

Complex

Chapter 1.

It was the kind of day when buildings seem to have just erupted out of the ground fully formed. The cloud cover was a grey satin sheet ending just before the horizon, where the sun hummed, just out of sight, like a vast orange alien. Everything seemed instant and massive. The monolithic agencies of man and nature enveloped me while I tasted brisk air. I walked down a sidewalk, and I looked at the leaves of trees around me, and I thought about money.

Money seems at first a material, until the reality of it as paper or zeros and ones renders the actual physicality of it moot. It's just a pattern in reality: a symbol. So maybe it represents raw value, just at one level of indirection. A single dollar is a symbol for so much bread, or so much booze, or whatever minuscule percentage of an aircraft carrier. Fuzzy logic. Every dollar is simultaneously every potential realization of value. So much cheese or so many surface to air missiles.

I saw Jack up ahead. He was pulling up on his motorcycle. Coming to a stop in the parking lot of the Economist Bar and Grill, he tossed his helmet across the bike's handlebars and spread his arms above his head in an exaggerated stretch. This revealed some of his lean, chiselled form to the girls at a table just inside the front window. He smiled and looked toward me.

"Dave!" he called. "Nice timing!"

I continued forward, acknowledging him with a sort of half-wave while I kept pondering.

Money breaks down when there's nothing to buy. Value becomes value-less. One million nothings is precisely nothing. So maybe money isn't value: value should endure, and in the form of money it can't. Money loses its infinite potential when there's nothing of immediate value to be had. Debt, however, lives through the bad times along with the good. Holding debt is power, and power is self-perpetuating. Money isn't an infinity of possible substitute values - it's the world of potential debtors.

If I get a dollar from you, it's the acknowledgement that you've received a dollar from me in some form. You owe me a dollar worth of something. Maybe, though, your personal contribution of value to the world doesn't interest me - you sell computer software that I don't need, or chocolate-covered ants that I'm allergic to. Fortunately, you can sell your ants to a woman who runs a micro-brew, and she can sell her beer to a kid who mows lawns to pay for college, and I need my lawn mowed. You had an IOU from the world for one dollar of value from the world, and you transferred it to me. Eventually, it got back to you, but it need not have. The whole system is a fluid that flows to fill its own needs, and to reach an equilibrium.

I reached Jack with my eyes a little glazed over.

"How's it going, David?" he clasped my hand and shook it.

"Hmm..." I mused, "Money, man - it's just another dimension."

"What the fuck you talking about, David?" He grinned.

"Just another dimension, man. The power hyper-dimension."

"Hyper-dimension? What the fuck man?"

We walked inside, and he headed for a table near the girls in the window.

"Yeah man, the topography of power. The obfuscated z-axis on the network map of man. You get yourself down deep in the valleys of the powerful, and the good stuff comes to you. Up on the mountain? You try hold on to something, it just blows into the stratosphere. Eventually it all just settles into the valleys man."

"Mountains and valleys - what the fuck?" He sits us down one table over from the window girls.

"Yeah man," I say, gesturing around us. There's bills from all over the world papering the walls, provided by the countless patrons of the place over the hundred odd years of its existence.

"You get one of these bills, it puts you that much deeper into the valleys. The deeper you get, the more the world falls around you for the taking. Everyone above you owes you something, and they'll drop something and it'll slip down and you'll pick it up and they still owe you, man.

"I don't owe anyone shit," he says, then coughs. "Shit, I could use a smoke."

"See, that's the instability of the whole system, man. As long as we all keep agreeing that this debt dimension, this power dimension, that it exists - then having money gives you power." I glanced over to where he was looking, and a couple of the girls were glancing smiles our way and talking to each other in low voices.

"This have something to do with the money disappearing?" he asked out of the corner of his mouth while he smiled back at them.

"Guess you could say it inspired me man." I craned my neck a little, looking around for someone who might bring us beers. "We've complicated the debt dimension, man." I waved my hand in front of his face, and gestured at the stock-ticker embedded into the table-top. "This economy we've built is fucking nuts. Housing bubbles, flash crashes - this is the shit of legend. Deep, mystical lore that no-one understands. Technical wizards build a high-frequency trading dragon-algorithm, and it stays under their control for a time, battling their ethereal competitors across an increasingly chaotic landscape of debts. Then the world shifts and cracks as the algorithms band together and rip at the fabric of the universe, and no-one knows what the fuck just happened. So the gatekeepers, the stock-exchange, they reset it all and chalk it up to some error or other. You won't lose everything - this time. But man, complexity is unpredictable."

"Man, are you fucking high?" he asked absently.

"Only a little, man," I replied. "How much of this increasingly mysterious and volatile debt dimension do you think people can handle, man? How long can they suspend their disbelief from up there on the barren mountains? Because the peaks of poverty are only getting higher and more perilous."

"So if money is this debt dimension or whatever," he asked "Then how does money just disappear, go somewhere else? How'd those guys manage to steal all of this debt? Why the fuck would anyone ever honour stolen debt?"

"That's the beauty of complexity, Jack! So there's this system in place to manage our debts to each other - it's complex. So complex that you can't keep track of the whole thing. Debt can flow through off-shore accounts, into and out of corporations and their subsidiaries, through third-world countries or percolate through launderers. The system is so damn complex it can't even keep track of itself. It's like a great big mind, a tiny universe. If you muddle up the origins of the debt enough, everyone just forgets where it comes from. Even the system itself. Think about it man. The stuff you know, do you remember where you learned all of it? No way. It's just there, sitting in your brain for use. Debt's the same way. Move it around enough, mix it up with enough other things, and no one remembers how you got it. Even if it's stolen."

"Fuck you're high," he sighed. "Hold on a sec." He moved across to the table of the girls. A moment later, the two that were looking over at us came back to our table with him.

Jack is a fucking wizard.

The girls, according to Jack, were Kaylee and Natalia. I rose to clasp each of their hands.

"I'm David." Kaylee sat down opposite to me.

"So, David," she inquired with a half smile, "like, what's up?" Natalia and Jack seemed to have settled right back in to a conversation started at the other table, so I decided to ignore them.

"Well... not much." I replied. "I just finished drinking beers up on the top of the Centre Bridge. I'm a ten-thousand year old corporate security consultant who throws his empties in the river."

Kaylee propped her chin up on her hand. Her shirt slipped down her forearm, and I glimpsed the fringe of an internal sleeve of tattoos.

"So you get paid to sort of, wander around inside companies and tell them..." she waved her hand lazily, "how fucked they are?"

"Yep." I said, leaning back a little, "Then I try to give them some advice, protocols, restructuring, whatever," I propped my self back on the back legs of the chair, "to unfuck themselves. To the extent that they can." I settled back on to four legs. "Big companies don't change easily." She folder her other hand under her chin, revealing more tattoos.

"I bet they're pretty good with the whole 'protocol' part - corporations eat that shit up." I laughed.

"Fuck yeah," I said, leaning over my folded hands to mirror her posture. "Anything you can stick in a memo and post on a company-wide mailing list."

"Attention all employees of MegaCorp inc." she looked through a sheet of imaginary paper held at eye-level and slightly to the right. "Please stop giving away the vault access codes to random callers. Signed, Bosses." She made a flourish in the air - a loopy, managerial signature.

I sighed. "It's closer to that than you'd think. Unfortunately, good security isn't a set of rules as much as it is a culture. People have to live and breathe it. And I'm not sure that building such a culture is even worth it for most companies. Probably cheaper to just get fucked now and then, rather than live in fear."

"Probably." She made a mock-serious face. We looked at each other for a moment.

"So, Kaylee," I asked with a wry smile, "like, what's up?"

"Meh," she replied, shrugging with exaggerated dejection. "I do statistical analysis for prospecting companies. Got some math degrees, mostly use them to make, like... bar-graphs about big oil datasets. Been thinking about getting into the finance thing - quantitative analysis."

"Ah," I said, "You want to be a quant when you grow up."

"Something like that. Fuck my mortal soul - I'll buy a new one."

"And dry your tears with fat stack of cash." I replied, drawing a single tear down my cheek with my finger.

"Hey - it's surprisingly absorptive," she laughed.

"Well, at least one of us has our priorities straight." I stretched.

"Yeah," she replied in a baby voice "and here you are, just making pennies looking out for those poor little companies, all lost and alone in the big scary corporate world."

It was my turn to laugh. "I guess I do alright. But hey, if I'm not looking out for them, who will? They sure can't take care of themselves. It's sort of a large scale blind-spot. Something about being part of these systems makes you incapable of reasoning about how they work."

Kaylee sighed. "Yeah... sometimes organizational stupidity is a little overwhelming. One branch of our company has this awesome software pipeline for taking survey readings right from the instruments and putting them in a database and analyzing them literally with one click. That's the stuff I work on - I do the math bit of the analysis. Then there's this other branch over in Europe. And they're like 'Oh no - we don't need that - we have this fucking monster spreadsheet and it's gods fucking gift to the world. It's magic and it is our child and it will live on into eternity!' And it's this dumb piece of shit that requires several employees to just manage, with all kinds of little scripts tacked on to it by idiots over years."

"You sound a little bitter." I pointed out.

She laughed. "I guess I do. Fucking spreadsheets..."

"Hey, they make the world go round. There's a certain subset of people that, deprived of their number shuffling, might go out and do some real world damage."

"Sometimes I imagine we could put them in camps or something," she said. "Subject them to some, like, conditioning."

I extended my arm at a forty-five. "Mein Fuhrer."

She laughed and slapped my arm down, rolling here eyes. "Godwin's law strikes again."

"Who is this Godwin fellow?" I asked.

"I dunno, like, some guy." She grinned and said, "He said something like 'As a discussion lengthens, the probability of a comparison involving Hitler approaches 1'".

"Hmm, sounds apt," I replied. "Though I think your mention of camps more than provoked it."

"Maybe." she stuck out her tongue a little and then smiled.

Some beers showed up at the table. The four of us divided them up, and I raised my glass.

"To easy money."

"Here here," said Jack. We drank.