I.

I got a thing about trees, especially ones in New York City. I appreciate their constant challenge to survive humanity, I am awed by their ability to transform light into matter, and I believe we share a profound communion with these benevolent creatures as they absorb the vagaries of urban life while contributing themselves to the evolution of their landscape. I seek to emulate these qualities in my vocation as an artist with a seed called New York Arbor Workshop.

I'd like to share what I have learned from this venture and explain a bit of my history. I am forty-two years old and I have been developing my New York City roots since 1993. These years have been spent observing the nature of life, absorbing the city, studying art history, working day jobs, and practicing the discipline of painting when possible. As an adolescent deeply influenced by reproductions of the New York School, the 60's, punk rock, and hip-hop, I set out in earnest to demystify the creative process in order to construct a new reality of purposeful being through my expression and take it to another level. Remember that? Like countless others, I figured that by discovering and emulating the lives of like-minded contemporaries and historic characters and using their most luminescent work as the standard to which my experience could aspire, my being would inevitably develop into Relevance. I learned a great deal by surviving this freighted method and the lessons persist. It took many years to differentiate between the mythology and the reality of living as a creative human and I have become gratefully intimate with the hopelessness of ego-driven delusions, the power of love, and the endless abundance of natural wonder.

As these lessons began revealing themselves in the late-2000's my creative impulse was shifting from painting toward a long-held interest in learning basic

woodworking. The financial crisis of 2008 claimed my day job as a full-time art handler but thankfully my wife's position as an executive was spared and, moreover, my general position on money was always more poetic than practical. The significant disparity between our salaries absorbed my lack of income and by 2009 the prospect for any job was bleak. The swirl of dramatic events coupled with many years of frustrated art studio efforts led me to formulate a five-year plan to create a self-sustaining fine art woodworking atelier. How hard could it be, I thought. I researched the basic disciplines, machinery, and workspace this would require and I pitched the idea to my wife. We assessed the considerable risks and returns as best as we could and by May of that year, she was an angel investor and I was a woodworker.

The Great Recession was a watershed moment that emboldened many entrepreneurial creatives to forge a new micro-manufacturing economy with a doit-yourself ethos. I embraced the newly minted buzzword 'solopreneur', abandoned all distractions, and began to set up shop. I secured an 800-squarefoot workspace in Industry City, a sprawling complex of century-old marine warehouses along the harbor near Brooklyn's Sunset Park neighborhood. I was enthralled by the history of the compound's purposefulness and its amazing state of dilapidation. I found what remained of its frenetic industrialism profoundly compelling and I dove into the fray.

The rent was relatively reasonable at the time though I would soon learn that this was also a watershed moment for developers seeking to exploit this new economy and I had planted my seed at the center of an ambitious plan to capitalize on the trend. I accepted the low-rent bait cautiously and I knew a switch was imminent, but the scale and force of indifference that Industry City perpetrated on the smaller outfits and emerging artists was profound. In the fall of 2013, the switch was activated with a nonnegotiable 50% rent increase and there officially went the neighborhood. The herald was sounded in every neighborhood

in every possible direction, as I immediately learned from the new management. I was free to stop work and break down all that I had built over four years and somehow find a new space elsewhere or I could endure a two-year witness to the Chelsea Marketization of Industry City at a monthly price equivalent to a one-bedroom apartment while I figure out how New York Arbor Workshop can develop in this neo-New York climate without a workshop. Such is the burden of arbor in this town. I had little choice but to preserve my roots, fortify my resolve, and continue to focus on transplantation to a new environment.

Despite the current instability however, I am very thankful for the opportunity to have established a strong foundation and to have developed solid rings of growth over the first four years. I appreciate each day that I was able to contemplate the design and execute the fabrication of a concept, test its feasibility of existence, observe its deficiencies and evolve its attributes. Through this process I discovered and embraced the unexpected virtues of failure and indifference and I am grateful for the boundaries that this vocation continues to reveal about my life energy and its place within the universe.

II.

In the beginning, there was nothing but a chop saw that I managed to retain from a 1999 East Williamsburg loft build-out. I had also used it for making stretcher bars and simple furniture out of framing studs though controlling the warp of the material to obtain a proper joint was pure mockery without the right machinery. My chance at redemption came ten years later and I acquired a jointer, a planer, a router, a band saw and a table saw to teach myself the various milling techniques by using larger studs. I formed these into worktable bases and then I introduced myself to the wonderful world of handling sheet goods. As the weeks became months, I began to apply what I had learned from the construction lumber to various hardwoods to familiarize myself with their specific working qualities and I transferred these lessons into a maple workbench top.

As the layout of the shop evolved, the chop saw was placed low to the ground because the size of the space necessitated multiple work surfaces at different heights. A childhood leg injury has been an ongoing holistic challenge and the physical intensity of twelve-hour workdays led to a need for temporal respite while working at varying levels. I was searching for a furniture project to execute in hardwood that would introduce joinery and assembly methods and I conceived the notion of an interlocking modular work stool that would complement my varied activities. How hard could it be, I thought.

I continued to practice techniques while I gleaned all the information I could on industrial design and woodworking. I soon learned that the most enduring samples shared a primary element based on a unit of measurement known as *Phi*, or the golden proportion. Further research on the subject revealed that the proportion denotes a universal evolutionary building pattern for self-generating organisms that is based on a consistent reciprocity of their interdependent components. It is demonstrable evidence that balanced growth is paramount to all mortal coils as it is embedded within the spirals of subatomic particles, of galaxies, and of our DNA. Our bodies conform to its boundaries, our minds intuitively perceive its presence as harmony, our ancestors divined practical wisdom from it, and our greatest monuments incorporate its cosmic interconnection. I thought it seemed like a decent place to begin my stool design.

But first, here is a little back-story. In 2007, my wife and I inadvertently discovered Rockaway Beach. We were absolutely captivated by its natural beauty and dumbfounded that it was an accessible part of the city. After years of weekend escapes from the city grind to remind us that the natural world exists, here was the Atlantic Ocean in our backyard. We were hooked. Personally, 2007 also marked the end of a twenty-year addiction to alcohol. My poor-choice-rich

formative years were spent in suburban America where I observed drinking as an identity and the mark of adulthood. That dovetailed nicely with art school where I inferred that surviving endless cycles of self-destruction was what creative people did and the ironic juxtaposition defined high art. For better or for worse, I have always had a propensity for logical conclusions and I wanted answers. Drenched in delusion, I hopped headlong onto a boxcar of toxic wreckage making all logically tragic stops down to its grand decrepit terminal. When I finally arrived at the bottom, the truth appeared with the rising sun on ocean waves and it powered all life without dogma or ego. The illumination trivialized the scale of every issue that once fueled my discontent and thus began a new world. I sublimated all of that reclaimed energy into every possible creative outlet and focused on getting my shit together. Then I became boundless energy flowing in search of a boundary and along comes this golden proportion. I spiraled forward with love in waves of determined self-correction and then it was time to design a stool.

I researched furniture design and ergonomic theory and I learned more about the deeply influential power of furniture. I observed the finest examples from city collections and anyplace else that I could see evidence of craft and design, but what really impressed me most was the growing piles of curbside furniture awaiting collection on any given trash day. I studied reports on the detrimental effects of furnishing to the physiology of both body and mind caused by the perversion of their cultural associations and the pursuit of convenience. I honed in on the degradation of our collective spinal integrity due to the delusion of synthetic comfort and the corrosion of self-reliance. I came to believe that our increasingly devout relationship with disposable furniture only supports universal indifference and inequity. Furthermore, these degenerative problems can only be addressed by a universal solution of balanced growth and I just got hip to one. I noted salient parallels between the state of the world and my ongoing narrative of self-correction and, in an effort to streamline my activities, I was compelled to

manifest the metaphysical concept of the golden proportion into hardwood and hope to plant a local seed for a global solution. Keep it simple, so I thought.

III.

Had my intention been so clear at the time however, perhaps I would have looked a bit more deeply into rapid prototyping. Instead, as a highly functional Luddite with much to learn, I indulged my purism for mostly antiquated methods and spent the next four years developing a modular furnishing system of the future. I sharpened my pencil and hit the vellum with verve. It did not take me long to absorb the profundity of the entire task but I still have a predisposition for logical conclusions and answers would be nice at this point. Here are some helpful hints that I have gleaned thus far: acknowledge failures as life lessons, be aware of every moment whether or not a blade is whirring nearby, more clamps, develop a fluid core, embrace life, fashioning your own dowels is a bit much, give in to universal powers, have a nice day, it is all about feeling, jigs!, know your limit and expand accordingly, let love rule, mind the gap, nobody beats the biz, obsessive is okay without compulsive, perfection is in the pursuit, quell fear, remain calm, safety first, time and tides wait for no one, use what you got to get what you want, value your fingertips above all ambitions, work out any doubt, expect delays, your monkey mind can be tamed and the Zen of handcraft is the way.

But first I had to learn that every thousand-mile journey begins with one giant misstep. Because New York Arbor Workshop is an ostensibly commercial venture I was convinced that I needed to brand my ego on the initial product and, in accordance with other contemporary market-driven trends, I had to express it in walnut. Both my ergonomic research and my zeal to reinvent the wheel led me to design a hardwood mash-up of a saddle and skateboard platform that rocked atop a simple rectangular base and these bases of different heights would stack

on one another to lock in place. The seating platform stemmed from the concept that our spines find their most natural position when our legs are supported at a 120-degree angle from our body, as on horseback, and that a constant state of controlled instability would naturally strengthen our spinal support network, dissuade idleness, and promote productivity. I had yet to fully submit to the universal order and the resultant disorder was like, ivy-league educational.

I built two stools, one at six-inches high and the other at eighteen-inches high, and when combined they formed a single twenty-four inch high counter stool. I applied the golden proportion only to the different heights of the bases and not to their rectangular proportions or to the dimensions of their individual parts. I thought that crushingly expensive three-inch walnut was necessary to form the angles of the saddle because I had spent weeks trying to join multiple angled planks to very limited success. From there, the beef of the saddle begot chunky rectangular legs and rails of varying dimensions. The saddle was dadoed down the middle of its underside and fastened to a white oak transverse spine fixed atop the center of the longer base axis. It was situated so as to allow for a quarter-inch gap between the base and saddle and the idea was that the oak spine would act like the trucks of a skateboard and enable a gentle, side-to-side rocking motion. I even had the notion that the saddle platforms could be removable and available in different woods further down the line in the future perfect.

After months of work and a crash course in the commodity pricing of lumber, I test drove my creation. The angles of the saddle hit me directly on the ass bones and sent searing pain through my body irrespective of sitting either English or Western style. As I rocked in search of any relief, my fingers and back-thigh flesh invariably filled the voids between the saddle and base to be mercilessly pinched with each move but thankfully, the white oak spine cracked along the entirety of its length and the whole point became moot. My backside slightly bumped into it

as I stood up to further inspect my handiwork and the disproportion of its base conspired with its top-heavy imbalance and tipped it over like a domino. The larger stool was on top and the impact was enough to sever the saddle from the base and send it shooting across the shop floor. I took in all of this wonder and in the clarity of the moment, I saw an opportunity to conduct a further stress test on the functional integrity of my assembly work by smashing the remains of the larger stool into useful bits of information. I noted what worked and what did not, then I calmly bundled the shards of data, filed them away, and reexamined my approach.

IV.

I thought it was wise to step away from woodworking for a minute and redirect my attention. I had reserved a fraction of the shop for drawing and painting with the hope that I could reinvigorate my threadbare reasoning for continuing their production. I had found myself yearning for a clearer meaning from the modest abstraction of my subliminal expressions and after years of practice, I began to profoundly question the further expenditure of my energy without a more discernible utility beyond striving to be a status commodity in an art world gone wild. I just could not shake the feeling that my lifelong belief in painting might be merely a market-driven, myth-based, masturbatory waste of effort that has ruined my life and now seemed like a good time to address my post-Modern malaise.

I made stretcher bars from leftover maple during the shop setup and I learned why they are typically made of softwoods when I tried to staple the canvas down. I managed to get the job done and I had enough material to make three rectangular canvases ascending in sizes that followed the golden proportion. Each canvas face was horizontally divided into two harmonic fields determined by each canvas height. The basic principle of *Phi* describes the proportional interrelationship of a whole unit divided just beyond its midpoint into a larger unit and a smaller unit. The proportion of the larger unit compared to the whole unit remains consistent with the proportion of the smaller unit compared to the larger unit. Here is the best part: either multiplying or dividing by 0.618 can determine the harmonic proportions of any given dimension.

I wanted to simply illustrate the essence of the ratio's fundamental binary relationships by adhering to this principle of consistent reciprocity. I also set out to explore these natural boundaries hoping that my endemic motivational conflict to hash out stylized psychic expressions into financial market instruments could somehow be resected from my mind. With a spectrum of arbitrary distractions aside, my conscious decisions were limited to whether the horizontal division was above or below the canvas midpoint, whether the resultant field was light or dark, which field was smaller or larger, and which one was on top or bottom. I chose to place the horizon below the midpoint, assign darkness to the resultant lower, smaller field and lightness to the upper, larger field. I could not resist the urge to push the experiment further by adding golden metallic flakes to the mix because I was curious to see how it would interact with the oil-based pigment and, if all else failed, at least it would sparkle. I applied these elements in thin layers with alternating waves of action, being mindful only of their essential qualities and the borders they share.

After a couple of weeks, the meditative exercise confirmed that my visceral process of painting was the primal manifestation of my unbounded energy desperately seeking a lucid natural boundary in which to flourish. By applying this naturally golden rule to my effort, I finally understood what rages within the sublime and how we are all beholden to cosmic interrelationships struggling to maintain a balanced reciprocity of light and dark elements. The mysteries that compelled me for so long gave way to the manifestation of an efficient formula for mindful expression that works out to be roughly sixty-two percent of *This* (A) and thirty-eight percent of *That* (B) to form one-hundred percent of *Everything* (A+B). I

had finally come upon a workable parameter for my creativity and, coupled with the immersive lesson in what not to do with walnut, I unambiguously revealed my ridiculous compulsion to over-complicate the process of achieving peace. I was set to abandon my bullshit, embrace the boundary, and develop myself in accordance with universal harmony. I doubled-down on keeping it simple, somewhat, and then I laid out all my silver on one square inch bounded by gold.

V.

I was now ready to return to my stool design so I built myself a drawing board and got back to it. A less-is-more approach became abundantly clear as I absorbed the lessons in natural efficiency, so I began the redesign using one inch as the primary unit of the stool's components. I planned to continue in walnut because I was compelled by its inherent charms and, relatively speaking, twoinch walnut planks are a considerable bargain when compared to three-inch stock. Guided by these boundaries, I developed an approach that would enable me to optimize the minimum amount of hardwood necessary for structural integrity, reduce material waste, and streamline the workflow of milling and assembly operations.

According to *Phi*, the smaller harmonic proportion of one inch (A) equals fiveeighths (B) and the larger proportion is one and five-eighths (A+B). For the stool components, I decided that the legs and rails would be one-inch square, the seating platform would be composed of five-eighth high by one-inch wide slats and sadly, the rocking seat deck concept was still worthy of investigation. For the overall stool dimensions, I decided to use eighteen inches as the primary unit to determine its harmonic proportions. The seating area of each stool became eighteen inches wide by eleven inches deep and three stool heights were determined: seven-inch (A), eleven-inch (B), and eighteen-inch (A+B). I started with two stools, an eighteen-inch and an eleven-inch, that would combine into a twenty-nine inch high barstool. For the bases, I wanted to achieve a consistent height of the lateral rails on all four sides to form horizontal upper and lower frames integrated with the legs. To achieve this, I dadoed half the width from the outer two sides of the legs where the rails meet, which left a quarter-inch post at each inner corner. I then dadoed and mitered half the width of the rails one inch from their ends and joined the rails to the leg posts with handmade dowels. The only variation to this homogeneous approach was the leg height.

For the seating platform, I ditched the heft and angularity of the saddle but retained the skateboard-inspired rocking deck. I beefed up the spine and fixed it to the base in the same way as before, but I replaced the singular saddle chunk with eighteen individual slats across the seating platform. Sixteen inner slats ran the depth of the stool to form the main seating area and one inch was removed from the ends of the outer two slats to allow for the legs of the upper stool to rest directly on top of the lower stool's legs. The height of the slats that formed this one-inch void was devised to stabilize these compound uprights and secure the upper stool from lateral movement. The under side of the slats were dadoed then bonded together to the spine and then I routed the top edges with a quarter-inch round-over bit. This time, I diminished the gap between the base and deck to one-eighth of an inch because I thought that it might mitigate the pinch factor and besides, it looked cool. With this sinister-looking void, the deck appeared to hover just above the base and it gave the appearance of a barstool one might find in the lounge of the Death Star.

When the time came to test pilot all this coolness however, the universe provided me with more emphatic lessons in efficiency. I immediately learned that a smaller void exponentially increases the power of the pinch and given the extensive time and effort required to produce this painfully futile design, it was okay to let the concept go. To drive the point even further home, the platform also failed to fully secure the stools' uprights together. In the testing process, I stacked the larger stool on top of the smaller stool with the impression that the legs of the former had landed and locked in place, though that was not the case. The truth was spectacularly revealed as I went to sit atop the stools and I crashed through the lower front rail of the upper stool on my way to the floor. To my surprise, I reacted in a wholly different manner than the prior misadventure and I picked myself up, dusted myself off, and tried it all over again.

I was satisfied with the rest of my design methodology regarding the proportions of the components and the construction of the base. The only aspect that needed to change was the gap of the seating deck so I returned to the drawing board. I decided to build all three heights of the platform with the decks bonded directly to the base. I followed the processes that I established with the previous attempt and, six to eight weeks later, I had a working prototype and nothing crashed to the floor. This does not imply that the process did not provide salient failures / life lessons, but I was finally able to establish a basic evolutionary framework in which I could develop both New York Arbor Workshop and myself.

VI.

About this time, I came upon a prototype design competition sponsored by the International Contemporary Furniture Fair (ICFF). The prize was a small booth that would expose you to scads of prototype-seeking global designers and manufacturers. I had just missed the entry deadline for the following year but I kept it in my mind as I continued to refine my prototype. Also during this period, I sought out possible venues that might be interested in the concept or, more accurately, interested in helping me to develop the concept. I dutifully read the *Times*' Home section for industry trends while mentally composing my fantasy blurb. I attended institutionally sponsored panel discussions on the plight

of the Neo-Craft practitioner that were led by current denizens of the field and I was inspired to compose impeccably formatted business letters articulating my concept to these successful hipsters of industry. I tapped send and delivered them to the Cloud wherein they remain. A bit later, I submitted my refined entry to the ICFF prototype competition for the 2010 expo but alas, it was not my year. More months of dead-letter writing, industry fact-finding and prototype jiggering ensued and I reapplied for 2011 to no avail. Over these years, I could not help but notice that if I wanted anything done at all I would have to do it myself and by this point, the ICFF seemed to be just one more of those things.

I learned that being denied by the 'competition committee' twice does not preclude you from renting your own booth and exposing yourself. I held an emergency meeting with my angel investor and together we decided that the ICFF was worthy of the considerable booth fee and a necessary step forward for New York Arbor. Surely one of those eager global designers and/or manufacturers would take notice of my concept and help us deliver it to the world, we wagered. So with a great deal of hope, I plunked down five large ones for the smallest booth possible in January for the May 2011 expo.

By this time, my methodology to follow patterns of growth naturally led me to expand the prototype into a nine-component furnishing system. It started out simply enough. After establishing the basic construction protocol, I was able to settle on consistent foot rail heights, which then allowed the stools to be securely tethered by fixed leather straps when stacked in any combination. Given the fundamental tripartite composition of *Phi*, I came to the conclusion that three stools would equal a single, interdependent unit and the prototype would be presented as such. With one unit of three stools, the logic went, you would receive three stable platforms of three elevations that could combine to form two side chairs, or a counter stool, or a bar stool, or a dining table, or a counter-height work surface - all storable within an eleven by eighteen-inch footprint. With

two units, you would have six stable platforms of three elevations that could combine to form four side chairs, or two counter stools, or two bar stools, or a dining table with two side chairs, or a standing bar with its own bar stool - again, all storable within an eleven by eighteen-inch footprint. But was that enough? Hardly.

I continued to follow the formula and expanded the seating platform area to eighteen inches square. Applying the same construction methods, I slightly modified the larger platform to allow for the smaller stool to stack and lock for multi-tiered, variable-sized surface options. Having established the (A) and the (B) factors of *Phi*, the elementary summation (A+B) was the only logical course of action. The result was a twenty-nine inch wide by eighteen-inch deep platform that stacked and locked variations of the smaller stools. When combined, the three platform sizes of three heights formed a seventy-two-inch high by twenty-nine-inch wide by eighteen-inch deep hardwood tower of user-defined furnishing potential that I dubbed *The Hi-Phi System*. In the months leading up to the expo I had completed two nine-piece sets for presentation, one in walnut and one in ash. I made photographs, updated my website, devised my promotional materials, prepared my spiel, and steeled my nerves.

There were many lessons to learn and I was ready to receive them. The ICFF 2011 would be notable because it marked the final phase of the greenwash trend and the beginning of the industry's fusion with fashion. It was also the year before the indie Neo-Craft outfits really came out of the woodwork to announce their arrival as the newest trend. My booth was situated between a New Hampshire maker of hand-blown glass lighting ornaments who generated her next year of work during the four days of the expo and a San Francisco retail tchotchke shop that sold cheap beaded curtains and those cat clocks with the moving eyes and tail. Our diversity was pretty typical of the smaller, outer ring of booths that surrounded the central big booth players and that allowed me to feel slightly less

idiotic about being there. I set up my stools, put a smile on my face, and welcomed the public to my prototype.

I am happy to report that the overall critical reception of *The Hi-Phi System* was positive. Architects, designers, students, and those who had ever lived in close quarters immediately understood it and that was very encouraging. Their appreciation of both the concept and its execution invariably led to questions of price points and delivery windows for which I had no real answer. Unable to utter 'thousands of dollars and incalculable time', I stammered on about how 'I am here to secure a manufacturer...' 'This is a 'not-for-sale' prototype...' 'You will be the first to know when...'They smiled generously, wished me the best of luck in my endeavor, and moved on. Every other interaction I had was someone trying to sell me something.

The days went on like that and then I actually met a manufacturing representative from Walmart who inquired about my work. He was kind enough to tell me that his company could not manufacture it because the stacking aspect was a liability unless it could be attached to a wall. I thought that was nice. My good fortune continued later on when I met the only other manufacturer to cross my booth in four days. He said he could produce them in China if I did not mind violating basic human rights just a little bit. 'A few missing fingers' is how he phrased it. I thought that was not so nice, but very informative.

Here are the top three lessons that I learned from the ICFF:

1. There is value in my concept.

2. Nobody will manufacture your work unless you are somebody and that somebody is you.

3. The ICFF sucks unless you blow glass.

I was very thankful for the ICFF experience however, and I sent letters of appreciation to all the helpful contacts that I had made at the expo. In my estimation, the event was worth the effort and expense because there is nothing like a four-day immersion in hundreds of thousands of square feet dedicated to raw commerce to reveal one's true feelings on the subject. It was evident that the prototype-to-production process was a larger nut than I thought and it was never clearer that I had to devise my own way forward.

After the expo, I took a break to contemplate various cracking strategies for the great nebulous nut of prototype production. I could move to Pennsylvania. found a company in the central part of the Keystone State that actually produces honest, non-basic-human-rights-violating hardwood furniture; entry-level shop sweeper today, furnishing designer tomorrow. I could abandon woodworking and embrace aluminum. Although I am captivated by woodworking, my use of onesquare-inch for the prototype enabled a painful awareness of its fragility and I knew that a significant redesign was imminent. I had a disturbing vision of making stools for the people, the people breaking the stools, the people returning the stools, and me repairing the stools for the people in perpetuity. I came to admire the durability of the iconic Emeco aluminum chairs and stools and as it happens, they are also in Pennsylvania. I could use what I had to get what I want - right here, right now. As I learned from my process thus far, a simplified approach works best for me just after I overwhelm myself with a myriad of arbitrary options. How many more nebulous nuts do I really need to crack, I wondered. I knew that I had to keep it simple and acknowledge my predicament not as a daunting impossibility, but as a continuation of my development as a conceptual artist. Talk about nebulous nuts. At least I had been whacking at this one for years and I think the shell was finally starting to give.

The expo and my subsequent research revealed that the only plausible course toward producing my prototype was to secure artistic credibility through some form of institutional validation. By this point, I was more confident in my creative efforts after both the meditative painting exercise and the didactic progress of my woodworking. With mild amusement, I noted the ironic fact that New York Arbor Workshop was created to abandon my self-centered motivations as a conceptual artist and now its fate was wholly dependent on embracing my self-centered identity as a conceptual artist. With that realization, I assumed that I needed to officially declare myself an artist, avail myself to inspiration, and create an unambiguously conceptual work of fine art. In the meantime, I paused production on the prototype and I redirected my attention to several furnishing projects / life lessons related to a personal apartment renovation for the remainder of the year.

VII.

In the beginning of 2012, my sound artist friend (and PA-native) Jim Bobness approached me with an idea for a collaborative work based on his latest sound design project. Jim digs classic science-fiction literature and at the time he was reading Kurt Vonnegut's, *Slaughterhouse-Five or The Children's Crusade*. He was taken with the novel's presentation of cyclical time-travel and the impositions of boundaries throughout life in general. He had digitally generated samples, grouped them into harmonic triads, set measured boundaries in which they interacted, and cycled the groupings along the harmonic scale into a continuous loop. His working title for the piece was *So It Goes*, a leitmotif used throughout the book. Frankly, he had me at bounded tripartite harmonies, but when I absorbed the satiric novel about the senseless destruction of Dresden, I was never more inspired to create a sculptural work of art. Eight months later, *Bertha Mars Fossillator (The Harmonic Crusade or So It Goes)* was presented to the world.

It started out simply enough. Jim had a digital file to be played on an MP3 device directly through two four-inch studio monitors. From a design perspective, I felt the arrangement called for a singular object capable of housing the hardware and projecting the sound. That concept led to two objects: a cabinet and a sounddirecting canopy of some sort. I wanted to incorporate motion to underscore the time-tripping theme and I also saw a chance to assuage my deep guilt about not using a Technics turntable that had been collecting dust under my bed for some time. The direct-drive turntable then begot the notion of multiple belt-driven objects being powered by a main source and this then necessitated projecting a support backwards in space from the plane of the turntable. This space and the presence of an onboard electrical outlet then led to the addition of a light that would illuminate the void and highlight the perpetual motion of the belt-driven objects. With these boundaries as the framework, I quickly sketched out an object that looked like an alien jukebox and we were both satisfied.

For the cabinet, the triadic musical relationships offered me an opportunity to investigate the triangular manifestation of the golden proportion while expanding my knowledge of casework construction. A golden triangle is formed when the two longer sides of an isosceles triangle are in harmonic proportion with the smaller length of the base. The resultant two base angles are seventy-two degrees and the top angle equals thirty-six degrees. I decided that the front of the cabinet would represent the triangle's base and the sides would follow the prescribed angles. The use of the turntable alluded to the original source of the audio samples, provided the animating force of the components, and it also led me to use twelve inches as the primary measurement by which to calculate the harmonic proportions of the entire object.

With the primary measurement established, I used its harmonic factors to determine the size of the cabinet and the divisions therein, whose forms were dictated by the hardware and its function. The turntable rested securely in a

shallow well on top of the cabinet. The cabinet height was then harmonically divided into a smaller upper tier and a larger bottom portion. Three chambers formed in the lower part; two larger areas for the speakers and a smaller space in between to house the electrical power strip. The speakers were oriented backwards so as to project into the sound-harnessing canopy, which then determined that the backside of the cabinet was to be open on both the upper and lower levels and that the lower front side of the cabinet was to be covered with a removable access panel.

The arrangement of the lower chamber provided support for the upper cabinet level, which was also divided into front and back sections. The single chamber of the back section housed and concealed the light source and the consequent front section was divided into five chambers. The uprights that formed these sections were meant to support the weight of the turntable and I had originally thought of placing the MP3 player in the center chamber, which required a cable access hole through the bottom of that portion. The pentagonal motif underscored the title of the inspirational novel and also referenced the geometry of golden triangles. When harmonic triangles emanate from the five sides of a pentagon they form a pentagram, and therein lay just a smattering of infinite universal mysteries that we had hoped to engage.

With the main structure of the cabinet established, I devised the support for the belt-driven objects by attaching a centered spine to the underside of the cabinet top that ran from the inside wall of the light housing chamber to the apex of the triangle as determined by the established proportions. I had recently acquired a lathe to creatively negotiate the ever-increasing amount of cut-off hardwood scrap that was too small to work on with the other machines but too useful to discard and, on a personal note, my surname is Turner and I was curious to see if the skill of turning was bred in me bones.

To activate my curiosity, I envisioned a spool-shaped bloodwood disc that would fit over the spindle of the turntable to harness and transfer its direct-drive motion. The centered spine arrangement would enable a leather belt to run through the channel of this main spool disc and interconnect on a consistent horizontal plane with the top spool of the first proportionally smaller spool disc on the first cog. This smaller disc would be fixed to a walnut rod that would then be fixed to an identical bottom spool disc. Another belt would run from this lower disc of the first cog to the lower disc of the next harmonically diminutive, structurally identical cog arrangement and then a third belt would run from the smaller top spool of this middle cog to engage the spool of the smallest, final member.

For secure rotation, these dumbbell-shaped cogs would be fixed to a maple dowel that ran up through its underside and down through metal bushings countersunk into the top and bottom of the spine. The dowels would extend through the underside of the spine enough to fix small hooks upon which would hang diminishing lengths of metal rod that held blank compact discs at variant angles to reflect and animate the onboard light. Just above the metal rods, proportionally interrelated paper discs would also be suspended from the lower hook to visually conceal the revolving compact discs.

For the canopy, I envisioned a wire armature that would be covered by rice paper. To help ease the overall construction process, I decided that the canopy would be a distinct, removable object supported by hardwood framing that would connect to the cabinet. I chose this approach because it seemed to be the most accessible and efficient method to cover the considerable area determined by the given proportions and hopefully, the nature of the materials would keep its weight down to a manageable level. I wanted to exploit the translucency of the rice paper and the curves of the armature to offer a harmonic counterpoint to the rigidity of the cabinet and the revolving discs. I also thought to apply gold leaf to the lower interior of the canopy to reflect both the light and sound waves emanating from the rear of the cabinet and project them towards the front of the canopy portal.

With these concepts in mind, I had enough information to draw a quarter-to-oneinch scale rendering of the cabinet from which I constructed a model. It was my first attempt at the process and it took about a month to work out the complex angles and other structural details. After fabricating the cabinet model, it was clear that the only way to negotiate the specifics of the canopy construction would be in full-scale, so I made revised drawings of the cabinet in actual size and got to work. The model proved to be very useful in the actual construction process and I was able to complete the final form within a couple of weeks using three-quarter-inch MDF. In anticipation of its significant weight, I attached a set of four-inch casters to the underside of the cabinet for easier handling and, after I fastened the hardwood spine to the cabinet body, it resembled a gigantic Art Deco horseshoe crab, which was interesting. By that point, I was becoming way too familiar with wrangling this big thing through little spaces to keep calling it a thing, so I named her Bertha with the hope that we might get along.

After Bertha's chassis took shape, it was time to work on her canopy shell. I built a hardwood frame that connected the canopy to the top lateral edges and the four rear edges of the cabinet. This frame secured the terminal points of the major structural wires that emanated from a central hardwood hub that attached to the far end of the spine. I then used smaller wooden blocks with offset holes to join the major armature intersections. After achieving the main structure of the canopy, I wanted to thicken the circumference of the armature to make it appear less wiry and also to provide more support area for the rice paper. Dreaming of sushi, I devised what I thought was an efficient strategy to accomplish this by cutting down eleven-inch wide rice paper rolls into eleven one-inch wide rolls with my Silky Wood Boy pull saw.

Using the cabinet width for reference, I tore consistent lengths from the one-inch rolls and, starting from the rear of the central armature, I tightly wrapped the oneinch strip around the wire and then around itself, and bonded the rolled strip with acrylic medium. I then placed a five-eighth-inch temporary spacer next to it and fastened another strip in the same manner and repeated the actions on down the line. Inch by inch, day in and day out, I applied seemingly infinite revolutions around the armature core, invoking the primal activity of a record, or a planet, or any living thing. Thankfully, my experience with the blessed repetition of milling hundreds and hundreds of prototype component parts had somewhat prepared me for the consuming task. After a month of work, it was time to cover the inbetween spaces to achieve the desired armature girth by applying the same amount of rice paper over the gaps. The good news was that it only took half the time and the end result looked like a completely plausible skeletal network of fossilized bones. Moreover, the new gaps formed by the top roll made logical connection points for a lighter gauge wire to tether the main armature and enable further support for the rice paper shell.

Again, I started the connection of the lighter gauge wire on the top central armature at the main support hub on Bertha's backside. Spiraling clockwise with a continuous line, I ran the wire around the armature at the first gap and connected it to the corresponding gap on the next armature, wrapped it around that and brought it back to the first, wrapped it around that and brought it back to the first, wrapped it around that and brought it back to the next, and then repeated the method all the way around her entire back portion. A few thousand feet of wire later, I tethered the front armature supports and finally began to layer the exterior rice paper shell. By that point, with her initial coat of rice paper, structural vertebrae network, and the fishy herringbone pattern revealed by the lighter wiring, I could not help but notice that she looked just like a great white whale, but I chose not to read too much into it. Call me a *schlemiel*.

The time had come to remove the shell from the chassis to work on the inside. I was able to clamp the canopy to a worktable and layer the interior with larger, harmonically proportioned strips of rice paper. For the gold leaf, I employed a variation on Old World gilding principles with a thin red-oxide acrylic undercoat to enhance the brilliance of the leaf and, though only the lower inside portion of the canopy was to be gilded, I decided to paint the whole interior with the undercoat. When the time came to gild the lower portion, I fashioned a hook and rope to suspend the canopy from a ceiling pipe for easier access and it resembled a despondent Rauschenberg Combine or perhaps something Hemingway wrestled out of the Gulf, which was interesting, too.

Alas, after all of this work, there was a major issue with the form of the canopy. The varied qualities of the material and application methods conspired with the ambitious spatial expectations of the canopy design to form an inadvertent swayback effect on the central armature support that was immune to any corrective influence. It was elegant and graceful enough but we had had a long-standing arrangement for an arc and I was determined to fulfill the order. I simply needed to form the profile of the original arc on the exterior of the canopy by filling in the swaybacked space along the central support from the rear hub to the portal apex. I grabbed my Silky Wood Boy, cut a slew of one-inch rice paper and got unrolling. Back and forth, just like Cameo song that played for a solid month. I was finally able to satisfy the initial order and, at the end of many days, Bertha had a rather fetching dorsal fin. To apply the exterior finish coat, I briefly reattached the canopy to the base and could not resist quoting memorable lines from *Jaws* to no one in particular.

I applied a final coat of acrylic medium mixed with an iridescent pumice, initially to emulate a nautical shell, but thankfully the mix also worked for an accidental great white whale shark. After the shell cured, I removed it from the base and hoisted it aloft with the Hemingway hook and turned my attention to finishing the cabinet. Sanding between coats, I applied three layers each of black gesso primer and Mars black acrylic paint to every surface. I reattached the canopy after the base cured and I made another observation.

Bertha the compound object had become Bertha the singular figure with the two forms joined together and, riffing on the ancient male practice of objectifying the female figure, I took the next logical step and deified her. A goddess with a shell... where had I seen that before? A constellation of art historical associations had aligned with my defenselessness against the use of obvious puns to reveal the second name of her title, Mars. I wanted to give a layered meaning to her proper name by respectfully quoting Botticelli's, *The Birth of Venus*, and use *Bertha Mars* to underscore the binary interrelationships of life and death, light and dark, female and male, and love and war. Now that she had a proper name, she could also potentially apply for a line of e-z credit, open a Facebook account, or chat with the NSA about her meaningful identity.

Two seasons had passed and it was time to turn, turn, turn. After months of inadvertently extreme papier-mâché work, teaching myself faceplate turning with big chunks of pricey exotic hardwood whirring at thousands of revolutions per minute seemed like a day at the beach. I immediately learned that the most import aspect of turning is tool sharpening, which is an entire discipline unto itself. To underscore that point, my use of dense, tool-deadening bloodwood allowed ample opportunity to hone my sharpening skills using a water-cooled grinding wheel system. After spending considerable time figuring out the proper angle setting for the sharpening jig, there was still enough steel left on the tool to actually start turning the wood. There are few things as satisfying as touching a well sharpened tool to whirring hardwood and covering yourself in its chips as you shape the form. FYI: Keep your mouth closed. Thankfully, the slightly toxic and mildly skin-irritant qualities of the bloodwood were negligible and I managed to form the spools into the chatoyant blood-red discs that I had envisioned. The

walnut support rods were delightful to turn after the exotic intrigue of the bloodwood and finally, I used handmade half-inch maple dowels to assemble the objects as planned. To further support the infinite time aspect of the main thesis, I carved a V-shaped notch detail on the slightly modeled topside of the main disc to emulate an ouroboros form that snakes around the turntable deck in perpetuity.

As it turns out, my surname made a little more sense now than say, Cogswell or Spacely, which would have been super helpful with the moving parts. Anyway, I am grateful for what I got and for all of the gifts that Bertha had given me thus far. Eventually, through a no-longer-surprising-amount of trial and error, I managed to conjure her cogs to life. Here is how the gears of this goddess go: The turntable rests in a three-quarter-inch well that is slightly longer than the depth of its base. This allows a removable brace to lock and unlock the backside of the turntable to remove or adjust the tension of the first belt. The three cogs on the spine are at fixed distances, so I tethered the ends of relatively sized leather belts with heavyduty staples that enabled me to finely adjust the belt tension in order to smoothly revolve all the objects at thirty-three-and-a-third synchronous revolutions per minute. I attached the metal rods and blank CDs, the lighting fixture and electric power strip, and then I installed the light bulb and audio components. I carefully replaced the canopy to the base and after eight months of labor, she was alive. Alive! I had my Mary Shelley / Mel Brooks moment and then I shared the good news with her other babyfather.

Jim and I decided on a mid-August reception for Bertha, which allowed a couple of weeks for me to try and articulate what exactly I had been doing since January. As a mildly observant global citizen with a massive obsession for reciprocal interrelationships, I could not help but notice that the world was infinitely spiraling into apocalyptic chaos and I figured that if Bertha was going to take up the size and space of a voting booth, then she should cast a partisan ballot for infinitely spiraling into universal harmony.

Given the dogmatic death matches and no-holds-barred cockfighting that define the male-dominated madness of our contemporary geopolitical circus, I do not particularly need to see more females in higher office as much as I see the need to put every hubristic clown in timeout for his delusional behavior. I would offer every contemptible warmongering coward a radical reeducation in fundamental cosmic law through the administration of enhanced harmonization techniques, followed by healthy snacks and a lengthy nap. I think that the universe would approve of this message and if Bertha Mars was going to be a significant player in this era of relentless egomaniacal campaigns, dogmatic extremism, and boundless aggression, she was going to need a bigger name, an ultraconservative platform, and an army of some sort.

What is in a surname? What is bred in the bone? In the case of Bertha Mars, organic coils of fossils and oscillating action or *fossillation*, if you will. Big names and big thoughts require big initials and now *Bertha Mars Fossillator* was ready for big duty. BTW: B.M.F. can also mean Bad Mother F'er, so watch your step.

For BMF's unassailable policy platform, I invoked the principles of the golden proportion from which she was born. György Doczi's, *The Power of Limits*, continues to be my reference for all harmonically interrelated topics and has been instrumental to my development since the New York Arbor venture began. Under a BMF administration, it would be mandatory reading for the ongoing rehabilitation of candidates, clowns and their constituencies. In the book, the author coins the term, *dinergy*, to describe the two essential energies that define the binary dynamics of the golden proportion and compose the patterns of organic growth: Living (A), Dying (B), and Life (A+B). Bertha's governing policy would be called The Harmonic Compromise, and the formula would serve as the foundation of all administrative initiatives. With the application of this policy, a

golden era of equity would begin to correct the imbalance of the terminal oneversus-ninety-nine percent problem that is endemic to unlimited capitalism towards a more universally benevolent sixty-two-versus-thirty-eight percent allocation of resources under the auspices of mindfully limited, or golden capitalism.

With a policy for economic harmony in place, I directed my attention to raising an army of golden proportion. At the time, I was reading a book by a highly regarded Buddhist monk named Chögyam Trungpa entitled, *Shambala: The Sacred Path of the Warrior*. The text proposes a secular application of traditional Tibetan warrior principles to guide individual development as a means toward greater societal enlightenment. The personal attributes of a harmonic warrior: the balancing of ego-driven desires, the bravery of basic goodness, and the allegiance with natural world order - are simply behavioral limitations that emulate Bertha's proportional boundaries and thus further underscore her *raison d'être*. Armed with a stockpile of enlightened strategies, a universal mandate for equity, a surplus of bombastic rhetoric, and a passion for overwrought project titles, I declared a global war on dogmatic delusion and/or a greater jihad to end all jihad and thus, *Bertha Mars Fossillator (The Harmonic Crusade or So It Goes) était arrivée*.

For propaganda, I collected my thoughts on sound design, Mr. Vonnegut, and the theoretical politicization of universal harmony and stated Bertha's case in a manifesto. I coupled the declaration with the initial alien jukebox sketch from way back when into a program bill printed for the occasion. I commandeered the empty workspace next to mine and prepared for the event; Perrier was offered but no cheese, what for the ongoing vermin infestation of Industry City. Anyway, the reception was very nicely attended and harmonic times ensued. Jim worked the room like a champ, my angel did her best to see the big picture, and I thanked everyone for everything. We waited awhile for the media to show up but

they must have spaced on the date, so we tucked Bertha in for the night and went to a diner. In the end, it was truly a golden evening of golden stars deluxe.

After the initial phase of the campaign, it was time to work on Bertha's promotional reel. At a minimum, I wanted to create an informative presentation of our work for consideration by anyone who might care about such things. At a maximum, the YouTube video of Bertha's golden spiral would go viral and deliver perpetual awesomeness to all. As it happened however, it seemed that the universe wanted to emphasize the consistency of both *Phi* and the unexpected challenges that Bertha provided throughout her construction. The video took exponentially longer to produce than I had anticipated due to technical difficulties that ultimately wiped out a laptop. Once again, I managed a stylishly middling solution to get the job done with as much grace as possible and the end result was a six-minute-seven-second, spiral-informed, viral-ready video. The world may tap it whenever it is ready to accept that there is a true cosmic order of creation that reveals all other dogma as the destructive megalomania of little men with big ballistics geeking out on old comic book heroes at the expense of all that is or was or will ever be. So it goes.

## Epilogue

Bertha will be three years old in August. She stands sentry as my bullshit detector in a voting booth-sized corner of the shop swaddled in a protective coat of linen and sawdust, patiently awaiting further duty abroad. Meanwhile, the sad clowns of the apocalypse hasten to ride their backward asses roughshod over our beautiful reality to actualize their delusional Judgment Day fantasies, convinced that God will say, "Well played, Bozo. It's like you were reading My mind."

I have never been a big fan of blame games but if the media had shown up and our promo had gone honey badger-viral, perhaps the kids of today would be lining up to join BMF and The Harmonic Crusade to become Higher Plane Jane and Johnny Gee Whiz and not gleefully swearing their allegiance to her arch nemesis, ISIS, and The Hardcore Endgame porn that spawns No Brain Jane and Johnny Jihad. But, I suppose the media can have an off night, too. In any event, ISIS makes viral videos like a hell-bent teenage bully and crazy nastyass hellbent bully don't care. No offense, but this homie does not play that.

Fear not, harmonic warriors, Bertha Mars abides. Jim and I have been exploring alternate versions of BMF that may be helpful to promote natural wonder over artificial ignorance:

Plan A: *The Harmonic Comfort Station* is a Bertha Mars-form that emanates perpetual waves of golden energy for direct public utility. Employing Bertha's original design as a model, the harmonic comfort station would be a stainless steel cabinet attached to a revolving platform of the same material that rotates once every twenty-four hours. A translucent fiberglass canopy embedded with photovoltaic cells would power interior LED lights and activate the moving parts. The oscillating components would be devised to produce harmonically interrelated tones generated by the reciprocity of their physical interaction and naturally projected from the canopy portal. The formerly hostile surrounding area will thus be transformed into a free harmonic hotspot for connecting to the universal web of everything and chilling out with the Cosmos for as long as it takes to play nicely with others and/or let the end-of-days thing go. Consider it a We-Free Zone.

Plan B: Fight Fire with Fireworks, or, Immolate, Baby, Immolate! is a nuclear option that I would prefer not to exercise but desperate times call for desperate

measures. As a martyr for universal amazement, BMF will combust in a sacrificial blaze of protestation should ISIS continue to metastasize unabated while the RNC further clenches its malignant stranglehold on the public weal for private interest and their shared zealotry for Judgment Day fantasies conflate into abject reality for every living soul. With clarity of purpose and a heavy heart, Bertha would be hauled to a discreet mountainside, filled with fireworks, and blowed up real good for a hardcore endgame porn shoot-and-post. I know a spot in Pennsylvania.

Plan A+B: U.F.O. / G.T.F.O. Bertha can do fantasy, too. Starting in Dag Hammarskjöld Plaza and spiraling clockwise, a continuous string of harmonic comfort stations would be placed at strategically proportional intervals until the entire planet was so adorned. When the global network is in place, according to the prophecy of genesis as revealed by the intelligent design of the creator, BMF would actualize her destiny as an alien jukebox. The concert of euphonic chimes and golden tones would entice good-vibe-seeking intergalactic time travelers to pop by for grins and giggles. After we explain our aggro-clown situation, they would deliver every retrogressive yahoo to the century of their choice and let them hoist on their own petard. Then, with balance restored to our beautiful world of here and now, our alien saviors would offer free joyrides through the Cosmos to every harmonic warrior who would like to blow this juke joint for awhile and see what heaven is really all about.

VIII.

Cool collaboration, bro. The fall was approaching, and after we had made our unambiguously conceptual work of fine art, Jim got called back to a day job and I was set to revise my stool prototype. The stools that remained in the shop performed dutifully throughout the fabrication of Bertha and literally proved their utility on every level, both individually and in stacked combinations, as they offered instant support solutions at any height. Their practical use also continued to provide further information on what structural aspects worked and what deficiencies needed to be resolved. But, ever the overachiever, Bertha had even more gifts to reveal concerning aspects of my personal structural deficiencies that required immediate attention.

During the construction of Bertha, repeated squatting and stepping motions conspired with complications from my aforementioned childhood leg injury to aggravate my right knee into revolt. To my jaded sensibility, a blown knee is hardly worth mentioning but this was the good one and when your last leg goes, you pay attention. This inadvertent stoicism earnestly began in July of 1987, at age fourteen, when a car accident completely fractured my left femur just above the knee. Initially, pins were inserted to reconnect the bone to itself and I was in traction for two weeks. Apparently, the pins proved to be insufficient after this period so heavier screws were surgically employed to hold the bone together, followed by more weeks of traction. By the time I was released from the hospital with a full leg cast, the x-rays revealed that the bone was healing, though the lower portion of the femur had set at a slightly skewed angle.

When the cast was removed and I began physical therapy, I immediately learned that this new arrangement caused my kneecap to shift painfully to the left when the leg bent, allowing a void into which the relative nerves and tendons slipped for a pitiless pinching as the kneecap slid back into place when the leg extended. To imagine the subtle torture involved in such a scenario, visualize every part of your entire teenage body is facing north except for everything at and below your left knee, which can only face north-by-northwest. Now, try to walk towards the north in a straight line without spiraling out of control. The good news was that only every other step was excruciating, but the bad news was that the duration of

the injury caused all of the musculature on the left side of my body to atrophy from an over dependence on my right side and, after twenty-five years of overcompensating for the damaged left leg, arthritis had forcefully set in behind the right kneecap and exponentially flattened my world.

Here is more good news: With my hindsight goggles on, I can clearly see that the situation envelopes some of my favorite obsessions - intractable problem-solving, proper joinery, and the pursuit of natural balance. But as this awareness rapidly unfolded, I found myself at the bottom of another long and painful spiral looking for an authoritative way to reclaim my severely compromised mobility, so I looked for help to navigate the first few steps toward a reversal of this misfortune. Thankfully, my angel is connected to a healthcare plan that led me to an injury specialist who diagnosed the arthritis and directed me to a competent physical therapist. He informed me that it was possible to develop the kneecap musculature so as to control the inherent slip-and-pinch problem which, given the historically painful association, never even occurred to me as an option. This powerful knowledge allowed me to instantly form a new perspective on the whole issue and he devised a strengthening program that yielded modest results over a six-week period. By the end of October, the new vantage point revealed a constructive way to spiral into control while embracing my obsessions and learning how to properly walk for the first time in my adult life.

As long as my hindsight goggles are still on, I think it would be prudent to add bottom-outs / blank slate development, pattern recognition, and proportional interrelationships to my obsessive list of faves and here is why: Just as the first strides of my rehabilitative spiral commenced, along came a super-sized spiral of superstorm revelation to test my mettle. As it turned out, my practical working experience to that point had somewhat prepared me to witness Hurricane Sandy and her destructive aftermath as a golden opportunity to further develop my fundamental convictions in the real world. Nonetheless, my gut went hollow seeing the true awesomeness of the natural universe and my heart goes out to those still affected. That said, I was able to appreciate playing for the universal amazement team and I saw every storm-related challenge as a divine provision for gaining strength and wisdom in understanding the responsibilities of my position.

To absorb the big-league totality of the major storm, my angel and I evacuated from our oceanfront spot to our riverside spot and then the river drowned our car, perhaps to insure that we would not miss a moment of the afterparty. To strengthen our remaining fortunes, we walked eighty blocks a day from our powerless downtown dwelling to my angel's office in the electrified uptown district to check in with the outside world and, more importantly, to transfer ice from her commissary to a cooler in our kitchen. To be certain, we were never more thankful for our ground-floor apartment wherein we were able to truly appreciate functional gas lines and basic plumbing. To fortify our loving bond, we had candlelit dinners in our living room with the curtains drawn open to bear witness to actual darkness in the absence of cornea-searing, cosmos-canceling streetlights and, over the week of conventional power loss, we saw the upper floors of our building complex grow darker and guieter as the residents vacated in a steady stream of baby-strollers, big roller bags, and little yapping dogs. To be honest, I momentarily thought that I was in heaven, though I knew it was too good to be true. Just as we were settling rather seamlessly into our neonineteenth-century rhythms, modernity came back online and when it did, we were very thankful to take a long, hot shower, to be sure.

I spent the next week mindfully walking and appreciating the utter destruction of my surroundings while waiting for the temporary Rockaway ferry to begin its service. I walked down through the East Village over to my shop in Sunset Park to see how much the harbor had devoured. Along the way, I mourned the ancient trees in East River Park that were toppled flat, trying to comprehend the raw power involved in such carnage. Thank you for your life of service, ancient trees, it seems that you never had a chance to survive in such extremity. The river itself still looked angry, bloated, and too damn high, in my humble estimation, and in spite of consuming our car and every other vehicle in the neighborhood, I thanked her for her tireless efforts. I was even more thankful that I could climb the stairs and walk over the Brooklyn Bridge with thousands of other accidental interborough commuters and gaggles of tourists making the most of their ill-timed trips with bonus disaster gawking. I thought about all the times that I had walked across this beautiful bridge over the years because some kind of major poop had hit the fan, knocked out all other viable options, and necessity compelled me to get to the other side. Thanks for being there, Brooklyn Bridge.

Everything was kosher at the shop, though Industry City had been out of power for a week. A large pier used as dealership storage for fifteen thousand new vehicles sits between the buildings and the harbor and it thankfully bore most of the storm's rage, which succinctly decommissioned the whole lot, which was like, wow. Nice job, New York Harbor. In the buildings, the basements had flooded and knocked out some electrical works but thankfully, the entire complex is mostly wired with a rigged network of rooftop extension cords. Consistent electrical delivery has never been their strongest amenity, and before Sandy, I considered the surprise bi-monthly brownouts as forced quiet-time breaks in power tool activity. I used the time to wave to other work-blocked tenants from my window while contemplating the value of our \$200 non-metered monthly electricity fee and thanking goodness that I did not work with consistentelectricity-dependent computer-y things in this place. Thanks for the quiet times, Industry City; I bid you a heartfelt, *shalom*.

The emergency ferry service to Rockaway commenced at the beginning of the following week and I was prepared to contribute my energy to the revival effort. I

sailed with a neighbor that lives in our beachfront co-op who, along with his wife, was transformed into a superstorm refugee sheltering on the Upper East Side. Onboard the ferry, he introduced me to a lovely neighbor from our block that also fell under Sandy-refugee status, though she and her husband were directed to a midtown budget hotel. As it turned out, she worked for the Jamaica Bay chapter of The American Littoral Society, an environmental advocacy group concerned with the well being of coastal areas and the critters that inhabit them. Their office on the bay had been completely inundated, like every other converted fishing shack in Broad Channel, and she had much work to do. We sailed the bloated harbor with about a dozen other bleary-eyed Rockaway refugees, dodging carcasses of armoires and sideboards that probably once lived on Staten Island. In silent awe, we surveyed the coastal damage on both sides of the harbor from Liberty and Ellis Island to Red Hook and Coney Island, but the wreckage of Rockaway was something to behold.

Upon entering Rockaway Inlet, we could observe the charred and twisted shells of Breezy Point dwellings wrecked by both fire and flood. As we passed beneath the Gil Hodges Memorial Bridge, we could see a newly formed mountain range that dominated the landscape around the ten thousand-car parking lot of Jacob Riis Park. As the formations came into sharper focus, it was evident that the massive forty-foot piles of debris were composed of just about everything on the peninsula that was below the eight-foot waterline of the storm surge. We motored eastward into the bay continuing our survey of the damage, some of it still smoldering, and readied ourselves for the work that lay ahead.

We disembarked at the temporary dock on 108th Street and walked a short distance to our block in Rockaway Park. To circumnavigate the still-smoldering area on Rockaway Beach Boulevard between the dock and our block, we went directly to the beach and walked along what was once the boardwalk. One hundred and fifteen beautiful blocks of uninterrupted boardwalk that provided seaside pleasure for generations was now either completely gone or fucked up beyond all recognition. It was especially hard to take because it was our lifeline to the eastern peninsula and it was the primary conduit that enabled our neighbors to do neighborly things that strengthened the bonds of our whole neighborhood. In fact, it was the deal-sealer when my angel and I plunged into Rockaway real estate and we all continue to mourn its loss. Thank you, beautiful boardwalk, you were really wonderful and we are truly blessed to have known you.

Our neighborhood was now bonded by tons of sand from what I consider the most aptly named superstorm in history. The beach at the shoreline seemed at least two or three feet lower than I remembered and the boardwalk in front of our six-story building was a crumpled wreck that would have been *inside* of our building if it were not for the fortuitous placement of a single tree planted on an earthen berm that abuts the oceanside facade. Thank you for your heroic sacrifice, dear tree. The building next to ours was not so fortunate. An errant beam from the boardwalk was transformed by the storm waves into a battering ram, slammed through a metal door that was four feet to the left of our door, and allowed the ocean unfettered access to their entire ground floor. The oceanfront of many other neighboring buildings suffered similar fates.

I found the missing beach by glancing towards the bay, down our tree-lined street of century-old Dutch Colonial-style houses. The scene looked like a Surrealist dreamscape with a two-foot blanket of white sand punctuated by six-foot drifts. I absorbed the beauty of it all while a Department of Sanitation guy in a bulldozer repeatedly carved a bulldozer-wide path up and down the middle of the block. Our building's glass-enclosed street-side entrance was unprotected by traditional storm-preparation methods though it remained intact, save for a single pane of glass on the lower half of one of the two vestibule doors. Instead, we were very fortunate to have Tommy, our building's superintendent, who, along with his buddy Danny, held these two doors shut against the eight-foot surge of ocean that roared down our block. Ill-advised, but deeply appreciated, fellas.

Not one to relent, the Atlantic Ocean passed by Tommy and Danny, continued around the corner of the building entrance, down the driveway, and through the bottom panel of the automated door to fill our eight-car garage. An auto-aquarium was formed, swirled the few remaining cars around a bit, and left behind several feet of sand in its wake. Thankfully, none of that torrent came into the main building and though the water table rose up through the ground enough to sink our main boiler, the building was spared any other major storm-related destruction. It did, however, exacerbate a preexisting plumbing issue that became increasingly pressing for Tommy to resolve, so I wanted to help him out by lending a hand. He took on the ocean, after all.

Tommy is a good guy from the neighborhood who has had some tough breaks and he does his best to keep it together, all things considered. His latest challenge was that his mother's house on the next block over had flooded to the first floor but he had to solve this plumbing problem made impossibly worse by the storm's non-electrified, unavailable-plumber aftermath, all the while his buddy Danny was otherwise engaged. The plumbing issue was crucial because it was pouring through one of the two remaining tenant's bathroom ceiling, over her barely-functioning toilet. Her name is Jozefa and she lives on our floor. Jozefa is an older Polish woman who suffered a stroke many years ago and manages to live by herself with occasional help from a friend, though she had no means to evacuate anywhere else. The other remaining tenant in our forty-two-unit building is a retired high school guidance counselor named Frida and she also lives by herself on our floor. Frida is a legendary local spitfire with an endearing brand of spunk who, as it turns out, can be very sweet when catastrophe comes a-calling.

For the next month or so, I did what I could to comfort our neighbors and help Tommy get the building back in order. Over the weeks, I developed an amicable

routine with my fellow seafaring revivalists as we wrought our way forward by day and lumbered onto the last boat by nightfall. I rode the ferry daily throughout the week, checked in with my lady friends, climbed a lot of stairs chasing the pernicious leak with Tommy, shoveled wet sand to utter exhaustion, and witnessed a sensational post-disaster mega-event unfold all around me. There was Sixty Minutes, FEMA fecklessness, and an amphibious landing by the United States Marine Corps like it was the beach at Normandy. The immense volunteer response was touching and it was especially wonderful to see utility vehicles from far-flung municipalities plying their recovery efforts to our power lines while our local energy provider revealed itself as the quizzical conglomerate of ineptitude that it is. Thank you, midwestern utility guys. Gratefully, conventional power was restored by Thanksgiving time and superstar power was delighting our neighborhood with the likes of Jon Voight and Bill Clinton appearing at barbecue benefits two blocks over in either direction. By Christmas time, the plumbing was fixed, the boiler was replaced, most of the sand was off the street, and the rest of our neighbors slowly returned from their exile to a post-Sandy world. For a first act grand finale of this ongoing tragicomic play, Bruce Springsteen and The A-list Band of All-Time rocked Madison Square Garden for the benefit of the Department of Sanitation guys and everyone else who simply wanted to resuscitate the neighborhood they love. Thank you for all of your efforts, neighbors.

I am very fortunate that Sandy enabled me to develop my existential chops on the universal amazement team but the major storm was minor league stuff when compared to the post-aftermath training that was about to begin. After the superstorm trials had abated somewhat, my angel and I spent the holidays with family and friends in several locations far from the disaster zone. Though we were physically exhausted and our minds were greatly agitated by recent events, my angel felt thoroughly unwell besides. She had been feeling uncharacteristically lethargic for some time and there was dizziness, fullness in her left ear, a holistic feeling that she was perpetually hungover without cause, and no remedy would alleviate any of the sensations. We did our best to endure the rest of our barnstorming holiday tour and resolved to seek a professional opinion upon our return. After the New Year, my angel consulted with an ENT practitioner who could not explain the fullness in her ear but suggested that she have an MRI taken for a better perspective. A nerve-wracking week later, he informed her that she had a one-centimeter intracranial tumor growing behind her left ear, just below her halo.

A vestibular Schwannoma is fun to say but a horror show of a diagnosis. Also known as an acoustic neuroma, the relatively rare illness is characterized by a generally benign tumor that slowly grows on cranial nerves associated with balance, hearing, and facial muscles. It is kind of like your own personal superstorm persistently raging inside your head because it gums up the delicate internal works, wreaks havoc with everything it touches, and it forever alters the future in incalculable ways. To make things worse, the ghastly spectrum of symptomatic manifestations caused by the affected neurological networks is a combinatory crapshoot depending on the size, composition, and location of the tumor, as no two cases are the same and all post-operative prognostication is anecdotal at best. We immediately took to the Internets for further information and we did our best to not lose our shit over the voluminous blog posts describing a myriad of nightmarish scenarios that were now very plausible realities for my angel. Together, we researched the leading treatment options, institutions, and specialist surgeons to move toward resolving this latest challenge.

After consulting with two specialists, we opted for the one that wrote an authoritative book on the subject. He was affiliated with Memorial Sloan-Kettering Cancer Center and the dozens of achievement awards in his office that

proclaimed his extraordinary competency with the matter at hand somewhat comforted us. He was compassionate to our predicament, candid in his articulation of the surgical process, and as knowledgeable as possible about the post-operative realities. He explained that it was in our best interest to surgically resect the tumor as soon as possible in order to alleviate her symptoms and stave off any further deterioration of her faculties caused by the neuroma. He assured us that the post-surgical recovery would be intense but manageable after four to six weeks. Most fortunately, his services and affiliated institutions would be covered by my angel's healthcare plan. After he conferred with his surgical partner, a kindly MSKCC veteran who would perform the actual incision, we set a mid-March date for the operation.

Ever the dynamo, my angel used the remaining weeks before her surgery to get her affairs in order and strengthen her resolve for the recovery. We made a concerted effort to see the imminent surgery as a fundamental step to remedy her peculiar malaise and she did her best not to imprint deleterious thoughts on her psyche by reading more anxiety-inducing websites. At work, she confided the situation to her colleagues and they generously granted her whatever she needed to recuperate. At home, she reintroduced herself to the Pilates method of exercise and found a very nice instructor who helped her strengthen her body as the operation drew near. She alerted family and friends of the situation and they returned their heartfelt regards. At the shop, I tried to focus on work to occupy my thoughts, consulted with Bertha for peace of mind, and then I prepared to pause once more for another superstorm hiatus.

I am happy to report that the operation was successful in removing the tumor but sadly, the auditory nerves could not be saved and my angel lost all hearing in her left ear, which is as sucky as it sounds. The good news was that she was alive and she could still smile of her own volition, but the bad news was that she had to relearn how to walk while enduring severely compromised neck musculature and a migraine beyond all comprehension. After she survived a few interminable post-op days and nights in the hospital, her mother helped me bring my angel home to convalesce among her new garden of floral arrangements sent from all of her well-wishers. My dear mother-in-law prepped our apartment for maximum convalescing comfort, cautiously handed me the reins of recovery on her way out of town, and then my angel and I began our resuscitative spiral towards wellbeing. I thank you all very much for your love and support in this most precious endeavor.

Over the ensuing weeks, I did what I could to not despair at the sight of my incapacitated love suffering beneath a big, bloodied head bandage and provided for my angel as best as I could manage. I tried to make her as comfortable as possible to get rest, aided her around the apartment, and cooked on demand. After the first few weeks, as her old self was melding into her new self, our new reality was slowly starting to blossom. By April, she was strong enough to start reclaiming her compromised sense of balance and relearning how to walk with what was left of her vestibular system. We developed a daily routine of gentle mobility training with mindful walks around our apartment complex as she began weekly specialized vestibular therapy sessions at the hospital and personalized Pilates training at a studio in our neighborhood. Day by day, my angel strengthened her faculties and developed new strategies for meeting the ceaseless demands of her recovery. By May, my angel was authoritatively navigating the mean city streets all by herself and back in her office trying not to freak out too much about what just happened, though it remains a constant challenge. Thank you for your boundless courage, my sweet angel.

Now, thanks to our ongoing training in calamity management, my angel and I continue to learn valuable lessons about the intricate wonders of mind-body, husband-wife, and life-death relationships. For that, I would like to give a very special thanks to broken bones, superstorms, and intracranial tumors because

our lives would be far less illuminating without them.

IX.

I returned to the shop prepared to resume work on my prototype after two trying seasons. Since the ICFF, I realized that the lower rails needed to be lowered to a consistent height for extra strength and easier tethering compatibility. This new arrangement would enable the addition of a lower shelf that could also fortify the structure, balance the top-heaviness, and increase the stools' practical capabilities. I returned to the drawing board and devised a plan based on the composition of the seating deck by using sixteen three-eighth inch high by one-inch wide slats, half-lapped at their ends, to fit a three-sixteenth rabbet on the front and back rails. The slats were to be bonded prior to assembly, with the top of the lower shelf being flush with the top of the lower rails to allow for the tethering strap hardware to be discreetly installed in the five-eighth inch space just beneath it. I made new drawings and got back to work.

I still had two-inch walnut stock in the shop and I milled enough material for a set of three stools. The process went well, considering my lengthy hiatus, though the assembly of the lower shelf provided new challenges in bonding the slats into an absolutely flat surface. Through trial and error, I did what I could to thwart the propensity of the material to bow by developing assembly jigs and regulating clamping pressure. After sorting out the shelf fabrication method, the rest of the assembly proceeded in the same manner as the prior editions, though I realized that the diminutive space between the bottom of the upper rail and the top of the lower shelf on the two shorter stools did not fit the height of my orbital sander, thus providing further challenges in the finishing process. To address these issues, I needed to sand the top surface of the shelf and install the tethering hardware before bonding the seating deck in the final assembly. By the end of June, I was able to manifest the upgrades and the new version was ready for testing. The set performed well in balancing the top-weight, locking the combined stool uprights, and strengthening the structure though I still had reservations concerning its overall durability and the persnickety assembly method.

Over the years since the expo, the larger eighteen-inch square and eighteen by twenty-nine inch rectangular stools of the ash set that I had built became extremely warped and they gradually pulled themselves apart. Not only was this spectacular self-destruction interesting to watch, the predicament led me to abandon these two larger-sized platforms entirely for the development of a removable adaptor that would convert the remaining eleven-by-eighteen-inch seating area into multiple, task-oriented tabletop attachments. To underscore the space-saving modularity concept of the prototype, these attachments would be designed to be wall-mountable. The structural failure of the ash also led me to explore poplar as an alternative hardwood that was similarly priced far below walnut. I procured a half dozen two-inch thick poplar planks and let them dry out while I made drawings for the tabletop adaptor.

After working out the basic details of the frame-and-panel construction, I used walnut stock to form the first model. The idea was that the adaptor would rest and lock on the top of the stool and it could be used by itself as a twenty-inch square tabletop, or used to secure either a twenty-two-inch cutting board or a twenty-four-inch square tabletop. The two-inch deep adaptor framed the stool top internally to form two narrow wells on the longer sides that were fashioned to receive and hold the mating tabletop attachments. These three-inch wide wells were covered by removable panels that were held in place on both the topside and underside of the lateral braces by magnets for onboard storage while utilizing an additional attachment or when mounted to a wall. It took a few weeks to achieve a working model and then I set out to fabricate a cutting board attachment in maple and a larger tabletop attachment using the remaining walnut in the shop.

For the two-inch thick cutting board, I applied the assembly techniques that I gleaned from the stool shelf and adaptor panel construction to achieve a level surface. After the assembly, I successfully rounded over all of the edges but failed miserably in routing a fluid trough around the surface of the cutting board, which succeeded in completely ruining the entire piece and exhausting my maple supply. I absorbed the lesson and turned my attention to the five-eighths-inch thick walnut tabletop, which was comparatively more successful inasmuch as I did not ruin it after weeks of working on its construction.

By the end of August, the poplar was ready to be milled and I planned to fabricate another adaptor to refine the construction methods as well as another set of stools to test the durability of the hardwood. The poplar was quite agreeable to manage though after working with the higher-end species, I found the variegated grain visually distracting. I decided to resolve the issue with the introduction of black wood dye after constructing the second versions of the adaptor and the stool set using the lessons learned from the previous attempts.

Around this time, I could not help but notice a four-story banner hanging from the roof of my neighboring shop building that announced a one-year anniversary benefit art show for Hurricane Sandy victims. I figured that I must have missed the invitation to be included, but I thought it was a nice gesture, nonetheless. I did, however, get a call from management on the first of September announcing a fifty-percent rent increase for the benefit of Industry City's new controlling owner, Jamestown Developers. I went to the office prepared to negotiate but I never felt more powerless. With absolute indifference and a saccharin smile, the new landlord representative told me that there was simply nothing they could do about how 'red-hot' Brooklyn was and that it was no longer possible to let one single square-foot of the borough be rented for less than twenty-five dollars per red-hot unit. She excitedly suggested that I try to find a cheaper solution, and so I

did. After a week of research, I found that she was short-sighted in her revelation of the real estate zeitgeist inasmuch as I discovered that every borough and surrounding county is as equally and inaccessibly red-hot. After being broadsided by the whole situation, I surveyed my severely limited options: stop production, pack up the contents of my shop, and move everything into storage for an indefinite period, or, continue production, appreciate the contents of my shop, and endure the onslaught of a radically invasive reconstruction of Industry City for the exploitative advancement of bourgeois bohemian bullshit at a designer price. Had I known then what I know now, I would have chosen the former but I begrudgingly agreed to the latter. I returned to the office to sign an extortive twoyear lease because I simply wanted to continue working and I did not know what else to do.

I got back to my project trying not to be too distracted by either the increasingly anxious environment or the ongoing exodus of my neighbors caused by this new reality, but it continues to be a challenge. Ever hopeful, I chose to exploit the situation by converting the anxiety into a motivating force that would, theoretically, enable me to move forward. After several weeks, I was able to construct the full stool set and the tabletop adaptor in poplar, though I still had reservations concerning the overall durability and assembly methods. However, with the need to secure backing more emphatic, I felt that the concept was ready enough for presentation, so I produced an animated video using scaled down drawings. There was a bevy of technical difficulties to complement my profound reservations and, by the time that I completed the video, my concerns about the fundamental designs became unbearable. The one-inch rails of the tallest stool were too precarious and the tabletop adaptor was too complicated to be practical, both in its construction and its intended use.

The good news was that I really liked working with the poplar and I procured a full dozen more planks to work out new designs. For the stools, I decided to

reintroduce the eighteen-inch square format and increase the proportions of the component parts by a golden notch. The legs and rails went from one-inch to one-and-five-eighths square, the seating slat height went from five-eighths to one-inch, and the lower shelf slat height went from three-eighths to five-eighths. In a few weeks, I was able to construct two complete sets, though the overall weight seemed excessive for its purported facility of modularity and the persnickety assembly process remained. Nonetheless, I pressed on with a design for a wall-mountable tabletop form that superseded the adaptor concept by fitting directly over the stools. I made drawings for a one-inch thick by twenty-nine-inch square tabletop for the beefed up stools and, though I had yet to redesign the eleven-by-eighteen-inch stool, I also drew up plans for a compatible five-eighths-inch thick by twenty-four-inch square tabletop.

The new tabletop design allowed me to further develop my panel assembly prowess, introduce colored dyes, and it taught me to ply. Each tabletop was formed by two bonded panels of eight planks, with each panel being half the thickness of the tabletop, fastened to a harmonically proportioned frame that enveloped the sides of the stool's seating platform and top rail. For assembly, the lower edges of the bottom panel were chamfered and then screwed to the top of the frame. With the grain oriented perpendicularly, the top panel was bonded to the bottom panel and then the upper edges of the completed form were chamfered. As I had planned to incorporate black wood dye for the stools, I also came upon the notion to use color for the tabletops. For my palette, I looked to the harmonic spectrum of the *I-Ching* and decided to incorporate colors associated with four cyclically interdependent elements: Water, Earth, Fire, and Metal. I worked out the milling protocol, assembly methods, and finishing techniques with a single twenty-four-inch model and, after I learned what not to do, I procured more poplar and proceeded to fabricate twenty twenty-four-inch and four twenty-nine-inch tabletop forms.

It started out simply enough. I have been teaching myself how to play guitar for a while and over the years, I developed a habit of counting by fours as I worked in the shop to practice my timing and to order my physical movements. The tic became very pronounced after a six-month pause in playing when I accidentally removed one-sixteenth from the tip of my index finger on my fretting hand with the table saw. It happened during the construction of the ICFF prototypes and, over the months of looking like a roving Number One Fan with my bandaged hand, I employed this strategy for practice while regulating the blessed tedium of voluminous tasks performed in solitude. Inspired by this measured methodology, I chose four colors that represent the ordering of natural elements that, according to the *I-Ching*, also denote major cardinal orientations and familial attributions. Adhering to this concept, I considered each grouping of four distinctly colored tabletops as a single set and, if I was going to expend the effort on four different dyes, I figured that it would be more practical to do multiple tabletops in each color. With that logic, I decided to produce five sets of the twenty-four-inch square and one set of the twenty-nine-inch square. I milled and assembled for the entire winter, counting by fours all along the way.

By the springtime, I was ready to dye. I used a single application of concentrated, water-soluble powdered pigment developed specifically for wood and I applied the dye with clean rags. I began with black on the three sets of stools and then I began to cycle through the four colors, six tabletops at a time, starting with blue (water / north / mother), then green (earth / east / daughter), then red (fire / south / father), and finally yellow (metal / west / son). After completing the dye job, I finished the objects with oil and paste wax, devised and constructed simple wall-hanging units, and installed the twenty smaller tabletops onto my shop wall. Lo and behold, I came upon the realization that I had finally created paintings with discernible utility. The field of gem-colored squares was a welcome addition to my unadorned shop and they managed to temporarily calm my increasing anxiety about the encroaching redevelopment of my building until I learned that

Jamestown would be razing all the walls on my floor when my extortive lease expires.

By the summertime, my universal amazement mojo was starting to wither as the relentless developer bullshit accelerated. Industry City was now referring to itself as a 'campus', which smacks of exclusivity and transitory juvenile privilege. Everincreasing amounts of electronic edicts enumerated new restrictive policies, reduced amenities, power shutdowns, water shutdowns, months-long elevator shutdowns, and increased operational fees, all the while announcing the arrival of well-endowed art outfits, organically curated cupcake companies and exclusive designer events in which we were not invited to participate.

As if that were not enough, my most recent efforts were now leading me to an impasse concerning a significant restructuring of my workspace in order to continue to develop the prototype. I had the notion to use a combination of hardwood and manufactured plywood in the eleven-by-eighteen inch stool redesign and I noted that a panel saw and an air compressor would be very helpful acquisitions. I managed to work out a couple of models using scrap wood but accurately cutting down full sheets of plywood stock alone is dangerously precarious without a panel saw and a properly dedicated space in which to use it. In order to reclaim enough space for the panel saw, I would need to build a sixfoot deep by twelve-foot wide storage loft that was substantial enough to hold Bertha Mars. The reclaimed space could also be fashioned into an enclosed spraying area for a more efficient application of dyes and finishes and the compressor would allow me the additional option of using pneumatic nailers and accessories. Alas, given the imminent destruction of my studio walls, I just could not muster the motivation to invest in the equipment or build the considerable structure, so I reluctantly halted the prototype production once again.

I scrambled for alternative solutions to my predicament by checking real estate

listings and want ads trying to find some way forward. A friend of mine works at an art handling outfit in Long Island City and at the time, they were looking for someone to potentially work in the crate shop. I accepted the position because I wanted to see if Long Island City could offer any accessible workspace, if the owner of the company might be interested in helping me further develop the prototype, and if I could still cut the mustard as an expendable culture-industry functionary. The answer was a resounding no on all counts. I spent the hottest two weeks of that summer absorbing the density of the neighborhood's Big Culture-Big Money outposts, learning that my presence in the crate shop was actually a political ploy for a preexisting drama, being demoted to a paid intern, and improperly disposing tons of environmentally horrible packing material waste from a steamy covered dock. Though it was nice to work with other people after five years of solitude, when their August workload slowdown approached, we amicably parted ways and I took off from everything for the entire month of August like I was French. *Quelle horreur.* 

## Х.

My malaise lingered into September with more inane searches for suitable workspace and then I returned to art making. I am into Halloween, so I decided to make animal mask headdresses for the annual Horror Rockaway Hullabaloo hosted by our neighbor. A few summers ago, another friend of ours from the neighborhood had lovingly coerced me to compose music to The Owl and the *Pussycat*, an absurdist children's poem from the nineteenth-century. I employed a simple three-chord progression that I continue to use for guitar practice and it has become something of a signature jam in my nascent quiver of playable songs. The poem also includes a ring-adorned pig and a pious turkey with hilltop real estate, which makes four distinct characters, and I am into distinguished foursomes. Moreover, embracing absurdity seemed like a plausibly commendable course of action, all things considered.

I devised jigs made of scrap wood and packing material into four head-shaped forms that were clamped to my worktable to support the construction of each headdress. I had a roll of pliable wire mesh used for sculpture, and I came upon the notion to use the material for the structure of the skullcap and the basic shapes of the animal faces. I used web images for reference, though I applied the golden ratio to homogenize their proportions. After attaching the face shapes to the skullcap, I roughly filled out the rest of the of the forms with newspaper, then I swaddled them using layers of rice paper and clear acrylic medium for finer distinction, and finally I painted on the details with acrylic colors. I managed to complete the foursome in time for the party and, Io and behold, I came upon the realization that I had finally created sculpture with discernible utility. Hand in hand, on the edge of the sand, we danced by the light of the moon.

In November, Jim was involved with a show for his latest sound project and I helped him design the event postcard. The show was the culmination of his yearlong fellowship with a long-running experimental multimedia outfit and he presented his work along with the work of another fellowship recipient at a Chelsea venue named The Red Door. The presentation was also intended to be a fund-raising event for the well-worn venue, as it had suffered from major structural problems and was facing imminent encroachment by developers. Legend has it that this was the go-to rehearsal spot for rockers passing through the Chelsea Hotel environs since the late-70's and it was still owned by a commercially averse former manager of The Rolling Stones. In fact, the name of the otherwise non-descript venue was inspired by a young Mick and Keith who saw a red door and, in a brooding state of mind, wanted it painted black. Nearly forty years on, the owner was grasping at any chance to stave off the inevitable march of redevelopment and, despite a two-year Kickstarter campaign that raised twenty-five-thousand dollars, his legendary venue was pronounced CBGBobsolete in May of this year. The three-story building, which abuts a scaffoldingensconced, sidewalk-shed behemoth of a structure destined for luxury condos, will be sold and the ailing octogenarian owner will simply have to move his hippie-dippy artistic values elsewhere. A commemorative plaque will have to suffice now, or perhaps the neighboring developers will exploit the historic authenticity of The Red Door as a marketable bourgeois bohemian-chic referent to old New York that has been scrubbed clean and sanitized for luxuriously exclusive consumption by those who appreciate paying dearly for gleaming cubes of inauthenticity. I bet I know what color the door will be.

After the event, Jim received an open call for submissions to another fellowship competition sponsored by Socrates Sculpture Park and he forwarded the email link to me for consideration. We visited the site in Astoria, Queens, surveyed the work of the prior year's recipients, and were wholly nonplussed by the Parks Department selections. Initially, we contemplated an immersive, naturally sound-producing work but the concept quickly grew beyond the scope of capability and the piece was clearly impossible to produce within the parameters of the competition. With that realization, we then decided that I would conjure and submit a soundless concept under my name and, if I were awarded the fellowship, Jim would assist in the fabrication. I thought that being awarded a fellowship from the venerable competition would be a nice feather in my cap that might allow me to work out a plausible way forward, but frankly, I was more motivated by the application process which would force me to gather and articulate five years of previous work that sorely needed organization.

For my submission concept, I attempted to derive harmony from my developerinduced despair with a work entitled, *Dealing with Dystopian Development (If the D is for Diamonds then Run the Jewels)*. It was inspired by the zeitgeist of New York City though, in hindsight, it seems that pitching an anti-developer artwork to the Parks Department might be a bit antithetical but, adhering to my absurdist trend, I gave it a whorl anyway. Here are the nine hundred words or less of the actual submission:

For your consideration, this is a proposal for a sculpture that harmonizes the desire for accessible creative space with the reality of the New York City real estate market by combining primary tenets of the I-Ching with basic materials of urban development. The I-Ching represents a millennia-old attempt to organize human development by observing natural boundaries that reveal the essential unity of the diverse and perpetually changing situations of being. The key elements of this creative system used here are: Wu Chi – the concept of total awareness wherein all energy begins and ends, Tai Chi – the complement of Wu Chi defined by the fundamental binary interrelationship of dark (vin) and light (yang) energy, and the Baqua – the original eight symbols that encircle Tai Chi and present reality as an interconnected series of concepts. The Wu Chi is represented as an empty circle, the Tai Chi is represented with either a broken line (yin) or a solid line (yang), and the Baqua present alternating combinations of these lines into groups of three, known as trigrams. These eight symbols are placed in an analogous spatial arrangement known as the Later Heaven sequence wherein the nature of each trigram flows into the next. I am offering to produce a harmonic composition of these associations into a structure that functions as a welcome place of respite, contemplation, and expression. The form of the structure is inspired by the primary visual referent of urban development and inadvertent place of respite, contemplation, and expression familiar to all New Yorkers - the ubiquitous construction wall and sidewalk shed mindfully emulating an ancient system of balanced progression.

The title of the work refers to a formation of strategies for navigating a city possessed by developers' market-driven contrivances despite escalating imbalance for its population. The subtitle is a conditional clause that underscores reciprocity and is also an encapsulation of time that spans my twenty-two years as eyewitness to the vagaries of NYC development. It is borrowed from hip-hop

culture, which is a preeminent model for dealing with dystopian development through creative energy, and this sublimation in the presence of authoritarian manipulation serves as a touchstone for the work. 'The D is for Diamonds' refers to the diamond-shape motif within the piece and is sampled from the Double-Platinum 1989 album, Paul's Boutique by the Beastie Boys. 'Run the Jewels' works as a complementary imperative along the precious gem theme and is also the name of a powerful hip-hop collaboration that produces some of the most sonically inventive, thought provoking, and politically relevant music today.

Situated on a flat grassy area by the river, eight upright 8'h x 8'w framed walls of construction-grade plywood are securely arranged into an octagon that is encircled by an 8'h x 8'w steel sidewalk shed. The shed has sixteen exterior uprights that are horizontally braced at 36" high on four alternating sides and open at four sides corresponding to north, south, east, or west. Additional bracing to the sixteen interior uprights follow typical shed construction. The roof of the shed is clad in corrugated steel though without the additional plywood parapet associated with typical structures. The exterior of the eight panels is painted in shades and tints of Hunter green and each panel has a raised plywood trigram that corresponds to its cardinal direction. The viewer remains outside of the octagon but is encouraged to circumnavigate and visually access the interior through 12" x 12" diamond-shaped portals of Plexiglas, 60" high at the center of each panel, in different colors according to its principal orientation. The interior face of the panels is gilded entirely in gold leaf and the ground within the octagon is cultivated and sown with wildflower seed.

The design of the components underscores modularity and impermanence. Each 8'h x 8'w wall is actually composed of five interlocking frames made of 2" x 4" stock with plywood on both sides. These attach to a freestanding frame of 4" x 4" stock to form each wall and the walls are then fastened together. The walls can be disassembled and reassembled for repurpose. Ideally, the majority of the

plywood and framing timber is locally sourced reclaimed construction material and the sidewalk shed components are rented and personally assembled on site. I realize, however, that the shed structure may present bureaucratic issues concerning liability and permit licensing so I am prepared to alter the means of construction to achieve a similar formation. The preliminary budget projections are: \$500 reclaimed lumber, \$1000 sidewalk shed or alternative structure, \$300 fasteners and hardware, \$300 acrylic paint and sealer, brushes, rollers, \$200 Plexiglas, \$600 imitation gold leaf and size, and \$100 garden seed and equipment for a total of \$3000.

In conclusion, this work reflects my interest in universal organic patterns of growth and it attempts to relate these creative natural boundaries to the public sphere. This theme is the essence of my artistic enterprise because it demonstrates an intrinsic physical and metaphysical logic that prefers balance and order. Furthermore, in the spirit of fundamental dualities, it also offers an unambiguous view of imbalance and disorder that may, if the right energy is applied, reveal a strategy for corrective action. This effort represents a summation of these principles and it is my hope to be awarded the opportunity to express them directly to The People of New York.

## Thank you for your consideration.

I did appreciate that I managed to arrange ten captioned slides of five years of work, conjure and articulate a somewhat lucid proposal, create visually compelling support material, and submit a strong presentation by the mid-January deadline. The process offered something like hope for a way forward even though I would have to wait until mid-April for a reply and I suspected that the Parks Department would not share my anti-establishment, hip-hop-inspired vision of universal amazement. Meanwhile, to underscore the absurdity of my workspace situation, Industry City began tearing up the cobbled street directly below my second-floor windows for a major reengineering project that commenced just after the New Year. Their plan was to install a raised sidewalk that ran along the facade my building, eliminate the highly functional existing dock, and move the inefficient new dock twenty-five feet away from the building entrance, which ultimately placed it directly under my window. I chose to pound the pavement elsewhere to escape the relentless jackhammering and to look for alternative real estate throughout the wonderfully crisp days of January and February, to absolutely no avail. In March, I returned to my shop only to bear intimate earwitness to every dock offloading drama and the din of jackhammers that were repeating the engineering marvel directly across the street. To retain what was left of my mind, I bailed from Indifferent City for the seaside and started this essay to articulate the history of the New York Arbor Workshop venture with the hope of working out a solution for its continued development. The initial plan was to spend three weeks on ten paragraphs to expand the slide captions but, as with most of my simple plans, it grew exponentially to cost three months of work on ten chapters. Thankfully, I got a thing about expansive proportions. So it grows.

While midway through this essay-cum-tome, I received the rejection notice from Socrates, I sulked for a minute, and then I sent a proposal to donate my shop equipment along with myself to a local artists' group. Should they also reject my offering, I will try another organization or reluctantly hold a developer-distress sale in the near future and recalibrate my reality. It remains clear that I must vacate my workspace as soon as possible while convincing myself that thriving by my creative endeavor is still a plausible strategy for growth in this town.

In the meantime, thank you for your consideration.

George Turner, Rockaway Park, May 2015.