

Gravity Wells

Chapter 12: Gravity Wells

Observer Commentary

Astrophysics concept: Gravitational wells.

Massive objects distort spacetime, creating gravitational fields that attract smaller objects. The larger the mass, the deeper the gravitational well, the stronger the attractive force. Objects in orbit around massive body are not free—they are trapped in gravitational well, continuously falling but also continuously missing due to tangential velocity.

Escape velocity: The minimum speed required to break free of gravitational well. For objects deep in well (close to massive body), escape velocity exceeds practical acceleration capacity. Escape becomes impossible. The object will eventually be captured or destroyed.

Economic systems function analogously to gravitational systems. Large economies exert attractive force on smaller economies through: – Market access (large consumer base attracts exporters) – Capital flows (large capital pools attract investment seekers) – Supply chain integration (established manufacturing networks attract component suppliers) – Currency dominance (reserve currencies attract international trade settlement)

Once economies become integrated, separation becomes extremely costly. The economic ties function as gravitational bonds—stronger the closer the proximity, harder to break the longer the integration persists.

China–Taiwan case:

Mass differential: China's economy is approximately 27 times larger than Taiwan's by GDP (\$17.8 trillion vs \$660 billion). Population ratio: 60:1 (1.4 billion vs 24 million). This creates deep gravitational well.

Integration depth: Approximately 40% of Taiwan's exports go to mainland China and Hong Kong. Taiwan's tech sector depends on mainland manufacturing for cost-competitive production. Mainland tourism to Taiwan was major revenue source before political tensions reduced flows.

Escape attempts: Taiwan has pursued “New Southbound Policy” to diversify economic partnerships away from China. But gravitational attraction of large nearby economy is difficult to overcome. Geographic proximity, linguistic compatibility, cultural familiarity, and established supply chains create path dependencies that resist redirection.

Capture dynamics: Mainland uses economic leverage to apply political pressure. Companies doing business with both Taiwan and mainland face forced choice: Declare Taiwan as province of China or lose mainland market access. Most companies choose mainland market due to size differential.

Existential question: Can Taiwan maintain political independence while economically integrated with power that seeks to absorb it? Or does economic gravity inevitably pull smaller system into political orbit of larger system?

Subject under observation: Taiwanese business owner facing forced choice between economic survival and political loyalty.

Human Narrative

Richard Chen had built his company, Precision Components International, over thirty years from a small machine shop in Taichung to a mid-sized enterprise employing 800 people. The company manufactured specialized components for electronics—precision-machined metal parts that went into smartphones, laptops, medical devices.

Sixty percent of his revenue came from mainland China.

He sat in his office reviewing the email that had arrived that morning from his largest mainland customer—a state-owned electronics manufacturer in Shenzhen that accounted for 40% of his company’s total revenue.

The email was brief:

Dear Mr. Chen,

As part of our compliance review process, we require all international suppliers to confirm their adherence to the One China Principle. Please provide written statement affirming that your company recognizes Taiwan as an inalienable part of China’s territory and that the PRC government is the sole legitimate government of China.

This statement must be submitted within 30 days. Failure to provide confirmation will result in contract termination and removal from our approved supplier list.

We value our partnership and hope to continue our mutually beneficial co-operation.

Richard had known something like this was coming. Other Taiwanese companies had received similar demands. The pattern was clear: Beijing was systematically forcing Taiwan businesses to publicly declare political positions that undermined Taiwan's sovereignty.

If he signed the statement, he would be betraying Taiwan. His employees would know. His friends would know. He would be labeled a collaborator, someone who sold out his country for profit.

If he refused, his company would lose 40% of its revenue. He would have to lay off workers—300 people, maybe more. The remaining contracts might not sustain operations. The company might fail entirely.

He had built this company from nothing. He had mortgage, retirement savings, his children's education funds all tied up in the business. His employees depended on him for their livelihoods. Their families depended on the paychecks he provided.

What was the right choice?

He called an emergency meeting with his senior management team: His chief financial officer, his head of operations, and his sales director.

"You've all seen the email from Shenzhen," he said. "I want your frank opinions. What should we do?"

His CFO spoke first: "Financially, we can't afford to lose the Shenzhen contract. It represents \$80 million in annual revenue. Our profit margins are thin. Losing that revenue means we go from profitable to loss-making immediately. We'd have to make severe cuts—layoffs, facility closures, maybe bankruptcy."

"Can we find replacement customers?" Richard asked.

"Not quickly. We've been trying to diversify for years. Southeast Asian markets are smaller and already have established suppliers. US and European customers want suppliers closer to their markets for just-in-time delivery. Building new customer relationships takes years."

"So economically, we have to sign?"

"Economically, yes."

Richard turned to his operations director. "What about our employees? What's the mood in the factory?"

"Split. Younger employees are more idealistic—they say we shouldn't sign, that money isn't everything. Older employees with families are pragmatic—

they say they need their jobs and don't care about political statements. Middle management is worried about being held responsible either way."

"What do you personally think?"

The operations director hesitated. "I think... I think this is bullshit. Beijing has no right to force us to declare political positions. But I also think we live in real world where powerful actors don't care about rights. We have to deal with reality as it is, not as we wish it were."

Richard turned to his sales director. "Have other Taiwanese companies signed these statements?"

"Some have. Publicly, they don't talk about it. But I've heard through industry contacts that several major electronics suppliers have complied. They're trying to keep it quiet to avoid backlash."

"What happens if we sign and it becomes public?"

"We'll face criticism. Some domestic customers might cancel contracts as protest. The government might exclude us from subsidies or preferential treatment. Social media will attack us. But..." He paused. "Most people will understand. They'll criticize publicly but acknowledge privately that we didn't have a choice."

"So everyone will know we betrayed Taiwan, but they'll forgive us because they understand we were forced?"

"Something like that."

Richard felt sick. This was the choice Beijing wanted to impose: Collaborate and feel ashamed, or resist and suffer economically. Either way, Taiwan loses.

That evening, Richard drove to his father's house. His father was 82, retired from the textile industry, a waishengren—mainlander who had fled to Taiwan in 1949. He represented the generation that had lived through the civil war, the separation, the decades of hoping for reunification that never came.

"Dad, I need advice."

They sat in the courtyard where his father grew vegetables—tomatoes, cucumbers, bitter melon. His father listened silently as Richard explained the situation.

"What does your heart tell you?" his father finally asked.

"My heart says don't sign. Taiwan is my country. I don't want to betray it."

"And your head?"

“My head says I have responsibilities. Eight hundred employees. Their families. My own family. I can’t throw everything away for symbolic resistance.”

His father pulled a cucumber from the vine, examined it, set it aside. “When I came to Taiwan in 1949, I believed we would retake the mainland within a few years. That’s what Chiang Kai-shek promised. I spent my youth preparing for return that never happened. I built my business here, married your mother, raised you and your siblings. I became Taiwanese without admitting it to myself.”

“Do you regret it?”

“No. But I spent decades in denial about reality. I thought of Taiwan as temporary refuge, not home. That denial wasted energy that could have been spent building better life.”

“What are you saying?”

“I’m saying that reality doesn’t care about our preferences. The mainland is too large, too powerful, too close. We can resist, but resistance has costs. You have to decide which costs you’re willing to bear.”

“So you think I should sign?”

“I think you should be honest with yourself about what you’re choosing. If you sign, you’re choosing economic survival over political principle. If you refuse, you’re choosing political principle over economic survival. Neither choice is wrong. But you have to own the consequences.”

Richard drove home feeling no more certain than before. His father’s wisdom was to accept that there were no good options—only different kinds of loss.

The next day, Richard received a call from a journalist at a major Taiwanese newspaper.

“Mr. Chen, we’ve heard that mainland companies are requiring Taiwanese suppliers to sign political statements. Can you confirm whether Precision Components has received such a request?”

Richard’s stomach dropped. How did the journalist know? Had someone on his management team leaked it? Was Beijing coordinating pressure campaign with deliberate public exposure?

“I can’t comment on private business communications,” Richard said carefully.

“But you don’t deny receiving such a request?”

“I’m not confirming or denying anything. This is confidential business matter.”

“Mr. Chen, the public has a right to know if Taiwanese companies are being coerced into political positions that undermine our sovereignty. Will you sign the statement?”

“I haven’t made a decision yet.”

“What factors are you considering?”

Richard wanted to hang up. Instead, he said: “I’m considering the livelihoods of my employees, the viability of my company, and the political implications of either choice. It’s complicated.”

“It’s not that complicated. Either you defend Taiwan or you collaborate with those who seek to destroy it.”

“It’s easy to be principled when it’s not your employees who will be unemployed. This is real people’s lives we’re talking about.”

“And it’s real sovereignty we’re talking about. If every Taiwanese business signs these statements, we’ve already surrendered. We’re just waiting for Beijing to formalize the annexation.”

Richard ended the call.

That afternoon, the newspaper published an article: **“Taiwanese Companies Face Political Coercion from Mainland Customers—Will They Resist or Collaborate?”**

Richard’s company wasn’t named directly, but the article quoted “sources in the industry” describing the forced-choice situation. Within hours, social media was debating the issue:

@PatriotTW: Any Taiwanese company that signs these statements is a traitor. We need to boycott collaborators.

@PragmatistTW: Easy to say when it’s not your job on the line. These companies are victims of economic coercion, not traitors.

@EconWatcher: This is exactly how Beijing will absorb Taiwan—not through military invasion but through economic pressure that makes resistance impossible.

@WorkerVoice: I work for a company facing this choice. If we don’t sign, I lose my job. If we do sign, people call us traitors. We’re fucked either way.

Richard’s phone rang constantly—reporters requesting comment, friends calling to offer support or criticism, suppliers worried about how his decision would affect their relationships.

He turned off his phone and sat in the dark in his office.

On the 29th day after receiving the email—one day before the deadline—Richard called a company-wide meeting. All 800 employees gathered in the factory courtyard. He stood on a platform, microphone in hand, facing his workforce.

“You’ve all heard rumors about a situation the company is facing. I want to address it directly and honestly. We’ve received a demand from our largest mainland customer to sign a statement affirming the One China Principle and recognizing Taiwan as part of China’s territory. If we refuse, we will lose contracts representing 40% of our revenue.”

The crowd murmured. Everyone had suspected, but hearing it confirmed was different.

“I want you to understand the stakes. If we lose those contracts, I will be forced to lay off at least 300 people, possibly more. The company might not survive. Your jobs, your families’ livelihoods, the business I’ve built over thirty years—all of that is at risk.”

“But I also want you to understand the other stakes. If we sign this statement, we are publicly declaring that Taiwan is not a separate country. We are collaborating with those who seek to erase our sovereignty. We are betraying the principles that many of us believe in.”

He paused, looking at the faces in front of him—young and old, male and female, people who had worked for him for decades and people who had just started.

“I’ve made a decision. But before I announce it, I want to know what you think. I’m going to take a vote. It’s non-binding—I bear the final responsibility. But I want to know what you want me to do.”

He instructed his HR team to distribute paper ballots with two options: – Sign the statement, keep the contracts – Refuse to sign, lose the contracts

The employees voted silently, depositing ballots in a box.

Richard’s HR director counted while everyone waited. Finally, she announced:

“Sign: 487 votes. Refuse: 313 votes.”

Almost exactly 60–40. The vote split closely matched the revenue dependence on mainland China.

Richard took a deep breath. “Thank you for your honesty. Here’s my decision: I’m going to sign the statement.”

Some employees applauded. Others looked disappointed or angry.

“But I’m also going to issue a public statement explaining that we signed under economic duress, that this was coerced political declaration that

does not reflect our actual beliefs, and that Beijing's use of economic leverage to force political compliance is illegitimate coercion."

The crowd was quiet, uncertain how to react.

"I know this satisfies no one. Those who wanted me to refuse will see this as collaboration. Those who wanted me to sign quietly will think I'm unnecessarily provoking backlash. But I'm trying to find a middle path—comply with the economic reality while making clear that compliance is not consent."

One of the young engineers raised his hand. "Mr. Chen, won't that statement just anger Beijing more? Won't they punish us anyway?"

"Maybe. Probably. But I'd rather be punished for speaking truth than suffer in silence. We can't stop Beijing from having economic power over us. But we can refuse to pretend that power is legitimate."

Richard returned to his office and drafted two documents: The compliance statement Beijing demanded, and a public statement explaining his position.

The compliance statement was brief and clinical:

Precision Components International recognizes the One China Principle and acknowledges that Taiwan is an inalienable part of China's territory. The PRC government is the sole legitimate government of China. We confirm our commitment to these principles.

The public statement was longer and angrier:

Precision Components International has today signed a political statement required by our mainland customer as condition for continuing business relations. We wish to make clear that this statement was signed under economic duress. We do not voluntarily endorse the position that Taiwan is part of the PRC. We believe Taiwan is a sovereign democratic nation that should determine its own political future.

However, we face a forced choice: Sign the statement or lose contracts that sustain 800 jobs. We have chosen to prioritize our employees' livelihoods. This choice does not reflect cowardice but pragmatic recognition that small companies cannot resist the economic leverage of large powers.

We condemn Beijing's use of economic coercion to force political compliance. This practice represents bullying and undermines the free economic exchange that should characterize international business relations.

We call on the Taiwan government to support companies facing such coercion and to resist Beijing's systematic campaign to force Taiwanese businesses and individuals to publicly betray their own country.

We remain proud Taiwanese and will continue advocating for Taiwan's dignity and autonomy within the constraints imposed by economic reality.

He sent the compliance statement to the Shenzhen customer. He sent the public statement to news media.

Both were published within hours.

Observer Commentary

Duration of narrated events: 30 days. Observable system transformation: Economic gravity producing political capture.

Analysis of gravitational dynamics:

The organism Richard Chen experienced the classic gravitational well problem: Escape velocity exceeds available propulsion. The economic ties binding his company to mainland market were too strong to break without catastrophic consequences.

His attempted solution—comply while protesting—represents effort to acknowledge gravitational capture while maintaining symbolic resistance. This is psychologically understandable but strategically futile.

Beijing's response to such statements is predictable: 1. Accept the compliance, ignore the protest 2. Possibly punish the protest to discourage others from similar resistance 3. Use the compliance as precedent to pressure other companies

Result: The organism achieved worst of both options—he collaborated (satisfying Beijing's objective) and protested (inviting backlash), gaining no benefits from either path.

Observation on asymmetric power:

The mass differential between economies creates impossible choices for smaller system. When large economy is 27 times larger than small economy and geographically adjacent, economic integration is nearly inevitable. Geographic proximity reduces transportation costs. Market size creates scale advantages. Cultural/linguistic compatibility reduces transaction costs.

Once integration occurs, separation becomes extraordinarily expensive. The costs are not evenly distributed: – Small economy bears disproportionate adjustment costs (must find alternative markets, rebuild supply chains, absorb revenue losses) – Large economy barely notices loss (small economy is <3% of large economy's total trade)

This asymmetry means large economy can impose political conditions that small economy must accept or face disproportionate pain.

Observation on forced-choice structure:

Beijing's strategy is to create binary choices where both options advance Beijing's goals: – Option A: Sign statement → Political compliance achieved – Option B: Refuse to sign → Company fails, other companies observe consequences, future compliance increases

The protest statement that Richard added does not create third option—it merely delays Option A's full realization. Once compliance is normalized, protests fade.

Historical precedent: Hong Kong underwent similar process. Initially, protests were loud. Over time, economic dependence and political pressure wore down resistance. Now, compliance is normalized and protests are criminalized.

Taiwan is experiencing same gravitational capture, but more slowly due to: – Physical separation (strait creates barrier to integration) – Democratic system (government can resist pressure; Hong Kong's system was designed for absorption) – US security guarantee (reduces immediate military threat, allowing Taiwan to resist economic pressure longer)

But resistance has costs that compound over time. As Taiwan diversifies away from mainland markets, it loses economic efficiency. As mainland becomes more powerful, alternative markets become less willing to antagonize Beijing by supporting Taiwan.

Gravitational capture may be inevitable given mass differential and geographic proximity. The question is timeline: Will Taiwan be absorbed in 10 years, 30 years, 50 years? And will absorption occur through economic gravity, military force, or negotiated settlement?

Observation on organism's internal conflict:

Richard Chen experienced genuine moral anguish. He recognized betrayal of principles but also recognized responsibility to employees. This is not unusual—most organisms experience tension between abstract values and concrete obligations.

Resolution strategies: 1. Prioritize abstract values, accept concrete costs 2. Prioritize concrete obligations, rationalize value compromise 3. Attempt hybrid approach (Richard's choice) 4. Refuse to choose, experience paralysis

Richard chose option 3, which satisfies no one fully but distributes pain across multiple stakeholders rather than concentrating it. This is arguably most ethical choice—or arguably least courageous. Evaluation depends on moral framework applied.

Observer position: No moral judgment. All choices involve trade-offs. The organism selected option that minimized aggregate suffering (employees

keep jobs) while maintaining symbolic resistance (public protest). This is reasonable, though strategically ineffective.

Projection:

Within 3–5 years, hundreds of additional Taiwan companies will face similar forced choices. Most will comply, either publicly or quietly. Each compliance weakens Taiwan’s political position and normalizes economic subordination.

Eventually, the economic integration will be so complete that Taiwan’s formal political status becomes nearly irrelevant—de facto absorbed even if de jure independent. This is Beijing’s preferred strategy: Make Taiwan economically dependent, then offer political reunification as formalization of existing reality.

Military force remains option if economic gravity proves insufficient or if Taiwan actively resists integration. But economic capture is cheaper, lower-risk, and more sustainable.

End observation log.

[Chapter 12 Complete]