

CULPABILITY

ALSO BY BRUCE HOLSINGER

The Displacements

The Gifted School

 $The\ Invention\ of\ Fire$

CULPABILITY

BRUCE HOLSINGER



 $S \xi G$

Spiegel & Grau, New York

www.spiegelandgrau.com

Copyright © 2025 by Bruce Holsinger

All rights reserved. No portion of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopy, recording, scanning, or other—except for brief quotations in critical reviews or articles, without the prior written permission of the publisher.

This book is a work of fiction. All characters, names, incidents, and places are products of the author's imagination or are used fictitiously.

Interior design by Meighan Cavanaugh

Library of Congress Cataloging-in-Publication Data Available Upon Request

ISBN 978-1-954118-96-6 (hardcover) ISBN 978-1-954118-97-3 (eBook)

Printed in the United States

First Edition
10 9 8 7 6 5 4 3 2 1



And this, I propose, is the inhuman soul of the algorithm. It may think for us, it may work for us, it may organize our lives for us. But the algorithm will never bleed for us. The algorithm will never suffer for us. The algorithm will never mourn for us.

In this refusal lies the essence of its moral being.

—Lorelei Shaw, Silicon Souls: On the Culpability of Artificial Minds

I met Lorelei Shaw when she was writing her thesis on what would now be called the ethics of artificial intelligence. She was enrolled at the University of Chicago pursuing a dual doctorate in engineering and philosophy, she told me on our first date, working in the new field of computational morality. With a self-conscious laugh, I asked her what that meant. She lined up our coasters, glasses, toothpicks, and cocktail napkins along the bar and started to explain.

She was interested, she said, in how we learn to be good. She wanted to know whether we can train machines to be good in the same ways we train ourselves. I watched her lips move as she spoke, mesmerized by the spray of freckles across her delicate features, by the frizzy mess of hair, by the small cleft in her chin.

Draining her martini, Lorelei told me the title of her dissertation ("Computational Reason and Ethical Realism: Are Humans Moral Machines?"), then squirmed on her stool blinking like an owl, daring me to leave.

I ordered another round.

The May of our wedding I finished my second year of law school at DePaul and started a summer associateship at a midsize regional firm outside Washington. The following winter I accepted a return offer just as Lorelei landed a tenure-track position at Johns Hopkins, in nearby Baltimore. We bought a condo in Maryland close to the train line so we would both have an easy commute; a few kids later, we upgraded to a house in Bethesda.

To our friends and families it sounded like the beginning of a joke: *A lawyer and a philosopher walk into a bar.* . . . Our differences, though, kept things interesting, alive. There was an element of fascination and husbandly pride in watching Lorelei whoosh off to high-flying symposiums in Brisbane or Dubai, get tapped for lucrative consulting gigs by think tanks and corporations, while I toiled away in a suburban office park mired in spreadsheets and Keurig cups. But I liked the work, the churn of clients and cases, and where I came from, a steady paycheck as high as mine made me a shining success story. My people had no idea DePaul wasn't even the best law school in Chicago. Not second best, either.

I didn't care. I had Lorelei, we had our family, we had unbelievable luck.

The year of our fifteenth anniversary, Lorelei won a MacArthur Fellowship, the so-called Genius Award. The citation mentioned her groundbreaking work on the morality of AI, her role in shaping an emergent field of vital importance to the future of humanity. At the celebratory reception, I huddled in a corner with Charlie (nine at the time) while the Hopkins president joked about the salary package it would take to keep his mother from jumping ship to Stanford or M.I.T.

But she stayed. Lorelei has always been loyal that way, to her employers, her passions, her three siblings.

The youngest of these is Julia, who, at the time of our marriage, was clerking at the U.S. Supreme Court for Justice Breyer. (The Shaws are that kind of family.) After the ceremony, Julia, tipsy, pulled me aside to tell me how much she admired me. I was skeptical and asked her why. There aren't many men, Julia said, who would be comfortable marrying their clear intellectual superior. Well, there aren't many smart women, I countered, who would be comfortable marrying a guy as dumb as a brick. That's where you're wrong, Julia said, and whisked herself off toward the bar.

My sister-in-law had told me nothing I didn't already know. Unlike my new wife, I was never going to be a standout in my profession, was never going to have a brain like hers. The world-class genius and the average Joe: proof of concept, I suppose, for the hoary adage that opposites attract. But somehow we made it work, all while raising three kids in health and relative harmony.

How do we do it? I would wonder at times. What's our secret sauce?

When I asked her this once, Lorelei responded with an impromptu comparison, tossed off with the ease of a seasoned chef flipping pancakes. A family is like an algorithm, my wife declared as she folded dish towels in her compulsive way, making a neat stack with the four corners perfectly aligned. She offered no further explanation.

Ohhh-kay, I thought, and filed away the analogy in my running catalogue of her quirky observations—though for Lorelei, I've come to see, the simile was a kind of creed. It gave her something to believe in. Something to cling to in the face of disorder, calamity, sudden death.

Like an algorithm, a family is endlessly complex yet adaptable and resilient, parents and children working together as parts of an intricate, coordinated whole. Sure, there might be some bugs in the system, a glitch or two. But if you simply tweaked the constants from time to time, life would continue to unfold in its intricate yet predictable patterns, an endless cycle of inputs and outputs subject to your knowledge and control.

Thus: A family is like an algorithm. Repeat it to yourself often enough and you'll even start to believe it.

A family is like an algorithm.

Until it isn't.

GLITCH

They call it the winner's curse: a classic dilemma in corporate acquisitions when the parent company bids too high on the target firm, overvaluing assets, underestimating debt. You see it a lot in the wobbly real estate sector these days, and high tech is always vulnerable to this kind of predicament.

The case in front of me now—literally in front of me, in the form of a draft memo on my laptop, balanced between the dashboard and a raised knee as my family hurtles along this Maryland highway—concerns a straightforward merger of two solar energy companies. Our client got a bit exuberant during deal negotiations, accepting the smaller outfit's hyped-up self-assessment of its market appeal. (Turns out most home solar customers don't want "vintage" roof panels in Art Deco or Gothic Revival style.)

Now our client is getting cold feet. You can feel the change in the tone of the e-mails and in the mood of the Zooms, this mounting unease. The execs are looking for reasons to back out, and my job is to convince them otherwise, to show them why a withdrawal would be a big mistake.

I've got a solid argument. The legal bills entailed in a dissolution and inevitable lawsuit would quickly surpass the target's inflated valuation minus its actual value. Our client, in other words, will lose far more money by pulling out of the deal than by staying in—and the difference will directly benefit my law firm. The memo on my laptop explains this uncomfortable irony with rhetorical delicacy and a touch of humor.

I am crafting a particularly artful sentence when we go over a bump in the road, causing the computer to jiggle on the bony knob of my knee. I catch the thing before it falls and rest it on my thighs, but there my words dissolve in a dazzle of sunlight, so I resume my original, more awkward position, crouched with a shin up against the glove compartment.

Charlie laughs at something. I abandon my sentence and glance at him in the driver's seat. The sight of my son's handsome face in profile brushes away my irritation. His left elbow perches on the windowsill and his right arm rests at a languid angle on the central console, legs spread and knees a foot apart.

Charlie serves as our de facto driver today—not driving so much as monitoring our progress along this stretch of road. We have owned a SensTrek minivan for six months now, though when we put the vehicle into hands-free mode its maneuvers still unsettle me at times: abrupt decelerations, inexplicable lane changes, uncanny twitches of the wheel. But the car seems to know what it's doing, and a certain freedom comes with relinquishing control, trusting our lives and limbs to the alien hidden somewhere behind the dashboard. Like an old player piano, its invisible mechanism worked by a ghost.

A glimmer of amusement lingers in Charlie's eyes.

"What?"

He shakes his head. "Just thinking."

"The game?"

"Yeah."

"It's Madlax Capital, right, the first match?"

"That's tomorrow. Today's Tristate."

"Didn't you crush those guys at the winter classic?"

"Their goalie was injured and that dude's a beast. He's going to Michigan."

"Ah." I smile. Michigan, a school that tried and failed to recruit Charlie during junior year. "So maybe you'll see him this upcoming season."

"We play them in April. Away."

"Love it." In my head I start planning a spring trip to Ann Arbor.

Today's destination is more mundane, a youth sports megacomplex on the Eastern Shore of Delaware. The tournament will be the final event of Charlie's youth career, and we're all five going over for a chaotic weekend with sixteen other families we have known for years, shuttling back and forth among the crowded hotel, the tournament fields, chain restaurants for large group dinners.

Already I miss these frenzied events. The prospect of spending Charlie's last one together has induced a bit of preemptive nostalgia, tempered by excitement about what the following years might bring. Half the team will be going on to play college lacrosse. But Charlie is the undisputed star of his squad, a four-star recruit heavily courted by top programs. He committed to North Carolina a year ago, speaking with the coach out on the back deck while his mom and I waited in the house, distended with pride—tinged, now, with melancholy. Charlie departs in six short weeks for pre-season team camp and his freshman year, a prospect we are all mourning in advance.

With the possible exception of Alice, not her brother's biggest fan. The two of them had another fight before we left, a tiff over a portable phone charger of disputed ownership.

In the visor mirror I catch a glimpse of our older daughter's thick lenses, ice-blue with the glow of her screen. She brings a hand up to her nose and wipes a shining trail of snot along her cheek. I repress the urge to pass her a tissue, suggest she look out the window for a while. I know that any comment along those lines wouldn't be welcome right now.

I angle the visor to check on Lorelei. Dust-pink headphones cup her ears as she scribbles in the notebook spread open on her lap. While I bang out a routine client memo, Lorelei is preparing for a working group in Montreal next week, on AI and quantum something-something. Her head bobs to the gentle contours of the road, her brows knit in concentration. This is how Lorelei works when she's on a tear, whether in bed before the lights go off or in the air during a transatlantic flight: focused, noise-canceled, oblivious.

She glances up, perhaps sensing my gaze in the mirror's narrow plane. An automatic smile, smudges beneath her naked eyes.

Lorelei has been working too hard, especially over this last year, when the demands on her expertise seem to have reached a career high that borders on destructive. She is too driven, too zealous, too eager to please all the claimants on her limited time. I can see what the overcommitment is doing to her.

Lorelei knows I worry, thinks I worry too much. I disagree. (She knows this, too.)

In the mirror she winks at me, a nothing meant to appease, before her gaze drops back to her lap.

I shift the visor again to look at Izzy. Our youngest sprawls on the bench seat in back, shoulder strap barely grazing her upper arm, fine-boned as a dove. Rather than turning around I shoot her a text—*Tighten your seat belt!*—and watch for her reaction. She straightens and snugs the strap up her arm, giving my reflection a cheerful wave with her iPhone. Seconds later three thumbs-up emojis blip up on my screen, followed by a heart.

Unlike her sister, Izzy will be in heaven this weekend. It's always worth taking her along on these things for the joy factor alone. A one-person cheering squad and a favorite sibling among Charlie's teammates, she'll spend half of every game performing handstands and cartwheels on the sidelines, chiding refs for bad calls.

I flip up the visor and scan the road ahead. Weekend beach traffic clogged the highway as we left Bethesda an hour ago and crossed the Bay Bridge, though by now the flow has lightened along this two-lane etched through soybeans and corn on the rural Eastern Shore. Cars whip along from the opposite direction while others pass our speed-limit-obedient minivan from behind. We're in no hurry; face-off isn't until 5:30. We've built in plenty of extra time to get to the complex for warm-ups, and I have another forty minutes to finish my memo.

With a sigh I prop the laptop on my knees and hunch down in my seat. Again the screen displaces the road unscrolling ahead.

By the time we cross the state line (a quick glance out the passenger window: *Welcome to Delaware* with a wavelike swoosh in two shades of blue, "Home of Former President Joseph R. Biden, Jr." emblazoned along the bottom), the memo is nearly done. In ten minutes I will e-mail a draft to the managing partner, completing this last work task before the family weekend officially begins.

I cock my head at the screen, staring down a final, problematic phrase, and—

"CHARLIE, STOP!"

Alice, screaming from behind me.

Charlie's left hand clutches the wheel. Jerks.

An alarm blares from the dashboard.

A screech of rubber.

An impact.

A blinding explosion against my eyes and head.

A sensation of weightlessness.

One flip. Two.

A horrible stillness when the minivan comes to rest, somehow back on its four wheels.

A chemical smell. Overpowering, close.

A hissing from the engine.

Moans. Gasps. One sharp cry.

Through these seconds I am aware that an automobile accident is about to occur

is occurring

has occurred

Jagged fragments whirl in my head.

And finally, stillness.

My ears ring, as if someone just pounded a gong inches from my skull.

Charlie moves first. Below the ringing, in the depthless silence, there is the dull click of a seat belt. My son pivots in his seat to look at me.

Blood trickles from his nose: the punch of the airbag.

We are otherwise uninjured, the two of us.

For an endless moment we stare at each other. We stare and we stare because the one thing neither of us wants to do is to turn, to look, to discover how the last ten seconds will echo down our lives.

The first image I see when I spin around is the blood-streaked face of my wife. Lorelei's head rests unmoving between the crumpled door and the seat, her neck at a bad angle. Her eyes, fixed on mine, blink in a steady and knowing rhythm.

Then they shift right, toward Alice.

Who is unconscious. Or dead.

Alice's upper body tilts against the door. Her glasses frames sit askew, smashed into her eye sockets, the lenses webbed with cracks. Blood streams from some hidden broken place beneath her hair.

In the rear of the minivan Izzy starts to whimper, a puppylike sound that rises as the ringing in my ears fades.

I push open my door, stagger out, pull at the handle of the sliding door but think better of it. Alice's damaged face rests on the window glass, which is smeared with blood and mucus. If the door opens it will move her head, her neck.

I go back in to see Charlie trying to scramble over his seat to reach his mother and sisters. But half the minivan's roof caved in during the roll down the incline, leaving no room. Charlie slides back into the driver's seat and starts pushing at his door.

I wedge myself between the two front seats and crouch down between Lorelei and Alice. I hear myself speaking like an automaton, trying to project calm despite my rising panic. "We had an accident. Is everyone okay? We had an accident. Try not to move. Izzy, help is coming, you'll be okay. Alice, can you hear me? Alice? We had an accident. Lor, try not to move. You too, Alice. Alice? Hey, Alice?"

Moans from Lorelei, louder wails from Izzy.

From Alice, silence.

I take her left forearm gently, feel her clammy skin, the wild throbbing in her wrist. She clutches her phone against her stomach with her right hand, which is trembling, knuckles white. I try to hide my terror from Lorelei but she keeps staring at Alice, with eyes frozen like a mannequin's.

Charlie finally manages to kick open his door as others approach our van, drivers who pulled off in the wake of the collision. I hear several of them speaking to emergency dispatchers.

A man's gruff voice cuts through: "There were two cars. Other one's on fire."

I glance out Lorelei's latticed window. Smoke billows from the soybean field across the road.

Charlie presses the tailgate release button. Somehow the mechanism still works. The tailgate rises automatically and allows him to access Izzy over the top of the bench seat. The shape of the minivan has distorted back there, the mangled frame bulging to create a cocoon around her injured body.

I smell the burning now from across the road, an acrid stink.

"Dad, Izzy's really hurt," says Charlie. "She's stuck, and her leg is like—it's stuck."

He tries to soothe Izzy as I reach for Alice. Palpate her shoulder, feel for her breath—and then she moans softly, a miraculous sound. A song of life.

I implore her to stay still. She moans again.

"Don't move," I say sternly, to Izzy and to Lorelei. "Not an inch. Either of you. Stay as still as you can."

I crouch there between the seats with my arms spread and a hand on each of their broken bodies. Behind them Charlie leans in from the back with his powerful arms draped over Izzy's shoulders to keep her still and calm.

In these twisted knots we wait.

Before long the paramedics arrive, ambulances and fire trucks rushing in. The crew forces open the sliding door with a jawlike machine and extracts Lorelei and Alice from their seats with necks braced. Lorelei can move her

legs and arms, Alice can wriggle her fingers. Izzy's leg gets wrapped in a foam contraption when the paramedics remove her from the car.

"Thank you," she says to them in her tearful voice. "Thank you guys so much. Thank you."

Soon my wife and daughters lie parallel to one another in a grassy area between the shoulder and the field. EMTs tend to their wounds, blanket them against shock, prepare them for transport.

At one point, as Lorelei's stretcher disappears into an ambulance, Izzy mumbles something to Charlie. He walks over to the ruined minivan and emerges with four phones. He hands me mine and Lorelei's, shows Izzy that hers is safe. The heft of the devices feels oddly soothing, normalizing, both a security blanket and a connection to the former world, to a time already gone.

Alice still clutches her phone against her belly, has been clawing it all along since the impact, even when unconscious. That phone isn't going anywhere.

At an EMT's direction, Charlie and I climb into the front cabin of Alice's ambulance and sit crammed together as the vehicles transporting Lorelei and Izzy precede us away from the scene. Ours makes a slow circle back onto the road and gives us a clear view of the vehicle that struck us: a Honda Accord, the hood and grill accordioned almost to the windshield. The fire that engulfed the Honda has been extinguished by now. A lone tendril of smoke rises from the wreckage.

With a throb of sorrow I take Charlie's hand and he lets me hold it, for the first time in years. I look down at our joined fingers then numbly back out at the scene. The first responders have concealed the Honda's windshield and doors with tarps, shielding the dead within.

I wonder who and how many they were, how young or old; also I wonder who loved them, and who will be most shattered by their loss.