Datum (No. 1 Methods)

Datum

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For the past several years Iowa State’s Student Journal of Architecture has put out an annual publication with a collection of student-written essays and select student projects. CORE, as it was called then, sought to showcase exceptional student work and to provide a platform where students from all levels could have a critical voice within the discipline of architecture. Comprised of about ten motivated individuals each year, the issue has evolved from disposable student newsprints into the perfect-bound book dispersed today. Each year’s publication has improved upon the previous one, culminating in what many of us believe is the best issue to date – last year’s book chronicling architectural discourse.

Still, it felt to many of us involved that the steps we were taking and the books we were producing at CORE weren’t having the impact on our discipline that they should have. These books, although being distributed to donors, alumni, and faculty, were mostly going to a student population that disregarded the essays inside and ultimately left the book relatively untouched, allowing it to collect dust on their bookshelves. The student work showcased was only a small portion, usually representing the group of students involved in producing the actual publication.

CORE no longer meant what it once did, and so something needed to change.

The handful of us involved with last year’s issue met at the beginning of this year looking forward to the new publication. We advertised our meetings as usual, new members came, and we got down to business. Armed with a new outlook on things, we recognized the steady improvement in previous issues, but also identified the problems and faults in what we were doing, and eventually asked ourselves, “What exactly are we doing?”

The answer was simple – our aim is to be critical. That is what we’re being taught here. More than preparing us for practice, teaching us how to design, or even providing us with the technical skills we need to succeed in the professional world, this school is seeking to mold us into critical thinkers. Most of you who are reading this are, or at one time were, students enrolled in architecture school. You all know what it is like to be in our position – students filled to the brim with ideas, questions, criticisms, excitement, and optimism about what we are doing here and why we are doing it. These publications we are producing ought to capture that excitement and hopefully convey it to the readers.

But once again, we are students. And as students, there is only so much we can write, say, or do that will have the same effect that it would coming from a person in a position of power. Our intent is not to implement change or to start a revolution,
but rather to point out where – perhaps – change is needed. CORE, Student Journal of Architecture is a student-run, student-produced publication, and thus should emphasize or reinforce the fact that we are students.

We talk about many things at our weekly meetings. If you look at our most recent issues, you will see that topics have ranged from interdisciplinary concerns, to housing and dwelling, to the topic of discourse itself. One topic that always seems to come up over the course of the year – or at least it seems we discuss often – is the topic of beauty and aesthetics. Philosophically, it is an engaging subject and always provides for a lengthy conversation amongst the members of the group. The curious thing is why exactly it always seems to come up in discussion. I cannot say for sure, but I imagine some of it has to do with a stigma that prevents us from candidly speaking about beauty in other arenas like our studio courses. Whatever the case, our weekly meetings have become appropriate outlets for us to discuss these matters, to refer books and videos to one another, and often to provide suggestions to other members for how to handle certain situations.

One aspect of beauty, raised initially in a seminar elective some of us have taken on the topic of Goodness & Beauty, seems to be how it enters our realm of education. Philosopher Elaine Scarry, in her appeal On Beauty and Being Just writes, “Beauty is a starting place for education.” We can debate the merits of this comment or assess its validity (and trust me, we have at our meetings), but the point I want to raise is not actually about beauty. The point I would like to reiterate is that Scarry is offering to us a motive, or a starting place on which to base our education. That place could be anywhere, or rather could be anything, but it certainly ought to come from our institutions of higher learning. Architecture schools in this country have the opportunity to provide a diverse range of emphases on which to base their curricula. And, in fact many of them do offer unique situations and learning circumstances. But when you look across the country, how many schools are prescribing an educational course that is in some way firmly rooted in advocating sustainable principles and providing resources and skills linked with state-of-the-art technological developments? My guess is most of them. I’m not suggesting this is an incorrect approach or even that – given the current state of our environment and economy – it should be anything else, but I am suggesting that we all need to pay more attention to that starting place for our education.

At CORE understanding that starting place has become a priority because it is precisely where we are as students. And, with the refreshed outlook on the role we perform as a Student Journal of Architecture, we have decided to represent that starting place with a new title for our group and the journal: DATUM. In addition to being the singular form of the word data, it is also a fixed starting point of a scale or operation. The datum level is something we’re all familiar with as students and practitioners of architecture. It is also a place in time we can all recognize as the beginning years of architecture school. Those of us involved with the change see it as somewhat of a rebirth. It is a new outlook on our student journal, and hopefully a new standard we can measure ourselves against.

To some extent, we are all at the datum level. Where we go from here is entirely up to us.

Max Mahaffey
Editor, DATUM
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This issue is the result of acting on that indeterminacy.
INTRODUCTION

"IN EACH PROJECT WE BEGIN WITH INFORMATION AND DISORDER, CONFUSION OF PURPOSE, PROGRAM AMBIGUITY, AN INFINITY OF MATERIALS AND FORMS. ALL OF THESE ELEMENTS, LIKE OBFUSCATING SMOKE, SWIRL IN A NERVOUS ATMOSPHERE. ARCHITECTURE IS A RESULT OF ACTING ON THIS INDETERMINACY."

— STEVEN HOLL

The methods by which we create architecture are abstract and vast. Some designers sketch, some build a plethora of study models, some write, some read, etc... but everyone has their own mode of working. We often look at those who have come before us to see how they work. We study Steven Holl’s watercolors. We look at Le Corbusier and Frank Gehry’s sketches. We try to comprehend Zaha Hadid’s complex and imaginative paintings. But because of the rigor of our architecture studios, we seldom have the opportunity to look at our own processes with a critical eye. In this iteration of CORE Datum, we attempt to engage our work by understanding the methods we employ to create it. Along with essays directed towards our peers, faculty and administration, practicing architects, and other institutions, we have chosen specific student projects that exhibit unique ways of working in order to illuminate aspects of our design processes that often go unnoticed. Some methodologies are clear to us, but many also seem unclear, even after the fact. It is not always easy to determine how or why we design the way we do. This issue is the result of acting on that indeterminacy.

METHODS OF COMMUNICATION
CURRENT COMMUNICATIONS

Jake Groth
It is often said that as an architecture student you will learn more from your fellow students than from your professors. During my first year in the professional program I found this statement to hold true. Coming from the freshman core program, I had my own ideas of what I thought architecture at Iowa State was. Reality proved to be quite the opposite. Most of my first semester consisted of a scramble to understand what I was supposed to be doing. Since I was at a loss with my own misconceptions, I turned to those around me in the 2nd year. Located within the new King Pavilion, intercommunication between studios occurs regularly. During breaks late at night I find myself walking around the studio to see what everyone is working on. Those once aimless walks have become a habitual part of my design process. On these walks I see different points of view and creative uses of materials. All of the different techniques I saw inspired my own ideas. A student used plaster to create a volumetric model of Chicago and immediately I thought of the positive and negative qualities moldable materials have. The same student created a solid-void map, not unlike Giambattista Nolli’s, by pressing on the reverse side of the paper to make a form of city Braille. Immediately I thought of how Braille, on a larger scale, could translate into a building façade (my apologies to the blind). Another classmate used sugar cubes as an abstraction of modular forms, but when he sanded the cubes the sugar crystals themselves created an interesting organic texture. None of these ideas should be looked at with awe and reverence but rather the important thing is that these ideas originated from those around me. We should use our peers as a method to inspire and motivate each other. Our designs can build upon their ideas and processes. I am not suggesting we copy the work of our fellow students; rather, we should learn from their mistakes and expand upon what they started.

SOON AFTER DISCOVERING HOW MUCH I COULD LEARN FROM MY CLASSMATES, I SET OUT TO TAKE A LOOK AT THE ENTIRE ARCHITECTURE PROGRAM AT IOWA STATE.

I walked up the spiral staircase and journeyed over to the armory to see the works in progress. I asked questions, learned about new projects, and got excited about the program in general. I wanted to learn more about the program so I turned to the architecture website, where finding information proved to be more of a task then I expected. Online I found limited samples of student work. In the various publications like the architecture brochure or past issues of CORE, I found even less information. The best information I found was on the 2nd floor in student services where I found a few past graduates’ portfolios that depicted their work. After flipping through these individual student portfolios I was handed the annual portfolio of the UW-Milwaukee School of Architecture and Urban Planning. Within the massive book of 150 pages I saw projects
from every studio and every year. I closed the book with a full understanding of how the architecture program at UW-Milwaukee operates. The same is true for their website, which is well designed so finding a project description requires only a few simple clicks. This left me wondering, why doesn’t Iowa State have a portfolio or a website up to this standard?

The most likely answer is that no one has the time or money. On top of that some organization needs to step up and become the ‘architects’ of such a publication. Maybe the members of Datum are these people. We discussed this regularly at meetings, and ultimately decided that the publication would feature essays and samples of exceptional student work. Whichever the case, the major factor in the lack of communication in and around our program is the absence of an architecture compendium. As a result, communication within our department is at a standstill. It feels like there is no enthusiasm for the work we are doing. Across the board most faculty members have no idea what other studios or teachers are working on. Sure, some small talk may occur in the elevator, but the only formal cue to what is going on between studios happens through events on display in Gallery 183, program days, and more recently at the lecture series.

The most peculiar way we learned about other studios this year was through “What’s in the box?,” an overhyped event that could only hold disappointment for the masses. In spite of this, when the box was finally opened the entire college was there to watch. Although nothing was physically inside, the box did contain something. Inside was an idea that brought students in the college together, and got them talking about their latest projects. The box started simple, eventually growing into a topic of daily conversation, an unexpected result. This is what our program has the potential to achieve, communicating to others so they may talk about Iowa State with excitement and appreciation. People need to know what is going on underneath this glass roof, but this level of communication comes with challenges.

Unlike the ease of communication described in the first few paragraphs, communicating our ideals at the program level proves to be full of controversy and differing opinions. What exactly are we, as a program, trying to accomplish? Where are we headed? How do we ultimately want our program viewed as and understood to be? I asked professors their opinions on the matter, and received mixed responses. In the end, they came to the conclusion that Iowa State produces well-rounded students through studios and required courses, yet offers opportunities to students to become more specialized in areas such as digital media, architectural theory, environmental studies, etc. For people on the outside looking in it is hard to understand what the program is officially about at this specific moment in time. The faculty changes and so do the requirements, but most of the change occurs within classroom to keep the environment active and current. It is for this reason that we must keep people informed. As architecture itself changes, so should we. Keeping our distributed media up to date needs to become a priority.

Currently, communication to other entities outside the college is in shambles, and desperately needs updating. The ISU architecture informational pamphlet tells prospective students about projects that have been discontinued. In Arch 202, for example, we no longer make motion machines as described, but instead we can be found working on a project focused on representation at different scales. The new project was implemented because the motion machine only taught a small amount

**AS ARCHITECTURE ITSELF CHANGES, SO SHOULD WE.**
in the allotted timeframe in comparison to the current scale project. After reading the pamphlet, incoming students will turn to the architecture website. Its arrangement of tabs and menus make it extremely hard to find useable information or samples of student work. The only thing current is a photo of Gregory Palermo’s bowtie. Architecture may be nearly impossible to describe via a pamphlet or website, but the fact remains that both of these publications are what we have handed out to represent our image. Is this what we want to say? Fortunately the new website is under construction and hopefully will be implemented soon. The reason for the slow update was in the attempt to find a professor, already overloaded with classes, to create the website in their precious free time.

Critics may say that updating and having publications such as these is not important to those in the program, or even important at all. I somewhat agree, but information communicated currently may be the key to unlocking our potential. This is why I stress the importance of exchanging thoughts, opinions, or ideas in the workplace and in the studio environment. Earlier I described how intercommunication between studios led to a better understanding of projects and later went on to form new ideas and new inspirations. The same is true for our future employers. The goal is that someday employers can pick up a publication about the architecture department and clearly understand what we are trying to accomplish. From there, an appreciation toward the students of Iowa State will be formed. All of this will lead to a higher overall reputation for the program and better job placements for graduates. If this is the case then why do we — as students — not take the initiative to capitalize on this phenomenon? Is it because we have so much work on our plates, or is it because we feel intimidated to cross the inter-class barrier? I think it is that over time we become so locked into our own environment and routine that we forget to consider the influence of external sources. The 2nd and 3rd years are lucky and are somewhat encouraged to break routine because of the close proximity of studios within the King Pavilion and Armory. As a result, collaboration between studios occurs easily. Why limit this to the 75 people of your own class, rather than talking to the 325 other architecture students that are in studio every MWF from 1:10 to 5:20?

In order to realize the outcomes stated above; we, as students of Iowa State, need to take the initiative to share and communicate the work within our program to each other. It is an internal process that ultimately shapes the outsider’s perception of us. It can start as easily as taking a break from studio and wandering to another studio to talk to a friend.

OR, IT CAN BE MORE RADICAL, LIKE TALKING TO THE FACULTY OR BY JOINING STUDENT ORGANIZATIONS.

It can happen when you bump into someone in the print lab or in the atrium.

Another idea that the college could implement could be to designate one hour each week to walking between studios to foster skills in communication. If we can learn to communicate our ideas with ease, then students and everyone else (faculty, the College of Design, the architecture community, and employers) will be on the same page. In my current state within the program, I am only at the beginning of grasping what we are about. I can only hope that in my next three years I will fully understand.

In the past few years our program has begun to lose its reputation. People do not know of the wonderful things we are creating here. If Iowa State wants to build a better program than it already has, they must share our current successes with the larger architecture community. We will gain morale, and a sense of community pride through our publications. If we focus internally and build upon ourselves it will inevitably lead to better communication with the outside. They are ready to listen; we just need to start talking. ♦
BOAT HOUSE

JAKE GROTH
THIS BOATHOUSE IS A STORAGE/WORKOUT FACILITY FOR THE DES MOINES ROWING CLUB AND DRAKE. IT IS MEANT TO REPLACE THE CURRENT BOATHOUSE AND IMPROVE ITS STORAGE CAPACITY, WITHOUT ADDING ANY GROUND FLOOR SQUARE FOOTAGE.

Located on the floodplain of Birdland Park in Des Moines, this facility acts as a reinterpretation of the rower’s movement on the water. It is continuous and spiritual. If rowers follow the datum of the building while cueing their boats they will surely follow its direction to success on the water.
BOSTON NEW MEDIA LIBRARY //

RYAN FISHER, WILL REIHMANN, AND KEVIN WAGNER
THE BOSTON NEW MEDIA LIBRARY MIXES NEW MEDIA ELEMENTS WITH THOSE OF A TRADITIONAL LIBRARY.

These new media spaces are strategically dispersed throughout the building in order to create discovered moments for visitors as they move about the library. An exterior rain screen that wraps the entire collection regulates light according to the function of the different spaces behind it, effectively opening them up or closing them off from the outside. The library’s overall form is meant to draw pedestrians off of the street and funnel them upwards, from lively street level public entertainment facilities, through intimate stacks and collection areas, and into reflective gallery and lounge spaces.
TWO HARMLESS WORDS THAT CREATE SUCH AN INTENSE RELATIONSHIP THAT THEY CONSUME AND DEFINE THE LIVES OF DESIGN STUDENTS.

Studio quickly becomes the place where you not only spend a majority (or all) of your time, but also a place where you can freely experiment, express, and define yourself as a designer. Honesty is an integral part of that process, in both the work and the criticism of that work. Are we being honest in the creation of design and are we honestly, without qualm, telling peers what is on our minds? We owe it to ourselves to ask that question and to ask why a filter of insincerity has arisen. Are we really utilizing studio in the way it was intended? Are we expecting too little from our peers and professors; are we, ourselves, giving too little? Our fears of rejection are keeping us from developing honest dialogues in studio. Honesty, it seems, has taken a backseat in studio and it is time we not only address it, but also change it.
The idea of honest conversation is a difficult concept to translate into the realities of a studio setting. Giving an honest opinion is not an inherent skill. It is one that takes time to develop and requires delicacy to deliver. Our instructors should be our example for how it is done and to set the tone of the studio.

**If we fail to establish an honest environment, then studio becomes an artificial situation that benefits no one.**

The onus is on students to be honest with each other, and not let our camaraderie and fear of offending our peers get in the way. We should never have to say: “Don’t take this personally...” and then not say what is really on our minds. Why, when asked for our opinion, do we say one thing only to turn to another friend and say something contradictory? Have we become a generation of design students where being artificial is more widely accepted than being truthful? It gives no advantage to the students, department, or college for peers and reviewers to sugar coat a review and leave honesty behind. So, instead of getting helpful reviews, we get amicable reviews where the critics pacify the students and avoid speaking their minds. An amicable review is the worst kind of review I can get. I want professors and peers to tell me what they truly think, to say exactly where they think I went wrong and what I could have done to make my project brilliant. When would we ever want someone to lie about our design when they could add to it and make it better? We are cheating ourselves and forfeiting our design concepts for something more standard by not being honest. Why don’t we have informal pin-ups at two o’clock in the morning when we can be completely honest with each other? Why do we only become honest after a review when it is too late? We have to change the mind set that enables us to cater to someone else’s feelings in lieu of helping to better their projects.

Thomas Dutton, a professor from Miami University in Oxford, Ohio, once said: “Giving criticism is perhaps central to what architectural professors do, but it cannot be a practice monopolized by them.” We need to take that to heart and start offering our honest opinions. Our reputations are built not only on our individual successes, but also on the reputation of the entire program.

Our job as students is to take the initiative, get off our asses, and produce some critical and honest work. It is time we stopped letting our fears and insecurities dictate our education. It is time we saved ourselves.

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The Boston New Media Library is a comprehensive project designed to serve the Haymarket district. Although the program aims to be a "New Media library", the term "New Media" is indeterminate, so the library was designed with a flexible zone to incorporate both the nature of new media and the designated square footage required for the print collection. The program called for many functions aimed at attracting the general public of Boston, including an auditorium, cafe, gallery, reading spaces, study rooms, digital lounges, and outdoor gathering spaces.
BOSTON NEW MEDIA LIBRARY //

MATTHEW SENER, ZAC ROSENOW, AND KIRSTEN KRUSE
The focus of the design is to identify new media as the primary resource of organized knowledge, and display the disjunct relationship between print media and advancing technology.

This relationship was discovered through the theme chance. Chance surfaced through process of design and numerous iterations. Chance has provided us an opportunity to take a stance on the relationship between print and new media. Tension between the two programmatic elements is rooted in the inability to coexist with minimal impact on one another. As new media continues to gain strength through popularity and efficiency, the duplication of knowledge has forced printed media to become a secondary source. Print media, however, has a timeless quality associated with it that digital media has not yet captured. The characteristics of physical interaction between a human and a book possess an intimacy that cannot be recreated in new media. The project acknowledges the admirable qualities of each media type and displays the disjunction between the two. The print collection is intentionally limited to topics regarding art and design including: music, dance, poetry, theater, photography, and architecture; directly corresponding to the primary programmatic spaces of the library. In addition, the design will introduce an unprecedented library environment to the residents of Boston through the availability of a wide range of resources featuring a new media collection that engages the user, introduces cutting edge technologies, and utilizes new media as an educational tool.
ARCHITECTURE IS WHATEVER ARCHITECTS SAY IT IS.

AS ARCHITECTS, WE HAVE ACTIVELY (THOUGH NOT ALWAYS KNOWINGLY) SET THE TONE OF OUR PROFESSION.

When people talk about architecture, they must deal with the image that we have presented. That image, for the most part, is a serious one. An architect has to be licensed. We work with serious people. It's pretty demanding stuff. In my essay, I want to ask the question: what if we told people it was something else? What if, even though we do a lot of serious work, we presented an image that wasn’t so serious? What if we sold ourselves as competitors, anthropologists, entertainers, neighbors, characters or social servants? We are all of these things to some extent, so why not bill ourselves as such?

My essay, then, is not a traditional narrative, but a series of speculative "scenarios" that describe different ways that architecture could be approached and presented. Hopefully these scenarios will open up new ideas about how we think and talk about architecture in, perhaps, a less-than-serious manner.

SCENARIO 1: THE ARCHITECTURE CHANNEL

All architecture, all day. TV crews move into architecture firms and capture the process of design for viewing by the masses. Design decisions are recapped in play-by-play.

"Here's the latest on TP&P's ongoing design of a factory for Trotters, the company producing lace-up shoes for horses in Effingham, Illinois. Young intern McNamara arrived at the drawing boards at 9:30 this morning with a delivery from Starbucks as designers Harris and Yin were doing site layout for the project. Harris had zoned the northern end of the lot for parking, when McNamara reminded him that principal Jouleis' had intended to use that part of the site for stables. Harris dropped his head in exhaustion and frustration, but Yin interjected! She suggested they keep the parking and stables adjacent, to contrast to passersby the way transportation has changed since the invention of the automobile. McNamara picked up the pen and sketched out a layout, based on a fifteenth-century Italian monastery design. Harris' face brightened as he picked up his 20 oz dark roast. The three began to discuss materials.

The Midwestern firm WHUTT Design out of Des Moines has selected a bidder for the Boingo Super-Dense Bouncing Balls complex in San Francisco. The winning bidder is Jack n' Trade partners out of Los Angeles; a risky move as Jack n' Trade is just coming off of a lawsuit involving their work on Gehry's latest, the 70-ft tall 'House for a Dwarf' in Tallahassee. More details as they arise..."
SCENARIO 2:
DINNER WITH AN ARCHITECT

Architects present church dinner style, renting out a dining hall from the local veterans club and presenting their project over dinner catered by the local grocery store, free to anyone who shows up. Drawings are laid out on a table between deserts and coffee. A truck driver flips through blueprints as he swallows a mouthful of ham, mashed potatoes and corn all served in one spoonful. Mothers wipe butter from the children’s fingers before they run up to ogle the renderings. Whipped cream falls on the model. When the team is relatively certain that no one else is going to get up for seconds, they begin.

“Good evening, folks. We are the design team from FAD Studios, and this is our proposal for an addition to Emmitt Smith High School. Our process started by researching the history of this particular neighborhood of Dallas—" at this point a baby interrupts by crying noisily. The mother carries her out respectfully. “I hope not everyone feels that way about our proposal!” The crowd laughs. “In all seriousness though, we want to remain true to the spirit of the existing building while also expressing a belief in the possibilities of the future,” and the presentation continues. Everyone interested in the building or the food gets a chance to hear about the project. Some people like it, some don’t. It remains a topic of debate in the community until an up and coming firm, Slow Design of Dubuque, Iowa, proposes the new city hall.

SCENARIO 3:
THE ARCHITECTURE FAIR

Step right up, one and all, to see the Amazing Tasteful Terry solve a design problem in less than one hundred seconds! That’s right! He’s done it all, kids! Want a sculpture to mourn the overhunting of whales to be dropped into the middle of the ocean? He’ll do it!

ALL HE NEEDS IS HIS SKETCH BOOK, HIS SHARPIE, A ROLL OF TAPE AND A SHEET OF FOAM-CORE.

Then he’s ready to solve any creative conundrum you can throw at him! C’mon kids, don’t be shy!

Tasteful Terry is just one of the attractions at the world famous, Wright’s Travelling Architecture Fair! Imagine the delight in your child’s eyes when they see 6 full-size semi trailers roll into town one summer morning. As they unload their wares, rides and games appear in what used to be the parking lot for the baseball field. An inflatable Guggenheim appears where kids under twelve can slide down past inflated renaissance paintings into a ball pit. Test your strength to see if you can straighten out the Leaning Tower of Pisa. For the adults, enjoy a 7&7 at a replica of the Seagram building, and possibly romp around a bit in the fountains out front. The favorite game for Toledo, Ohio may be “Ring Toss onto the Chrysler Building, but folks in Wichita can’t get enough of “Find the Schinkel.”
SCENARIO 4: ARCHITECTURE, THE VIDEO GAME

Create your own architect in this new, best-selling game available on all platforms! Personalize wardrobe with a countless selection of shirts, pants, accessories and one pair of glasses! You start the game as a graduating high school senior, and go through four mini-games to test your design mettle and see which academy will accept you. Each school proposes a different curriculum, see if you can beat them all! Outcompete your peers as you enter the internship round, hitting the books as you try to pass your licensing exams.

Once you’re a licensed architect, you can start your own firm and enter design competitions to try to unlock new modeling software, clients, and a second pair of glasses! Then, create new characters, guide them through school and recruit them into your firm! Pretty soon you’ll have the most lucrative firm in town. Link up with other architects to compete for bragging rights, and practice your fundamentals in mini-games like: The Great Eraser, X-acto Knife, Studio Crit and Don’t Call it a Mall!

SCENARIO 5: COLLECTIBLE ARCHITECTURE CARDS

Hey kids, be the first to collect the whole International Style! Architects move to hook ‘em while they’re young with a new line of collectible cards representing buildings, architects, sites and styles. If that’s not enough, they throw in a stick of stale gum. Cards indicate a designer’s place of origin, duration of career, schools attended, notable buildings, and competitions won! Imagine the drama and intrigue created as children compete and trade to have the best collection:

“Melissa has Corbu’s entire catalog, including the unbuiltis, except for Unite d’Habitation! Reggie has a copy of Unite d’Habitation, but he’ll only trade it for Melissa’s extra Corbu card, but Melissa won’t trade because she wants one to carry around and one to keep in mint condition. I’m gonna try and trade Reggie my Aalto rookie card for his Unite d’Habitation so I can get Bernini’s Baldacchino from Melissa. I think she’ll give it to me because she doesn’t think classical architecture is worth anything, but I’ll show her when I get the entire Renaissance! No one knows this yet, but last week I traded Walter Gropius to my cousin for Bruneschelli, I can’t believe what a dope he is! No one else has even seen a Bruneschelli card, and mine’s in almost perfect condition!” Many years later, when Melissa’s grandkids visit her in her apartment building floating over Niagara Falls, they’ll ask to look through her card collection again. She’ll bring the book down from the shelf and tell them the story behind each card as they take it from its plastic sleeves and pass it around. All of them except the mint condition Corbu, of course.
POWERS OF TEN // SEAN TAYLOR-DAVIES

Using an 8” x 8” module, students were asked to document a particular site at several different scales - or zooms - starting with a bird’s eye view and ending inside of a single residential unit. Materials, cropping, and data were left to the students’ discretion to encourage different means of representation and to provoke new conceptual positions on how to engage the site.
As a continuation of the zoom studies, students were asked to create a wall, a chair, and a window using only a single piece of 8” x 8” material. Once complete, a volumetric wall-chair-window assembly was created that fit within an 8” x 8” x 8” invisible cube.
It also allowed for students to work amongst one another, a rare occasion in the years following. Those with a variety of skills and interests can interact daily and even collaborate on projects, including the doorway. At that stage, I felt I was more a first-year design student than an architecture student. There was a sort of camaraderie when passing another on campus with portfolio and art box in hand. The long hours allowed me to get to know my classmates better and more quickly than other majors. Yet what the Core Program also did was create competition between pre-archs, as well as an animosity between the groups of pre-majors (pre-arch vs. pre-graphic vs. pre-LA, etc). Every time I walked around studio, I was not only admiring classmates' work, but also sizing up my potential competition. I was relieved after seeing good work and hearing that they weren't applying for architecture in the spring. Ideas and concepts were kept secret until one was sure that they wouldn't be taken and executed in a better fashion. When in Core one felt they had to be the most original, the smartest, and the best.
In the Core Program, there was also an unspoken idea - at least among the pre-archs - that Architecture was THE program to apply for and the most difficult to get into. It has consistently been chosen most often as a first choice for potential applicants since Core began in the 2004-05 academic year. I lived in the Design Learning Community, and a majority of my floor mates started out as pre-architecture majors, but the numbers began to dwindle before the first semester had ended. Within the first few weeks, I realized how vast the pre-architecture population really was. Architecture became a goal, an accomplishment, as opposed to an actual major or future career. I can truthfully say that in my first year, I made little to no effort to find out what architecture was, who contemporary architects were, or how the design principles I was learning at the time could be applied to architecture. My view of architecture was about as basic as it came.

In second year, I started out with essentially a blank slate: we had some of the basic tools (drawing/rendering/collage/prototyping skills, basic design principles), but very little knowledge of architecture as a profession or way of thinking. The feeling of competition was still strong in my mind as the semester began, but slowly went away as I started to get to know those in my studio. When it came time to design my own buildings, I was stuck in shape-making mode. SketchUp models became abundant, and I had hoped a concept would magically arise from one.

It was around this time that I attended a meeting for the student journal of architecture, called CORE at the time, now called Datum. That particular meeting happened to be one that covered a wide range of topics: the quality of our instructors, the Iowa State architecture program as a whole, and the accreditation process, among others. This discussion, which took place in early November, shook the notion I had that architecture -- both the program and the profession -- were the greatest things out there. Is architecture becoming obsolete? Should students have to confront more obstacles than the Core Program?

This discussion, along with future ones, completely questioned my faith in the architecture program. I began to speak up more in class, tried to learn more about architecture outside of class, and challenged myself to produce better work. My initial mentality in the architecture program was a superficial one, not uncommon among beginning students: shape-making. The idea of shape-making may very well come from the popularity of "starchitects" such as Gehry and Hadid. It is a mentality that was shattered by discussions as a studio class, but more importantly from weekly Datum meetings. Simply having the opportunity to talk with older students (an unfortunate rarity in my experience), as well as the occasional professor outside of the classroom has been invaluable. The new perspectives and wisdom of others has continually energized me and seeing students that are still passionate as upper-classmen is reassuring. One of the most important lessons I’ve taken away from Datum is to take an active part in your education, otherwise the long hours and obstacles will catch up to you. I’ve learned to avoid just scraping by in studio and other classes. I’ve avoided doing yet not understanding so that I won’t end up drafting toilet fixtures for the rest of my days.
As a public gathering space, the building and its functions strive to instill pride and create a stronger sense of community.
The Community Arts Collaborative facilitates positive change in the Old North St. Louis Community. As a public gathering space, the building and its functions strive to instill pride and create a stronger sense of community. This project is environmentally conscious by re-urbanizing the neighborhood while restoring its historic residential textures.

The site strategy involves: building along the street edge to restore density, controlled access from all sides, a visual transparency that opens the interior to the community, and maintaining a rhythm and scale appropriate for the neighborhood.

The Community Arts Collaborative is divided into three primary wings. The exhibition space and the Urban Studio Café are located to the north, on the most active street front. To maintain the neighborhood’s historical character, the façade of the existing building has been incorporated. The studios along the east edge and their adjacent support spaces create a rhythm of heavy and light, incorporating itself into the neighborhood fabric. The southern wing contains retail space as well as live/work units for the artists/instructors. A courtyard provides a transition space between the three wings.
A 4096 cubic foot space, this dwelling is designed for 1-2 persons, located against the street wall in a current void on Main Street, Ames, Iowa.

It offers, at a minimum: sleeping, food preparation, eating; a stove, a refrigerator, a sink, a shower or bathtub, a toilet; storage. Light and air must arrive from the street wall and the rear wall, not from above or below. The front edge of the unit maintains continuity with the street wall as it is designed to respond to the neighboring two facades.
I WROTE THIS PIECE THE DAY BEFORE THE DEADLINE. I KNEW ABOUT IT FOR MONTHS. I KNEW MY TOPIC, I READ BOOKS, WROTE NOTES, USED A GREEN HIGHLIGHTER. I DISCUSSED IT AND THOUGHT ABOUT IT TO GREAT LENGTH.
I wrote this piece the day before the deadline. I knew about it for months. I knew my topic, I read books, wrote notes, used a green highlighter. I discussed it and thought about it to great length. For weeks and weeks, I continued to put off the act of writing it for other activities, some more important than others. “Crunch time” approached and I drafted a schedule for myself. Unsurprisingly, it was not adhered to, pushed aside so that I could stand in my backyard and have a drink while playing with fire on a beautiful spring evening. Yet, it loomed in the back of my mind, poking and prodding, much as I stoked the flames, waiting to be released.

I would like to refer to a passage from Robert Grudin’s *The Grace of Great Things* where he eloquently describes a bout of writer’s block in an attempt to explain how I feel when I write.

“Yesterday I sat at my desk and could not write. I fidgeted, typed a few aimless words onto the computer screen, and stared at them until they began to shimmer. My back ached. I glanced at the clock and noticed that two hours had passed, as though in two minutes, except I suddenly felt old and very tired. I walked out of the office and looked for someone to chat with.

“When I got back, things were no better. The office looked stricken and skewed, like architecture photographed at the moment of collapse...To top it off, I noticed for the first time that every horizontal surface in the office—computer, clock, fan, radio, typewriter, telephone—was encrusted with blackening grime, and that this grime was defacing my office as obscenely as my own inactivity was defacing my brain. I got up again, found a bottle of Windex, and worked like a demon, rubbing away at a pint of dissolving filth.

“When I was through cleaning, I sat down and at once started writing freely.”1

I have never been a confident writer. Perhaps it is because I hold the skills and opinions of others in too high esteem as to undermine my own abilities. In my years as a college student, writing has become increasingly difficult and frustrating, I think, due to the fact that now, when left to my own devices, I feel the desire to write about things that are personal and hold a great deal of importance to me. Exposing these emotional and/or personal fragments about my work, my methods, and my interests to a critical audience, can be both intimidating and debilitating. For a while, I believed that I hated writing.

Not until recently—within the last year and a half—have I come to realize how integral writing is to my work. Looking back on a few of my sketchbooks, new and old, I noticed that they are almost half writing, half drawing. Upon reading the passage in Robert Grudin’s book, I began to view the importance of writing in my life much differently. The design process is full of figurative “road blocks” much like the one Grudin was faced with. These unbearable situations in which we are forcing ourselves to think creatively at times when we are strained and distracted are all too common. In much the same way that Grudin cleans—therapeutically—I have tried to use writing to overcome obstacles in designing during my projects, whether that is through writing an essay or just notes in a sketchbook.

Writing allows us to reflect. It is at those “road blocks” or points of chaos that we need to be critical of ourselves and ask “Why am I doing this?” Through the act of writing, we can free the thoughts that slow us down, figure out the things we do not understand, and solidify the reasoning behind what we are doing. For, if we cannot explain our work clearly and passionately, we cannot expect our audience to take it seriously.

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The writing set the stage for what was one of the most incredible places I have ever been.
Through writing I began to learn more about myself and how I work. I do not think it was until my fourth year of school when I began to understand my true beliefs about architecture. Attempting to write about my work showed me that my beliefs concerning design are increasingly moral, ethical, and experiential and much less about what is “cool” or trendy. Perhaps this is just a result of my own maturation as a designer but it was something revealed to me through the act of writing. Over time I have amassed pages upon pages of notes, ideas, fragments, and short essays in an attempt to articulate my design concepts and thoughts. In much the same way one cleans their desk to keep a sense of order, I write to keep myself in order, to clear my head of the ‘fluff’. A change occurs in the transcription of thoughts and ideas to a physical medium, and usually relates directly to a particular thought or idea but at once has a more concrete and moving effect. It is pen on paper.

Aside from dealing with my insecurities, reading how others write has been the most crucial part of the improvement in my writing. To be a good writer, one must be a good reader. The design culture relies heavily on all of its participants being aware of what each other is doing and thinking. In some way, everyone serves as and searches for sources of influence and inspiration. Over the past year, I have read various writings by Peter Zumthor, Juhani Pallasmaa, Lewis Hyde, Michael Benedikt, Robert Grudin, etc... all of which have inspired me to better my own writing. These pieces have encouraged me to reflect and ask myself, “What am I doing? Why am I doing this? What do I believe in?” These kinds of dilemmas are addressed through writing in many of their works, things we cannot necessarily see or understand in their architecture (particularly in the case of Zumthor).

I made it a point to read Zumthor’s Atmospheres before I went to visit the Therme Vals in Switzerland — an architectural pilgrimage, if you will. The writing set the stage for what was one of the most incredible places I have ever been. The building itself was beautiful but it was the people, the light, sounds, smells; the myriad of both tangible and intangible elements that made it incredible architecture. This is evident in the stones of the building. Both conceptually and physically, the structure is held in place by the stones quarried from the same mountain on which it sits. As bread goes with butter, Zumthor’s writing forms a symbiotic relationship with his architecture.

"AS WE WRITE, SO WE BUILD: TO KEEP A RECORD OF WHAT MATTERS TO US."
— ALAIN DE BOTTON⁴

This is the essence of writing. It brings order, allows us to reflect, and enlightens us. I continually try to view writing not as a hurdle but as a parallel development to my design projects, serving to make them more than they are visually by revealing the things I care about; the things that make architecture so extraordinary. ❧

THROUGH THESE HAPTIC EXPERIENCES, OUR INVISIBLE RELATIONSHIPS, OUR TICKS, OUR HABITS, AND OUR FAULTS, CAN BE ILLUMINATED TO US.
With the rise of technology and mass production, our world has become an increasingly visual place. We are slaves to our sense of sight. Though these objects cannot completely free us from that sight, they can begin to illuminate another of our senses, our sense of touch. If we instead view vision as a precursor, urging us to touch, each object serves to skew our perception of common object, surfaces, and materials. Each one creates a uniquely haptic experience. Through our interactions with these objects, we can focus more on texture, weight, temperature, imperfection, desire, comfort, and companionship.

Each object calls into question the common idea of functionality or utility. While they may be considered useless, each indeed has a unique function.

In a sense, an invisible relationship is formed with each object. The stone comforts, the wood floor cast reminds us of home and gives us something to do while we wait, and the handforms leave us wanting more.

Through these haptic experiences, our invisible relationships, our ticks, our habits, and our faults, can be illuminated to us.

1. Handforms
   Concrete cast in heat-molded acrylic

2. Cups
   Concrete cast in paper coffee cup

3. Egg Carton
   Concrete cast in recycled paper egg carton

4. Stones
   Black basalt from Washington, Plaster, Walnut

5. Jean Pockets
   Denim lined with rabbit fur

6. Wood Floor Cast
   Concrete cast on aluminum foil over an uneven wood floor section

7. Apple Tray
   Concrete cast on vacuum-molded styrene
For the sake of clarity, we will focus on the educational aspect first. At Iowa State, you are not taught how to sketch. I remember as a young child being taught how to draw letters in what was deemed a proper fashion, and then spending the next 10 years taking notes and destroying those clean forms in the name of speed and efficiency. True, we take a general drawing class as freshman, however, this concentrates on general representational drawing and techniques, not creative sketching. This portion is glossed over as a component of our education. I am realizing now, the most instruction I ever received in sketching was from a book I grabbed on a whim - *101 Things I Learned in Architecture School*. In 2 pages, it talked about line quality, overlap of corners, and clarity. This info, while useful and simple, refers to the aesthetic quality of sketches, which is like talking about the quality of craftsmanship on a massing model. On a 20-minute brainwave, there are those of us who utilize rulers, exact-o knives, and superglue, and others who will crumple some paper and foil together to figure out the same amount. This is not to forget those reviewers who will comment and judge...
IF I HAVE LEARNED ANYTHING IN THE LAST FOUR YEARS, IT IS THAT ATTAINING THE DESIRED EFFECT CAN BE ACHIEVED IN NUMEROUS DIFFERENT WAYS, AND THE DIFFICULTY LIES IN CHOOSING ONE METHOD TO DO IT.

on the craftsmanship of process, engaging another argument about whether process should be shown during a presentation, how much, in what form, etc. I will ignore that issue in favor of simply asking whether sketching should be taught more with an aesthetic focus or as a freeform tool; one that may take whatever style, form, or medium the artist is comfortable with. This would seem to be the easiest way of encouraging self-expression while still getting the most out of our sketches.

Paul Klee described a sketch as “An active line on a walk, moving freely, without goal. A walk for a walk’s sake.” This methodology rings mostly true for me. Despite whatever rational constraints and logic tourniquets I apply to a design concept, it is still inherently a creation of intuition and feeling. Ignoring the philosophic challenges this might raise, we shall press on to evaluate our options.

Our first option appears to fall in line with the way other types of architectural drawing are taught. Or not taught, for that matter. Our required curriculum lacks anything resembling an architectural drawing class, choosing instead to focus on teaching software. This is obviously important in our line of work, but I feel there is something lost by not receiving any instruction in architectural representation with respect to hand-drawing. Nevertheless, sketching seems logically to be too intuitive for a typical drawing class, and would appear to require a more challenge/critique based method of instruction.

Our second option is to teach a method of no method, or at least not a predetermined one. For instance, I have been using colored ink pens a great deal this semester. Why? Pens require more attention than pencils, read boldly, and I like color. If I have learned anything in the last 4 years, it is that attaining the desired effect can be achieved in numerous different ways, and the difficulty lies in choosing one method to do it. I was never told to use pens, or pencils, or markers. Instead, I received only an encouragement to “try something new, see how it fits.” One would agree that stepping outside of one’s box can always be of value, so this seems the better choice.

SO WE SEE THAT SKETCHING SHOULDN’T BE SUBJECT TO A PRESCRIBED TEACHING METHOD, AND THAT ITS USE SHOULD ALWAYS BE ENCOURAGED AND ASSISTED.

Should its method or benefits stagnate, than we should be nudged in new directions. Now we move on to the development of process sketching, or sketching as process.

It seems that sketching is always what I return to when I hit a wall, need to sort out an idea, or remember a place. It’s become a standard from my earliest memories of studio to always have a sketchbook at hand, throw something down and enter the moldable environment that is the sketch page. It becomes

1Paul Klee, Pedagogical Sketchbook, June 1968
a concrete record of your advancement through a project or place. Not asking early students to integrate sketching into their work robs them of a great method to advance their design ideas and concepts.

It seems almost cliché to make a point about the advantages of carrying a sketchbook; just read the brochure tucked inside every new Moleskine. Nevertheless, a sketchbook is truly a tactile personal record that cannot be matched by anything else, so long as you always have it with you. For the photojournalist, “f/8 and be there” is the mantra. For a design student, “have sketchbook, will go.”

I hold the opinion that Sketching is not something that should be taught in the same manner as tributary area calculations and duct sizing, but neither should it be ignored with the understanding that students will simply figure it out for themselves.

I have picked up pieces of advice from my studios to date, and from drawing class in Rome this year, but one should not have to wait for 5 years before finally being comfortable enough to trust their own hand. Our professors and fellow students can give a lot of help with a little advice, or provide a challenge to step out of the comfort zone. Our travel journals, trace paper remnants, and final drawings will all be the better because of it.
TRIFORT //
A TOY PROTOTYPE
ALEX HALE

Repeated triangular modules provide the user direct interaction with physical forces, gaining insight into a world governed by geometry. Through the creative process of assembly, space and light are intimately explored. What results is a sanctuary, a brief separation from an overexposed life.
INSTALLATION // ADAM AALGAARD

Created from artifacts used in the domestic practice of listening to music, this compositionally-driven installation seeks an understanding in the use of music listening devices and how they influence and are influenced by the spaces in which they are used.

A PIECE EXPLORING THE SPATIAL IMPLICATIONS OF LISTENING TO MUSIC.
ADAMAALGAAR // ACOUSTIC ROOM

A 1-TO-1 SCALE ROOM BUILT TO TEST ROOM SHAPE, WALL CONFIGURATION AND SPEAKER PLACEMENT ON THE WAY IN WHICH WE PERCEIVE MUSIC.

This project is an extension of the domestic activity installation piece (left) in which I explored the spatial implications of music listening.
I am exploring the domestic practice of reading to create a special experience through touch and light. I am most interested in the tactile qualities of making of marks.

**BE IT A COFFEE STAIN OR A FOLD IN A PAGE, THESE MARKS LEAVE A TRACE; THEY CREATE A HISTORY. IT IS THIS HISTORY THAT GIVES A QUALITY TO EXPERIENCING A SPACE.**
DESIGNERS, AS WELL AS THEIR DESIGNS, ARE DEFINED BY METHODS. METHODS: THE PLANNED OR DISCOVERED PROCEDURES, TECHNIQUES, OR LOGIC WE USE.

Nonetheless, methods are also an expression of the personal perspective of the designer; they give form to our intentions so that we may communicate directly with the end user. This also defines methods also as language.

Throughout history, different ideological methods (the classical orders, the Renaissance, and the Modernist manifesto, which are only a few) have prescribed a way in which we should contribute to the world, trying to answer what is right and what is beautiful. As the social situation changes, however, so do these answers. Our methods, therefore, ultimately describe the way we choose to understand, make, and exist within our own time.

To create contributing individuals, an education in design should involve an exposure to and practice of, methods and communication. A material and explorative process, especially important in the beginning, helps to develop a wide range of
skills and viewpoints, creating a base understanding from which we can make our own way. This process, however, also needs to include an understanding of failure that would allow us to be uninhibited as we explore different methods of expressing ourselves. Currently, the effort required by the often frustrating and continuous work of trial and error, is being displaced by us students; we want to be easily understood and accepted as we attempt to reveal our ideas. This exclusion and want are entertained by the ease with which computers help us create fast, seemingly developed, and attractive, or at least accepted, imagery. This can even distract from the fact that we have, materially, very little exploration to show for ourselves. The language of the computer is further encouraged because it resonates with that typically accepted in professional practice. It, therefore, supposedly tempers us for success. I believe instead that this fear of projects and portfolios that question our own methods, education, and profession allow our collective body of work to be rendered mediocre.

Today the technology of our own hands is thought to be more difficult or archaic than that of computer-aided design (see the line to the laser cutter during the final weeks of the semester if you do not believe me). It was only through a demonstration of the skill of our hands, however, that we were accepted into this program. Our belief that these skills are more difficult might be tied to the fact we are never forced to encounter instruction on these skills after the initial precedent project our inaugural year, in which we have to do a section drawing by hand. We do, however, during the same semester have to take an entire course on how to create and manipulate computer models and images. Once you realize how quickly a 3D model generates plans and sections and those fancy looking perspectives the night before a project is due, you wouldn't blame us for believing it's the easier way to work, but besides practicing our ever-worsening habits of procrastination, how is our design development really being aided?

As a working method, the language of modeling software also becomes the language of expression. Each individual project that is inserted into a computer-aided design tool becomes articulated through the standard logic of that software. Development of the project is then regulated within its own set of rules. That language does, however, allow for the creation of lines that are uniform and can snap—and who isn’t thankful for snaps? That perfectly uniform line, can also be duplicated throughout the entire project, and organized to form equally perfect corners, angles or impressive looking curvatures (unless you are using SketchUp which does not actually understand curves). That same line also appears in everyone else’s project that used the software. While easily replicated, the line also becomes very ambiguous, allowing 3D modeling rules and actual design intentions to be mistaken for each other by our audience, and sometimes we even trick ourselves. Further, initial ideas and those generated throughout the design process are written over by the most recent iteration of the project and there are too many steps between where you are and where you were to use Ctrl+Z. I understand that some of our decisions are going to be basic and such programs help fill in these parts and save us time: time that we believe allows us to get further into the design process, but we aren’t really going anywhere. When we begin with such a controlled language, our ability and opportunity to invent is severely limited. Our projects become a homogenized version of where we started or where we may have gone.

I should also clarify that I do believe there are many beautiful solutions that are arrangements of a standardized language.

Le Corbusier worked at convincing us of this through defining his five points of architecture. He eventually also proved that one language cannot be universally well executed, or its solutions always the correct ones.

I should also clarify that I do not mean to exclude computer-aided design from any curriculum. I only want to suggest that if we intend to invent we first need to learn (and be taught) to trust and employ our own hands and their highly individualized way of working. The product is individual to us but each
mark is also highly unique; and each is in relationship to the moment and situation in which it was created.

When we create with our hands we also have the ability to be uninhibited and to surprise even our own eyes. It exposes the difference between what our brain intends to make and what our hands actually create. The gap between our brain and hands presents an opportunity for us to witness the kinds of marks we make naturally, reexamine what we meant to say through them, and also interpret their role in our design’s development. The method of our hands allows our language and intentions to constantly adapt to each other instead of letting the language regulate the process. The methods for working with our hands are also infinite, from hand drawing, to the manipulation of materials (wax or dried pasta models), to things far from what I can imagine now. An exploration in materials in relationship to our design development would create a proliferation of methods, which we would use to learn reciprocally through each other.

Ultimately, I don’t believe that any one method is more difficult than another. Instead, each method has its own built-in language that is beneficial when it is understood and used intentionally. The diversity of teaching styles within Iowa State’s program allows for a varied understanding of methods, though it might require a bit of seeking on your part. Basic architectural drawing skills, however, should not be an elusive skill that we have to obtain for ourselves. We are students of architecture and we need to know architectural drawing.

Of course, each of us has the choice to require it for ourselves. It is a hard choice, one that works off of typically undeveloped skills and possibly against the mechanism of studio, which always has a particular rhythm based on the instructing professor. It, however, is always still a choice that we make, even if we choose to be indifferent or allow perceived restrictions to actually restrict us. Ultimately we have to take responsibility for what we want our set of skills to be, and what we want to learn in our education.

Computer-aided design will continue to assume more liability, it has already learned to be intelligent enough to embed typical construction methods in every line we make, and ensure that our walls connect with the roof. Though if we consent to design’s version of spell check we also give up some control of our process of design and development. The giving up liability, but also giving up control, has a strong correlation to the current state of the profession as architects allow engineers, and construction managers to do part of what was traditionally the role, and knowledge, of the architect. (While it may seem easier if we all submit to a standardized method, our language and our products will also suffer from standardization, but standardization produces more, and processes that produce more win out. Does history not teach us that conquerors write history, and that capitalism loves products?) I believe our relationship to our education has a direct correlation to the health of the profession. It will shape how we understand and contribute to the definition of the architect.

This misunderstanding of our choices, responsibility, and impact of the methods we employ is a great disservice to our education, our profession, and us. As students of design, we must be active participants in our education. Ultimately, we need to be aware of our impact and seek out the knowledge that will allow us to successfully express ourselves. I think this includes choosing to learn how to use our hands.
A NUMBER OF SHOES WERE RECONTEXTUALIZED based on a personal experience with British artist Rachel Whiteread's work. Focus was on the materiality and crafted details revealed by the interior casts, which also became a study of interior space and shape.

A topographical map explores the relationship between elevation and the wines produced in Australia. Aromas from the glasses and the lighting from below allow the viewer to experience additional qualities of the wine.
CHICAGO ARTS CENTER //
SAM MULHOLLAND

An art center in downtown Chicago for the sequential arts, the building took inspiration from comic book depictions of Gotham City. The building uses the idea of linear narrative, moving through the building as they would move through a comic strip, frame to frame, or room to room, and is designed and depicted in a manner similar to comic strips or graphic novels.
A SET OF 24 FORMS THAT ADDRESS THE FOLLOWING CONCERNS:

- over/under
- open/closed
- solid/void
- light/heavy
- contain/surround
- stop/limit
- intersect/pass through
- join/divide
- shrink/grow
- puncture/patch
A moment of sudden inspiration, a moment where every consideration and detail seem to fall into place behind a larger idea, thereby setting the real work into motion. It is the moment that at once brings relief and excitement, confidence and purpose to a project. Design requires inspiration.

But what is the source of this inspiration? Could it be simply an instant reaction, an intuitive genius, or nothing more than a stroke of good luck? The seeming instantaneity of inspiration might support these possibilities.

Yet could it only be through hours of careful research and thoughtful analysis, hours spent sketching and diagramming, hours spent constructing and reconstructing, hours spent in conversation, hours of questioning, that a truly inspired concept is achieved?

The moment one finds inspiration is often paralleled to the switch of a light or strike of lightning. Its fleeting nature makes one rush to capture its essence with urgency, before the moment is lost forever. Psychoanalyst and writer Adam Phillips argues, “...we still don’t know where many of the best things about us come from, that many of them may not be teachable, and that we can’t always recognize them — or rather, say what we recognize — when they turn up.” The inability to predict the timing or definite origins of inspiration further increases the pressure to preserve its character in the moment. Therefore the intuition to recognize a potential idea is of greater necessity. Inspiration that goes unnoticed will have no influence on the work.

When one hesitates at the moment of inspiration, the instinctive response may be to immerse
INSPIRATION CANNOT BE FORCED; THE PRIOR WORK MAY ONLY CREATE A CIRCUMSTANCE IN WHICH THIS INSPIRATION CAN TRANSPIRE.

oneself in the work with the hope that it will trigger an epiphany. When in doubt, make, and it will come. Of course, there are times when it happens just like that. But it’s also possible for one to get lost in the work, so much so that it distracts them from potential inspiration. In The Grace of Great Things, philosopher Robert Grudin cautions against “...a mechanical relation between mind and idea, one in which too much emphasis is put on conscious effort and too little on openness and receptivity.”

Inspiration cannot be forced; the prior work may only create a circumstance in which this inspiration can transpire. As Phillips writes, “Without practice no one can play a musical instrument, but practice at best creates the conditions in which inspiration can happen; no amount of practice creates or guarantees the inspiration.” Indeed, it is entirely possible a work could be forced to fruition without ever realizing a true inspiration.

There can be no broad formula for inspiration. The individual can only seek understanding within his or her own process, and in doing so aspire to create inspired works. Poet Randall Jarrell once said, “If a true poet is someone who is struck by lightning several times, then the only thing a poet can do is make sure he keeps going out.”

MATERIAL MOMENT //
ALEX MICHL, SAM MULHOLLAND

A MATERIAL MOMENT IS AN EXPERIENTIAL WORK that orders objects and materials in a given space to offer an ambiguous narrative for a theoretical room for drinking wine. These pieces are 1:1 scale works using a material not meant to be assigned to the wall, floor, or table, but rather left open for interpretation.
CONSERVATORY // ANDREW MIXDORF
FOR THE PUBLIC TO OBSERVE AND STUDY THE NATIVE ECOSYSTEMS OF DENVER IN AN AVIARY AND REPTILIAN CONSERVATORY.

SITUATED IN DENVER, COLORADO THE CONSERVATORY IS A SUBSIDIARY DESIGN FOR THE LARGER SUSTAINABLE URBAN COMMUNITY.

It was designed in collaboration with Alex Michl, Yvonne Hidle, Sam Mulholland, Tyler Arndt, and Alex Fales. It acts as a supplementary education center and connector for the early childhood education center and restoration prairie. It provides the public with a year-round extension of the prairie environment in which to observe and study the native ecosystems of Denver in an aviary and reptilian conservatory.
In the back of our heads, we continue to admonish this notion of a concept. It is seen as abstract, and the question is often posed, “will somebody really see the concept unexplained as a narrative once structured in the built environment?” The answer most often is no.

Young designers often use a concept and create a design that mirrors that concept, unable to see it as merely an inspiring idea. For example, a design based on the visual qualities of light filtering
through a dense forest soon develops into synthetic trees. Although it is easy to appreciate the allure of light filtering through the forest floor, the concept is not about the actual trees inhabiting that forest. The design becomes too literal and quickly becomes a tasteless mockery of the real thing, as is often seen when man attempts to directly replicate an experience that nature has long since perfected.

At variable points within the design process, the concept becomes a hindrance if followed too strictly. Acknowledging the important moment in the design process when the concept becomes a decision-making influence is an ability that appears to come with experience. Furthermore, it becomes critical to hold onto the concept for a certain period of time. If there is no central idea to base decisions on, they soon become random and a design quickly becomes detached and incoherent.

Filtering and assembling our ideas into a coherent whole is the perpetual battle of a designer. Problems arise when there are too many great ideas. Just because a designer has a great idea does not mean it belongs in that particular project. Even to the non-designers of the world, it is immediately apparent when an idea has been forced upon the design’s functionality.

We have all seen a good-looking outfit ruined by one accessory gone awry. In the same way a pair of shoes or a nice tie will not look good with every outfit, good ideas in architecture do not always translate from project to project. An important sign of maturity in a designer is the ability to filter and clarify ideas. Just because an idea is exquisite residing within a precedent does not mean it is appropriate within a different application.

There are reasons why it is generally considered unacceptable for a beginning design student to use ‘aesthetically pleasing’ as a reason for making design decisions.

AN AMALGAM OF AESTHETICALLY PLEASING IDEAS DOES NOT NECESSARILY LEAD TO AN AESTHETICALLY PLEASING DESIGN.

Theodor Adorno states that “great architecture gains its supra-functional language when it works directly from its purposes, effectively announcing them mimetically as the work’s content.” The aesthetics are the most connected when derived from an original system or concept. The importance of a concept and a connecting reason for each decision is vital to a young designer. Without a concept to return to, decisions become arbitrary.

If beauty, as aesthetic attractiveness, is so important to designing the occupiable spaces of our daily lives, then why is beauty not an acceptable reason for decision making? Using improved aesthetics exclusively as a rationale for a particular design decision is blasphemy in a critique. Admittedly, there are few designs that can survive critique from the general public if based purely on aesthetics. Function must be apparent. Neil Leach makes an interesting comment on function, stating, “there must therefore be a negotiation, it would seem, between the functional and the aesthetic - between a representation of functionality and functionality itself.” When the reasoning of aesthetic presence is based on an established system, it is still perceived as coherent, even if not a functioning element of the original system.
I have reached a point of dissatisfaction in my architectural education where I feel unable to reach the next step in my understanding of design. We all know that feeling when you walk into a space and a quiet calm of excitement settles in. We desire the ability to grasp what it is that makes the space so intriguing and so comfortable at the same time. We desire to inhabit the space in a way that we become part of it and the space, in turn, becomes part of us.

How can we possibly begin to know how someone will perceive a space from drawings and models?

I can not seem to grasp how to create such a sensation without designing 1:1 in a physical manner. How can we possibly begin to know how someone will perceive a space from drawings and models? I can fulfill a program, create legible drawings and represent a volume in a scale model but I am missing that understanding of the, for lack of better terminology, “aha” moment. I know the sensation, and I know when a design truly moves me. The only place to begin to understand the design process that creates such a sensation is to pursue continual advancement in the understanding of models and drawings. Leach discusses modeling as a form of conjuring, “architectural drawings and models could be seen in the same light as mimetic representations of an actual building, which might, as it were, ‘conjure up’ those buildings for the beholder. Drawings and models could therefore be seen as charged with the potential to open up a ‘world.’” Leach concludes his thought stating, “the very principle of modeling must be seen as ‘invocatory.’” In the end it may not be possible to utterly envision how a building will be occupied and perceived, as the building reacts to the human occupant in a reciprocal manner, “a building could be perceived as an ever-evolving fabric of occupations which is molded by human activities.”

Only through our imagination of the finalized space can one begin to understand the affect it will have. If we create a system that we can return to when making an untracked decision then the design will appear to have a purpose. “Space and the sense of space can become more than impoverished purpose only when imagination impregnates them with purposefulness.” It is easy to come to the conclusion that when designing for the human scale it is nearly impossible to predict the final outcome. Though difficult, it is through creating an intriguing scaled space that we begin to realize its potential should its proportions increase. There is no guarantee that a good design will retain its intrigue at full scale, but a lifeless design is sure to remain as such when enlarged.

I am unsure on when and where a system or concept becomes beautiful, but it can found through multiple iterations of the concept. Given my humble knowledge of the process of architecture, I know for sure beauty cannot just be pasted on. The turning point of this comprehension appears to be in understanding where the developed system or concept is applicable and where it must be loosened. “Beauty makes presence shine. It brings elegance and dignity and has a confidence, an effortlessness that is not labored or forced. This fluency and ease of presence is ultimately rooted below the surface in surer depths.”

I do not know how to teach this, nor do I even know if it is possible to teach. Maybe it is only attainable through experience and observation. For the moment I am content in my frustration. Being discontent with fulfilling a function and only creating a compilation of “pretty things” may be the first step towards an understanding, “for architecture has only ever consisted of the ornamentization of structure and the structuration of ornament.”

CREATING INTRIGUING AND STIMULATING SCALE WORK APPEARS TO BE THE FIRST STEP ON A LONG JOURNEY THAT REQUIRES AWARENESS OF OUR OWN PERCEPTIONS OF THE ENVIRONMENT AROUND US.

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The Starter House is a 1000 sq. ft. home situated on a wooded site in Ames, Iowa. Students designed these homes imagining themselves as a recently-graduated client, emphasizing spatial efficiency and the act of dwelling - particularly in a natural environment. This project served as a springboard into a more developed design with passive solar considerations.

ALEX HALE

MATTHEW SENER
"...Emptiness may resound without sound, may be filled by its potential to be filled, and make open what is complete..."

Michael Benedikt, For an Architecture of Reality
We remember the corncrib — the weathered red paint on the wooden slats; the refuse of birds and rodents that have passed through it; the crossing wood members supporting its sunken roof. The crib belongs in these midwest landscapes.

We remember the temple — the faded wooden floorboards beneath our bare feet, creaking as we softly move from one space to another. The emptiness in the atmosphere allows nature to fill our thoughts. There is a place in our memories reserved for the vernacular and the sacred.

The chapel is intended to encourage reflection and evoke a spirit of inquiry. It is a slow space. Throughout the semester we have resisted the prescriptive processes typical of our educations. In lieu of orthogonal drawings, we made small haphazard mock-ups and kept our drawings brief and gestural. The labor of torching and cleansing wood allowed us time to reflect and approach the more oblique aspects of architecture. Through these gestures, the act of making came into focus.
"I have no more made my book
than my book has made me."
Michel de Montaigne
"IN DANGER OF BEING CORRUPTED BY OUR PASSIONS AND LED ASTRAY BY THE COMMERCE AND CHATTER OF OUR SOCIETIES, WE REQUIRE PLACES WHERE THE VALUES OUTSIDE OF US ENCOURAGE AND ENFORCE THE ASPIRATIONS WITHIN US."

ALAIN DE BOTTON

I've written this paper once before. I was in my third year of architecture school, writing what I believed to be the most important essay I had ever written. The assignment was to write a manifesto for myself: to identify and articulate some conceptual thread or methodology present in all of my work; to ask myself, what the hell was I doing? The paper I wrote was meandering, like many of my essays, and this one is likely to be no different. I wrote of trouble and solace in my work - two separate values I believed I held - and attempted to unearth why I valued them. I presented my paper, but felt dissatisfied with my work. I vowed to write it again in two years, before graduating.

In many respects that assignment was the basis for this particular issue's theme. As a departure from collective discourse as a methodology, I wondered, how do you work? I thought everyone has his or her own way of thinking. How great would this issue be as a collection of individual manifestos, of ten different essays each chronicling a specific mode of working? I thought of how important it would be to the school, to the publication, and to each of the writers. I thought of the value of self-reflection. I thought it was critical.

Two years ago I thought I'd be ready to write this by now. But two years passed and here I am - still feeling unprepared to take this on. I thought that what I was doing was important, even if I didn't know what exactly it was. I thought it was possible to characterize my own practice by the time I was about to leave. I thought I'd have some answers by now, or at least a direction for where to go or what to do now. I thought.

I'm sure some of you are imagining, then, how debilitating it must feel for someone like me who has gone five years through a professional program, someone who - if you permit me to say it - has been remarkably successful at every level of his education, to fail to arrive at some answer to the question that has been his sole motivation for getting through school - Who am I?

It's maddening at times, but believe it or not I'm mostly optimistic. Why then, given the years of futility, can I stay optimistic about my future? Why, in one of the worst job markets in history, can I stand here jobless and clueless, but still smiling? Perhaps my naiveté has something to do with it. Perhaps I am smiling because I am a student, unburdened by many of the problems that plague those of you in the 'real world.' OR (and I'm inclined to believe this), perhaps it is because I have engaged in a process
of self-inquiry that, although not prescribed by my college, has given me more fulfillment during its brief moments of breakthrough than any letters on a transcript or dean’s list congratulations could possibly give me.

I’ve often wondered about authorship in design, or, why it seems some work lacks authenticity, integrity, passion, or some quality. It leads me to question why I take my work so seriously or why it seems I struggle with so many decisions in my work. I am invested in my work because it is an expression, a representation, an offering to society of who I am. A bad decision, therefore, or a poorly designed building becomes a reflection of me. Thus, I seek to be artful, deliberate, and compelling when I design. As a member of a team or employee working on a project in which we don’t have the final say, it is perhaps even more critical to have these sorts of convictions. The ideas and convictions may have to be presented more delicately, but the principles are still the same. If we expect to gain anything more than technical or professional knowledge from the work we are doing, we have to take a stand for the aspects of a design that matter to each of us. Then, even if the employer or other team members reject them, we wouldn’t be selling ourselves short on what we are capable of.

Architects often align themselves with artists because they believe the work they do has the same importance as what artists do. Yet, many architects often try to create a distinction (or hierarchy) between art and architecture by advocating stern principles and adhering to systems of logic (implying, in many cases, that architecture is more intellectual or more scientific and thus better than purely expressive art). But in doing so, we lose sight of what it means to concern ourselves with creative endeavors. Creativity is the clearest and boldest act of freedom we can participate in as human beings. At its best it repre-
sents a coalescence of rational thought, aesthetic sensibilities, and emotional clarity. The ability to shape or mold our environment from the smallest of scales like pen on paper, to the largest of them like the skyscrapers in Dubai, show us that we can manipulate our world in a tangible and purposeful way and ultimately prove how affecting our creative work can be. Why then, given the significance of creative acts, wouldn't we use our architectural work as an interface between each of us and the world? It seems critical to re-introduce personal expression into the framework of our discipline.

This is not a new thought, either. Ideas about self-expression within our field have been around for a long time. But the act of self-expression comes only with a thorough body of self-knowledge. And self-knowledge can only be obtained in a relative sense — after gaining knowledge of the world in which we exist (both the culture and the time). Carlo Scarpa once said, “I believe that it is art that makes us grasp the reality of the world. It is the effort that man has made, since his beginning, to make clear for himself, through forms, his own existence.” Scarpa uses the creative act as a means to express himself and then, in turn, to understand himself in his context. In a time when sustainable architecture is constantly referenced in technical terms, Scarpa also seems to be an appropriate example.

Among many other canonical works in his oeuvre, Scarpa designed one of the most successful and powerful examples of adaptive re-use in architectural history. And, he managed to do it 52 years ago when adaptive re-use probably wasn’t even an intelligible term! Sure, the impact of the Castelvecchio in Verona was heightened because the existing structure was antiquated and not post-industrial like many of the adaptive re-use projects we see today. But, his intervention wasn’t solely about the technical demands of the project. The Castelvecchio, like much of his other work was imbued with a higher purpose or a higher goal of attaining something beautiful. And yet, because of its culture of use and lasting impression we can call it sustainable today. Scarpa didn’t look at the sun as an object that produced quantifiable data in the form of azimuth and altitude charts. To Scarpa, a tree wasn’t just an element to be inserted simply for its air quality. They were also aspects of his world that had an emotional effect on who he was as a person and thus who he was as a designer. When walking the galleries of the Castelvecchio, you get the sense that you are a part of something much larger. You feel a part of a cultural context and a place in history different from your own. Your spine tenses, your ears shift slightly to the back of your head, and you clench your teeth in anticipation of what may be through the doors in front of you or lurking up behind you. You can imagine who Carlo Scarpa was because you sense that he is walking the corridors with you.

His contemporary, Louis Kahn evokes the same response in his work. “I used to wander around in those buildings on weekends. They were silent and mysterious. And I half-expected Lou to just appear from around the next corner,” said Nathaniel Kahn about his Yale Art Gallery and the British Art Center in his documentary film, My Architect. Peter Zumthor is another, and so is Tadao Ando. In all of their projects you can see the architect’s hand at work. They each become a record or symbol of the architect’s existence — camouflage, if you will, for announcing the architect’s values to the world.

In an essay he wrote three years ago for Architectural Record Juhani Pallasmaa wrote that, “Great creative individuals often have an amazing capacity to internalize qualities of landscape, light, and cultural traditions.” Through internalizing these external qualities of a place these great creative individuals enter into a dialogue where their personal design sensibilities become part of the equation. Thus, the product they put out into the world is as much a reflection and representation of themselves as it is of the cultural traditions from which it came. Zumthor is one of those great creative individuals, and he has convictions about his work. He doesn’t compromise and he loves architecture. As designers, not all of us have to love architecture, but we should all believe in its possibilities. It should be our jobs to convey and perpetuate the potential we see in the work we create.

Surely these are romantic notions and not all of us can identify with them, but if you put yourself in the proper frame of mind, you can be greatly moved by works of architecture. In his book The Architecture of Happiness, Alain de Botton writes, more eloquently than I can hope to, “The places we call beautiful are,
by contrast, the work of those rare architects with the humility to interrogate themselves adequately about their desires and the tenacity to translate their fleeting apprehensions of joy into logical plans – a combination that enables them to create environments that satisfy needs we never consciously knew we even had.6 The places we call beautiful are also those works that feel deeply personal. Sometimes its furnishings are able to evoke a room from your childhood home or perhaps it is the place where you met your future husband or wife. Or, perhaps it is not personal to you at all, but you can feel that a place was designed and conceived with great care and attention to detail. In that sense, it is personal to the designer; the extraordinary amount of time and effort it takes to put together a beautiful building leaves its mark on a designer. The work will only leave a lasting impression on the designer if he or she is able to engage the work on an emotional level and give it the significance and personal investment that it merits. Then a user can appreciate the amount of care put into the design because its materials come together in some elegant manner that charges the space with the designer’s presence.

In his book The Grace of Great Things (it has been referenced a few times in this publication), Robert Grudin writes, “Original thought is the product not of the brain but of the self. And ‘self,’ as I understand it is not confined by our skins but defined by our humanity.”7 I think of humanistic, virtuous words like honesty, sincerity, integrity, authenticity, beauty, grace, and curiosity. I don’t know how to elaborate on these terms, but I know I believe in these qualities and want my architecture to stand for them, too. Original or creative works are products of the self, so if we don’t instill our work with a sense of self then we can forget about architecture ever becoming anything more than a structure that serves a given purpose. We can forget about the joy and sense of possibility that the proper atmospheres can give us.

The challenge is substantial, though. Another philosopher by the name of Harry Frankfurt concluded, “Our natures are, indeed, elusively substantial - notoriously less stable and less inherent than the natures of other things.”8 When taken into consideration, it’s easy to ask, “Why bother?” Pursuing a potentially futile course is meaningless, right? Acquiring self-knowledge is a continual process. If it should end, what would compel you to do your work? The act of finding yourself is vital to the creative process and it is one we must confront with integrity. Again, Robert Grudin writes, “Finally, creativity is dangerous. We cannot open ourselves to new insight without endangering the security of our prior assumptions. We cannot propose new ideas without risking disapproval and rejection. Creative achievement is the boldest initiative of mind, an adventure that takes its hero simultaneously to the rim of knowledge and the limits of propriety. Its pleasure is not the comfort of the safe harbor, but the thrill of the reaching sail.”9 Producing honest work representative of our natures as individuals is terrifying. The prospect that it will be rejected, or worse, we will be rejected by society is hardly motivation to participate in that sort of work. Without the drive to learn more about ourselves, we can never really hope to be happy. Without convictions or principles to stand by, we can never hope to impact one another. And without the potential for danger, the completed work would never be as enjoyable or as rewarding.

In the end, in some meandering and round-about fashion, I return to the idea that this is my manifesto. I have written of personal investment, emotional input, and other qualitative concerns, and yet I still wonder how I work. It is an effort to gain understanding of the world and of myself that drives my work, but the process by which I ascertain that knowledge is still unclear. My architecture still comes from places I cannot always locate.

Then again, if we imbue our work with aspects of our own identities, it won’t matter how we work. What will matter instead is what we make and what it says about us.
An-Algos chair is an attempt to alleviate the pain I experience when sitting for an extended period of time due to a past back surgery. It is an investigation of my own body and the inherent problem with sitting. It is therefore less concerned with the final product and more about the intimate, tangible process I went through to get there. Throughout the course of this process I designed and fabricated a number of tools that helped answer questions I encountered as I progressed through the semester. An-Algos is a direct product of these tools and this process.
THE END IS
A NOTE ON THE ART DIRECTION:
It seems like almost every time architectural work is presented in publications, graphic designers and architects resort to sans serif fonts, machine-like precision, and other strategies that seem to exhibit notions of rigidity and sterility. For this issue we wanted to steer away from this architectural aesthetic and into a realm where interdisciplinary concerns have more meaning. As a group we encouraged our graphic designers to have fun with it and produce a publication that the entire design community could be compelled to flip through. It is our hope that this spirit of freedom and imagination on their part continues in successive issues of DATUM and perhaps changes the way some of us perceive architecture.
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