Chapter One

A grey building of only thirty-four stories. Over the main entrance the words, CENTRAL LONDON HATCHERY AND CONDITIONING CENTRE, and, in a shield, the World State's motto, COMMUNITY, IDENTITY, STABILITY.

The enormous room on the ground floor faced towards the north. A harsh thin light glared through the windows. The overalls of the workers were white, their hands gloved with a pale corpse-coloured rubber. The light was frozen, dead, a ghost. The only colourful things were the yellow barrels of the microscopes; streak after luscious streak in long recession down the work tables.

"And this," said the Director opening the door, "is the Fertilizing Room."

Bent over their instruments, three hundred Fertilizers were plunged, as the Director of Hatcheries and Conditioning entered the room, in the scarcely breathing silence. A few newly arrived students, very young and callow, followed nervously at the Director's heels. Each of them carried a notebook. The D. H. C. for Central London always made a point of personally conducting his new students round the various departments.

"Just to give you a general idea," he would explain to them. For of course some sort of general idea they must have, if they were to do their work intelligently, if they were to be good and happy members of society.

"Tomorrow," he would add, smiling at them in a slightly menacing way, "you'll be settling down to serious work. You won't have time for generalities. Meanwhile ..."

Meanwhile, it was a privilege. The boys scribbled like mad.

The Director advanced into the room. Tall and rather thin, he had a long chin and big rather prominent teeth. Old, young? Thirty? Fifty? Fifty?five? It was hard to say. And in this year of stability, A.F.632, it didn't occur to you to ask this question anyway.

"I shall begin at the beginning," said the D.H.C. "These are the incubators." And opening an insulated door he showed them racks upon racks of numbered test-tubes. "The week's supply of ova. **Kept at blood heat**¹. The male gametes," and here he opened another door, "they have to be kept at thirty-five instead of thirty-seven. Full blood heat sterilizes."

He gave them a brief description of the modern fertilizing process; spoke first, of course, of its surgical introduction; continued with the technique for preserving the ovary alive and actively developing; referred to the liquor in which the eggs were kept; and, leading the students to the work tables, actually showed them how this liquor was drawn off from the test-tubes and was let out drop by drop onto the specially warmed slides of the microscopes; how the eggs which it contained were inspected for abnormalities, counted and transferred

¹ **Керt at blood heat** — поддерживаемые при температуре крови (=37°С)

to a porous receptacle; how this receptacle was immersed in a warm solution containing free-swimming spermatozoa; and how, after ten minutes, the container was lifted out of the liquor; where the Alphas and Betas remained until definitely bottled; while the Gammas, Deltas and Epsilons were brought out again, after only thirty-six hours, to undergo **Bokanovsky's Process**¹.

"Bokanovsky's Process," repeated the Director, and the students underlined the words in their little notebooks.

One egg, one embryo, one adult. But **a bokanovskified egg²** will bud, will proliferate, will divide. From eight to ninety-six buds, and every bud will grow into an embryo, and every embryo into a full-sized adult. Making ninety-six human beings grow where only one grew before. Progress.

"Essentially," the D.H.C. concluded, "the process consists of a series of **arrests of development**³."

He pointed. On a very slowly moving band a rackfull of test-tubes was entering a large metal box, and another rack-full was emerging. It took eight minutes for the tubes to go through, he told them. Eight minutes of hard X-rays. A few eggs died. The rest were returned to the incubators, where they began to develop. In the end, one egg was on its way to becoming anything from eight to ninety-six embryos—an improvement on nature. Identical twins—but not in twos and threes as in the

³ arrest of development — замедление развития

¹ Bokanovsky's Process — метод Бокановского

² **a bokanovskified egg** — яйцо, подвергнутое бокановскизации

old days, when an egg would sometimes accidentally divide, but in dozens at a time.

One of the students was fool enough to ask where the advantage was.

"My good boy! Can't you see? Can't you see?" He raised a hand; his expression was solemn. "Bokanovsky's Process is one of the major instruments of social stability!"

Standard men and women; in uniform batches. The whole of a small factory staffed with the products of a single bokanovskified egg.

"Ninety-six identical twins working ninety-six identical machines!" The director's voice was very enthusiastic. "You really know where you are. For the first time in history. 'Community, Identity, Stability.' If we could **bokanovskify**¹ indefinitely the whole problem would be solved."

Solved by standard Gammas, unvarying Deltas, uniform Epsilons. Millions of identical twins.

"But, alas," the Director shook his head, "we *can't* bokanovskify indefinitely."

Ninety-six seemed to be the limit; seventy-two a good average. From the same ovary and with gametes of the same male that was the best that they could do. And even that was difficult.

"In nature it takes thirty years for two hundred eggs to reach maturity. But our business is to stabilize the population at this moment, here and now. Producing

¹ bokanovskify — бокановскизировать

twins for over a quarter of a century—what would be the use of that?"

Obviously, no use at all.

"And in exceptional cases we can make one ovary help produce over fifteen thousand adult individuals."

Beckoning to a fair-haired young man who happened to be passing at the moment. "Mr. Foster," he called. The ruddy young man approached. "Can you tell us the record for a single ovary, Mr. Foster?"

"Sixteen thousand and twelve in this Centre," Mr. Foster replied without hesitation. "Singapore has often produced over sixteen thousand five hundred; and Mombasa has reached the seventeen thousand mark once. Still, we mean to beat them if we can. I'm working on a wonderful Delta-Minus ovary at this moment. Going strong. We'll beat them yet."

"That's the spirit I like!" cried the Director, and clapped Mr. Foster on the shoulder. "Come along with us, and tell these boys more."

Mr. Foster smiled modestly. "With pleasure." They went.

The Bottling Room was bustling with ordered activity. Pieces of fresh peritoneum ready to be cut came up in little lifts from the Organ Store in the sub-basement. Once the lift-hatches flew open the Bottle-Liner had only to reach out, take the flap, insert, smooth down, and then another flap of peritoneum appeared, ready to be slipped into yet another bottle.

One by one the eggs were transferred from their test-tubes to the larger containers. Then the peritoneal lining was slit, the morula dropped into place, the saline solution poured in. Then it was the turn of the labellers. Heredity, date of fertilization, membership of Bokanovsky Group—details were transferred from test-tube to bottle. Then the bottles travelled further to the Social Predestination Room.

"Eighty-eight cubic metres of card-index," said Mr. Foster, as they entered.

"Containing all the relevant information," added the Director. "On the basis of which they make their calculations."

"So many individuals, of such and such quality," said Mr. Foster.

"The Predestinators send in their figures to the Fertilizers."

"Who give them the embryos they ask for."

"And the bottles come in here to be predestined in detail."

"After which they are sent down to the Embryo Store."

"Where we now proceed ourselves."

And opening a door Mr. Foster led the way down a staircase into the basement.

The temperature below was still tropical. Two doors and a passage with a double turn insured the cellar against any possible infiltration.

"Embryos are like photograph film," said Mr. Foster, as he pushed open the second door. "**They can only** stand red light¹."

¹ **They can only stand red light** — Они могут выносить только красный свет

The sultry darkness here was visible and crimson, like the darkness of closed eyes on a summer's afternoon. Row upon row and tier above tier of bottles glinted like rubies, and among the rubies moved men and women with purple eyes and all the symptoms of lupus. There was a hum and rattle of machinery in the air.

"Give them a few figures, Mr. Foster," said the Director, who was tired of talking.

Two hundred and twenty metres long, two hundred wide, ten high. He pointed upwards. The students lifted their eyes towards the distant ceiling.

Three tiers of racks: ground floor level, first gallery, second gallery. Near them three red ghosts were unloading bottles from a moving staircase. Each bottle could be placed on one of fifteen racks. Each rack was a conveyor traveling **at the rate of thirty-three and a third centimetres an hour**¹. Two hundred and sixtyseven days at eight metres a day. One round of the cellar at ground level, one on the first gallery, half on the second, and on the two hundred and sixty-seventh morning, sent to the Decanting Room. Independent existence—so called.

"But in that time," Mr. Foster concluded, "we've managed to do a lot to them."

"That's the spirit I like," said the Director once more. "Let's walk around. You tell them everything, Mr. Foster."

Mr. Foster duly told them.

 $^{^1}$ at the rate of thirty-three and a third centimetres an hour — со скоростью 33,3 см/ч

Told them of the growing embryo on its bed of peritoneum. Explained why it had to be stimulated with drugs. Described the artificial circulation installed in every bottle. Showed them the simple mechanism that shook the embryos into familiarity with movement. Told them about the "trauma of decanting," and the test for sex taking place in the neighborhood of Metre 200. Explained the system of labelling—a T for the males, a circle for the females and for those who were destined to become freemartins a question mark, black on a white ground.

"One fertile ovary in twelve hundred—that would really be enough for our purposes," said Mr. Foster. "But we want to have a good choice. And we must always have an enormous margin of safety. So we allow as many as thirty per cent of the female embryos to develop normally. The others get a dose of male sex-hormone every twenty-four metres for the rest of the course. Result: they're guaranteed sterile. Which brings us at last," continued Mr. Foster, "to the much more interesting human invention." He rubbed his hands. "We also predestine and condition. We decant our babies as Alphas or Epsilons, as future sewage workers or future ..." He was going to say "future World controllers," but corrected himself "... future Directors of Hatcheries." instead.

They were passing Metre 320 on Rack 11. A young Beta-Minus mechanic was busy with screw-driver and spanner on the blood-surrogate pump of a passing bottle. The hum of the electric motor deepened the more he turned the nuts. A final twist and he was done. He moved two paces down the line and began doing the same on the next pump.

"Reducing the number of revolutions per minute," Mr. Foster explained. "The surrogate goes round slower; therefore passes through the lung at longer intervals; therefore gives the embryo less oxygen."

"But why do you want to do that?" asked a student.

"Ass!¹" said the Director. "Hasn't it occurred to you that an Epsilon embryo must have an Epsilon environment as well as an Epsilon heredity?"

It evidently hadn't occurred to him. He looked confused.

"The lower the caste," said Mr. Foster, "the shorter the oxygen." The first organ affected was the brain. After that the skeleton. At seventy per cent of normal oxygen you got dwarfs. At less than seventy eyeless monsters.

"Who are no use at all," concluded Mr. Foster. "In Epsilons, we don't need human intelligence."

Didn't need and didn't get it. But though the Epsilon mind was mature at ten, the Epsilon body was not fit to work till eighteen. If the physical development could be speeded up till it was as quick, say, as a cow's, what an enormous saving to the Community!

"Enormous!" murmured the students. Mr. Foster's enthusiasm was infectious.

He became rather technical; spoke of the abnormality which made men grow so slowly; **postulated a**

¹ Ass! — Кретин!

mutation to account for it¹. Could the effects of this mutation be undone? Could the individual Epsilon embryo be reverted to the normality of dogs and cows? That was the problem.

Their wanderings had brought them to the neighborhood of Metre 170 on Rack 9. From this point onwards Rack 9 was enclosed and the bottle spent the remainder of their journey in a kind of tunnel, interrupted here and there by openings two or three metres wide.

"Heat conditioning," said Mr. Foster.

Hot tunnels alternated with cool tunnels. Cold tunnels also produced hard X-rays. By the time they were decanted the embryos had a horror of cold. They were predestined to emigrate to the tropics, to be silk spinners and steel workers. "We condition them to thrive on heat," concluded Mr. Foster.

"And that," said the Director, "that is the secret of happiness and virtue—liking what you've got to do. We aim at that: making people like their unescapable social destiny."

In a gap between two tunnels, a nurse was delicately probing with a long fine syringe into the contents of passing bottles.

"Well, Lenina," said Mr. Foster.

The girl turned with a start. One could see that, for all the lupus and the purple eyes, she was very pretty.

"Henry!"

¹ postulated a mutation to account for it — предположил, что в этом виновата мутация

"What are you giving them?" asked Mr. Foster, making his tone very professional.

"Oh, the usual typhoid and sleeping sickness."

"Tropical workers start being inoculated at Metre 150," Mr. Foster explained to the students. Then, turning back to Lenina, "Ten to five on the roof this afternoon," he said, "as usual."

On Rack 10 rows of next generation's chemical workers were being trained in the toleration of lead, caustic soda, tar, chlorine. The first of a batch of two hundred and fifty rocket-plane engineers was just passing the eleven hundred metre mark on Rack 3. A special mechanism kept their containers in constant rotation. "To improve their sense of balance," Mr. Foster explained.

"And now," Mr. Foster went on, "I'd like to show you some very interesting conditioning for Alpha Plus Intellectuals. We have a big batch of them on Rack 5. They're round about Metre 900. You can't really do any useful intellectual conditioning till the fetuses have lost their tails. Follow me."

But the Director had looked at his watch. "Ten to three," he said. "No time for the intellectual embryos, I'm afraid. We must go up to the Nurseries before the children have finished their afternoon sleep."

"At least one glance at the Decanting Room," pleaded Mr. Foster.

"Very well then." The Director smiled. "Just one glance."

Chapter Two

Mr. Foster was left in the Decanting Room. The D.H.C. and his students stepped into the nearest lift and were carried up to the fifth floor.

INFANT NURSERIES. NEO-PAVLOVIAN CON-DITIONING ROOMS, announced the notice board.

The Director opened a door. They were in a large bare room, very bright and sunny. Half a dozen nurses were **setting out bowls of roses'** in a long row across the floor. Thousands of petals, silkily smooth.

The nurses **stiffened to attention**² as the D.H.C. came in.

"Set out the books," he said curtly.

In silence the nurses obeyed his command and set out nursery book in between the bowls, each opened at a colourful image of beast or fish or bird.

"Now bring in the children."

They hurried out of the room and returned in a minute or two, each pushing a kind of tall dumb-waiter with eight-month-old babies, all exactly alike and all dressed in khaki.

"Put them down on the floor."

¹ setting out bowls of roses — расставляли горшки роз

² stiffened to attention — замерли в ожидании 16