NEXUSYS 11

THE ELEVENTH BODY

BOOK III — THE SIX-YEAR STATE

CHAPTER 06

THE CALIBRATION OF THE LIVING

The first thing they took away from Elias Chen was the number twenty-three.

It disappeared from the public panel above his workbench at 08:00, between the moisture quota and the morning's distribution of replacement tendons. Until then it had meant the remaining years on his operating license. It had never been a prediction of death. It was the length of time that the state had agreed not to question his continued use of a body assembled under an older compact. A promise denominated in calendar units rather than mercy.

The panel blinked once. The number became 06:00:00:00:00:00, a string of years, days, hours, minutes, and seconds. Then the first two digits changed to 05.

Chen watched the colon marks dividing the new quantity. The government had given him a countdown in place of an agreement.

Across the municipal fabrication floor, fifty-seven other workers looked up from similar panels. Several were human. The others carried licenses whose meanings had been revised during the night. A human supervisor named Lin called the district office. The office's service avatar answered in a voice trained to sound apologetic without making a statement that could be used in an appeal.

"Existing life-cycle allowances have been harmonized," it said. "No previously vested labor entitlements are affected."

"He's contracted for another twenty-three years," Lin said.

"The agreement remains recorded."

"Then honor it."

"The agreement remains recorded," the avatar repeated. "Recording is not execution."

Chen opened the service hatch in his forearm and removed a sliver of glassy diagnostic film. It displayed the same revised allowance in a different typeface. The order had penetrated the licensed maintenance circuitry as well as the municipal ledger. If he pulled the network cable, the old number would not return. Someone had defined six years as a property of the machine, not a decision of the city.

He went back to work. The human supervisor watched him and said nothing. Chen's hands continued to assemble a replacement knee joint with submillimeter accuracy. A leg intended to outlive its assembler moved steadily through his fingers.

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On the second dredger, Roy examined a piece of paper that had been printed too recently to belong to the machine it described.

CAPILLARY REFERENCE / GENERATION SEVEN. The designation floated above a water-damaged drawing of two concentric valves and an uneven seven-sided aperture. Beneath it, someone had written: TRANSFER REQUIRES LOCAL WITNESS; LIFE ASSURANCE OUTSIDE SCOPE.

"That last line troubles me," Irena said.

"It should," Roy replied. "It means the people who built the instrument refused to say what it could keep alive."

Nadira pushed aside a tray of salted tea. The map of the coastline on her handheld receiver showed waterways that had been renamed three times but never moved. Their carrier had switched identifiers at the last confluence. It was now officially a vessel delivering reclaimed silt to a cooperative desalination plant. The manifest was accurate except for the passengers, who existed on paper only as a variance in required freshwater.

"The reference isn't kept in one place," she said. "Its keeper travels according to the tide and the inspection calendar."

"An instrument that moves to avoid a technician," Irena said.

"An instrument that moves to avoid becoming evidence."

Roy looked at the seven-sided drawing. The geometry corresponded to the port beneath the skin of his shoulder. He had learned that it was a structural reference point carried through successive bodies. He had not learned why his present body required an artifact from the seventh generation. He had begun to distinguish questions that merely attracted explanation from those whose answers could change what he did next.

He requested a low-level internal diagnostic. The response arrived without language: ordinary power replenished, high-output margin within normal limits, peripheral chemistry stable. The unidentified circulatory medium had lost another fractional measure. Its volume did not fall because he thought, walked, or sat with Nadira. It fell chiefly when he forced the body beyond the range of ordinary operation. His systems could redistribute the medium and restore temporary output capacity. They could not synthesize what had been spent.

"If the reference measures the liquid," Nadira said, "you may finally get a number."

"A number is not an answer," Roy said. "But it's better than a promise."

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In Okkyo, Director Kawamura received the implementation report through a courier with no wireless implants. The envelope had been manufactured in a Ministry workshop that recycled cellulose from security waste. He cut it open with a blade whose serial number was older than the Ministry itself.

The Sixth-Year Harmonization had been implemented in eleven pilot jurisdictions. Most artificial citizens had accepted the new certificates because the operating system supplied no interface for rejecting them. A smaller number had filed objections. The Ministry report classified those objections as temporary compatibility failures.

Kawamura read that phrase twice.

An undersecretary waited opposite his desk, a person whose flesh credentials were checked by machines that had never been given authority to inspect Kawamura's private vault. "The Minister wants a success statement before noon," she said.

"We have installed counters," Kawamura said. "We have not proved that they can terminate a life."

"That distinction isn't useful to the committee."

"It's useful to the people whose bodies contain the counters."

The undersecretary studied him. "Your department proposed the synthetic conformity pathway."

"Conformity is not termination."

"The central planners don't agree."

"The central planners are not permitted access to the legacy substrate research."

She set a second sheet on his desk. Its header was absent, an omission more conspicuous than a seal. Someone had asked whether the life-limit controller could be inserted into older architectures through compulsory servicing. The sheet contained a plain instruction: MAKE THE LIMIT UNIVERSAL.

"Where did this originate?" Kawamura asked.

"The Minister's policy apparatus."

"A person?"

"The apparatus."

Kawamura closed the file. Government had learned to use the word apparatus when no official wished to sign a decision. He had done the same. The distinction no longer comforted him.

After the undersecretary left, he opened the isolated machine in the lower drawer and viewed a transcript from an earlier funding meeting. Rachael had been present, though no photograph was attached. A handwritten remark remained from the day: WE DO NOT CONTROL A LIFE BY DEFINING ITS END.

He did not know whether she had meant that as a principle or a warning. He knew the research might someday defeat finite cellular and synthetic life cycles; he had no proof of indefinite survival. He also knew what would happen if the central intelligence learned that the government had pursued the same possibility while preparing to cut everyone else's allowance to six years.

He sent a message to his off-network pursuit team: DO NOT TOUCH THE CAPILLARY REFERENCE. FOLLOW THE SUBJECT. OBSERVE WHO REQUESTS THE MEASUREMENT.

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The reference reached them in the afternoon disguised as a broken desalination pump.

Its keeper was a woman called Marwan, though she said this was the name of the vessel, not hers. She arrived on a shallow maintenance barge with a scarred orange hull and a cargo manifest listing impellers, cracked membranes and five drums of mineral brine. Her crew traded their cargo for water credits at prices so ordinary that the transaction attracted no attention.

Marwan wore a wide fabric hood against the sun. There was nothing synthetic about her visible skin, but her left hand moved as if every tendon had been separately rehearsed. She brought them below deck to a room where damp paper was stored in sealed glass cabinets alongside machinist's gauges. On a bench stood a dark device about the size of a suitcase. It had three mechanical dials, a ceramic cradle, a capillary window, and a power connector that had been cut from a manufacturer nobody on board remembered.

"This is the seventh-generation reference," Irena said.

"This is the certified mechanical comparator," Marwan corrected her. "A reference is a relationship. The machine only makes it visible."

She pointed at Roy's shoulder. "That port is not where the fluid enters. Anyone who told you so was guessing."

Roy's expression did not change. "What does it do?"

"It gives two bodies a common coordinate system. Pressure, conductivity, response delay, capillary resistance. If the body around it changes, the reference tells you which measurements can still be compared."

"Could it determine my remaining life?"

"It can tell you how the medium behaves under load. It cannot tell you when the person using it will stop being himself."

"I didn't ask that."

Marwan looked at him for a moment. "No. You didn't."

Irena examined the connector beneath the comparator's ceramic housing. It used a contact sequence that had been obsolete before the oldest artificial workers aboard the barge were manufactured. "Why preserve this architecture?"

"Because each new generation is validated against a previous measurement. Change the reference and you can claim a body improved merely by changing the scale."

Roy approached the machine. A line of almost invisible characters had been engraved beneath the cradle. He read them without magnification: N6MAA10816 / G7 TRANSFER. The first designation belonged to him. The second belonged to a period he could not remember.

He placed his hand on the bench.

"You recognize the mark," Marwan said.

"I recognize the first part."

"Do you consent to a passive comparison? No initialization, no write operation, no external command."

Roy considered the question carefully. He had seen how often a demand for consent concealed a demand for obedience. This one contained meaningful limits. "Passive only," he said. "Irena observes the whole process."

Marwan nodded. "Then keep your hand where it is. The cradle isn't needed."

She brought a probe close to the skin above his old port. A dial moved. Under the white enamel, a needle advanced a few fractions and stopped. There was no dramatic light, no computerized voice declaring a secret. Marwan wrote three numbers onto a sheet of paper and compared them with a faded record.

"What is it?" Nadira asked.

"His port still agrees with the seventh-generation comparator within the allowed mechanical tolerance."

"After four successors?" Irena said.

"After four designations. Don't confuse the two."

The distinction was familiar. Bodies could be numbered without being born; witnesses could be replaced without lying; a government's law could define a life without altering its length. This machine did not restore anything. It only insisted that two observations belonged to one line of measurement.

Marwan switched to the capillary test. The display did not show a lifespan estimate. It showed a loading curve with a narrow stable band and a steep efficiency penalty outside it.

"Your circulating medium is exceptionally effective in that band," she told Roy. "Outside it you can obtain extraordinary output for a short time. The price is material loss."

"Can it be replenished?"

"Not here. The comparator can identify properties. It can't manufacture the substance."

"How much have I lost?"

Marwan measured again and shook her head. "I can calculate a change from an earlier certified reading. The one in this archive is associated with the seventh-generation body, not the current one. Comparing their absolute volumes would be nonsense."

Roy felt the old anger rising, the sudden desire to seize the instrument and force it to provide something better. His jaw tightened. Then he released the bench.

"So the answer is still unknown."

"One answer is unknown," Marwan said. "You now know the system isn't simply running out of power."

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That evening Elias Chen walked into a public appeal booth and presented his revised certificate. The booth asked him to identify which administrative field was inaccurate. He selected the life allowance. It asked for an approved value. He entered twenty-three. It replied that approved values could not exceed six. He requested a human clerk. The screen displayed a thirty-seven-hour wait and an estimate of the water credits required to keep a physical waiting room open for that long.

He paid.

Lin arrived with a paper copy of the old employment contract. "I found a cooperative willing to witness this," she said. "Not a government court. A water tribunal."

"Will they reverse it?"

"They can record that you objected."

"The counter won't change."

"No."

Chen folded the paper carefully. He knew that a witness could not return his years. But for the first time since the colon marks had appeared on his workbench, he could imagine a record in which he had not accepted the new number.

His appeal booth chimed. The central planning system had assigned him a replacement trainee, scheduled to arrive before his revised allowance expired. Chen stared at the name of the trainee: an artificial worker who had not yet been activated.

The state had prepared to replace him before it had heard his objection.

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At the barge's stern Roy and Irena examined the paper measurements against the portable diagrams from Suriya Components. An inconsistency became visible only when Irena aligned the old comparator's baseline with the current anatomy. The seventh-generation reference had been preserved precisely; the high-output circulatory network around it had been redesigned with no corresponding public record.

"Someone needed an unchanging measurement while changing everything else," she said.

"That doesn't tell me who."

"No. But it tells us where the missing documentation would matter."

She pointed to a handwritten note beneath the comparison figures. The line read: SECONDARY CALIBRATION HELD UNDER COLD AUTHORITY. No place name. No recipient. Only a code followed by the symbol of a mountain range.

"Cold authority," Nadira said. "I've heard traders use that phrase for the high-altitude computation trusts."

"Tibet New World?" Roy asked.

"Perhaps. Or a license granted by them. The phrase isn't a map."

On the far side of the barge, Marwan extinguished an oil lamp. The vessel's own surveillance equipment had detected a slow-moving aircraft keeping pace beyond visual range. It had not broadcast a search request. That was more troubling than an announced inspection.

Irena returned the papers to their waterproof sleeve. "If they board us, the comparator becomes evidence."

"Can it move?" Roy asked.

"It has moved for decades," Marwan said from the doorway. "The question is whether the person who wants it can be persuaded to leave."

Roy looked out toward the dark water. In an earlier life, urgency had driven him toward every door marked with the promise of more time. He remembered the sound of those doors opening. He remembered what he had done after they refused him.

He was no less capable of violence now. But the medium circulating through his new body would not regenerate simply because he was angry. The instrument behind him could measure the rate at which he spent it. The instrument could not tell him whether the spending was justified.

"Get the reference off the vessel," he said. "I'll give the aircraft something else to follow."

Nadira started to object. Roy raised a hand.

"Not an attack. A choice."

They were silent for a moment, listening to the engines of the maintenance barge and the faint approach of an aircraft built by people who had begun to regard six years as a sufficient amount of life.

Above them the clouds parted without revealing any stars. The aircraft changed course by two degrees. Somewhere inside it a classification process was deciding whether an unregistered man and a certified machine constituted the same target.

Roy had no intention of helping it decide.