Repair Rolodex

Ethan Howard

Exchanges, Changes, and Patchwork Parables

A Special Chair (stories make things meaningful) 09 - 32	Ω	Buttons (using unconventional/waste materials) 127 - 142
Introduction (what this book is about) 33 - 38	0	On The Curb (the ethos of putting our stuff curbside) 143 - 146
(not) Built for Repair (repairs leave scars) 39 - 62	п	Box Store Furniture (the stuff that gets discarded with disregard) 147-158
On Design (what is design, and what is repair) 63 - 66	_	On Footprints (using unconventional/waste materials) 159 - 160
(re)Generative Repairs (material selection is a special opportunity) 67 - 86	CT.	Meaning (full/less) (shifts in value and narrative) 161-176
On Stories (objects are visual reminders of a history) 87 - 88	O	On Individuals (using unconventional/waste materials)
Squeaky + Creaky (repairing heirlooms) 89 - 108	n	Keyboard (repair is larger than the individual) 179 - 188
My Mom Broke It (even the mundane can be exceptional) 109 - 124	-	Conclusion (in summary) 189 - 193
On Waste Streams (the landfill is an oxymoron)		Bibliography (sources and inspiration)

(the landfill is an oxymoron) 125 - 126

Copyleft © 2024 You are free to share and modify this book as long as you give appropriate credit, distribute your contributions under the same terms, and refrain from commercial use without permission. Original work by Ethan Howard.

Repair Rolodex

A thesis presented in partial fulfillment of the requirements for the degree Masters of Industrial Design in the Department of Industrial Design of the Rhode Island School of Design, Providence, Rhode Island

by Ethan Howard, 2024

Approved by Master's Examination Committee:

Ayako Takase, Graduate Program Director, Industrial Design

Markus Berger, Professor, Interior Architecture

Lindsay French, Thesis Advisor

Beyond the implications inherent in extraction, production, and consumption, lies an inescapable truth: dumping space is finite. The United States is projected to exhaust this resource within the next sixty years.¹ In Rhode Island that number decreases to twenty.² New York City fully ran out in 2001.³

When an object is consigned to the landfill, it does not simply vanish. Core samples from these sites can reveal intact and readable newspapers from the 1960s.⁴ This reality underscores the lasting impact of our waste.

Our stuff carries consequences. Yet, there is a glaring lack of accountability for the waste we (collectively and individually) generate. The Industrial Design industry perpetuates this problem by promoting mass production and consumption. Understanding this, I asked a question:

¹Environment America "A Day at the Landfill," 2024. ² RIRRC, "Central Landfill for

Irash," 2024.

Department "Freshkills Park," 2024

⁴ Hawaii Zero Waste "What Product Takes Up the Most Space in US Landfills?" 2024 "What can repair teach us about the way we value and relate to objects, waste streams, perceived obsolescence, and industrial design?"

SuSanA Secretariat, CC BY 2.0 via Wikimedia Commons

Abstract

This book is an index of nine exchanges with strangers whom I met online through email Listservs or by word of mouth. In these transactions, I offered to repair broken things for a trade-in-kind payment. Through the brief relationship between owner and designer, each interaction suggests that an object is almost never entirely obsolete despite its perceived obsolescence.

At the core of these trades is a grassroots protest of the landfill and a critique of our global capitalist commerce system. The apparent desire for and nature of these trades demonstrates that stories make our objects meaningful. Each interplay studies peoples' mercurial understandings of value. Each repair celebrates the scars that become evident when an object lives a long life. Each decision is rooted in the belief that small (inter)actions cause large ripples.

The nuance of a considered repair is never invisible but always beautiful. By leaving the scars of one's process, an object's history is memorialized. This reparative act breathes new life into our things, adding tangible and intangible energy to something deemed broken or devoid of value. In a world desperate and anxious for adaptation, stewardship, and care, our desire to buy something new must change.





Like most people in this book, I met Her on an email Listserv.

"I have a special chair. To transform it would be very powerful because it's so loaded"

She responded to my call for broken things with photos of her ex's chair, which he broke and left behind. I've never seen such a sturdy chair break like this from casual use.

"It represents a kind of stubbornness. The chair is solid. My ex was a solid person, a substantive figure. I think it might have been his grandfather's chair. So I can't imagine why he would have left it here."

> I was struck by the gravity of this object. Of all the trades presented by this book, it felt most unique.





As we sat together and talked, She asked herself a question midconversation.

"Am I even ready to get rid of this broken chair? Have I explored it enough to let you take it and fix it?"

This was the second time we met. The first time I was too bashful and nervous to take the object with me.

We sat quietly for a moment. I posed a question in response:

"Can I ask you something? What does moving on look and feel like?"

This question repeats itself in my process. To repair is to understand the story embedded in an object.





"To move on is to let go of its current state and stop dwelling. To enjoy its evolution and appreciate I'm not in control. While I am the keeper of this chair, I don't have to be responsible for every action that's taken on it. I'm being a little abstract on purpose to protect his... his dignity."

I think about shadows. A symbol of the past self. How do shadows manifest themselves in our objects?

"How attached am I to the brokenness of this chair as it represents the brokenness of my ex? How much satisfaction do I get holding onto this as opposed to rewarding myself?"

Can a repair highlight these metaphysical reflections of self while proposing a way forward?





This chair holds a heavy place in space. Emblematic of a human being sitting there stagnant, limbs detached.

> It was falling apart at the seams. I silently asked myself a question: "How do you repair a broken body?"

> > Regardless of the gaps in my own knowledge about this relationship, one thing is for sure: it's him.

In a body, we use something inert: Titanium/Porcelain. In this chair, I fabricate something both visually and physically non-reactive inspired by that logic. Brass sutures and rods bring back function and highlight what used to be broken.





"I've taken care of this chair because I care about it. Because I think it's worth it. Because I thought he was worth it. But you can't fix someone. You can only accept them for who they are with all their brokenness." Not everything broken can be fixed. But you can always scrap it for parts. It is a skill understanding what to do with something that seems beyond repair. "The judgment that something is irreparable is not straightforward, and the declaration of irreparability represents the result of struggles over when, where, and how to use our reparative resources." ⁵





C	CUSTOMER'S		DATE 1/16/24							
N	NAME A SPECIAL CHAIR									
ADDRESS										
CITY, STATE, ZIP										
SOLD BY CASH C.O.D. CHARGE ON			ON.A	ACCT. MDSE. R		ETD.	PAID OUT			
7	DUANTITY	DESCRIPTION		PRICE		AMOUNT				
1	1	ULTRA-MACHINABLE 360 BRASS BAR		\$53.11		53.11				
2		3/8" THICK, I" WINE (IFT)								
3	2	(LEAR WELD FROXY			\$5.98		11.96			
4	1	ULTRA -MACHINARIE 360 BRASS ROD			\$26.32		26.32			
5		3/8" DIAMETER; (I FOOT)								
5	1	3/BIN FLUTED DOUEL PINS			\$3.17		3.17			
-	36	HOURS OF LABOR			A					
-										



Introduction

A tornado of ideas spat me onto the curb. I walked for miles, stumbling upon broken pieces of furniture, repairing them, and releasing them back where they came from — feeding an anonymous ecosystem of circularity. Though this process of curbside repair offers poetry, it never evaluated, celebrated, or materialized an accurate portrait of an object's history and future; every object has a narrative, but without knowing its keeper, you'll never learn what it experienced.

The connection between object and person is what makes our things meaningful. It fills our stuff with stories; it creates heirlooms, gravity, and emotion. It speaks to the footprints our things carry. When something breaks, it sits on the curb or in the trash can, awaiting its final destination in the landfill. But it doesn't have to.

The act of repair enhances an object's perceived social and physical value through

the materials a designer employs and the aesthetic decisions made to revive function and affection.

Repair is an act of rebellion—against the landfill, consumption, materialism, and industrial production processes that harm our planet and ourselves. It is also an opportunity to transform something, breathe new life into it, and to preserve and augment its value.

"Placing repair at the center of the design process enables a powerful shift, whereby we significantly increase the life span of products... [it] is a progressive process, pushing something forward into a coproduced and expanded form." ⁶

The following pages present a series of repairs and corresponding interviews between myself and strangers I met online using email listservs. The repairs were commissioned in exchange for a trade-inkind payment. As a designer, my intentions focused on four key constraints informing my decision-making process:

- the requirement to bring function back into the broken object;

- longevity of the repair intervention (will it last as long as the rest of the object? If not, can I justify why?);

- maintaining a small environmental footprint (what are the costs and benefits of the materials and approaches I'm taking);

 and incorporating materials and aesthetics that conceptually speak to the history of the object and its future.

The trades I received speak volumes about how each individual valued the time, labor, and knowledge required to repair their broken objects. I do not intend to analyze the quality of the trades received; that's for the reader to witness, consider, and draw conclusions from. Collectively, though, the trade-in-kind asks a sincere and pressing question: What is the value of a repair to the
individual?

When the idea for a repair trade first came into resolution, it did not include the process of interviewing my co-producers. However, through each interaction between these strangers and me, it became apparent that the stories attached to our objects are essential to understand, and that doing so requires a directed conversation to determine what something needs to become functional and cherished again.

As designers in the midst of an environmental crisis, we must center our processes around repairing and facilitating a deeper emotional connection between people and their objects. This will help keep our things out of the landfill; repair and emotion generate value and elevate objects to heirlooms that are more difficult to discard.

Throughout this book, alongside the repairs and interviews, are six elements

that inspire my approach to and philosophy about repair. These ideas are not universal; they're not intended to be. Instead, they aim to inform and inspire change, new perspectives, and an understanding that when something breaks, we have motive to fix it.





"They both come from thrift stores or are found. I have a feeling this one's older. It comes from a Buffalo garage sale for like \$1 or something. And something similar with the other."

"I really love Japanese stuff, electronica especially. I suppose American-made would do as well. They just do it better. Sounds vain. Sounds like this generality. But, you know, in so much Japanese design, there's a hard edge that's avoided. A love of form and all the rest of it."





"I don't know, though; at the same time, I'm just not worried if something's going to break. It's not all about being practical. It's about... you know." Intrigued, I asked Him a question: "So it's not about longevity? When you're buying something, especially if you're thrifting, you're not thinking about having to repair it one day?"





"No, not at all."

Haphazardly, I mentioned something. I figured he would have thoughts:

"Or you could just patch them forever. I have a scarf, and everybody's like, ohhh, where'd you get that? It's just a shitty gray scarf I've half-ass embroidered every time it got eaten to death by a moth."

> "I have torn-up Carharts from my past life brewing beer. I heard you can sell them for more than you bought them."





"I've done all these little squares of different colors using thick wooly thread. So there are these colorful stitch blocks on gray. The best medium. It turned it into a design feature. We've gotta backtrack. What are we talking about?" As I took these lamps apart and put them back together, it became apparent that certain components were custom fabricated with the accuracy and finesse of a machine. It was impossible to re-create the partially melted plastic ring holding an 18-gauge wire perfectly in place. I am not skilled enough to reproduce the tiny drop of solder that touched a piece of copper without inhibiting the movement of the lamp's shade.

The right to repair is essential for a future where we stop polluting our landfills. There's also an obvious need to design things using tolerances, materials, and strategies that welcome repair, not deter it. These were lamps, not microprocessors.





These two lamps required about 20 hours of labor to repair. I learned how to solder; I made two trips to different automotive stores to source parts (one obscure ceramic washer, because I broke the original, and a set of new bulbs for the bayonet-style sockets). I nearly cried at one point; I dropped a tiny nut (half the size of my pinkie finger), didn't see where it fell, and then crawled around on a floor covered in sawdust for 45 minutes, searching for it. I experienced what it means to work on something not designed for repair. The reality that bringing back function to certain objects (especially electronics) will result in scars and unavoidable changes. That sometimes we might have to accept that only the raw materials are worth saving, not the object in its current state.





CUSTOMER'S OFDER NO. 2 DEPARIMENT DATE 130 24									24	
N	NAME (NOT) BUILT FOR REPAIR									
A	DDRESS									
CITY, STATE, ZIP										
$\mathbf{\lambda}$	SOLD	BY	CASH	C.O.D.	C.O.D. CHAPGE ON A		ACCT.	MDGE RETD.	PAID OUT	
>0	UANTITY	DESCRIPTION					PRICE		AMOUNT	
1	2	BAYONET BASE AUTOMOTIVE BULB					2.50		5.00	
2	1	BANONET BULB SOCKET					2.99		2.99	
3	1	COLMAN PRIMARY WIRE IS A BED					7.19		7.19	
	0,102	EPOXY REAN					1,27		1.07	
	19.5	HOURS OF LABOR					N/A			
	13									
					and the second					



On Design

"Design is a discipline of action." ⁷ It helps us decide when and how to take action, improving the state of things.⁸ But who is a designer and what does that mean in the context of repair?

"Everyone designs who devises courses of action aimed at changing existing situations into preferred ones." ⁹ Design abets change. Those who design affect this existing situation — their circumstances by the nature of the product they choose to create.¹⁰ Hence, "the design process is a systematic way of accomplishing something."

The role of a designer should be flexible and holistically responsive to the needs of people and the planet. Design is direction, force, power, and imposition.¹² Design is cooking.¹³ Ultimately, "design is thinking as a social scientist, feeling like an artist and making like an engineer — but not being an

⁷ Monteiro, 19
⁸ Manzini, 1
⁹ Simon, 111,
¹⁰ Jones, 77
¹¹ Markus Berger, 2024 Email
¹² Fry, 5
¹³ Augle Takaon, 2024 Email

expert at any of those, and viewing that as an asset." ¹⁴

Yet, these idealistic descriptions of the field do not accurately embody its history. The reality is that design is often a form of destruction. "There are professions more harmful than industrial design, but only a very few of them." 15 To make something, you must deconstruct or destroy something first. There is a certain logic we must accept as consumers of things: we are inherently connected to processes of extraction and exploitation. The mining for materials, the exploitation of human labor to manufacture things on a global scale affordably. The systems humans have created and continue to rely on constantly subvert the future, incapacitating the ecosystem that supports us. How do we collectively address this paradox? We can do this by shifting our understanding of design through a lens of repair.

"To repair is to acknowledge and respond to the fracturability of the world in which we live in a very particular way not by simply throwing our hands up."¹⁶ If design theoretically seeks to improve and sustain existence, then the repair process capitalizes on the core principles of design with a redirected focus on stewardship and circularity. To design reparatively is to be a catalyst, to steer as a rudder, to propose, speculate, and instigate. And that is what this thesis attempts to do. It scrutinizes our broken things - the products of our systems - unraveling them and stitching together alternatives.

"Repair serves as an invitation to a renewed form of community and social exchange, as well as an alternative, holistic way of facing environmental and social breakdown."¹⁷ It allows us to think critically about the material realities of our world, seeing them as something more valuable than just the sum of their parts. Repair pushes the ethos of design beyond the creation of something new by reinvesting in the things that already exist. Design fueled by capitalism mercilessly pushes forward. Design fueled by repair inspires action, carrying the present into the future in an exciting and new way.

To repair is to approach the preexisting, specifically that which has been defined as broken, and respond to that brokenness by observing the past, looking as far into the future as possible, and approaching each decision in an informed and intentional way.

(re)Generative Repairs



A mutual friend introduced me to Her over email. She had a lamp that was in need of repair.

"I have a lamp I am trying to fix. I'm reading Stephen Lubar's essay in Marcus and Kate's book right now. But Marcus says it might take me three years (to fix the lamp, not read the essay!) if I follow Lubar's course."

It had a broken socket, and the internal structure holding everything upright was wobbly.

I fixed the lamp in about an hour; I've done lots of similar repairs before.

"These were chairs that had been in my attic for 15 years or something. They came from a house that belonged to my husband's great-grandfather. So they're pretty old."

The objects I received in-kind from Her interest me more than her mother's lamp. So, this chapter will shift focus to the trade (unlike others).




"I don't know how old they are. Early twentieth century, maybe older. They're so delicate and interesting. But the chairs were completely unusable because the seats were gone."

"They come from a house on the shore on the ocean in Rhode Island."





When I think of the ocean and weaving together new seats, I think of something fibrous and malleable. I wonder how plausible it would be to fabricate new seats with beach grass or kelp. Doing so would be more meaningful and local than buying prewoven cane from an online retailer. Days later, I reached out to a local kelp farmer and purchased five pounds of fresh sugar kelp. On my way back from Portsmouth, RI, car smelling like the ocean, I stopped at the grocery store to pick up some vegetable glycerin and gelatin. Though I've never worked with this material, bioplastic seemed like a reasonable way to bind the kelp blades together and preserve their structural integrity.





As I wove the seats together, my hands became sticky with salt. During the hours-long process, I filled my mouth with handfuls of the kelp blades that were too short to use. Briney. Bioplastic painted between each layer welds the kelp together and creates a durable bond. When you can eat the same material you're working with you realize how interconnected everything could be. When your chairs smell like the ocean for weeks, you realize how lovely it is for your objects to literally embody their story. When you think regeneratively, you push your design decisions to accommodate a future reliant on stewardship and ecological engagement.





ſ	CUSTOMER'S	ORDER NO	3	DEPARTMENT DATE 01/28/24					
A	DDRESS) GENE	ERATIVE	REPAIRS					
to	ITY, STATE, ZI	P					- Jacobier		
$\left(\right)$	SOLD BY CASH		CASH	C.O.D.	CHARGE	ON.	ACCT.	MDSE, RET	D. PAID OUT
2	QUANTITY		DE	SCRIPTION			PRICE		AMOUNT
1	1	3-10	AN SOCKI	ET LAMP	HOLDER		\$5.	98	5.98
2	1	60-WATT EQUIVALENT LIGHT BULB				LB	\$3.49		3.49
3	1	SCRAP FELT PAD					\$0.00		
4	1	HOUR OF LABOR					NA		
5									
6									
7									
8									



On Stories

The human body is similar to an object's material "body"; both carry stories, speak for themselves, and document and shape our reality. Both internalize and externalize wear and tear, require maintenance, and impact their environment and the people around them. Both deserve respect, care, and repair.

My dad is a roofer. I grew up learning his trade. Crouched down on my knees, elevated stories above the ground for hours at a time, we laid down sheets of EPDM roofing rubber, cut and fastened sheet metal, nailed shingles, sawed insulating foam boards, and painted lines of noxious adhesive. It's brutal but rewarding work. It teaches you about the process of making, labor, maintenance, repair (roof leaks), and yourself. After years of abuse, my dad's knees failed him. His body became a reflection of use and history. His labor bears the scars to prove it and tells his story.

There was no question about whether my dad would get his knees repaired. Instead, it was a matter of understanding when the timing was right. There is no curb or landfill for the parts of our bodies we wear down. An infrastructure and mentality of repair exists. You consult an expert whom you research and speak with and who interviews you to understand what you need to be functional again. No different than a body, our objects have histories, too; it's what makes them unique and personalized. No different than a body, there should never be a question as to whether or not an object deserves to be repaired.





"These are my grandma's chairs. She was an antiques dealer who never sold anything. They lived in Tennessee. According to my mom, they came from an old school house called the Ransom House School. It eventually shut down." She brought me seven chairs, three large and three small. Though there were no broken limbs, the chairs were squeaky and creaky.

"I think they might be from the 30s or 40s because that's when the school shut down. She bought them at an auction and then used them as her kitchen chairs."

Nearly all repairs shown in this book are visible. This project is unique because my interventions were close to invisible.





A few metal sutures and a lack of squeaking and creaking tell the story of this repair. To alter and change their appearance risked faux pas.

"My grandparents both had strokes. So my parents, who live in Providence, moved them up and basically just moved my grandparent's house into storage."

The process was a preservation job, allowing seven heirlooms to continue to function and stand independently. There was no reason for a co-produced alteration of form. This repair taught me that there are times to intervene, and times to remain sightless.

"The chairs stayed in storage for a while and got moldy because there was no dehumidifier in the unit. When I needed chairs, I asked for them. Now they're in my apartment."

The only way to know which treatment is best is by interviewing the owner.





I asked Her: "How did you de-mold the chairs?" I don't know what kind of response I was hoping to hear.

"I just washed them down with some water."

As dissatisfyingly logical as it was, speaks to a hesitation to harm or alter a family heirloom (I would have used some vinegar at least). On a few separate occasions, I asked Her if I could take apart one of her smaller chairs and use it to make her a set of six equally sized hybrid chairs. "I said this before to you, but I still think it would be cool to take one of the chairs, harvest its parts, and make a set of six that are all the same size." There's something impractical about having seven dining chairs, four of which are a bit smaller than your average adult would like to sit in. Then again, I was imposing my personal bias on the situation.





"I think that would look really cool. I asked my mom about doing it. She called me and made me feel like an 11-yearold. Maybe we can when she forgets about them." I responded, "I love that you both talked about it. And that she told you no. To me, that means these are still valuable and have meaning."

"I guess it does. They feel sentimental to me. Since they were her childhood kitchen chairs, it makes sense they feel sentimental to her. Because you have so many formative memories on them."

This resistance to change, and the uninhibited desire to preserve, marks the objects we call heirlooms.





		17	4611			
CUSTOMER'S	CORDER NO. 4 DEPARTMENT	DATE 1/16/24				
NAME SQ	UEAKN + CREAKN					
ADDRESS						
CITY, STATE, 2	db					
SOLD	BY CASH C.O.D. CHARGE C	N. ACCT. MDSE. R	ETD. PAID OUT			
QUANTITY	DESCRIPTION	PRICE	AMOUNT			
1 1	1.5 in x Yain DOWEL PIUS	\$2.85	2.85			
2 1	1.131 × 14 in FLUTED DOWEL PING	\$ 3.28	3.28			
3 15	HOURS OF LABOR	NA				
4 +3	HOURS OF LABOR	NA				
5 + 1	HOUR OF LABOR	N/A				
6 1	802 CLEAR WELD EPOXY	\$21.98	21.98			
7						
3						


My Mom Broke It

Burns Mill Lawrence Sp Marlowe Blake



I love how boring Her mug is.

"I'm a big mug person. I really care what mugs I use. I like mugs that have designs on them. And I especially like mugs that are about books or have books on them."

When you see it, you wouldn't guess it has so much sentimental value.

"I bought this from my master's program at Cambridge. It's from the English department. They are like five pounds. My friend wasn't an English student, but she saw my mug and wanted one. So, she went and bought it. Now, the two of us have the same mug."

Burns Lawrence Marlowe Blak



"I realized when I brought it back from the UK to Arizona, it disappeared. So I asked my mom where it went. She told me it had a chip. She tried gluing the bits of ceramic back, but there was still a gap. So, she put it in a drawer in the bathroom. I guess she didn't want to disappoint me by telling me."

The mug was glued together with Elmer's glue by Her mother. As I washed away old coffee stains,

the broken pieces fell off, and the glue dissolved. How were they still on there when I received the mug?

An essential part of repair is understanding when to use certain materials and practices.





This is a lesson I'm constantly learning as I encounter new objects to repair and new materials to work with. My first repair attempt was with a branded silicone fix-it-all material. After letting it cure, the pieces came off again. So, I changed my approach to a food-safe resin.

The resin is dyed red, a distant reference to the Urushi lacquer used in Kintsugi (before a final coat of gold became the standard). What I am doing is different from Kintsugi, though. The goal of this repair was not to elevate the mug's value; it was to bring it back to a functional state both efficiently and effectively. To allow it to persist as the simple object it already was. I asked Her, what're your thoughts on James Joyce?"

"I've read Dubliners. I actually went to Dublin shortly after and looked at all the locations he references. I went to a place called Sweeney's pharmacy and got a copy of Ulysses at a little pharmacy."

I think we ran out of stuff to talk about but were still stuck together.

cambridge

Burns Marlowe Blake Jonson Jonson Pueston Bunyan Gaskell

Burns Milto Lawrence Spen Marlowe Blake

JOTUMEN 5	ORDER NO	5	DEPARTMENT			DATE 2/15/24				
ME M	y mo	m BROW	LE IT							
DRESS										
Y, STATE, ZI	Р									
SOLD BY		CASH	C.O.D.	CHARGE	ON.	ACCT.	MDSE. RETD.		PAID OUT	
QUANTITY DESCRIPTION						PRICE		AMOUNT		
.2502	FOOD SHAFE RESIN					\$2.50		2,50		
1	RED ALLOHOL - BASED OYE					\$0.99		\$0,99		
2	HOURS OF LABOR					NI	A			
-										
	1									
	VIE DRESS (, STATE, ZI SOLD I IANTITY -2502 1 2	VIE MN MO DRESS X, STATE, ZIP SOLD BY ANTITY 2502 FO 1 RED 1 2 HOUR	VIE MN MOM BROW DRESS (, STATE, ZIP SOLD BY CASH IANTITY BE 2502 FOOD SHAFE 1 BED ALLOHDL-P 2 HOURS OF U	VE MN MOM BROKE IT DRESS (STATE, ZIP SOLD BY CASH C.O.D. IANTITY DESCRIPTION 2502 FOOD SAFE RESIV 1 BED AUGHOL-BASED D 2 HOURS OF LABOR	VE MN MOM BROKE IT DRESS (STATE, ZIP SOLD BY CASH C.O.D. CHARGE MANTITY DESCRIPTION 2502 FOOD SAFE RESU 1 BED AUGHOL-BASED ONE 2 HOURS OF LABOR	VE <u>MN MOM BROKE IT</u> DRESS (, STATE, ZIP SOLD BY CASH C.O.D. CHARGE ON. MANTITY <u>DESCRIPTION</u> .2502 FOOD SAFE RESIN 1 RED AUDIOL - BRSED ONE 2 HOURS OF LABOR	VE MV MOM BROKE IT DRESS (, STATE, ZIP SOLD BY CASH C.O.D. CHARGE ON ACCT. MANTITY DESCRIPTION PR 2502 FOOD SAFE RESU \$2.5 1 RED ALLOIDL-BASED ONE \$0. 2 HOURS OF LABOR N/	5 1 2/15 ME MN MOM BROKE IT DRESS A, STATE, ZIP SOLD BY CASH C.O.D. CHARGE ON. ACCT. MDSE. R SOLD BY CASH C.O.D. CHARGE ON. ACCT. MDSE. R IANTITY DESCRIPTION PRICE IANTITY DESCRIPTION PRICE IANTITY DESCRIPTION PRICE IANTITY DESCRIPTION PRICE ISON SAFE. RESKU I RED AUGHA - BASED ONE V/A Z HOURS OF LABOR V/A	5 3/15/34 ME MN MOM DRESS RESS (STATE, ZIP SOLD BY CASH C.O.D. CHARGE ON. ACCT. MDSE. RETD. IANTITY DESCRIPTION PRICE \$2.50 1 RED. ALLOHOL - BRSED. DNE 2 HOURS OF LABOR	



On Waste Streams

I used to fish at a dump in Turah, Montana. The land is overgrown; after years of abuse, the site was decommissioned and purchased by my uncle. Amid tall, flowing perennial grasses, you can find tires and car doors partially submerged in the dirt. Home to black bears, berries, and tarnished barbed wire fencing, the dump sits above a flood zone bordering the Clark Fork River. It's quiet; splashes of sunlight burst through a thick swath of trembling aspen trees. The lack of maintenance makes the land beautiful. I'd come to the dump to fish for trout as a small boy. Its beauty and scars inform and motivate my work today.

The landfill defies logic. Devoid of oxygen and filled with the substrate of our industrial sins. "When excavated from a landfill, newspapers from the 1960s can be intact and readable."¹⁸ What exists in this space is both timeless and timely. Timeless because many of its contents will last forever. Timely because we're running out of space -or already have and need to prioritize and propose viable alternatives. The garbage produced in New York City travels to places like Ohio and North Carolina because the city ran out of its own dumping space in 2001 when the Fresh Kills landfill closed.¹⁹ Meanwhile, residents of NYC still produce roughly 12,000 tons of garbage per day.²⁰

The landfill is an oxymoron: a place to catch trout and also a festering wound. The dump and the river flowing beside it are proof of our inability to address and support change.

¹⁸ Hawaii Zero Waste "What Product Takes Up the Most Space in US Landfills?" 2024. ¹⁹ Nagel, 30 ²⁰ NYC Environmental Protection, "Recycling and Waste," Baruch College - City University of New York.

Buttons

HER.



"I bought this jacket in Providence in a little corner store because I've been halfstealing my roommate's jackets for a while. I've outgrown a lot of my clothes. When I bought it, I knew I wanted to change the buttons."

This garment was not visibly broken, reinforcing my philosophy that a collective panoptic definition of brokenness cannot exist.

"I often change my stuff to make it the way that I want. Most of the clothing I buy is from Spain because it's from people that I know who are making the clothing. I like knowing where the materials are sourced."

What needs repair can only be determined on a case-by-case basis.





The inherent possibility that objects can go unused, even if unbroken, prompted thoughts on waste streams.

"On the jacket, there are very thick decorated knobs as the buttons. I don't like my clothes to be too flashy."

This mix between broken/unbroken and waste/resource became central to the thinking behind this repair.

"Not only that, but the buttons aren't functional. The other side of the jacket is sewn through, and the holes are closed with a stitch."





Speaking with Her made clear how closely connected she was to her home. I asked her about it:

> "Could you tell me more about where you're from? What food do you eat there? What's popular?"

> > This question inspired the material decisions throughout this repair.

She's talking about Periwinkles (or Caramuxos if you're from Galicia).

"We have these things that live on the rocks and are local to our area of Spain. They're very small. My brother and I would get a plastic bag and fill it with as many as we could, wiggling them off the rocks."

> Every process creates byproducts. Something that ends up in the waste stream. What goes uneaten here?





CUSTOMER'S OPDER NO. 6 DEPARTMENT						DATE O3/05/24					
NA	IME R	UTTO	NS								
AD	DRESS										
СП	ry, state, zi	р									
	SOLD	BY	CASH	C.O.D.	CHARGE	ON.	ACCT.	MDSE, R	IETD. PAID OUT		
QUANTITY DESCRIPTION						PRICE		AMOUNT			
1	145mL	ELOPOXY EPOXY RESIL					\$14.50		14,50		
2	1	QUILTING THREAD					FREE				
3	1/2	SILICONE MOLD MAKING KIT					\$16,99		8,50		
4	68	PERIWINKLES					FREE				
5	5	HOURS OF LABOR					NA				
6											
7											
8	S. Martin										



On The Curb

If the landfill teaches us how ignorant we are to abundance (our society operates like there are unlimited resources and limitless space) and how thoughtlessly we discard our belongings, the curb of our sidewalks teach us about brokenness.

There is something appealing about the lack of formality and clarity inherent in this waste stream, and something liberating about its anonymity. Objects that are too big for the trash bin, or too intact to justify throwing away sit liminal on the curb. Perceptibly devoid of value but valuable enough to receive special treatment.

When something sits on the curb, somebody stuck it there, hoping it would disappear. When people dump an object on the sidewalk, they are burdened with a lack of sustainable alternatives. They were unable to muster up the strength and time to care. They were unable to sell, repair, or re-home the object in a way that felt manageable and economically feasible. When these curbside objects disappear, so does their history.

Mercurial interpretations of waste, value (is this worth holding onto or re-housing?), brokenness (does it need to be cracked or wobbly to be broken?), and intention (am I putting this here because I know it doesn't belong in the trash?), create unique entropy and opportunity.

Some things sitting on the curb are totally intact; they do not need to be repaired, but instead re-homed. Others are completely derelict and split along the seams. What unifies these objects? They are no longer wanted and welcome in the space they used to exist. To be broken doesn't always mean splintered and shattered; it can mean tired, ugly, outdated, oversized, boring,
or simply a reminder of what is no longer desired. To be broken means to be devoid of a certain level and type of function. To be broken means there's an opportunity to repair.

The ethos of putting stuff curbside in the United States is emblematic of a sickeningly materialistic culture of consumption. It epitomizes the short-sighted nature of our society, and the lack of repair infrastructure in this country. It devalues the inputs and materials required to make new things, and perpetuates a broken system inspired by a misguided belief in abundance, cheapness, endless opportunity, and the idea that newer is better.







The story of this object shouldn't be told through specific materials and aesthetics.

"This is a set of dresser drawers. I bought it off a listserv in September. I think it was \$35. I bought it with a nightstand that was \$15. So I basically paid \$50 bucks for both."

The dresser was meaningless, broken, and not intended to last. It filled a practical void until She finished school and moved on. So, I took a practical approach to the repair, relying on scrap steel bent into L-shaped braces on a finger break.

"The nightstand broke. So, I ended up getting a new one from a grad student. Honestly, it was probably salvageable. But the drawer ended up coming off the side of the table."

The materials, effort, and end product needed to be simple, pragmatic, functional, and durable.







As I repaired Her dresser, I acknowledged three things:

"I gave the old one away to somebody but with the caveat that the drawer was not in great condition. They seemed fine with it, because I just gave it to them."

1) That increasing its lifespan, even temporarily, is better than discarding.

2) That our society is plagued with objects designed to break. This stuff will continue to populate our landfills.

"I think this dresser is from IKEA, but I'm not sure. It was already assembled."

3) That this object has no value, so there is a chance that the trade I receive in kind will reflect that.





C	USTOMER'S	ORDER NO	. 7	CEPARIMENT	UATE 2/4/24							
N	AME BC	DX ST	ORE. FUI	RNITURE				E.				
A	DDRESS											
Cr	TY, STATE, ZI	Р					11/2					
7	SOLD BY CASH			C.O.D.	CHARGE	ON.	ACCT.	MDSE, R	ETD.	PAID OUT		
2	QUANTITY			ESCRIPTION			PRICE		TINUOMA			
1	1	SURAP SHEET METAL (FROM WORK				5	> FREE					
2	17	LEFTWER SCREWS					FRI		4			
3	2.75	HOURS OF LABOR						N/A				
4												
6								-				
7												
8												



On Footprints

Like a body, every object has two footprints. One is grounded in process: extraction, consumption, manufacturing, shipping, and material waste. This footprint speaks to the curb, the landfill, and the limits and needs of our planet's ecosystem. The second footprint exists as a shadow. It symbolizes history, the impact left behind, the fact of one's existence.

No different than the counterintuitive observation that a landmass's coastline can't be accurately measured due to its fractal curve-like properties, an object bears a fractal dimension connecting it to infinite, intrinsically linked systems. Though we have a waste problem, this is due to a consumption problem, a perception problem, and a value problem. These are all rooted in a culture of consumerism influenced by late-stage capitalism. Our constant yearning for stuff has created a reliance on things to define who we are.

Our world is littered with detritus from big box stores, skinned with fake veneer, filled with glue and chagrin. Boards of MDF create facades of personality, meaning, and taste. "The more an object [is] used, the more its beauty becomes apparent."²¹ Soetsu's words cannot apply to an object designed to last just 3-5 years.²² But they capture the potential for history to embed itself in the things we own.

This relationship creates an intangible and abstract sense of meaning that generates value.²³ A key factor in creating meaning and longevity; it keeps our things from populating the curb and the landfill.

²¹ Soetsu, 9

²² Rachel Wolfe, "Couches, Sofas and the Quest for Quality Furniture," The Wall Street Journal, April 16, 2024 ²³ Chapman, 23

Meaning (full/less)

WA AM



Like many of us, She finds sentiment in objects that feel meaningful to her.

"I am not in love with my plates. They do not mean much to me. It's weird because I feel like a lot of other objects I own [She drifts off]... I'm not... not a sentimental person."

This plate was definitely not one of them, though.

"I got this plate when I was a junior in college. My roommate entered us into an Instagram contest, which we proceeded to win. Each one got \$2,000 to West Elm. I had to pay taxes on it at the time, and I was upset because I was broke. We also lived in a dorm. so I didn't need fancy kitchenware. So, I thought I'd just find things I might eventually need."





"I bought these plates in a set of four. And I thought ~fancy~ because there was gold on the rim. Since then, I always moved into places where people had plates. So, I never used them until this year. Honestly, I still don't use them that much; I prefer to eat out of bowls."

"Recently, my sister came to visit. I think I was overwhelmed by the prospect of being a host. So, when I went to wash the dishes, I dropped the plate, and a piece fell off. I thought it broke so perfectly. It'd be such a waste to throw it away. But it's going to take me years to get around to fixing it."





At this point in the conversation I was curious: what does this lady eat?

"I don't know. I guess the only thing I put on a plate is salad. I'm just eating out of bowls all the time... like rice or whatever."

So, I asked the question: "What do you normally eat?"

This plate had no initial perceived value. So, the process of repair became threefold: Bringing it back to a functional state; making it more valuable than before; conducting the repair with a cheap material that would inflate in value over time. The solution was to strip the PVC coating off an electrical wire to extract the copper inside, then wind the wires together to make a braid.

By stitching the broken pieces together with a finite material, the plate's literal value will continue to increase over time. Its environmental footprint stayed small (using found wire), while the footprint the object holds in Her life took a leap forward.





	CUSTOMER'S ORDER NO. 8 DEPARTMENT DATE 2/27/24 NAME MEANING (FULL/LESS) ADDRESS CITY, STATE, ZIP											
SOLD BY			CASH	C.O.D.	CHARGE	ON.	ACCT. MDSE. F		ETD.	PAID OUT		
2	QUANTITY DESCRIPTION						PRICE		AMOUNT			
1	.2502	Z FOOD SAFE RESIN					\$2.5		2.50			
2	I	RED	ALCOHOL		- FRI	EE	(LE	FTOUER)				
3	I FT_	COLMAN PRIMARY WIRE 18 40 RED						FREE		(SURAP)		
4	7	1.5mm DIAMONIS DRILL BITS						\$3,50		3,50		
5	ATION	SOL	DERW			FREE						
6	3_	Hou			NI	Pr						
1												

Date: March 3, 2024



Ethan Howard Plate repairer/Exchange partner RISD Department of Industrial Design 161 S Main Street Providence, RI 02903

Re: Notarized letter regarding the matter of fair and reciprocal exchange for chipped plate repair.

The purpose of this notarized letter is to certify compensation for the repair of a white plate. I, hereby confirm that Ethan Howard is entitled to the enclosed, upon successful delivery of the plate I entrusted to his repair.

During our written and verbal exchanges, Howard expressed multiple sentiments I have attempted to reflect by this exchange. First, that repart often entails changing the nature of the object. Second, that he values and desires more time for his work. Third, that he is dissatisfied with the repair of his nail, which cannot be restored not replaced to match its former state. Lastly, he expressed disappointment that my delivery of the plate did not include a letter in the envelope containing the ceramic chips.

Therefore, I, the below-signed, offer Howard the following:

1. An additional, albeit different, nail to supplement his dissatisfaction with his own.

2. Authorization to the fair use of two hours of my time, in whole or partial increments, at dates and times to be agreed upon by both parties. These hours are intended specifically to free two hours of his time for his own discretion, and are not transferrable to other individuals, though they can be redeemed to take his place in obligations to others.

3. The delivery of these barters in the form of a notarized letter, amending my previous method of delivery to a format he might prefer.

Paid Jotantes 3/5/2

Randi Stanley Notary Public, State of Rhode Island My Commission Expires October 13, 2024 Notary # 759760

With gratitude,

one spare nail

for Ethan Howard

State of Rhode Island County of Providence

On Individuals

The design process shared by this book centers around individuals and their objects. There is a reason we use the word root in relation to cause. The terminology grassroots suggests a type of sustaining change which emerges from the ground up. To design reparatively alongside the embrace of individual object repair is the beginning of a movement to combat the looming catastrophe of environmental abasement and unchecked capitalism. It's a way to resist the myth our society worships: that success is only achievable through growth.

I spend my time finding things to fix, listening to the stories of these "broken" objects, and translating the protoplasm of those ideas into visual material responses and repairs. Breathing a second life into things we otherwise discard. The process of repair has so much to teach us all.

There is also an undeniable connection between the individual and their community. Many of these trades occurred as a dialogue between just two people. But nothing happens in a vacuum.

This is highlighted in the following trade, which required outside assistance from a designer who understands the complexity, materials, and logic of a circuit board.

Beyond this one trade, this project also held a workshop free to the Providence community, the success of which suggests there is a desire for opportunities to fix the broken things in our lives, and that there is a need for more infrastructure dedicated to repair.




I've never seriously repaired electronics beyond lamps. When I opened Her keyboard,

"I recently got a portable electronic keyboard for free. The previous owner said it works fine except for a dodgy power button. After using it twice, it stopped turning on, no matter what I tried."

the tiny gridded city of logic soldered to a circuit board was overwhelming and superseded my personal knowledge. So, I enlisted the help of a friend. After disassembling the keyboard, we used a jumper wire to bypass the power button proving the device functioned.

"I'm no good with electronics and don't want to open it up and tinker with it myself."

This process seeded an idea. Shipping a new button from a faceless online retailer seemed impractical and unsustainable.





In order to return function, while also de-mystifying the internal workings of the device,

"Originally, the keyboard had these weird light-up keys that I didn't like. Whatever you did to it made them go away."

we soldered the jumper wire to the circuit board and left the repaired connection exposed.

It's much more fun to turn on a keyboard with the pinhead of a wire than to press a bulky silicone button

"That's perfect because I found them super tacky."

- the perfect repair for a miniaturist.

(CI	JSTOMER'S	ORDER NO	. 9	PEPARTMENT			DATE 1 17 24				
NA	IME KI	ENBO	ARD								
AD	DRESS										
CITY, STATE, ZIP											
SOLD BY			CASH	C.O.D.	CHARGE	ON.	ACGT.	MDSE, RETO	PAID OUT		
0	LANTITY	DESCRIPTION PR				ICE	AMOUNT				
1	1 ATINY	BREADBOARD JUMPER WIRE					FREE				
3	BIT 2.5	HOURS OF LABOR					N/A				
4											
5											
7											
					A State of the sta			San	Section 199		



Conclusion

This book underscores the unique role of designers in the repair process. It emphasizes that a crucial aspect of preventing our objects from becoming waste is through creative reuse, boundless care, and in-person conversation. These practices not only teach designers about the needs, expectations, and ultimate desires of an individual and the object in question but also highlight their potential to shape a more sustainable design landscape.

Through the trades highlighted, thoughts on brokenness, stewardship, community, and the process and visual aesthetics of repair become apparent. What began as a simple request to repair broken things evolved into an exploration of value, relationships, the process of (un)making, and the ethos of repair. Each interview and each scar left behind on a mended object tells a story.

These stories, when viewed collectively, speak to the resilience, potential for cocreation, and enduring worth of things and materials that are often deemed broken. They challenge the discordance between our throwaway culture and the potential for renewal through various lenses, materials, and repair approaches. They remind us that even the seemingly mundane can hold immense value.

Repair, as a rebellion against the prevailing tide of consumption, asserts a radical proposition: that objects have lives beyond their perceived obsolescence and that our interactions with them are laden with stories that generate an intangible but essential form of value. Each interview illuminates the diverse motivations and perspectives of those seeking repairs. They show how an object's history intertwines with the human experience and our shared desire to find meaning in our things. The transformative power of repair is not just about fixing, but also about reshaping the relationship between individuals and their artifacts.

At its core, this journey is a proposition — a call to action for designers and consumers to reconsider the value inherent in the narratives we weave around our possessions, to cherish the scars of a life well-lived, and to reimagine our roles in a world desperately in need of thoughtfully considered consumption and production. It testifies that our objects should be treated like bodies. That our relationship to waste and consumption should be cautiously re-assessed and seen as an opportunity for intervention. And that our understanding of a footprint can carry itself into the actions we take as designers.

Though I hope readers will draw varied

responses, thoughts, and resolutions from the pages of this book, I insist on one specific tenet: the ethos of repair — the belief that our objects, like our stories, deserve preservation and respect – is paramount. The act of repair has transformative power; it reminds us that this process not only mends broken things but also begins to heal our relationship with the world around us.

Our most promising stance for the future is one that perceives our world in the context of community. When we ask ourselves questions like: How can I take this knowledge and share it with the people around me? How can I approach a process hyper-locally and regeneratively?

When I see something new, I think about its footprint in the world. Often, the trail of this footprint leads us deeper into the crisis in which our planet is submerged (through endless exploitation of people and planet and an unsustainable desire to equate success solely with growth). Conversely, the footprint of a repaired object moves simultaneously backward and forward in time by acknowledging a past life, respecting materials, pursuing regenerative and hyper-local design approaches, and providing a new life into the future.

To repair is to approach the preexisting, specifically that which has been defined as broken, and respond to that brokenness by observing the past, looking as far into the future as possible, and approaching each decision in an informed and intentional way.



Bibliography

Barron, D., Basu, R., Bhatti, Y., & Ventresca, M. 2018. Frugal Innovation: Models, Means, Methods. Cambridge University Press.

Berger, M., & Irvin, K., eds. 2023. Repair: Sustainable Design Futures. Routledge.

Boal, A. 1979. Theatre of the Oppressed. Translated by C. A. McBride & M.-O. L. McBride. Theatre Communications Group, Inc.

Caradonna, J. L. 2014. Sustainability: A History. Oxford University Press.

Chapman, J. 2001. Meaningful Stuff: Design That Lasts. Massachusetts Institute of Technology.

Chapman, R., Chapman, N., Connor, F., Fabel, R., Howden-Chapman, P., Livesey, B., Menzies, L., Moyer, A., Howden-Chapman, A., eds. 2013. The Distance Plan. The Distance Plan Press. American Foothill Publishing.

Environment America. "A Day at the Landfill." Accessed May 2024. https:// environmentamerica.org/washington/articles/a-day-at-the-landfill/.

Hawaii Zero Waste, "What Product Takes Up the Most Space in US Landfills?" Accessed May 2024. https://www.hawaiizerowaste.org/faqs/what-product-takes-up-themost-space-in-us-landfills/#:~-text=According%20to%20th%20US%20EPA,the%20space%20 in%20US%20landfills/.

IKEA Museum. Ogla Chair (1962). Product Stories. Accessed November 9, 2023. https://ikeamuseum.com/en/explore/product-stories/ogla-chair-1962/.

Joensson, W. 2018. Iconix: Exceptional Product Design. Skyhorse.

July, M. 2011. It Chooses You. McSweeney's.

Mari, E. 1974. Autoprogettazione? 2nd ed. Edizioni Corraini.

McKibben, B. 2007. Deep Economy: The Wealth of Communities and the Durable Future. Times Books/Henry Holt and Co.

Nagle, Robin. 2013. Picking Up: On the Streets and Behind the Trucks with the Sanitation Workers of New York City. Farrar, Straus and Giroux.

NYC Environmental Protection. "Recycling and Waste." Baruch College City University of New York. https://www.baruch.cury.edu/nycdata/environmental/recyclingwaste.htm.

NYC Parks. "Freshkills Park: About the Site." Accessed May 2024. https:// www.nycgovparks.org/park-features/freshkills-park/about-the-site#:--ttaxt=The%20four%20 mounds%20akS20Fresh.stopped%20accepting%20waste%20in%202001.

Rhode Island Resource Recovery Corporation. "Central Landfill for Trash." Accessed May 2024. https://irrc.org/about/operations/central-landfill-fortrash#--:text=Resource%20Recovery%20anticipates%20that%20at,about%20all%20of%20 our%20operations.

Ryder, B. 2010. "First Break All the Rules: The Charms of Frugal Innovation." The Economist. Accessed February 17, 2024. https://www.economist.com/specialreport/2010/d/17/first-break-all-the-rules.

Spelman, E. V. 2002. Repair: The Impulse to Restore in a Fragile World. Beacon Press.

Walker, S. 2006. Sustainable By Design. Earthscan.

Wikipedia. Coastline paradox. Accessed November 16, 2023. https://en.wikipedia. org/wiki/Coastline_paradox.

White, P., Belletire, S., Pierre, L. 2004. Okala Ecological Design: Course Guide. Industrial Designers Society of America.

White, P., Belletire, S., Pierre, L. 2013. Okala Practitioner: Integrating Ecological Design. Industrial Designers Society of America.

Acknowledgments

I'd like to thank these individuals:

Anna Glass Avery Howard Ayako Takase Elbert Giron Emma Caamaño Jess Brown Jesse Howard Lindsay French Markus Berger Monica Nelson Paolo Cardini **Richard Nashel** Sarah Mann Stan Howard Susan Nashel Tucker Houlihan

I'd also like to thank each of the professors who taught and inspired me during this degree program, the strangers who let me repair their broken stuff (who are no longer strangers), and the lovely people I met at RISD.

Your support and insights profoundly shaped the outcome of this project.

Designed by: Ethan Howard

Fonts Used: Authentic Sans Redaction Repair Service for Trade / Barter External > Inbox ×



Ethan Howard <ehowar03@risd.edu> to fortthunder 👻

Hi People,

I have an odd idea, but figured there might be some interest on this listserv. I really enjoy repairing things and want some new stuff to work on. I'm wondering if anybody here has something they want fixed (I'm especially good with broken chairs, tables, lamps, etc., but an always open to a new challenge). Here's the catch: I don't want to do the repair entirely for free, but I also don't want money. Instead, I want to trade/barter cool things (handmade stuff, baked goods, a poem, random things, books, etc.). If you've got an object that's in need of some love, let's see if we can work out a trade. I think it would be fun!

When I say repair, I suppose I mean "breathe a second life into," and when I say broken, I think I mean for you to define that as you see fit!

Thanks, Ethan RISD MID '24





Hi people,

I have an odd idea, but there might be one or two people on here who find it exciting? I really enjoy repairing things and want some new objects/prompts to work on. I'm wondering if anybody here has something they want fixed (I'm especially good at fixing broken chairs, tables, lamps, etc., but am always open to a new challenge). Here's the catch: I don't want to do the repair entirely for free, but I also don't want money. Instead, I just want to trade/barter cool things (handmade stuff, baked goods, a poem, random things, books, etc.) in return for the repair.

When I say repair, I suppose I mean "breathe a second life into," and when I say broken, I think I mean for you to define that as you see fit!



- Ethan

Tue, Jan 16, 8:10 AM	\$7	←	:

8 M

8 M

Fri, Jan 5, 8:12 PM

