is coming. Is it more of the same kind of people? — by same kind I mean people that will come to view fine art, or, in our case now, a parallel audience that comes to recreate.

You know — they are walking their dogs, they are riding their bikes and so forth. And, yes, they're engaging in an unplanned way, they're unplanning, they—they are engaging works of art that we extend into the landscape and as we do more and more of that there'll be wider, wider exposure, there'll be wider and wider identity with that, so there's an engagement with whatever we do on the site visually, both in shaping the land and with permanent and temporary works of art that are not planned encounters with works of art but are inviting people to come and experience those, those gestures, because they're attracted for a different reason. For me, that's the more interesting thing.

● *continued on page 46*

Four places you might end up in Terra Incognita upon creating a new Tab.



Four places you might end up in *Terra Incognita* upon creating a new Tab.

From a city like Dhaka, there are several options to pique the user's interest and intrigue them enough to distract them from their previous task at hand. If other users in the system have read about that city, a scrolling list of those stories shows in the top right corner of the screen. For the bold and adventurous, there is a large red button "Read about Dhaka" in the center of the screen. This functions akin to Google's "I'm feeling lucky" button to take them to a single news story recommendation about Dhaka.

Figuring out how to collect high-quality, stereotype-busting recommendations about the top 1000 cities in the world was no small problem. Our upcoming user study will inform us as to how well we have solved this problem. Using our ideas around civic logic as our guide we chose to follow a criteria of multiplicity, transparency, potential for reflection and prioritization of alternative voices.

The recommendations are delivered through many multiple sources: 1) stories that other users read or recommended in the *Terra Incognita* system 2) stories about that city that are being shared across the Internet but giving priority to

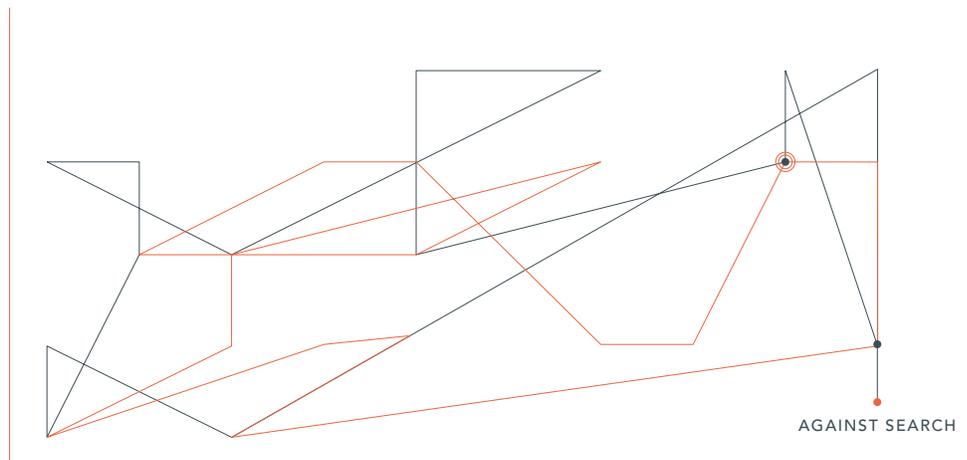
participatory media sites like Global Voices 3) stories that we crowdsourced through an open call 4) stories that people had originally saved through the Instapaper service and 5) stories curated in partnership with with editors from Global Voices. Even with these multiple sources of recommendations there were many blank spots in our recommendation system that we had to address. For example, China accounts for about 20% or 200 cities in *Terra Incognita*, but there was very little information in English about many medium-sized Chinese cities available through our recommendation channels. In this case, we worked with a media scholar from China to manually compile a list of English-language news sources by city.

While designing *Terra Incognita: 1000 Cities of the World* with civic logic in mind, numerous other questions came to mind. We hope to answer some of these through the user study but we need more brains working on these questions. How do you make algorithms, whose work happens behind the scenes, transparent and public? What kind of online reading leads to increased reflection? How do you balance civic goals with maintaining user interest and engagement? How can information systems engender productive disorientation — an encounter with difference that unseats the user, however briefly, and invites them to recalibrate their worldview? ●

Next Intersection

Read about similar themes in *Against Search* on page 76.

"Given the size of many digital media collections, simply seeing what's inside them is impossible (even before we begin formulating questions and hypotheses and selecting samples for closer analysis). Although it may appear that the reasons for this are the limitations of human vision and human information processing, I think that it is actually the fault of current interface designs."







"Each time you open a new Tab, Terra Incognita shows you a city that you have not yet read about and gives you options for reading about it."



HOPSCOTCH

By: Grayson Currin

"This was the first Hopscotch I'd ever attended as a mere listener, the first time I'd ever been able to hear actual sets by the loud legions emptying into the city at the start of every September."

Last weekend, people would not stop asking me if I was having a good time. In rock clubs, on city street corners and even at the table at which my wife and I finally sat down to have dinner around 1:30 a.m. on a Friday night: Everywhere I went, there the question (or some variation thereof) was, often presented with a latent yearning that presupposed I wasn't really enjoying myself. "Are you having fun?" "Are you enjoying yourself?" "This is different. Do you like it?" "So, how does it feel?"

The reason that my wife, Tina, and I didn't sit for a sandwich until close to closing time is that we had been busy bouncing between the sets of bands and DJs, producers and rappers at the Hopscotch Music Festival, a five-year-old Raleigh institution that brings a few hundred acts and several thousand listeners to the city's burgeoning downtown. In only the last few hours, I'd seen one musical hero (the violinist and minimalist legend Tony Conrad), an explosive set of harsh noise and elliptical hip-hop (courtesy of Los Angeles trio Clipping,) and the garage-rock approximation of a fistfight (from Ohio's blustering and rightly named Obnox).

I was, in fact, having a very good time.

But people kept asking not because I looked sour but because this was the first Hopscotch I'd ever attended as a mere listener, the first time I'd ever been able to hear

actual sets by the loud legions emptying into the city at the start of every September. During the first four festivals, I'd worked as the co-director, the second operational rung on a very high ladder that, for one long weekend, managed more than a dozen venues, a few hundred volunteers, a few hundred musicians and a temporary staff of several dozen employees. In previous years, I'd developed a reputation as the madman of Hopscotch week—jaw perpetually clinched, a long task list roiling behind my fixed beady eyes, sweat saturating my T-shirt no matter how often I changed, sleeping little and sailing from one venue to another on a gray single-speed bicycle. One graphic artist even designed a poster for the festival in the image of Excitebike, except that the skinny fellow leaning back on a dirt bike was now a big, bearded fellow on a single speed. Yes, that was me.

At the first festival, I managed to eat only a bagel in four days. On the first day of the third festival, a car slammed into me and my bike in the rain; on the third day, I was standing on a soaked stage to hold a tarp over an expensive keyboard as winds and an electrical storm ripped through the city. And at the fourth festival, I'd again left my handlebars, resulting in two massive cuts across my face for the duration of the event.

So, this year, had I been able to enjoy civilian life?

The reason that the answer was always so emphatically yes had little to do with my health. It stems, I think, from the casual, noncommittal origins of Hopscotch itself. I'd never planned on helping to build a music festival. I'd gone to lots of them, sure, from small, club-based affairs to massive, three-stage congregations in some generally empty field. No matter the circumstance, they seemed to require a lot of organization and management, two concepts that had never been particular assets of mine.

Instead, in 2009, I'd been working full-time as a music critic and as the music editor for four years, or essentially since the day I graduated from college. The job allowed me not only to devour and analyze music as a profession but

would draw onlookers and listeners from around the world. So why didn't we start it?

He convinced the management of the Independent to invest in the idea, or to at least let us explore the possibility. By the end of 2009, we'd started to book bands, to build a website and marketing materials and to leak word that September 2010 would bring an unprecedented event to downtown Raleigh.

And it happened just like that. Hopscotch helped transform Raleigh, lifting the city's reputation as a trove of young, energetic people doing interesting work. The event was touted by city leaders as evidence of the revitalization of downtown, praised by the police for its consistent lack of incidents, touted and lifted high in *The New York Times* and *Rolling Stone* alike.

"Hopscotch helped transform Raleigh, lifting the city's reputation as a trove of young, energetic people doing interesting work."

mostly to set my own schedule, too, guided by relatively flexible guidelines. I had a small team to oversee, but so long as I finished my work and did it well, there was no looming finality to any of it—no crowd to manage, no bands to placate, no soundchecks to organize. I wrote and edited my pieces, filed them, and kept going.

But in 2009, the *Independent Weekly*, the newspaper that jumpstarted my writing career when I was in college, hired an ardent and ambitious new advertising salesman, Greg Lowenhagen. A recent resident of both Chicago and Austin, he'd only been on the job for a few months when he noticed a void: Though the Triangle had a much-lauded music community, it didn't have a trademark music event, something that

The International Bluegrass Music Association borrowed our model when they moved their annual conference to the city in 2013, and Raleigh eventually used Hopscotch as one of the bookends for a month of "Music, Arts, Innovation and Noise" they dubbed the "M.A.I.N. Event." (I will forever maintain that the strange "noise" reference was a concession to Hopscotch's extreme experimental programming, my favorite, during my tenure.)



Rhys Chatham playing
“Guitar Trio” at
Hopscotch 2011.
PHOTO BY ABBY NARDO

But Hopscotch was always my part-time job or my side project, no matter how many hours I worked on it. I maintained my job as music editor at the Independent, and I kept freelancing for websites and magazines across the country. All those occupations fed into one another, I believed, forcing me to stay restless with my tastes and to defend ruthlessly every musical choice I made. The work was intense, but I loved the binary, reinforcement-driven nature of it all. In 2012, though, Greg and I learned that Steve Schewel, the man who had founded the Independent and avidly backed Hopscotch as an extension and enforcement of the brand, would sell the newspaper he had launched three decades earlier. He told us that he could sell the festival with the paper, but he preferred that, since we started it, we buy it from him, make it our business and make it our life.

For Greg, saying yes seemed predetermined. The idea and the very name of Hopscotch had been his, and over three years, he'd transitioned from an advertising executive into a festival director. We soon had meetings with lawyers and investors, and it all got very serious very quickly. Before long, I decided that, in fact, I didn't want to own a music festival. I didn't think I could serve in that capacity and as a music critic in good faith at the same time. I told Greg I'd work for him and for the festival we'd built together, but it would continue to be on a part-time basis. He went, in essence, from my co-worker to my boss. Three days before Hopscotch 2013, I told him that this festival would be my last. He needed someone with undivided attention, I reckoned, and I knew that I couldn't provide it. *continued on page 48*

● continued from page 35

ONE ON ONE: DAN GOTTLIEB

And so I assume that you're referring to--along the pathways and the greenways, the, the pieces of art that are kind of embedded in the landscape?

Yeah. So we have a starter kit out there now, you know, we haven't had full funding yet but that will come. But more than that, we're shaping the character of the land itself, which is a much more subtle design enterprise.. one that is not easily noticed. Right now we're changing the characters, the character of the forest out there, through managing the invasive species and changing the visual character — I'm as much interested in changing, in getting rid of the invasive species as I am in changing the visual

characteristics of these forested areas, because it changes, it profoundly changes the way that you feel in space. And so that's--it's happening right now, it'll be happening for the next several years, and the same thing for several other areas that you're — it's a creative environment that happens to be alive. It's very, very much alive. And, it can be very exciting, especially as you deal with the edges, the edge condition, because that's where it lives, that's where the, you know, our brain is trained to respond to the edges of color, of space, of shadow, and it's also true in the natural or naturalized world, that we respond to whatever the edge condition is and..

What exactly do you mean by that?

Well, on a large scale-- where forest turns into meadow. Where the edge of a path meets its its neighbouring ground plane. The way that a sculpture touches...

I see.

The way that signage sits on a place, the way that you literally sculpt the landscape as you move through it, the way you sculpt it with the way that you {{move}} or don't {{move}}, the way that you frame views, the way that you remove trees to open views. This is not new. This goes back to 19th century England and before. 18th century England, rather.

So, it's like determining how and when people pay attention or don't pay attention to transitions?

Yes, for sure. If you look at the Japanese perspective, you know, they are into highly packaging your experience, whether it's a product or their landscape, it, you know, they design... they have a tendency, in the Japanese traditional creation of landscapes, and even contemporary landscapes to frame for you. So it's a complete thought. That's presented as a finished object. And there's something very powerful about that, but it's also removed from your own body, in a way.

You're perpetually the observer. You don't have any room to participate.

Yeah, in framing your views, precisely. There's a different sort of traditional that comes out of Europe, in particular England, that's more picturesque, sort of romantic sculpting of the landscape, you know: "Look at the great estates there"; and, you know, shaping the land as a kind of a set piece but also one that unfolds as you move through it, and sometimes it's not all controlled. Here, we're trying to find a balance that allows the visitor to discover his or her own path, and make a series of subtle moves that

I hope is as thought out as any landscape or any place for art, but has a character that is a little bit more of 'this' place: so design qualities and design thinking in shaping this macro environment has a different set of criteria than it would in other places. And because the land has this certain history and it is in a certain place, my hope is that it will evolve as its own unique mash-up of different ideas.

● *continued on page 58*

Grayson Currin talks to Kurt Wagner, of Lambchop, at Hopscotch 2011.
PHOTO BY ABBY NARDO



Attending Hopscotch 2014, or going for the first time as a civilian, I recognized anew something I long ago learned from the weekly cycle of an alternative newspaper or the daily and hourly churn of a music website: Put everything you can into a project, frontload it with your personality and ideas and emotions, and then don't be afraid to let it survive (or perish) in the world without you. Move on, find a new mission, and repeat until your body of work feels substantive to you alone. You are not tethered to what you *create*. It's not a child that you need to raise until it's old enough to go to college, not a system that requires your constant input and maintenance, not an anchor

that prevents your self-sovereign motion. If the work is good, I believe, it will outlive you or, at the very least, your period of most passionate interest in it.

That, I know in retrospect, is exactly what happened with Hopscotch. For the first three years, it was one of the most exciting things I've ever done, a massive on-site, in-*process* learning experience that required me to take the skills and expertise I already possessed and pile on top of it — quickly, enthusiastically, tirelessly.

And I did.

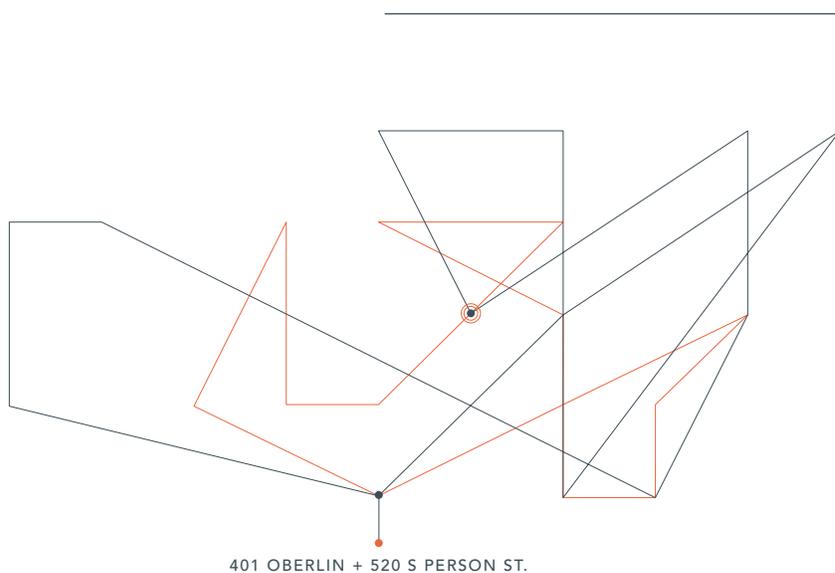
Before Hopscotch, I'd booked exactly one show, and it was a debacle. By the end of my tenure at Hopscotch, I'd booked several hundred bands, all between a price range of \$100 and \$100,000. I'd never known very much about music gear, either, but by the end of the fourth Hopscotch, I'd learned some amplifier models and years by sight. I'd read about the capabilities of keyboards I never knew existed, and how much it costs to have them shipped from distant cities. (Thanks for that particularly torturous lesson, John Cale.) And I'd managed to assemble an army of amplifiers required by my favorite band on the planet, Sunn O))), to play a show, in Raleigh's largest theater.

The morning after that set, as my wife and I sat in a local restaurant eating a large post-festival recovery brunch, she had an idea: For three years, I'd worked to bring so many bands to one town for so many people to see, but only the night before, I'd missed my favorite band playing in the city in which I was born for what would most likely be the only time. She suggested that we buy plane tickets and fly to Atlanta

that night to see the final show of their tour. It was a delirious 16-hour trip, but it was one of the most **memorable** and impactful moments of my life. Standing in The Masquerade, being overwhelmed by amplification as fog rolled through the room, I **remember** realizing that this is why I'd gotten involved in Hopscotch—to put some power behind music I loved. But what good was that if I didn't actually get to hear it? It was like playing an arcade game, but I wanted to **create** a new design. Something silent changed, and I knew at that moment that I had perhaps only on more year of missing my favorite acts and being hit by cars.

So on that Friday night of Hopscotch 2014, as I watched Tony Conrad saw at his violin inside a 19th-century church, I felt wonderful about something I'd helped craft and then let go, perhaps as good as I had ever felt about it. I'd tried to book Conrad for every Hopscotch, and in my absence and in my system, they'd finally done it.

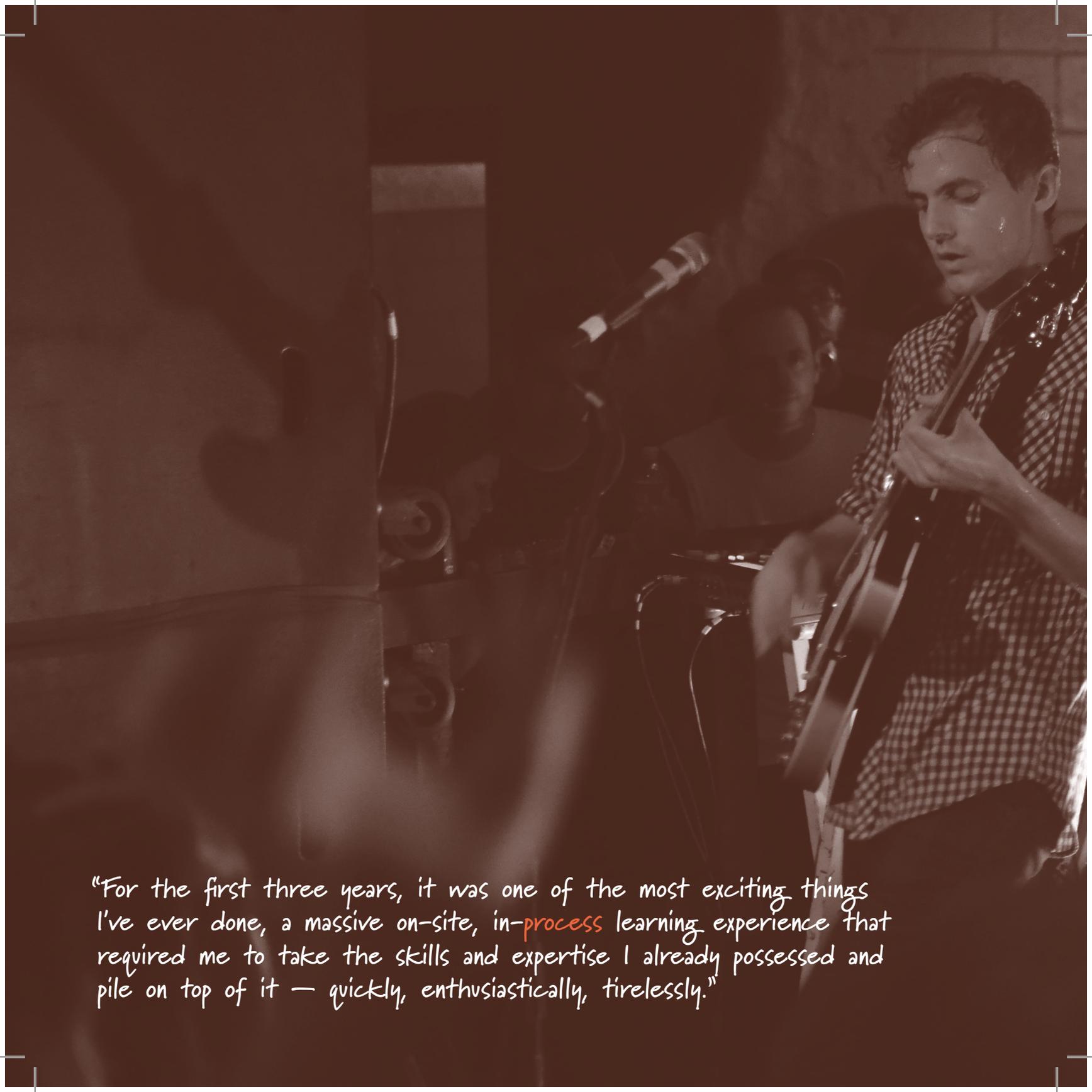
The air was cool. The sound was loud. The tones were radiant. I was having an amazing time, thank you very much. ●



Next Intersection

Read about similar themes in *401 Oberlin Road + 520 S Person Street* on page 86.

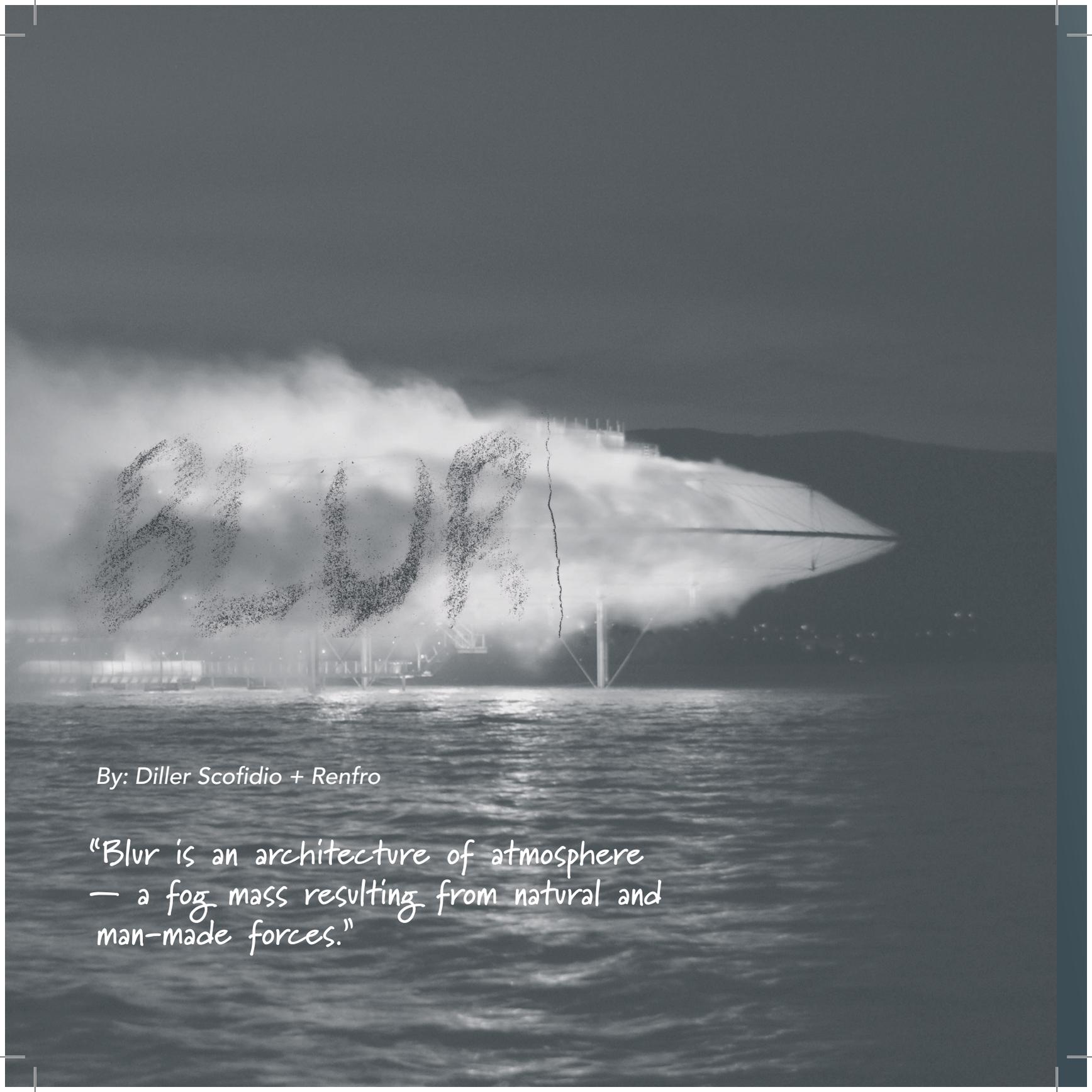
"As designers in a growing city, it is impossible to reject change, as well as the continuously changing life span of our buildings."



"For the first three years, it was one of the most exciting things I've ever done, a massive on-site, in-process learning experience that required me to take the skills and expertise I already possessed and pile on top of it — quickly, enthusiastically, tirelessly."

PHOTO BY ALEX SANCHEZ





By: Diller Scofidio + Renfro

*"Blur is an architecture of atmosphere
— a fog mass resulting from natural and
man-made forces."*

Blur is an architecture of atmosphere—a fog mass resulting from natural and man-made forces. Water is pumped from Lake Neuchâtel, filtered, and shot as a fine mist through 35 000 high-pressure nozzles. A smart weather system reads the shifting climatic conditions of temperature, humidity, wind speed and direction and regulates water pressure at a variety of zones.

Upon entering Blur, visual and acoustic references are erased. There is only an optical “white-out” and the “white-noise” of pulsing nozzles. It is a habitable medium that is formless, featureless, depth-less, scaleless, massless, surface-less, and dimensionless.

Contrary to immersive environments that strive for visual fidelity in high-definition with ever-greater technical virtuosity, Blur is decidedly low-definition. In this exposition pavilion

there is nothing to see but our dependence on vision itself. Is an experiment in de-emphasis on an environmental scale. Movement within is unregulated.

The public can ascend to the Angel Deck via a stair that emerges through the fog into the blue sky like piercing a cloud layer in flight. Submerged a half level below the deck is the Water Bar that offers a broad selection of bottled waters from around the world.

Water is not only the site and primary material of the building; it is also a culinary pleasure. The public can drink the building. Within, is an immersive acoustic environment by Christian Marclay. The lightweight tensegrity structure measures 300 feet wide by 200 feet deep by 75 feet high and is supported by four columns. ●



Visitors enter Blur's foggy environment. PHOTO SUBMITTED BY DILLER SCOFIDIO + RENFRO

Blur • Diller Scofidio + Renfro • Research | Create

Viewers approach Blur to be engulfed in its cloud.
PHOTOS SUBMITTED BY DILLER SCOFIDIO + RENFRO



Location

Yverdons-les-Bains, Switzerland

Status

Completed 2002

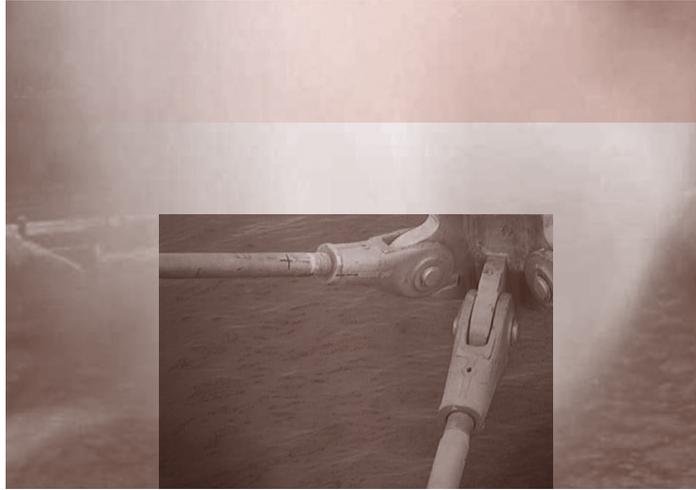
Scale

80 000 sf (7400 sm)

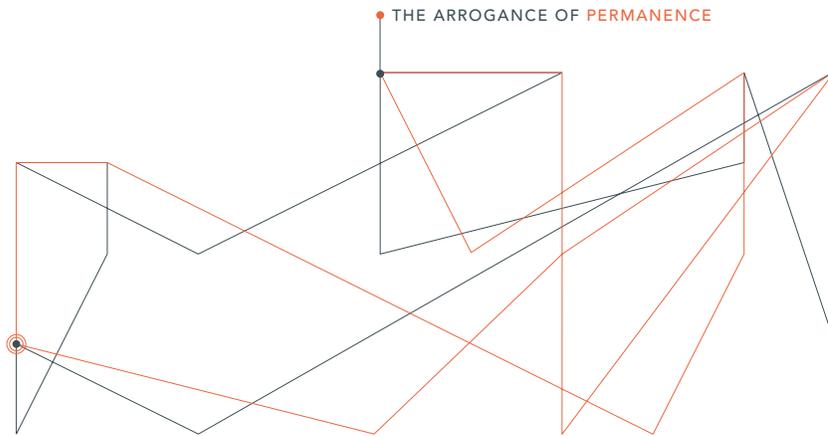
Awards

Progressive Architecture - P/A Design Award - 2003
Swiss TV and B. magazine - Golden Rabbit for Best Building of 2002 - 2003
The Guardian - Top Ten Buildings of the Decade - 2009





The tensegrity is a structural principle based on the use of isolated components in compression inside a net of continuous tension. PHOTO SUBMITTED BY DILLER SCOFIDIO + RENFRO



Next Intersection

Read about similar themes in *The Arrogance of Permanence* on page 8.

"If we cannot build upon the ever-evolving revelations of success and failure in culture and the making of things, we are denying the human drive for a better future."

*"In this exposition pavilion there is nothing to see
but our dependence on vision itself."*



An aerial view of Blur's structural environment.
The structure is surrounded by a large cloud.
PHOTO SUBMITTED BY DILLER SCOFIDIO + RENFRO



● continued from page 47

ONE ON ONE: DAN GOTTLIEB

Shelley Smith: So, the history of the land is fascinating to me, and I grew up here and I've always been interested in art, so my parents brought me here [NCMA] and I have great memories of coming here when I was a kid.

But, driving into it, I don't remember exactly when they told me there was a prison next door, or when they told me what a prison was, but I do remember looking into it and seeing that and thinking about what it was in direct contrast to what this is and how physically closer they were together and that having an impression on me.

I liked when you mentioned that the history of this site is all part of its DNA, so can you speak a little bit about that or elaborate on it and how you feel like it affects the experience now, or if it does?

It does affect the experience. Right now, it affects the experience in that it feels sort of 'undone' at the edge, and I mean 'undone' in both senses of the word.

'Undone,' that it's not complete--you know, this next round of design that I'm working on now is really to complete the campus and the whole entry experience and how we repurpose that land--but also 'undone' in the sense that what was there has been undone in a kind of big moment where the prison was razed.

We kept a couple of pieces; not very much. I would have actually liked to have kept a bit more, but the smokestack remains, the boiler house remains — and we intend to repurpose them as a beacon for a site, a signal, if you will — and a couple of warehouses which may or may not be a part of the future. When we tore down the prison, we, I had an artist come in, and he salvaged many of the prison bars, which, he loved the quality of the steel.

It had a fabulous grain to it. So we used some of those and he fashioned seating and some signs and some other furniture to kinda recycle the history. I had--from the very oldest building when the prison was being torn down, I had several bucket-loads of the very oldest bricks that were made, as I understand, by prisoners here, for their own prison, set aside.

We had an artist, Martha Jefferson Jarvis, who, the moment she knew about this, she kind of seized on it and had volunteer labor force to break up a bunch of bricks and create one of the sculptures out here that's called 'Crossroads.'

Oh, really?

It's one of the first sculptures that is way out in the park.

I didn't realize that was the context of that.

So it's the tall, broken brick, corncob-looking sculpture, and it marks the crossroads of these two paths that I had designed, which, very subtly but recycles and as we said is a remembrance of that. Just this week, I met with a state historian who is interested in commemorating the history of World War I. The 100th anniversary is upon us, and this site was used as a World War I tank training facility.

Really?

Yes, for a year or maybe 18 months. Unfortunately — well, I don't know if it was unfortunate — it was at the end of the war, and so, by the time they were finished training, the war was over. So it goes. They tried to get an authentic tank for parking here — turns out they're incredibly rare. But it did bring up the point of commemorating the history of a site.

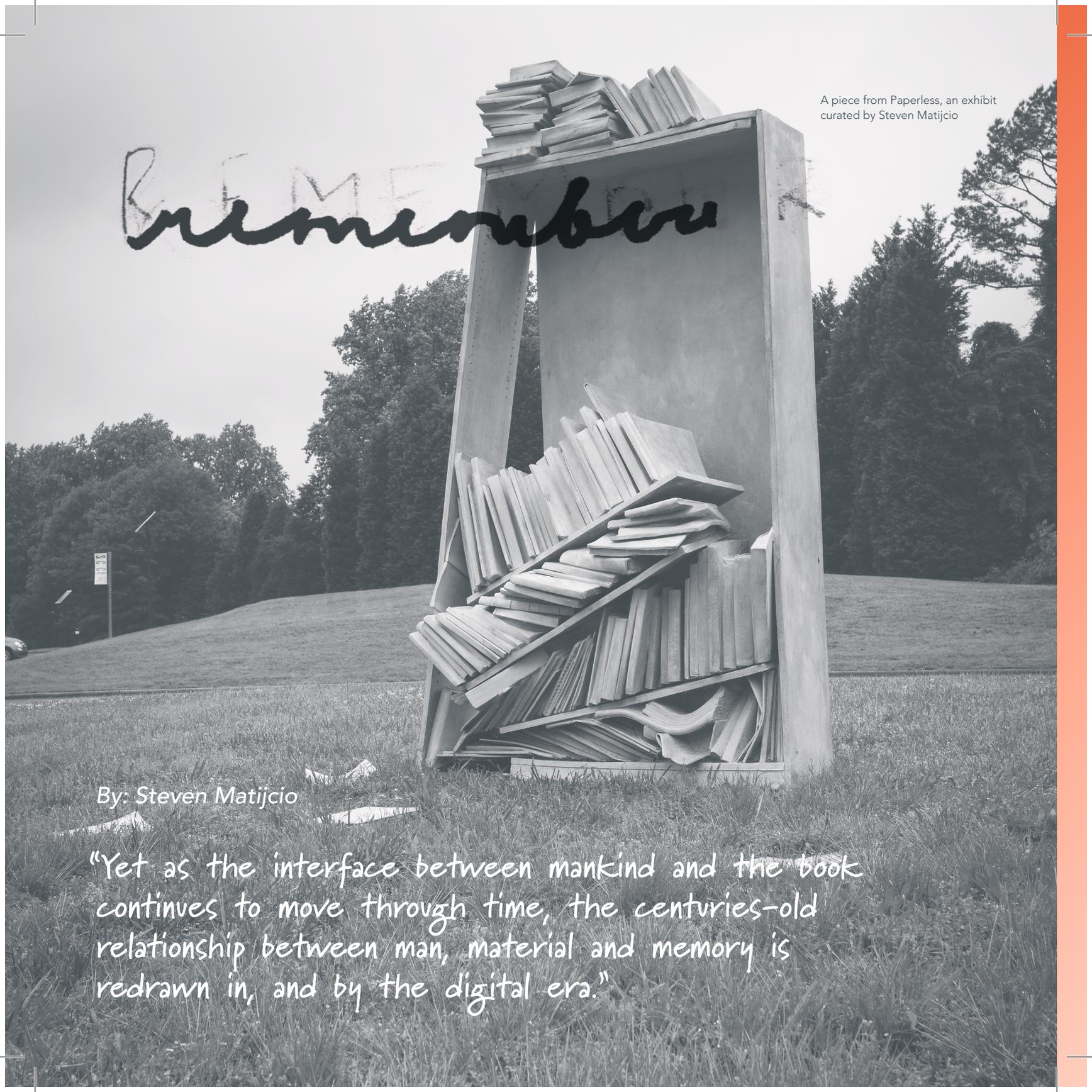
This was a civil war encampment and all these things before it became a prison, and then after some terrible incidents with escaped prisoners who subsequently murdered citizens, it then became a youth prison, which was only supposed to be for a short time but it was for a very long time. And so it has this. I remember when I came here for my interview for my first stint here — I've had two stints here — I was a designer in my first term.

I arrived here, and the taxi basically turned into this prison campus, because it's the first thing I saw coming in from the freeway, and I was like, "You've got to be kidding." Which, I shouldn't have been that surprised about, because I knew a little bit about the history, but it was shocking to see upon first entering.

So, here is this very decrepit prison, and it was a warm day with the barbed wire around, and it was almost entirely young black men in white t-shirts behind this barbed wire in front of a perceived white-run institution, and it was quite jarring to me. To think about this cultural institution, as the state's flagship institution, being built behind a prison was unusual, to say the least.

Absolutely.

● *continued on page 66*



A piece from Paperless, an exhibit
curated by Steven Matijcio

Remember

By: Steven Matijcio

"Yet as the interface between mankind and the book continues to move through time, the centuries-old relationship between man, material and memory is redrawn in, and by the digital era."

The essay "Remember" was written in 2012 on the occasion of an exhibition I organized at the Southeastern Center for Contemporary Art (SECCA) in Winston-Salem, NC titled *Paperless*. This thematic group show considered the endangered status of paper in an increasingly digitized society, where the "paperless economy" is turning said material into simultaneous antiquity and the abject. Yet as paper struggles against its purportedly imminent extinction, artists around the world are venerating its precarious empire. *Paperless* celebrated these

refugees of the information age, presenting theatrical elegies to the pariah of so-called "progress." Rather than seeking refuge in nostalgia — and an invented, romanticized history of superior record-keeping and recollection — the exhibition and essay instead celebrated imperfect, quintessentially human memory. Like this edition of *The Student Publication*, this is a tale of impermanence, entropy, and the catharsis of forgetting how we remember.

In his 2009 book *What is an Apparatus?* Italian political philosopher Giorgio Agamben characterized his titular inquiry as "literally anything that has in some way the capacity to capture, orient, determine, intercept, model, control or secure the gestures, behaviors, opinions, or discourses of living beings."¹ He goes on to explain that beyond institutions (such as schools, factories and prisons), apparatuses can also include, "the pen, writing, literature, philosophy... computers, cellular telephones, and...language itself."² In this symbiotic realm of object and subject, Agamben implies a fundamental, if enigmatic relationship between people

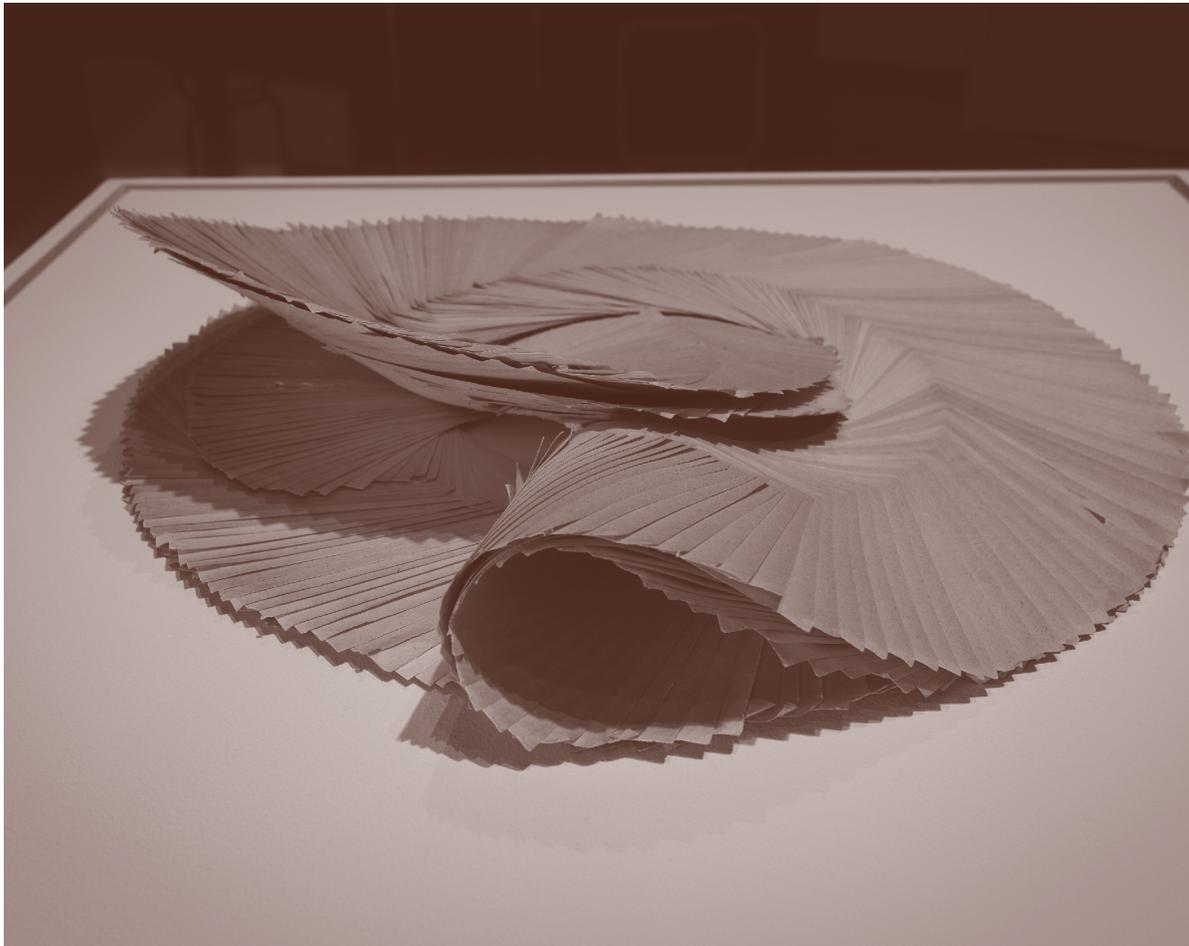
and the materials that shape us, as we shape them. Author Viktor Mayer-Schönberger mines the mnemonic niches of this provocative notion further, tracing a history through what he calls "external memories" crucial to the development of human knowledge, and how humans know. From prehistoric cave paintings and ancient scrolls, all the way to the diary of his stepfather, Mayer-Schönberger finds a thread less in specific content, and more in how "[my relative] externalized what was important to him, so he would have the cues he needed to remember something later."³

[1] Giorgio Agamben, *What is an Apparatus?* (Stanford, California: Stanford University Press, 2009), 14. [2] *Ibid.* [3] Viktor Mayer-Schönberger quoted in Stuart Jeffries, "Why we must remember to delete — and forget — in the digital age," *The Guardian*, 30 June 2011. Mayer-Schönberger's stepfather's diary included such quotidian notations as the daily temperature, and the quality of butter he had eaten that day. <<http://www.guardian.co.uk/technology/2011/jun/30/remember-delete-forget-digital-age>> [4] Vannevar Bush quoted in Abigail J. Sellen & Richard H. R. Harper, *The Myth of the Paperless Office* (Cambridge, Massachusetts: The MIT Press, 2002), 4.

In 1945, in search of the next evolutionary stage of **memory**, American engineer Vannevar Bush (1890-1974) imagined a mechanical library (called the “memex”) that would revolutionize acts of **remembering** by quickly and efficiently storing information without pen or paper. Seeking to better the subject by making it one with the object, he touted, “[The memex] is an enlarged intimate supplement to [man’s] **memory**.”⁴ From prosthetic to co-presence, American psychologist J.J. Gibson (1904-1979) theorized this acceleration of the apparatus to a place where an object or environment — according to its inherent properties — dictates how it can be used.⁵ When applying this model to paper (as authors Abigail J. Sellen and Richard Harper do in their 2001 book *The Myth of the Paperless Office*), Gibson’s theory of “affordances” describes a thin, light, opaque and flexible material affording tactile, quintessentially human actions of grasping, carrying, folding, recording and writing. Xu Bing’s essay in this catalog traces a piece of the long, interwoven history of man and paper that followed, where the material **created** to record **memory** implicitly embodies its place, maker, and the maker of all things. In a recent feature in *The New York Times*, contemporary paper maker Timothy Barrett recalls the anthropomorphic connection of finding an imprint of a person’s thumb in a renaissance-era tome, adding, “The fingerprint marked the sheet with the humanity of the person who made it. I could feel his presence.”⁶

Yet as the interface between mankind and the book continues to move through time, the centuries-old relationship between man, material and **memory** is redrawn in, and by the digital era. At this intersection of text and technology, David L. Small surveys a wave of mutations (in his doctoral thesis *Rethinking the Book*) as the exponential growth of electronic information spawns a hybrid apparatus in Agamben’s catalog.⁷ This essay will consider the reciprocal affect of paper’s evolution upon its maker, tracing the trajectories of book, page and print as a reflection of man’s ambivalent relationship with the media of **memory**. In a time where the conjoined life of paper and person faces a sublime frontier in the digital unknown, famously iconoclastic artist and author Doug Coupland locates an unsettling, but ultimately necessary paradigm shift at the precipice of human fate. Issuing an ultimatum with apocalyptic flair, he declares “Books are central to the transmission of culture from one generation to the next. At least for now... One way or another, books will cease to exist. They’ll either be supplanted or humanity will become extinct.”⁸

[5] James Jerome Gibson cited in Sellen & Harper, 17. The theory of “affordances” is elaborated in American psychologist J.J. Gibson’s seminal 1977 book *The Ecological Approach to Visual Perception*. [6] Timothy Barrett quoted in Mark Levine, “Can a Papermaker Help to Save Civilization?” *The New York Times*, 17 February 2012. In Alexandra Perloff-Giles’ 2011 *Harvard Gazette* article “What books mean as objects,” Harvard English professor Leah Price fondly reflects upon years spent in libraries looking for the physical presence/evidence of human use – savoring the discovery of “which pages have been cut, or which pages have been worn down by the mark of successive thumbs... coffee spills or wax stains from reading by candlelight.” <<http://www.nytimes.com/2012/02/19/magazine/timothy-barrett-papermaker.html?pagewanted=all>>



A piece from Paperless, an exhibit curated by Steven Matijcio

[7] David L. Small, *Rethinking the Book* (Cambridge, Massachusetts; MIT, 1999). A Thesis submitted to the Program in Media Arts and Sciences, School of Architecture and Planning, in partial fulfillment of the requirements for the Degree of Doctor of Philosophy, Massachusetts Institute of Technology. <<http://acg.media.mit.edu/projects/thesis/DSThesis.pdf>> [8] Douglas Coupland, "Insects" in the Time Capsules series. *The New York Times: The Opinion Pages*, 31 August 2006. <<http://coupland.blogs.nytimes.com/2006/08/31/insects/>>

To this point in the evolutionary trek of mankind across the millennia, the aforementioned Timothy Barrett heralds paper “as the elemental stuff of civilization.”⁹ His epic claim is reinforced by Dr. Dorothea Eimert, who earnestly asks — in the foreword to Therese Weber’s 2007 book *The Language of Paper: A History of 2000 Years* — “Could our civilization and the science of today exist without paper?”¹⁰ Yet in the past two decades, paper’s lengthy reign as the repository (some may say architect) of cultural **memory** is being usurped by swift technological change and the worldwide growth of smart devices.¹¹ And while many may view this challenge to paper’s empire as a more recent phenomenon, such an overthrow has arguably been in the works since the 1800s. During this time, a seemingly endless number of starry-eyed inventors and enterprising companies have introduced new technologies to replace, “the old, paper-based ways of doing things.”¹² From phonographs, telephones and radio to television, email and texting, paper — as the default avatar of old-fashioned practices and technology — has become a dead man walking; something to be bettered, improved, and surpassed as the word “paperless” has become synonymous with progress.

Yet while we think of “new media” as “mass media,” and the book as a stalwart of individual experience (isolating and affirming the Western notion of self), Canadian media guru Marshall McLuhan (1911-1980) reminds us that said book was the first vessel of mass communication.¹³ He dedicated much of his life to mapping the evolving social dynamics between media, message and **memory**, highlighting — as a case study — the way the printing press changed not

only the quantity of pages, but the character and relationship between author and authored. Before that, before the epoch-setting invention of Johannes Gutenberg, paper was the technological bellwether of its time — relegating more “primitive” writing surfaces (such as stone, wood blocks, clay tablets and sheets of laminated bark) to antiquity. The lessons that previous generations had learned solely by listening, watching and doing were subsequently squeezed into words and documents, materializing **memory** while narrowing the heterogeneity of oral traditions.¹⁴ Far from universal embrace, there was corresponding lament and anxiety in some corners — with 19th century British conservatives going so far as to denounce “mass” reading the way contemporary pundits condemn television and the Internet.

Speaking to the colonial **nature** of media (in words eerily apropos to paper’s current status vis-à-vis digital technology), McLuhan argued, “A new medium is never an addition to an old one, nor does it leave the old one in peace.

It never ceases to oppress the older media until it finds new shapes and positions for them.”¹⁵ In this light, paper’s role as a refugee of the information age may contain emancipatory potential. Rather than fighting against obsolescence, irreverent German theorist Friedrich Nietzsche (1844-1900) believed that being irrelevant (or “untimely”) was in fact, the most contemporary state — in that it allowed one a greater perspective of time and context.¹⁶ Inside its outsider role, the book can thus be an oracle as the page becomes a portal: their “auras” (with credit to Walter Benjamin) regressing from democratic dissemination to revered reliquaries.

[9] Barrett quoted in Levine. [10] Dr. Dorothea Eimert quoted in Therese Weber, *The Language of Paper: A History of 2000 Years* (Bangkok, Thailand: The Orchid Press, 2007), xiv. [11] Paper is being abandoned as an archival material, despite Edward Tenner’s claim that, in a side-by-side historical comparison, acid-free paper actually lasts longer than today’s computer **memory** and media storage. Some business offices are taking note of this situation, implementing policies where paper back-ups are now required for digital records. Please see Edward Tenner, “The Paradoxical Proliferation of Paper,” Reprinted with permission from Harvard Magazine, March-April 1988, p. 23-26 <<http://cool.conservation-us.org/byorg/abbey/ap/ap02/ap02-3/ap02-309.html>> [12] Sellen & Harper, 2. [13] Marshall McLuhan, Excerpt from “Classroom without Walls,” *Explorations in Communication* (Boston: Beacon Press, 1960). <http://faculty.uml.edu/sgallagher/marshall_mcluhan.htm> [14] Artist Natasha Bowdoin happily references the “time of the bards” in her work, where one would “carry” stories as intangible oral histories, changing and adapting their constitution with every new context.

As the norm now goes, the more ubiquitous objects (such as books, records, photo albums and cash) are replaced by digital/virtual “upgrades,” the more their original forms become the stuff of fetish. Just as the dematerialization of the art object (popularized by Marcel Duchamp and “named” by Lucy Lippard) led to a gradual resurgence in the art / act of making, the popularity of e-readers has produced a counter-fascination with the collection, display, and “object-ness” of books.¹⁷ From embellishing coffee tables to being lit aflame by political opponents, Harvard English professor Leah Price gives voice to a swirling vein of ontological (arguably Greenbergian) formalism when stating, “I’m interested not just in words — the verbal structure of a book — but also in the material object.”¹⁸ Shifting the focus from what they say (informational utility) to what they are (physical utility), Price has lived the paradigm shift between the historical “vulgarity” of treating a book as a bare object, to a place where, in her words, “It is legitimate to use a book as a paperweight, [or] to use an encyclopedia as a doorstop.”¹⁹ In the hands of modern-day designers and decorators, this materialist re-purposing takes on new flair as the architectonic properties of books turn them into plinths, pillars and risers for antique furniture, while their symbolic capital (as signifiers of knowledge and sophistication) turn them into status-driven ornaments. Like messiahs for the pariah, a recent New York Times report credited French “New Design-er” Philippe Starck as one of a growing number of said innovators to “give books a stay of execution” by using them as décor.²⁰ In a similar gesture of paradoxical salvation, some publishers are

keeping print alive to fend off the economic losses of e-book file sharing — containing the flow of information in a vessel once used to spread the word.²¹ Prognosticating on the fate of an object thus being pushed outside its function, Bob Stein — the Founder of “The Institute for the Future of the Book” — envisions his ward becoming a rarified luxury item for those that prefer deluxe packaging. In this uncanny context, as content slips into a state of being inconsequential, one must wonder what, and how the page will speak?

Beyond a heightened value as object, paper has now become an instrument for bestowing value upon that which it carries — like prime real estate for the life of words. In so doing, a hierarchy of information is instituted akin to that McLuhan observed in 1960: where books embodied the highest echelons of knowledge, and tele-media were incidental aids. Decades later, in response to Coupland’s previously cited ultimatum (and the perceived glut of raw information on the Net), blogger Scott Anderson gives credence to a growing print/digital class system when stating, “As much as I love the feel of paper, the vast majority of information transmitted from the printed page doesn’t need to come from a printed page.”

continued on page 68

[15] McLuhan quoted in Eric McLuhan & Frank Zingrone, editors, *Essential McLuhan*, (New York: Routledge, 1997), 278. [16] Friedrich Nietzsche cited in Agamben, 40-41. [17] “Manufacture” Media Release, E-Flux, 5 February 2012 <<http://www.eflux.com/announcements/manufacture/>> & Betty Ann Jordan, “Beyond the Coffee Table,” *Fashion Magazine*, Summer 2011, page 150-156. [18] Leah Price quoted in Alexandra Perloff-Giles, “What books mean as objects,” *Harvard Gazette* 10 May 2011. <<http://news.harvard.edu/gazette/story/2011/05/what-books-mean-as-objects/>> [19] *Ibid.* [20] Jordan, “Beyond the Coffee Table.” [21] Sellen & Harper, 10 & Scott Anderson, “The Mobile Revolution,” *University of Toronto Magazine*, Autumn 2010. In another paradox of the “paperless era,” It must also be noted that while the value of paper companies falls in the stock market, the actual production of paper continues to reach historical highs. <<http://www.magazine.utoronto.ca/life-on-campus/university-of-toronto-ipads-in-library-system/>>

● continued from page 59

ONE ON ONE: DAN GOTTLIEB

Dan Gottlieb: But then if you think about the larger narrative, of a place with this kind of history becoming — from incarceration to being a public asset that is trying to be as diverse as possible — I think that it's an idea that, for me, has been compelling enough to stay with for these years, and the more we can undo, restore.

For me, this is a much more meaningful word—it's to sort of restore purpose and meaning to those edges and how we invite people through various portals, the way that they are fixed and permanent experiences, or, going back to the subject of your inquiry, these ephemera. So, the term ephemeral, then, begins to blur as it becomes fixed in your perception or your dreams, so, whatever it was that you encountered, for this institution, becomes a part of the fabric of its identity to you—and the more 'yous' there are, the better.

Shelley Smith: And, to me, it's a fascinatingly rich history, but also, we talked about art being as personal as it is; and for me as an artist, it's one of the most freeing things that I can do, and to have this next to this very literal symbol of the lack of freedom...

I think what was hard for me to digest, growing up and seeing it as a child, but now that I'm older and seeing how the campus had progressed and what is being built here, it's, I think a really beautiful and hopeful story.

I wonder, too — we talked about memory earlier, and I explore the concept of memory a lot in my own work, and the impermanence of it, and the, you know, the almost mythology that we create through the residue of our memories.

I wonder, too, how much of that psychic residue — not to get too woowoo about it — exists on this campus that affects the experience we have here.

That's the funny thing about memory. Part of it is very short—people forget—and part of it isn't: but it becomes less sharp, it becomes... I'll just talk for a second about my own personal artwork, which, people look at it and say, "Oh, it's all blurry." Well, yes it is.

Um, because it's about that place that's kind of between sleep and awake, and I think that's really where most memory resides. So I often use the metaphor of squinting, if you will, that the play of shadow and light and the way it affects a place that you've been, an event that you've been a part of, maybe even a great painting that you've seen — lives in this other kind of place, that is kind of between those.

And it might not be the same for everybody, but I know it is for me, and this collection of sometimes blurry images add up to something that's quite powerful for me. Sometimes I think I stop caring about the content of things, because in this end most of that really ineffectual information —

I mean, it's great, but it's not the part that in the end moves me or makes me care about places or care about it as being eternalized. It's the way I see sort of a design process happening, too. I mean, yes, I have all of these technical design issues that I have to deal with every day, and you've got to be good at that, you'd better be good at that.

But on a more macro scale, if you really, if you're asking the public to participate in something, and you think about the role of design in that, it's a big responsibility. I believe it's a big responsibility to create a place that allows for these blurred images to happen, that is sometimes not so sharp as a singular object, but is a kind of more collective memory within yourself. This may sound a little, as you say,

woowoo-y. (LG) but I think that if you think as I do, about design — yes, there is a technical and precise side to it, and I rely on many people to sharpen the pencil, but if you think about this sort of greater responsibility of design and placemaking it's, I think, it's to allow people to build those memories.

And then it's interesting to think about what the relationship between that and maybe what the rest of your journal is going to be about with things that are controlled by your thumbs with something that fits in your pocket that is, in the literal sense, much more ephemeral. I'm sort of into the 'permanent ephemeral', if that makes sense.

It does, and that's something of a hard concept, something that we talked about a lot in class, like--what is this permanent impermanence?

What are we talking about? It almost felt like we were going back in circles, but it, I think, for me, when I think about art that has affected me in a "permanent" way is art that has really pressed that spot in me that is that kind of in-between sleep-and-awake spot.

So what's laying below the surface, it touches something--something that was maybe asleep, and then it wakes up, and then, maybe, it goes back to sleep.

It's an experience that I'm not likely to forget, but it's also not one that I'm really able to describe or recreate, necessarily, so I feel like, for my audience, as I make art, I make it for myself, essentially, and then I put an object out in the world.

What I would hope that people would get viewing that object is that it touches something — some memory is awakened, some connection is made from their life, and whether they remember that for the rest of their lives or not is not necessarily important as long as it happened in a moment.

And sometimes people want to bring that home and live with it.

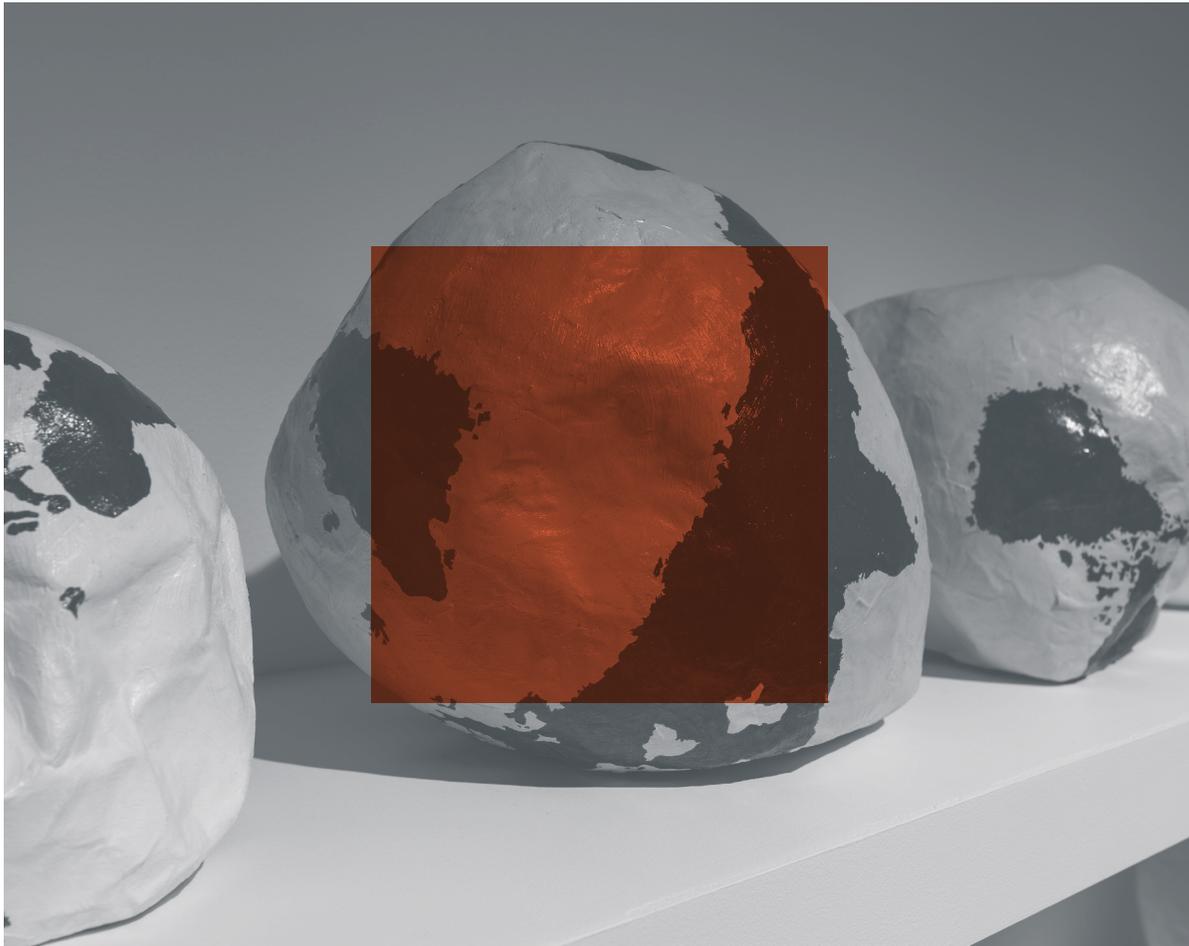
Yeah. I want to meet those people.

It's so rarely, but sometimes that does happen, and it's an interesting thing when it happens because they're taking that piece of whatever you've just created and it's living in somebody else's environment, and they are living with it, and it becomes part of their own eternalized. I just did some renovation on my house this past year, and I reinstalled my too-many-objects that I have in my house, and these objects. I know, object-making, it comes and goes — but we do still love those objects, don't we?

We do, absolutely.

● continued on page 84

A piece from Paperless, an exhibit curated by Steven Matijcio



[22] Ronald E. Rice & Sara Schneider, "Information Technology: Analyzing Paper and Electronic Desktop Artifacts," in Carolyn A. Lin & David J. Atkin, editors, *Communication Technology and Social Change: Theory and Implications* (Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers, 2007), 102. From years of research into the filing procedures of business offices, Rice & Schneider found that almost 3% of all paper documents are misfiled, 8% are eventually lost, and almost a full third are obsolete before they are used. [23] Price, "What books mean as objects." [24] Steven A. Johnson quoted in "How We Will Read: an interview with @stevenbjohnson from the @findings blog," findings, 15 February 2012 <<http://blog.findings.com/post/17661615384/how-we-will-read-an-interview-with-stevenbjohnson>>

“The lessons that previous generations had learned solely by listening, watching and doing were subsequently squeezed into words and documents, materializing memory while narrowing the heterogeneity of oral traditions.”

Whereas a digital text can live forever in accuracy and integrity — endlessly reproducible and beyond the grasp of analog vulnerabilities (i.e. age, light) — its sheer ubiquity infuses this information with the air of disposability. In his 2011 book *Delete: The Virtue of Forgetting in the Digital Age*, the aforementioned Mayer-Schönberger demonstrates how such data can be simultaneously infinite and inferior: arguing that — in contrast to earlier eras where it was more prudent to shed space-hungry files it is that much easier “to keep everything” when the files are immaterial. Eschewing editors, selection and Darwinism in the **process**, this derogation of the digital obscures the fact that — according to researchers Ronald E. Rice and Sara Schneider — most paper documents are misfiled, lost, or obsolete before they could even be considered valuable.²² Yet the very fact that such information is considered “important” enough to be printed on paper speaks to a romantic resurrection of the values with which we once **processed** such information. From sustained attention and linear thinking to an admirably non-instrumental approach to words in print, the implicit content of these pages are the ideals that, according to Professor Price, we want to believe we have.

Elaborating on this crucial point, Price emphasizes, “In thinking about new media, we measure what we do now

against a nostalgic baseline. We compare the way we really do use digital media to the way we imagine we once used printed media.”²³ Taking this one step further, it can be argued that by systematically printing emails and photos, building files until they bulge, and littering our desks with sheets of all sorts, it’s as much about what we want to **remember**, as how we want to **remember remembering**. Like a pseudo-mnemonic device of apperception and sublimation, this printing of digitized information tries to reunite the page with the ways we hope we once **processed** their contents. Renowned techno-sociologist author Steven A. Johnson injects a particularly revealing foil into this conversation when speaking about the inability to skim an e-book as easily (or as satisfyingly) as a paper book. Challenging our supposedly dedicated path through the tomes of old, he explains, “The digital age is supposed to be all about attention deficit disorder and hypertextual distractions, but e-books lock you into reading them in a linear fashion more than print books do.”²⁴ In this more objective mirror, in the stark, unforgiving stare of perfect digital **memory**, the mythology of our relationship to paper can be seen leading us to **mis-remember**; to hallucinate halcyon days of pure thought that — depending on your perspective — push us to demand more from digital sources, or chase a Lacanian ideal that never was.

And yet there is something so very tangible, so gratifying, of feeling the physical weight of one's progress through information move from the right to the left hand.²⁵ From hallowed scrolls to softcover paperbacks, the motor **memory** of collecting one's cognitive conquests is as intoxicating as it can be obfuscating. How much do we truly recall, and how much of that is actual content, versus the **process** of attaining that content?

In a recent study of knowledge worker practices across a spectrum of esteemed fields (law, finance, advertising, design), Alison Kidd found that paper documents were rarely filed or referenced after being generated. Instead, in a manner reinforcing Mayer-Schönberger's aforementioned thesis of external memories, it was the **process** of taking these notes that helped said workers to construct and organize their thoughts.²⁶ Sellen and Harper had similar findings in their study of Information Technology workers, highlighting their printing of emails "to read [the information] and make sense of it," and reminder memos that — according to their perceived importance — were reiterated into smaller pieces of paper then posted on a bulletin board or computer monitor.²⁷ In both studies, digitally generated information was manifested (and arranged) in the offices of these workers as temporary, but tangible constellations of documents meant to stoke, maintain and organize **memory**. Reading the ensuing desk piles as cartographies of a desired relationship between information and cognition, Kidd adds, "This [ostensible] clutter

provides important clues to remind [these workers] of where they were in their space of ideas." 28 Sellen and Harper are even more direct in their assessment, stating, "Without these bits of paper ready at hand, it is as if the writing, and more especially the thinking, could not take place in earnest."²⁹

In an even more formative intersection between material and **memory**, similar aspirations in, and of paper characterize the relationship between college students and textbooks. A recent survey by the Book Industry Study Group found that nearly 75% of U.S. college students preferred physical texts over their digital equivalent. The University of Toronto Bookstore sees much the same attitude amongst their constituency, with Director of IT Services Peter Clinton observing that said students, "despite having grown up in the Internet era, still largely prefer to read from the printed page."³⁰ And while Clinton emphasizes that "we're at a tipping point" when it comes to full-scale conversion from paper to digital publishing, a long-heralded parallel shift in the business world has failed to fully materialize. Sellen and Harper confirm that while "The future of the electronic office seemed assured, [and] the hegemony of paper doomed," that in actuality, "the promised 'paperless office' is as much a mythical ideal today as it was thirty years ago."³¹ Their research goes on to reveal that the World Wide Web has increased the amount of printing done at both home and office, the same way "the use of email in an organization causes an average of 40% increase in paper consumption."³²

[25] In *Rethinking the Book*, David L. Small reiterates that if you read books with both hands, the left hand holds what has been read, while the right hand holds information yet to be gleaned. "By weight and feel you know where you are, even if it never percolates to the conscious level." The dogears, bookmarks, margin notes and annotations that accumulate along the way add to this tangible **process**, in a way that window-like screen of monitors and e-books are not yet able. [26] Alison Kidd's 1994 study "The Marks are on the Knowledge Worker" as cited in Sellen & Harper, 63-64. To view Kidd's full article, please visit: <http://users-www.wineme.fb5.uni-siegen.de/home/VolkmarPipek/PUBLIC/workgroup/Papers/Kidd1994_KnowledgeWorker.pdf> [27] Sellen & Harper, 13, 111. [28] Kidd quoted in Sellen & Harper, 63. [29] Sellen & Harper, 1.

Across Europe, North America and other parts of the world, paper consumption is thus climbing as office workers continue to choose it as their preferred medium for reading, reviewing, delivery, planning, and organizing files. In so doing, paper's Platonic properties (i.e. thoughtful **processing** and seeding **memory**) are just as present here as they were in previous examples, with an added dimension of social currency. That is to say, many of these workers allocated special importance to the hand delivery of these documents to "humanize and personalize these **processes**."³³ Reflecting the people in/of paper's surrogate status within a dauntingly "paperless" world, Sellen and Harper echo Coupland's forecast when adding, "[the material's] physical presence on someone's desk drew attention to itself and served as a continual reminder to the recipient that action needed to be taken."³⁴

As paper lingers precariously on our collective, cultural desk — moving in and out of time as digital information colonizes almost every facet of being — just what action will take place remains to be seen. In Mike Huster's 2011 story for MPS Insights, "Paper is dead or long live paper?" he coolly reports, "Eventually, as has been declared, print as we know it, is dead" (my italics).³⁵ In so doing, he reiterates a widespread belief shared by many around the world, while also opening the provocative notion of metamorphosis. Behind all the anxiety, elegies and hand-wringing, the key point in this increasingly deafening dirge is that while the material (body) — print as we know it — may wither and perish, the praxis (spirit)

can transmute itself, its surrounding media, and the people employing this evolving apparatus. The sentimental nostalgia that paper afforded, allowing us to romanticize the way we were (and fear the way we could be), is giving way to precise data streams that demand address, and a more realistic rear view mirror. And yet, at the same time, the ethos of paper is softening the exacting stare of technology's infallible **memory** — burnishing the edges and blurring the recall to **create** a more conducive, human space for us to "progress."³⁶

The enduring presence of paper "artifacts" upon office desks and college bookshelves speaks as much to wistfulness and habit, as it does to the anxiety that technology brings in a mechanized world. In a 1995 study of the social ("shadow") costs brought about by the advent of e-systems, author and researcher Carole Groleau found that after computerization, many office workers continued to use paper files that the new systems were supposed to replace.³⁷ Rice & Schneider reinforce this finding in their research, recognizing the umbilical **nature** of paper within the digital frontier when observing,

[30] Mike Huster, "Paper is dead or long live paper?" MPS Insights, 11 February 2011 & Peter Clinton quoted in Anderson, "The Mobile Revolution." Clinton goes on to report that 90% of their survey respondents stated that if they purchased an e-textbook, they would want the option to print at least a portion of it. Respondents to the Book Industry Study Group survey stated they liked the "look & feel" of books, as well as their "permanence and ability to be resold." Huster article: <<http://www.mpsinsights.com/insights-blogs/paper-is-dead-or-long-live-paper/>> [31] Sellen & Harper, 5, 2. [32] Ibid., 1, 7. [33] Ibid., 68. [34] Ibid. [35] Huster, "Paper is dead or long live paper?" [36] Mayer-Schönberger warns that society's capacity to forget could be suspended by perfect digital **memory**, creating an ominous realm of self-censorship, and a shroud upon the creativity that can come out of cyclical mistakes and misinterpretation.

"The old forms were desktop artifacts serving as symbolic interfaces for the individual between two system regimes, providing a sense of continuity and security during a time of uncertainty."³⁸ McLuhan reminds us that similar unrest was felt when books unseated oral instruction's perch atop the information pyramid, and that such upheaval is as much predicament as opportunity.

Foreseeing the unsettling, but necessary winds of change that technology would bring to the world of print, he wrote, "This challenge has destroyed the monopoly of the book as a teaching aid and cracked the very walls of the classroom so suddenly that we're confused, baffled."³⁹ Cracks consequently fractured the imprint (implicit and explicit) of the page upon us, its population, propelling people to migrate with the spirit, if not the substance of paper. Decades later, awash in the waves of digital revolution and paper boats of ersatz intellectualism, Price echoes McLuhan's charge when urging us to not "make the history of the book a stick with which to beat digital media."⁴⁰

Akin to tea leaves in occult divination, it's helpful to look once again at the typical office desk for direction in the dialectical trek towards synthesis. With the desktop computer as the nucleus of today's work station, Rice & Schneider note how the importance of surrounding paper artifacts are often "ranked" by their user (sometimes subconsciously), according to their proximity to the central beacon. In turn, core operating systems of the computing industry (Windows, Mac OS) have greased the wheels of desired communion by allowing users to organize data into paper-familiar devices such as files, folders and recycling bins. To continue to ease hesi-

tant minds and facilitate more widespread digital migration, Sellen & Harper underline how new technologies are being developed "to look and feel more paperlike."⁴¹ From Kindles to Kobos, e-books are trying diligently to emulate the affordances of books and pages (including opaque screens, portability, margins, annotation features and patina) — prompting the aforementioned Bob Stein to proclaim in the era of e-reading, "We're in 1464 — the infancy of Gutenberg's press — and everything is poised to change."⁴² Making things new by making them more the same, such concessions to the legacy of paper allow us to dig niches in the heart of the machine, and maintain the necessary delusions to get beyond our fears. As a foil to the "humanizing" of digital **memory** he believes crucial, Mayer-Schönberger warns that, "Too perfect a recall, even when it is benignly intended to aid our decision-making, may prompt us to become caught up in our memories, unable to leave our past behind."⁴³

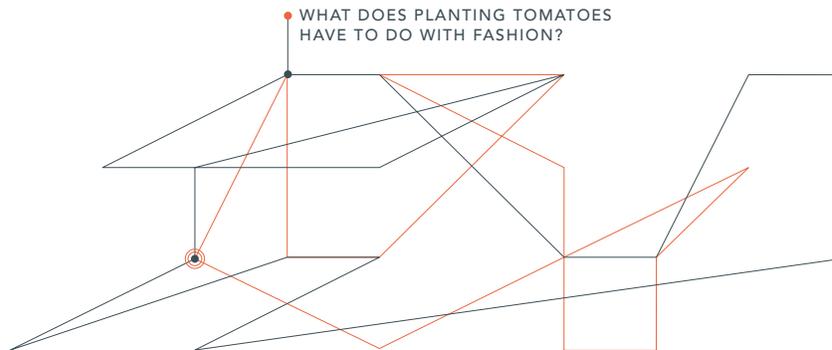
Instead — in the same way that the author reflects his/her apparatus — the equivocality, vulnerability and contingency of paper is a more accurate mirror of the human mind in its very inaccuracy. To better reflect the slippage, sfumato, and subjectivity of human **memory**, Johnson believes that digital texts will evolve the way of Wikipedia, "where the idea of a finished text, where all the words have been locked down, will start to seem a little less orthodox."⁴⁴ Rather than finish and authority, the digital "page" could be a palimpsest of gathering, gesture and — ultimately — a renewal of man's earliest ways of knowing himself and the world.

The always prescient McLuhan believed as much, highlighting the ways mass media (radio, TV, film) pushed the written word “back” to its origins; towards spontaneous shifts and a freedom of the spoken idiom. In his words, “[New media] aided us in the recovery of an intense awareness of facial language and body gesture.”⁴⁵ Thus emphasizing man’s fundamental role in the life of information, he goes on to add that, “If these ‘mass media’ should serve only to weaken or corrupt previously achieved levels of verbal and pictorial culture, it won’t be because there’s anything inherently wrong with them.

It will be because we’ve failed to master them as new languages in time to assimilate them to our total cultural heritage.”⁴⁶

In this light, if the birth of paper once narrowed the recollection of human vernacular, its life has allowed us to record great things, and romanticize them into even greater things. If the passing of paper obscures such memories — both real and imagined — its resurrection into an omnipresent, immaterial digital state affords new space for us, for the children of this apparatus, to collectively become the next page. ●

[37] Carole Groleau cited in Rice & Schneider, 112. The full title of Groleau’s 1995 unpublished doctoral dissertation is “An examination of the computerized information flow contributing to the mobility of tasks in three newly computerized firms.” [38] Rice & Schneider, 115. [39] McLuhan, “Classroom without Walls.” [40] Price, “What books mean as objects.” [41] Sellen & Haper, 7. [42] Bob Stein quoted in Levine, “Can a Papermaker Help to Save Civilization?” [43] Mayer-Schönberger quoted in Jeffries, “Why we must remember to delete - and forget - in the digital age.” [44] Johnson quoted in “How We Will Read.” [45] McLuhan, “Classroom without Walls.” [46] Ibid.



● WHAT DOES PLANTING TOMATOES
HAVE TO DO WITH FASHION?

Next Intersection

Read about similar themes in *What Does Planting Tomatoes Have to do With Fashion* on page 20.

“On its most immediate level, growing food literally connects you to roots and earth, but it also connects you with the skills and traditions that farmer families have used forever as they tilled the land to produce fruit, vegetables and — in this area — cotton.”

"As paper lingers precariously on our collective, cultural desk — moving in and out of time as digital information colonizes almost every facet of being — just what action will take place remains to be seen."



A piece from Paperless, an exhibit
curated by Steven Matijcio



Against Search

By: Lev Manovich, 2012-2014.

"Using search is like looking at a pointillist painting at a close range and only seeing colour dots, without being able to zoom out to see the shapes."

How to work with massive media data sets?

Early 21st century media researchers have access to unprecedented amounts of media--more than they can possibly study, let alone simply watch or even search. A number of interconnected developments which took place between 1990 and 2010 -- the digitization of analog media collections, a decrease in prices and expanding capacities of portable computer-based media devices (laptops, tablets, phones, cameras, etc.), the rise of user-generated content and social media, and globalization (which increased the number of agents and institutions producing media around the world)--led to an exponential increase in the quantity of media while simultaneously making it much easier to find, share, teach with, and research. Waiting to be "digged" into are hundreds of billions of videos on YouTube and photographs on Facebook (according to the stats provided by Facebook in the beginning of 2012, its users upload 7 billion images per month), millions of hours of television programs digitized by various national libraries and media museums, millions of digitized newspaper pages from the nineteenth and twentieth centuries^[1], 150 billion snapshots of web pages covering the period from 1996 until today^[2], and

numerous other media sources. (For more examples of large media collections, see the list of repositories made available to the participants of Digging Into Data 2011 Competition.)

How do we take advantage of this new scale of media in practice? For instance, let's say that we are interested in studying how presentation and interviews by political leaders are reused and contextualized by TV programs in different countries (this example comes from our application for Digging Into Data 2011^[3]). The relevant large media collections that were available at the time we were working on our application (June 2011) include 1,800 Barack Obama official White House videos, 500 George W. Bush Presidential Speeches, 21,532 programs from Al Jazeera English (2007-2011), and 5,167 Democracy Now! TV programs (2001-2011). Together, these collections contain tens of thousands of hours of video. We want to describe the rhetorical, editing, and cinematographic strategies specific to each video set, understand how different stations may be using the video of political leaders in different ways, identify outliers, and find clusters of programs which share similar patterns. But how can we simply watch all of this material to begin pursuing these and other questions?

Even when we are dealing with large collections of still images — for instance, 200,000 images in “Art Now” Flickr group gallery, 268,000 professional design portfolios on coroflot.com (both numbers as of 3/31/2012), or over 170,000 Farm Security Administration/Office of War Information photographs taken between 1935 and 1944 and digitized by the Library of Congress^[vi] — such tasks are no easier to accomplish. The basic method which always worked when numbers of media objects were small — see all images or video, notice patterns, and interpret them — no longer works.

Given the size of many digital media collections, simply seeing what’s inside them is impossible (even before we begin formulating questions and hypotheses and selecting samples for closer analysis). Although it may appear that the reasons for this are the limitations of human vision and human information processing, I think that it is actually the fault of current interface designs. Popular web interfaces for massive digital media collections such as “list,” “gallery,” “grid,” and “slide-show” do not allow us to see the contents of a whole collection. These interfaces usually display only a few items at a time, we cannot understand the “shape” of the overall collection and notice interesting patterns.

Most media collections contain some kind of metadata such as author names, production dates, program titles, image formats, or, in the case of social media services such as Flickr, upload dates, user assigned tags, geodata, and other information^[vi]. If we are given access to such metadata for a whole collection in the easy-to-use form such as a

set of spreadsheets or a database, this allows us to at least understand distributions of content, dates, access statistics, and other dimensions of the collection. Unfortunately, online collections and media sites typically do not make a complete collection’s metadata available to users. Even if they did, this still would not substitute for directly seeing, watching, or reading the actual media. Even the richest metadata available today for media collections do not capture many patterns which we can easily notice when we directly watch video, look at photographs, or read texts — i.e., when we study the media itself as opposed to metadata about it^[vi].

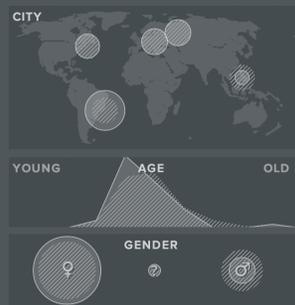
Against Search: How to Look without Knowing What you Want to Find

The popular media access technologies of the nineteenth and twentieth centuries, such as slide lanterns, film projectors, microforms, Moviola and Steenbeck, record players, audio and video tape recorders, were designed to access single media items at a time and at a limited range of speeds. This went hand in hand with the organization of media distribution: record and video stores, libraries, television and radio would make available only a few items at a time. For instance, you could not watch more than a few TV channels at the same time, or borrow more than a few videotapes from a library.

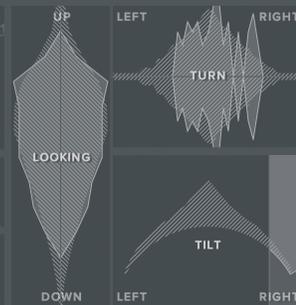
The **SELFIEEXPLORATORY** is part of **SELFIECITY**

Help Share Reset filters

DEMOGRAPHICS



POSE



FEATURES



MOOD

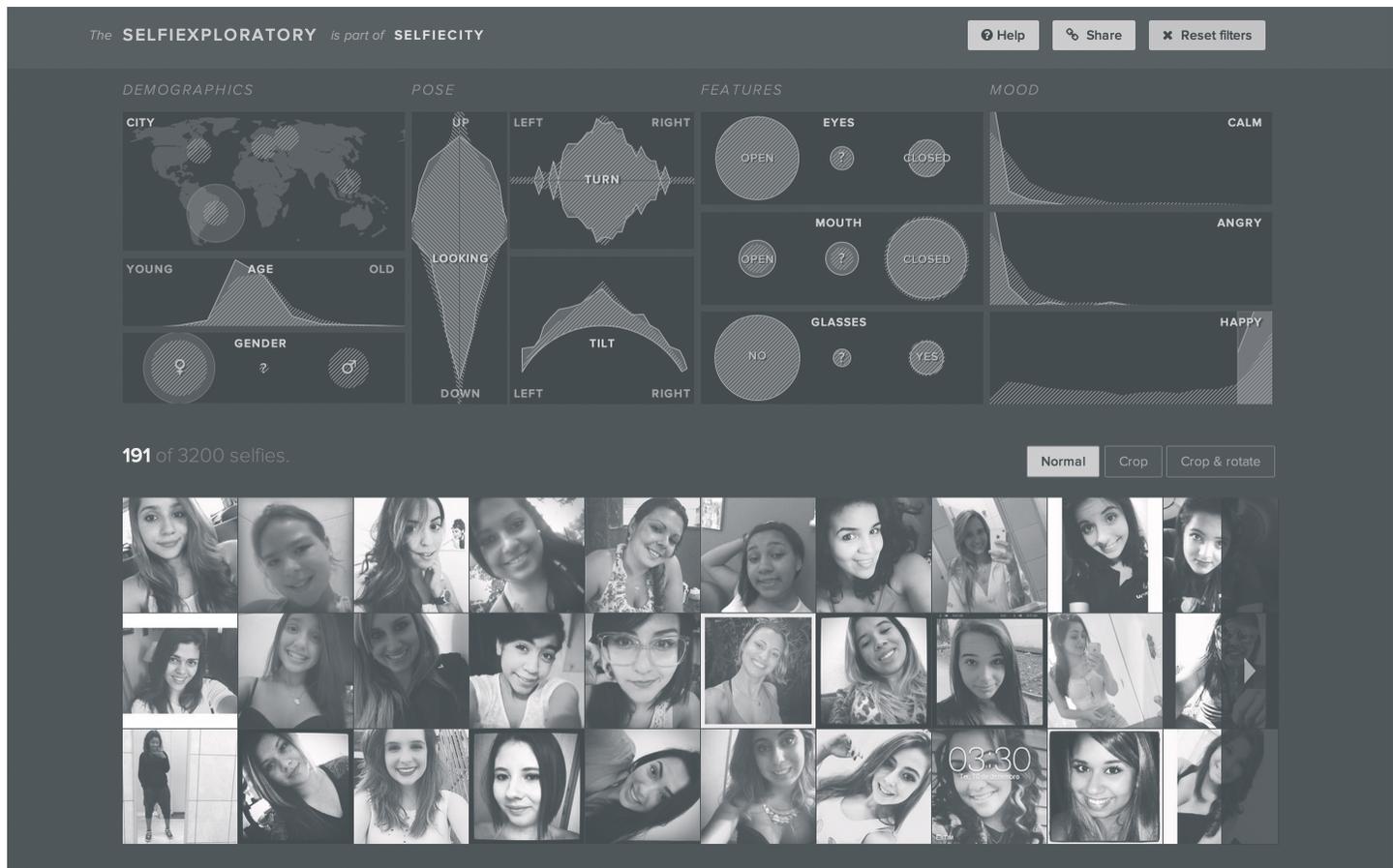


39 of 3200 selfies.

Normal Crop Crop & rotate



A screenshot of Selfieexploratory
SUBMITTED BY LEV MANOVICH



A screenshot of Selfiexploratory
SUBMITTED BY LEV MANOVICH

“Search interface is a blank frame waiting for you to type something. Before you click on the search button, you have to decide what keywords and phrases to search for.”

At the same time, hierarchical classification systems used in library catalogs made it difficult to browse a collection or navigate it in orders not supported by catalogs. When you walked from shelf to shelf, you were typically following a classification system based on subjects, with books organized by author names inside each category.

Together, these distribution and classification systems encouraged twentieth-century media researchers to decide beforehand what media items to see, hear, or read. A researcher usually started with some subject in mind — films by a particular author, works by a particular photographer, or categories such as “1950s experimental American films” and “early 20th century Paris postcards.” It was impossible to imagine navigating through all films ever made or all postcards ever printed. (One of the first media projects that organizes its narrative around navigation of a media archive is Jean-Luc Godard’s *Histoire(s) du cinéma* which draws samples from hundreds of films.) The popular social science method for working with larger media sets in an objective manner — content analysis, i.e. tagging of semantics in a media collection by several people using a predefined vocabulary of terms (for more details, see Stemler, 2001) — also requires that a researcher decide

beforehand what information would be relevant to tag. In other words, as opposed to exploring a media collection without any preconceived expectations or hypotheses — just to “see what is there” — a researcher has to postulate “what was there,” i.e., what are the important types of information worth seeking out.

Unfortunately, the current standard in media access — computer search — does not take us out of this paradigm. Search interface is a blank frame waiting for you to type something. Before you click on the search button, you have to decide what keywords and phrases to search for. So while the search brings a dramatic increase in speed of access, its deep assumption (which we may be able to trace back to its origins in the 1950s, when most scientists did not anticipate how massive digital collections would become) is that you know beforehand something about the collection worth exploring further.

To put this another way: search assumes that you want to find a needle in a haystack of information. It does not allow you to see the shape of the haystack. If you could, it would give your ideas of what else there is worth seeking, beside the needle you originally had in mind.

Search also does not reveal where all different needles in the haystack are situated, i.e. it does not show how particular data objects or subsets are related to the complete data. Using search is like looking at a pointillist painting at a close range and only seeing colour dots, without being able to zoom out to see the shapes.

The hypertext paradigm that defined the web of the 1990s likewise only allows a user to navigate through the web according to the links defined by others, as opposed to moving in any direction. This is consistent with the original vision of hypertext as articulated by Vannevar Bush in 1945: a way for a researcher to create “trails” through massive scientific information and for others to be able to follow those traces later.

My informal review of the largest online institutional media collections available today (europeana.org, archive.org, artstor.com, etc.) suggests that the typical interfaces they offer combine nineteenth-century technologies of hierarchical categories and mid-twentieth century technology of information retrieval (i.e., search using metadata recorded for media items). Sometimes collections also have subject tags. In all cases, the categories, metadata, and tags were entered by the archivists who manage the collections. This process imposes particular orders on the data. As a result, when a user accesses institutional media collections via their web sites, she can only move along a fixed number of trajectories defined by the taxonomy of the collection and types of metadata.

In contrast, when you observe a physical scene directly with your eyes, you can look anywhere in any order. This allows you to quickly notice a variety of patterns, structures and relations. Imagine, for example, turning the corner on a city street and taking in the view of the open square, with passers-by, cafes, cars, trees, advertising, store windows, and all other elements. You can quickly detect and follow a multitude of dynamically changing patterns based on visual and semantic information: cars moving in parallel lines, houses painted in similar colors, people who move along their own trajectories and people talking to each other, unusual faces, shop windows which stand out from the rest, etc.

We need similar techniques which would allow us to observe vast “media universes” and quickly detect all interesting patterns. These techniques have to operate with speeds many times faster than the normally intended playback speed (in the case of time-based media). Or, to use an example of still images, I should be able to see important information in one million images in the same amount of time it takes me to see it in a single image. These techniques have to compress massive media universes into smaller observable media “landscapes” compatible with the human information processing rates.

At the same time, they have to keep enough of the details from the original images, video, audio or interactive experiences to enable the study of the subtle patterns in the data.

Notes

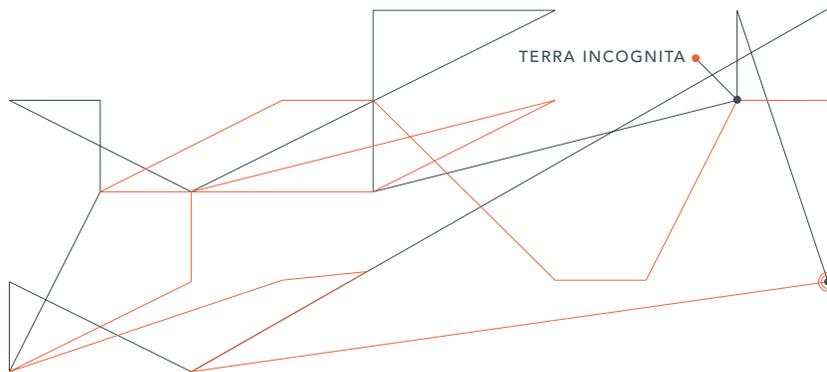
[i] <http://www.chroniclingamerica.loc.gov> [ii] <http://www.archive.org> [iii] See our pilot project <http://lab.softwarestudies.com/2011/09/digging-into-global-news.html> [iv] <http://www.loc.gov/pictures/> [v] <http://www.flickr.com/services/api/> [vi] For a good example of rich media metadata, see <http://www.gettyimages.com/EditorialImages> [vii] <http://www.softwarestudies.com>

Since 2008, my research lab (Software Studies Initiative, softwarestudies.com) has been developing visual techniques for interactive exploration of large visual datasets. Our techniques combine the strengths of media viewing applications, graphing and visualization applications[vii]. Like the latter, they create graphs to show relationships and patterns in a data set. However, if plot making software can only display data as points, lines or other graphic primitives, our software can show the actual images in a collection. We call this approach media visualization.

One practical example is Selfexploratory, the web application that we created in collaboration with other media designers and software developers (the design and develop-

ment was led by Moritz Stefaner). The app allows web visitors to explore a dataset of 3200 Instagram selfie photos using a number of variables such as geolocation, age estimates of people in the selfies, gender, face orientation, mood, etc.

While we feel that this app represents one successful example of how media universes can be explored interactively, we need more designers to do more experiments to come with more solutions – so we can navigate massive image and video sets without always relying on “metadata” and “search” paradigms, and have no limit to what we can discover. ●



Next Intersection

Read about similar themes in *Terra Incognita* on page 30.

“By tapping mystic rhythms with our fingers and staring into squares of light we traverse great oceans of distance.”

● continued from page 67

ONE ON ONE: DAN GOTTLIEB

Dan Gottlieb: Yeah, because they become a part of our, kind of, fabric. So we like to use our hands and make them —not all of us, but some of us who create things do —I certainly still love that process. And on a macroscale, place-making here is, you know, drawn out over decades and you have to find money to do it and people to support it.

And will it ever be finished?

Oh, it's never gonna be finished. Finished-finished? No. No. But, since you were a kid that started visiting here, to now, it's changed pretty significantly, and, so before I'm done with this — I have this one more sort of quantum leap — that the place takes, and so it's more choreography with all of that, and it's the opposite of the singular kind of 'it's me and my thing.'

But the intent is pretty close, at the same time; it's to put something out there that will invite people into a very small or a very large experience. I got to tell you, it's pretty rewarding when you hear people just out on the street who have been and had an experience, or had a good time, where they brought their mother, and to use it as a social bond.

The most powerful part of it, really, is that what you build then helps build other peoples' lives. It's a pretty, it's a pretty powerful thing when you overhear that somebody met somebody here on this site, and I've heard that a lot of times. I've also heard that teens have had other kinds of experiences here, of which we have photo evidence.

But the vast majority of it is kind of positive experiences and the social bonds that happen when people find themselves in a space that is, in particular, not clobbering them over the head with design, but if the design of a place is successful, then people are onto their other zone, whatever it is, and they want to return to it and make that a part of the fabric of their lives. So that's a very rewarding thing when that happens, and it has other, kind of functional pieces that are beneficial.

You know, we built this pond back here — and it sounds like a pretty pedestrian thing, but it was a demonstration pond for cleaning stormwater, and so it's a very, very innovative design. We had these brainiacs working on it, and came up with a very innovative system to drain this 50-acre site and remove point-source pollution and sedimentation inside a sculptural form.

For me, it was to demonstrate that visually pleasing design that's highly sculptural can contribute to the health of the water that's flowing downstream to the creek and eventually the Neuse river system. So, it's a demonstration pond in that we show, you know, a quarter million people a year that care to look at it, that it's important; so it could be an agent for change, as well. So it's a different and equally important responsibility for design.

Right. So this series of impermanent experiences can add up to a more permanent impression that then contributes to the story of someone's life.

Yeah. And I think that it's any publicly held institution's responsibility to at least contribute towards that--obviously not everybody's going to do this thing, but to be a responsible citizen in that way. That's sort of the next big wave here, how we respond to the emerging street front here. This museum becomes an active player in urbanizing Blue Ridge Road which is going to change pretty soon, we hope, into a different kind of place that invites people to walk and to bicycle between.

We have about six million visits within a half mile stretch here and it's dangerous and ugly. We're actively working to reverse that and we're going to be a key player. We'll be the cultural centerpiece of it, sure, but if we could also demonstrate sustainable practice and good design values, I'm hoping that we influence our neighbours with whatever happens. Not that they should mimic us, they can do their own thing, but we should set the bar as high as we can to make thoughtful environments, and healthy environments.

So, where does any of this leave off between permanent and ephemeral? I think it's all sort of a moving target, because it's always changing through time. Unlike the permanent collection, everything else is changing and will continue to change.

Even with the permanent collection, you know — we built the new building to take it out of, basically, a black box, and put it into a transparent box (sometimes called a white cube) that invites natural light in, that invites the gardens in, and to make it feel like a more democratic space on one level, and so if you extend that kind of design philosophy throughout the campus, creating these portals to the street front and to the emerging corridor and it's a pretty good framework to think about a design philosophy.

It is--and about how to be a leader in design.

We hope so! We hope so. Somebody's got to care around here, right? So, we do, we care a lot. ●

401 OBERLIN RD. + 520 S Person St.

By: Erin Sterling Lewis, AIA

"I've seen a tremendous amount of change since moving here in 2002 - some exciting and some devastating."

401 Oberlin Road demolition
PHOTO BY ERIN STERLING LEWIS

Change is constant. It insinuates impermanence and can be exciting or devastating. Living in the fast growing city of Raleigh, I've seen a tremendous amount of change since moving here in 2002 — some exciting and some devastating.

I practiced architecture for seven years before serving on the Raleigh Planning Commission. I worked on buildings that took at least a year to design and often as much time to build. The design process for each project grabbed part of my heart and soul and stole most of my weekends. I loved it because I knew I was helping make places for people — places and spaces that would last my lifetime and beyond. To me, this is one of the great joys and responsibilities of being an architect.

Before my experience with the Planning Commission, I was not familiar with the analysis, discussion, and debate that leads to change in our city, almost none of which directly addresses the value of design. Most astounding to me was the manner in which a new development slated to replace an existing architectural gem was presented to the city in 2011. The attorney representing the case rightfully pointed out that Raleigh was ready for greater density at 401 Oberlin Road. To further his point, he also stated that the 1957 government building designed by Leif Valand, was "obsolete". While I concurred with the statement about density, I was horrified that any building just over fifty years old could be considered obsolete, let alone a beautiful, contextually sensitive work of art that so strongly held the corner of an important intersection for both cars and pedestrians.

Watching the demolition of 401 Oberlin Road was heart-breaking, because I knew what the replacement was to look like, which sadly, was a building that simply works. Important buildings on prominent sites all over Raleigh are being designed and built based on several factors: market value of the land, cost of construction, number of units needed to repay bank loans, and keeping neighbors happy. Landscape design associated with these buildings is rarely more than required by code, which is quite minimal. Proportions seem prescriptive and the material palettes are completely predictable.

But the buildings work. They are approved and they are built.

As designers in a growing city, it is impossible to reject change, as well as the continuously changing life span of our buildings. But it is possible to approach each building's design with the same vigor and passion as Leif Valand did when he designed 401 Oberlin Road as a building to last far more than 50 years. No matter how permanent or impermanent, buildings should be designed so they are meaningful while they are here and missed when they are gone.

How can designers embrace change and create buildings that are more than just what works?

In 2010, my business partner, Matt Griffith, and I set out to open an architecture practice in Raleigh called in situ studio. In Latin, in situ means, "in its natural place". For us, this means paying attention to several factors of context in the way we approach design — the site and surroundings, the time in which we are building, and the people who will be affected by our work.



Prince Hall Historic Overlay
District contextual image.
PHOTO BY NICOLE ALVAREZ

In our practice, we have found that doing more than just what works takes a willingness to embrace constraint in a way that allows us to think outside the box and **create** projects unique to their place. It takes determination and patience with the public **process**, and it is an opportunity to educate all involved about the value of good, site sensitive, unique design.

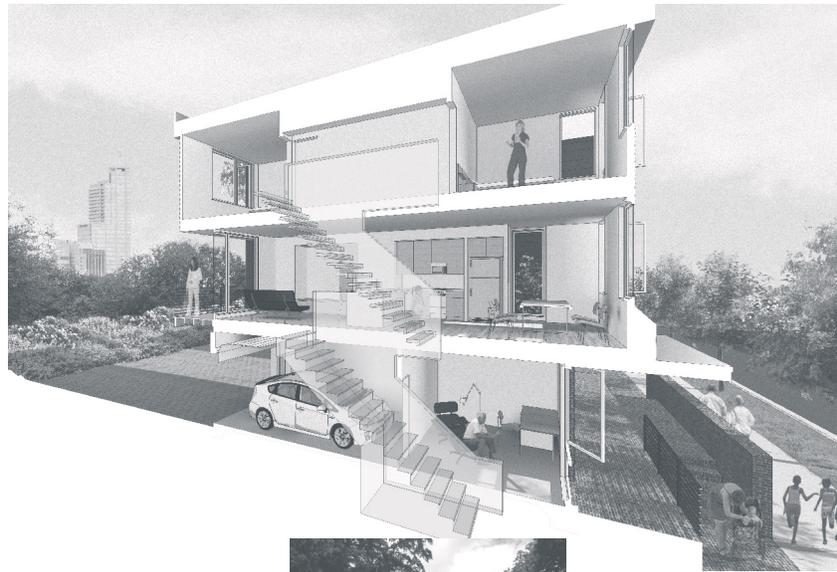
Our design of ten townhomes at 520 S Person Street in downtown Raleigh for the Downtown Housing Improvement Corporation (DHIC) is an example of a project that set out to capture all of the above. The site is located in the recently designated Prince Hall Historic Overlay District, immediately southeast of the center of downtown. Three single family homes used to occupy what is now ten townhouse lots and open space. There is a rich history of community and place in the neighborhood, a factor that we immediately observed and documented. We met with the neighborhood on multiple occasions to gain their input, analyzed each architecturally contributing structure in the district, and had preliminary design reviews with the Raleigh Historic Development Commission, the Appearance Commission, and the Urban Design Center. This collection of information informed us of the numerous constraints within which we were to design.

520 S Person Street rendering.
RENDERING BY IN SITU STUDIO



"...we have found that doing more than just what works takes a willingness to embrace constraint, persistence and education, and celebration."

520 S Person Street section rendering. RENDERING BY IN SITU STUDIO



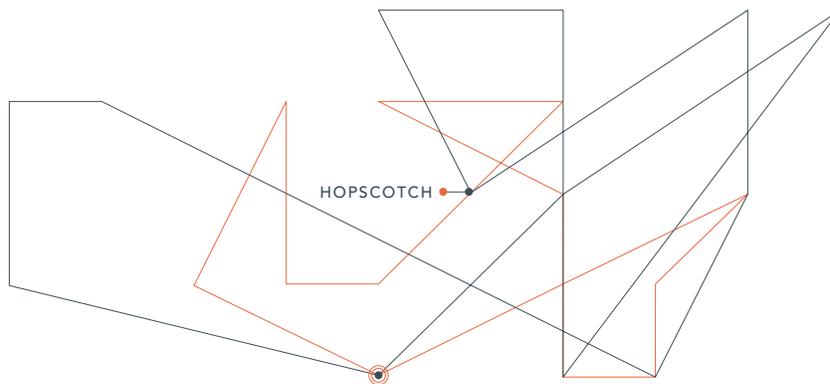
Prince Hall Historic Overlay District contextual image. PHOTO BY NICOLE ALVAREZ

The design for 520 S Person Street does not mimic any surrounding structure. It does not look like the many other multi-family development constructed in Raleigh over the last ten years. It was design using materials and methods that reflect the 21st century. It is as unique to its site and surroundings as every building should be, all the while inspired by dozens of architectural elements and desires expressed by the neighbors. The design still received criticism because it was unfamiliar, but our design team remained determined. We spent a great deal of time educating neighbors and city planners about how the design will not feel out of place because it was in fact, inspired by its place.

After more than a year of meetings with constituents, stakeholders, neighbors, and authorities having jurisdiction, we gained approval of the design. All ten units sold in less than one week. Construction will be complete in summer, 2015. We hope this building demonstrates that site sensitive, unique design can be approved and built. We also hope designers will begin to care less about what simply works and more about their role in giving our city its identity — no matter how permanent or **impermanent** the work may be. ●



401 Oberlin Road, built 1957. PHOTO BY GOODNIGHT RALEIGH



Next Intersection

Read about similar themes in *Hopscotch* on page 42.

"Everywhere I went, there the question (or some variation thereof) was, often presented with a latent yearning that presupposed I wasn't really enjoying myself. "Are you having fun? "Are you enjoying yourself? "This is different. Do you like it?" "So, how does it feel?"



"We also hope designers will begin to care less about what simply works and more about their role in giving our city its identity — no matter how permanent or impermanent the work may be."



About the Authors

Aly Khalifa

THE ARROGANCE OF PERMANENCE

Aly Khalifa comes to the design profession from a bipolar education at NCSU: Mechanical Engineering and Product Design. His goal is to find the balance of both of these disciplines in each project challenge. Aly's career is chiefly centered about Gamil Design, a firm he started in 1995. His work experience previously included working for the NCDOT, wind tunnel of the US EPA, Performance Bicycle, and teaching at NCSU's College of Design.

Aly started Gamil in the interest of furthering the synthesis of creative design with creative engineering into a field called invention development. Their specialty in advanced design, engineering and development of sporting goods accessories (skates, footwear, eyewear, gloves, bags) has led them to many clients, including: Nike, Trek, Bausch & Lomb, and Outdoor Products. This has further developed into partnerships between Gamil Design and Asian manufacturers. Aly travels heavily to Asia to realize Gamil's projects that are produced in mass-market quantities.

Together with a handful of other professionals, Aly and his wife started Designbox in 2001. Designbox is a creative collaborative located in Raleigh, NC with members honing their creative skills at weekly meetings. Designbox members represent some of the finest talent in the area and are responsible for curating monthly shows in their prominent downtown gallery.

Designbox has sprung a number of community projects in which Aly has led facilitation sessions. These projects have ranged from sculpting undesirable landfills into fun urban parks to rethinking Raleigh's own self image. The latter eventually led to the creation of SPARKcon - the Triangle's first Creative Conference that enabled more than 30,000 people in the Triangle area to stake its claim as the "Creative Hub of the South."

Natalie Chanin

WHAT DOES PLANTING TOMATOES HAVE TO DO WITH FASHION?

Natalie Chanin is a designer, entrepreneur, educator, and author living and working in her hometown of Florence, Alabama. Chanin holds a degree of Environmental Design from North Carolina State University (1987) and has been a finalist for the Cooper Hewitt National Design Award for Fashion in 2005 as well as a finalist for the CFDA/Vogue Fashion Fund in 2009. She has worked in fashion, costuming, and styling in New York and Europe but returned home to Alabama in 2000 to create the company now known as Alabama Chanin.

Alabama Chanin creates 100 percent hand sewn-garments using organic cotton grown and milled in the United States. The small company produces garments that are made to order and fabricated in a contemporary cottage industry style that has employed over 500 seamstresses since its founding. Utilizing a design/build philosophy has allowed Alabama Chanin to manufacture every piece of clothing they design and sell while revitalizing a once-dying textile production community. In the spirit of the open-source movement Alabama Chanin has created a lifestyle brand of workshops, instructional books, custom sewing kits, and retreats to allow others to bring the craft of hand sewn production into their own homes and families.

"We seek to be a sustainable company, one that creates beauty and meaning without creating excess waste or destroying natural resources. We do not live as though there is no tomorrow; rather, we live as though we know there will be."

- Natalie Chanin

Catherine D'Ignazio

TERRA INCOGNITA

Catherine D'Ignazio is an artist, software developer and educator, and occasionally goes by the name of kanarinka. She is the Director of the Institute for Infinitely Small Things, an interventionist performance troupe, and former Director of the Experimental Geography Research Cluster at RISD's Digital+Media MFA program. She taught in the Comparative Media Studies program at MIT in 2009 & 2012. Her artwork has been exhibited at the ICA Boston, Eyebeam and MASSMoCA, and has won awards from the Tanne Foundation and Turbulence.org. Catherine has a BA in International Relations from Tufts University and an MFA in Studio Art from Maine College of Art. She has lived and worked in Paris, Buenos Aires, and Michigan, and currently resides in Waltham, MA.

Catherine conducts research on critical geography and media attention at the MIT Center for Civic Media. Her thesis looks at ways to "engineer serendipity" — to create encounters with information outside our comfort zones, biases and habits. She will be contributing a visual essay around her new project — Terra Incognita — a game designed to "stage encounters with more diverse information, cultures and people...[and] subtly disrupt our habits in the service of serendipity."

Dan Gottlieb

North Carolina Museum of Art

ONE-ON-ONE

Dan Gottlieb is the Director of Planning and Design at the North Carolina Museum of Art (NCMA). He is crucial to the direction and curation of the art and exhibitions at the museum. Art exhibitions in their very nature and definition are temporary, but despite this level of impermanence, they have the ability to influence visitors and other artists with lasting imagery, experience and theoretical impact. With exhibitions coming and going on a monthly basis, a conversation with Gottlieb about museum planning and art exhibition curation as a temporal art form provides a perspective not often explored.

Grayson Currin

Music Editor, *Indy Week*
Writer, *Pitchfork.com*

HOPSCOTCH

For the past four years, Grayson Haver Currin has served as the co-director of Hopscotch Music Festival, a three day festival that pops up in Downtown Raleigh at the beginning of September. Having served as the music editor at the Indy Week since 2005 and writing for online music journal, Pitchfork, since 2006, Grayson has amassed a vast knowledge for the music industry, both locally and nationally. With this knowledge, Grayson has helped bring in over 450 bands and 60,000 fans to the music venues and streets of Downtown Raleigh since 2010. Hopscotch is a special three days in the Fall, filling the streets of Raleigh with people, bikes, music, food and a buoyant sense of urban community. Despite its temporal nature, the lasting effect of the festival can be seen in the culture, economy and the overall energy of Downtown Raleigh throughout the year.

Elizabeth Diller, Richard Scofidio and Charles Renfro

Diller Scofidio + Renfro Architects

BLUR

Diller Scofidio + Renfro is an interdisciplinary design studio that integrates architecture, the visual arts, and the performing arts. Based in New York City, Diller Scofidio + Renfro is led by three partners – Elizabeth Diller, Ricardo Scofidio, and Charles Renfro – who work with a staff of architects, artists, and administrators. One of the firm's earliest projects was the Blur Building, a pavilion at the 2002 Swiss EXPO. Blur was a metal platform above the water, shrouded in a cloud of man-made fog. It intended to be a temporary performance with permanent success. The pavilion was part ethereal experience and part media experiment. It used wearable, wireless technology embedded in enhanced rain coats to react to other visitors and change, according to these relationships. All that remains of the building is a documentation of the **process**, the data and the project, in the form of a book, aptly titled *Blur: The Making of Nothing*. This project is the definition of **impermanence** that makes a lasting impact in the design world.

Steven Matijcio

*Cincinnati Contemporary Art Center
Southeastern Center for Contemporary Art*

REMEMBER

Steven Matijcio is the present curator at the Cincinnati Contemporary Art Center and a former curator at the Southeastern Center for Contemporary Art in Winston-Salem, North Carolina. He is a graduate of the University of Toronto and the Center for Curatorial Studies at Bard College, New York and has held positions in a number of galleries and museums including the Plug In Institute of Contemporary Art, the Power Plant Contemporary Art Gallery, the Art Gallery of Ontario, and the National Gallery of Canada. Matijcio is a lecturer and published writer, and in 2011 was a curator in residence in Gwangju, South Korea and Berlin, Germany. He won a 2010 Emily Hall Tremain Exhibition Award for the project "paperless" and in 2012 he was the curator of the fourth Narracje Festival in Gdansk, Poland. Matijcio was also commissioned by the Robert Mapplethorpe Foundation in 2003 to curate one of their first online exhibitions.

Matijcio is responsible for the Inside Out: Artists in the Communities II project that took place at SECCA in 2010. Inside Out II was a varied event aimed at mixing up different organizations and communities, and included walks, temporary sculpture and street art. At its root, it was meant to, in his own words, turn "the familiar into the unfamiliar."

Lev Manovich

Software and Digital Media Culture

AGAINST SEARCH

Lev Manovich is a new media theorist and digital culture advocate. He is a professor at The Graduate Center, CUNY, and a Director of the Software Studies Initiative which works on the analysis and visualization of big cultural data. Manovich's latest book, *Software Takes Command*, analyzes the history of software and highlights the lack of educational programs that use this history as a tool for teaching technology and digital design. Through Manovich's texts, as well as his current projects, he questions the idea of **permanence** of software and technology, specifically imagery and data. His work is about creating permanent documents out of seemingly **impermanent** or unconnected pieces. New connections are made and new **permanence** formed through the analysis of these pieces. The **permanence** of technology, whether it is the hardware or software, depends on the design. Manovich inspects the fact that both hardware and software become outdated yearly, if not more often. This leads to a certain media culture, workflow and design **process** that deserves to be analyzed further.

Erin Sterling Lewis

401 OBERLIN RD + 520 S. PERSON ST.

Erin Sterling Lewis is a Co-founder and Principal at *in situ* studio, an architecture firm in Downtown Raleigh. She is a native of Illinois and grew up in Mississippi. She earned a BArch from the University of Kentucky in 2002. Before founding *in situ* studio, Erin worked for nine years at Frank Harmon Architect PA, where she played an integral role in various projects, including the Merchants Millpond State Park Visitor Center, the Walnut Creek Wetland Center, Horseshoe Farm Park, the AIA NC Center for Architecture and Design, and the First Presbyterian Church Renovation.

Erin is involved in various community outreach and volunteer programs. From 2004 to 2006, Erin served on the Raleigh Historic Districts Commission. She has served on the Raleigh Planning Commission since 2009, and currently serves on the advisory board for the NCSU College of Design School of Architecture. Erin has been an invited juror for the City of Raleigh Sir Walter Raleigh Awards in 2007 and 2010, as well as the 2010 North Carolina Solar Center NC Sustainable Building Design Competition. In early 2010, she volunteered to teach a course on sustainable design at the NCSU Encore Center for Lifelong Enrichment. In 2010, Erin joined the AIA North Carolina (AIA NC) Board of Directors. On the Board, she serves as the Young Architects Forum (YAF) Director as well as Chair of the Programs Committee, which focuses on Program Development, Educational Outreach, and Design Exhibitions for AIA NC's Center for Architecture and Design.

Erin lives in a 1923 bungalow near downtown Raleigh with her family.

The College of Design wishes to thank the following donors for their generous support of *The Student Publication Campaign*. Without their commitment we would not be able to produce this important publication.

These gifts and pledges were inspired by a substantial challenge bequest from Fred and Bobbie Adams.

Special thanks as well to the Publication Campaign Committee led by Steve Schuster, FAIA, (1973) of Clearscapes and David Ramseur, AIA, (1968) of RPA Design. The committee met from 2000 to 2002 and included John Cort, AIA (1967), Ligon Flynn, FAIA, (1959), Don Lee, FAIA, (1961), Wes McClure, FAIA, (1969), and Lloyd Walter, FAIA, (1960).

If you would like to make a gift to *The Student Publication* Endowment please contact Carla Abramczyk, Assistant Dean for External Relations and Development at (919) 513-4310 or carla_abramczyk@ncsu.edu.

\$55,000

NC Architectural Foundation

\$10,000 - \$25,000

Joel Clancy
Clearscapes
Perkins & Will
Sherwood L. Webb and Roberta
Softy Webb

\$5,000 - \$9,999

Clancy & Theys Construction
Cort Architectural Group PA
C.T. Wilson Construction Company
Dixon Weinstein Architects
Ligon B. Flynn
McClure Hopkins Architects
Ramseur-Peterson Architects, PC
Walter Robbs Callahan
& Pierce, Architects
Lloyd G. Walter, Jr.

\$2,500-\$4,999

Flad & Associates
JDavis Architects PLLC
Henry W. Johnston
Little & Little
Hunt McKinnon
Marvin J. Malecha
Metrocon, Inc.
Skinner, Lamm & Highsmith, PA
Skanska USA Building Inc.



\$1,000-\$2,499

Abee Architect PA, Dallas Abee
 Randolph R. Croxton
 Reginald Cude
 DTW Architects & Planners Ltd.
 Harry Ellenzweig
 Roland Gammon
 Howard Garriss
 W. Easley and Suzanne L. Hamner
 Jeffrey Huberman

G. Daniel Knight, Jr.
 Ramsay GMK Associates, Inc.
 John Sawyer Architects
 Stec & Company Architects
 Rodney Swink
 Troxell Associates Architecture, Inc.
 William E. Valentine
 Walter Vick, the LSV Partnership
 Architects/Planners

\$100-\$999

Fred and Sherry Abernethy
 Boney PLLC
 Charles H. Boney, Sr.
 David Burney
 Sloan Burton, Jr.
 CBSA Architects, Inc.
 Cothran Harris Architecture
 Bertram Ellentuck
 Irwin E. Jones
 Don Kunze
 Elizabeth B. Lee

Bruno Leon, Architect
 Lucien Roughton Architects
 Michael Moorefield Architects, PC
 Murray Whisnant Architects
 Sherman Pardue
 J. J. Peterson, Jr.
 Prime Building
 Charles M. Sappenfield
 James Stevenson
 Charles H. Winecoff
 Winstead Wilkinson Architects PLLC

Editors

Mirtha Donastorg
Jedidiah Gant

Design

Chelsea Brown

Content Development and Marketing

Pauline Haddad
Elisa Huber
Miriam Naqui
Shelley Smith

Faculty Advisors

Tania Allen, Editorial and Course Advisor
Kermit Bailey, Design Advisor

Publication Committee Faculty Members

Marvin Malecha, Dean of the College of Design
Carla Abramczyk, Assistant Dean of External Relations
Susan Brandeis, Professor of Art + Design
Denise Gonzales Crisp, Professor of Graphic Design
Russell Flincham, Assistant Professor of Graphic, Industrial and Art + Design
Jennifer Landin, Teaching Assistant Professor of Biological Sciences
Fernando Magallanes, Professor of Landscape Architecture
Cecilia Mouat, Assistant Professor of Art + Design
Sara Queen, Assistant Professor of Architecture

Published by NC State University College of Design
Copyright © 2015
ISSN NO. 0078-1444
LC 04417343

This volume was printed and bound by Carter Printing.
250 copies were produced at a cost of \$5000.

Typefaces used in this publication are Avenir by Andrian Frutiger,
Sanchez Slab by Daniel Hernández, and Marydale by Brian Willson.

NC State University is dedicated to equality of opportunity. The University does not condone discrimination against students, employees, or applicants in any form. NC State commits itself to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, or disability. In addition, NC State welcomes all persons without regard to sexual orientation.