

The Grid

The sun's setting. My forehead presses against the cool windowpane. I'm home on summer break from college in the city. My brother decided to stay in town with his girlfriend. I can see downtown from my room, all glinting glass and metal rising hundreds of stories into the sky. The air is filled with MagLev cars, their occupants letting the automatic system drive while they read the paper or call a friend. The Grid holds everything up. It all looks so big. The outskirts feel small by comparison. The houses are old, no more than ten stories and heavy with concrete and brick. The Grid still hasn't reached this far out.

Downtown grew first because it was just more populated. They say we were running out of land, and that's why we grew upwards instead - there was so much space up there. MagLev or Magnetic Levitation devices were already getting pretty popular back then, but they were small scale until the Grid was laid down. Mile after mile of metal crisscrossing under the city, giving the MagLevs something to repel from. Now, the city grows upwards, buildings and sidewalks and cars hovering miles above the ground, while the outskirts are held firmly down by gravity – and our own stubbornness.

“Like *hell* they can tear up my roads, my neighborhood – my *home!*” Dad's voice echoes from downstairs. He yells a lot these days and he's on the phone a lot. There's definitely a correlation.

The city is trying to expand the Grid and most neighboring towns like ours won't let them¹. Dad works as a lawyer in the city, but when he comes home, he helps run the Anti-MagLev Society². He uses his skills as a lawyer to his advantage. They mostly call the city and sign petitions, but every once in a while, someone does something radical. Our neighbor's son almost got arrested last week for harassing a city contractor who came in to survey the roads. I think he stole some equipment.

¹ Oudshoorn, N & Pinch, T. “Resisting Consumer Technology”: First method of resistance is opposing the introduction of a technology into a community

² Kline, R. & Pinch, T. “Users as Agents of Technological Change”: similar to the anti-automobile societies created in rural parts of the US, who petitioned and also used more drastic measures to stop the influx of cars

“Alright pal, bribery isn’t getting you anywhere. You can shove that “compromise” of yours right up your – “Dinner time!” Mom saves the day again. I peel myself away from the view and run downstairs.

Mom’s laying out plates when I get to the dining room. Dad fumes the corner, aggressively mixing the salad. A lettuce leaf flies out of the bowl. I reach over and pop it in my mouth.

“What did they say this time?” I ask.

“They said they want to compromise, but it’s all just cheap tricks.” I raise an eyebrow, and he continues. “They said they have a design for a new hybrid car – MagLevs and tires, all at once, so we can keep using it on *normal* roads here, and still get into the city. Honestly, all they really want is to create demand for the Grid. We’ll start liking these hybrids and one day, we’ll all just convert to the real things.³”

MagLev cars are fast and safe, using sensors to signal to each other. The new buildings that come with the Grid are clean and pretty, and house hundreds and thousands more people than the squat buildings here now. The problem is that only happens after installation. Installing the Grid in the first place is a logistical disaster. Roads are torn up and houses are demolished to clear the way for the every growing metal lattice. Dad grew up in this apartment, and he’s not about to let it go down without a fight.

The city isn’t going to let it go either. Until the whole area is converted to the Grid, the technology will continue to be a mix of botched hybrids trying to accommodate two different ways of living. Somehow, they’ll create demand until the Grid covers the region.⁴

Alex is my best friend - we grew up together. She’s staying in her dorm over the summer, like my brother. That weekend, I drive to visit her. The road into the city is having the Grid installed, so traffic is a disaster.⁵ Construction crews swarm across the highway, digging up concrete and dragging huge metal bars into the holes. The four lane road has been condensed into one. Traffic

³ Kline, R. & Pinch, T. “Users as Agents of Technological Change”: Because of the users, manufacturers may redesign technology to fit a social construct.

⁴ Oudshoorn, N & Pinch, T. “Resisting Consumer Technology”: The creation of demand, like the promotion of electric washers during electrification, is used to increase technology use.

⁵ As discussed in lecture, infrastructures often build off the infrastructure that is already present (like the roads).

begins to spread out when we reach town. Construction was finished long ago, shiny buildings reaching to the sky and MagLev cars ripping by overhead. I drive carefully – my old car doesn't have the sensor that the new cars do, so the automatic driving system doesn't always recognize it. My dad petitions a lot against the new cars because of that. Something about “dangerous instrumentality” and liability and all kinds of other lawyer speak.⁶

I arrive half an hour late. Alex lives on the 76th floor. She meets me in the lobby, and we jump into the elevator. The magnetized car accelerates upwards at a breathtaking speed. The doors slide open.

“I'll never get over this view,” I sigh. Wall sized windows show light, wispy clouds floating around the tops of buildings downtown. I'll have a similar view from my dorm next semester.

“Eh, it's not that bad,” Alex grins. “C'mon, I wanna show you what I got!” She grabs my arm and drags me to her room. She pulls a pack of cigarettes and a lighter from her desk drawer, and an odd looking set of bracelets from under her bed. She shoves it all into a faded canvas bag, and we head back to the elevator.

Once outside, we run around the building to the new park. It's quiet and cool under the trees. We sit on a bench as Alex lights a cigarette.

“Mkay,” she says. “Check these babies out.” She rummages in her bag with one hand and holds up four black bracelets for me to see. They're adjustable. Each has a single LED, flashing green.

I frown. “What are they?” I ask.

“Hover bracelets, duh!” She's grinning ear to ear. “See, the light goes green when you're on top of the Grid. It means they'll work.”

“Work how, exactly?”

“Like this.” Alex hands me the cigarette, and puts two bracelets on her wrists, and two on her ankles, tightening the straps. She waggles her eyebrows at me and taps her fingers twice against the left bracelet. She rises into the air, giggling. My jaw drops.

⁶ Jain, S. “Dangerous Instrumentality”: How do we legally handle new technology, such as cars, and who is responsible for accidents?

“Wha-?” I try to compose myself. “There is no way that thing is legal.”

Alex shrugs as she floats around the park. She looks weightless. “Probably not. Then again, neither are those things.” She nods towards the cigarette I’m still holding for her. I gingerly put it out and drop it in the trash next to the bench.

“Okay, well, how does it work? Where’d you get it?” I’m bubbling over with questions.

She’s floating about on her back, eyes closed. “You know Max? He was in our anthropology class last semester? Whatever, it was him. I don’t know all the science, honestly, but long story short, they’re MagLev. It works because of the Grid!⁷ I heard some guy in the year above us managed to MagLev his skateboard. Pretty sick, huh? Apparently, MagLev Corp is opening up a competition. Best unorthodox use of the Grid – you know, not the buildings and cars and stuff – could land you a job there doing R&D!”

“Wait, seriously?”

“Yeah, it sounds like they’re trying to make the Grid more popular. You know, get input from the rest of us.⁸ It pays well too. Okay, your turn.” Alex floats back down and unstrap the bracelets. She hands them to me. “Put them on!”

I take the bands and wrap them around my wrists. Alex pulls out another cigarette.

“Hold up. You should come up with something for the competition!”

I stop wrapping to stare at her. “No way. My dad would kill me. Or disinherit me. Or both. Plus, I would never win.”

“Please. You get straight A’s in everything ever, and I know you love the engineering classes you started taking last semester. You’re a natural!”

“I can’t. Really.” I finish wrapping my ankles and tap the left wristband twice. A smile creeps across my face as my feet lift off the ground. I feel like I don’t weight anything.

⁷ Oudshoorn, N & Pinch, T. “Resisting Consumer Technology”: Second method of resistance is not using technology is the prescribed manner.

⁸ Kline, R. & Pinch, T. “Users as Agents of Technological Change”: Users can influence technology, instead of technology influencing the users.

“Sure you can!” Alex waves her arms dramatically. She pulls a tablet out of her bag. “Look, the application is right here online. You don’t even need an idea yet, they just want an idea of how many people are signing up.”

She holds the tablet up to where I’m floating. I take it and roll lazily onto my back, like she did earlier. It feels wonderful. I look at the application. I’m torn.

When I get home, mom’s on the phone with my brother. I flop down on the sofa and turn on the TV. Ads for MagLev cars and new super high-rise apartments stream by⁹. A few minutes later, Mom says goodbye and hangs up. She joins me on the sofa, offering me a bag of pretzels.

“Andrew says hi,” she says. “He seems to be doing well.”

“Oh, yeah?” I ask. Mom laughs a little.

“Your father will be proud to hear that although your brother continues to live in the city, his girlfriend seems to have a good influence on him. Remember how she’s from the countryside? Well, apparently the rural folk make your father’s anti-MagLev campaign look like child’s play. They literally go in and stand before the construction machines and rip up the Grid and all kinds of craziness. Point is, she’s convinced your brother to not take part, as he called it. They’re living in an apartment on the ground floor and are driving a regular car and everything. They just won’t get involved with this whole Grid thing!¹⁰”

I laugh. Dad will be happy to hear about that. I remember the application. Alex emailed it to me when I wouldn’t fill it out in the park. I haven’t filled it out, but I haven’t deleted it. Dad would be less happy to hear about that.

Dad gets home late.

⁹ Oudshoorn, N & Pinch, T. “Resisting Consumer Technology”: The Grid is advertised in an attempt to increase demand.

¹⁰ Oudshoorn, N & Pinch, T. “Resisting Consumer Technology”: The third method of resistance is by not “purchasing” the technology, also called “consumer resistance”.

I've been thinking and worrying in the weeks since I visited Alex. I know my father has a point about the dangers of the Grid. If they install it here, our home will be demolished and we will have temporary housing in the city while the metal is laid and the residences put up. The new residences can house hundreds and thousands of more people than our little homes. The community would be drastically altered. He worries about the safety of the new cars and who is liable for damages. He sees the problems.

I see things differently. I don't understand why we have to believe that this new technology, this new infrastructure has to influence us so negatively. Why don't we influence the technology, and fit it to our culture? I want to be a part of the people that change technology in the way that we want, to make it fit our society.¹¹

Dad gives me a hug. I take a deep breath. "I'm not going back to school next year." He stops short. Another deep breath. "I'm going to work for the Grid."

¹¹ Kline, R. & Pinch, T. "Users as Agents of Technological Change": A user actively decided to take initiative to influence a technological infrastructure, so that the infrastructure better fits the societal norms of the users.

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