

Chronopolis

by James Graham Ballard, 1930-2009

Published: 1960
in »New Worlds«



His trial had been fixed for the next day. Exactly when, of course, neither Newman nor anyone else knew. Probably it would be during the afternoon, when the principals concerned—judge, jury and prosecutor—managed to converge on the same courtroom at the same time. With luck his defence attorney might also appear at the right moment, though the case was such an open and shut one that Newman hardly expected him to bother—besides, transport to and from the old penal complex was notoriously difficult, involved endless waiting in the grimy depot below the prison walls.

Newman had passed the time usefully. Luckily, his cell faced south and sunlight traversed it for most of the day. He divided its arc into ten equal segments, the effective daylight hours, marking the intervals with a wedge of mortar prised from the window ledge. Each segment he further subdivided into twelve smaller units.

Immediately he had a working timepiece, accurate to within virtually a minute (the final subdivision into fifths he made mentally). The sweep of white notches, curving down one wall, across the floor and metal bedstead, and up the other wall, would have been recognizable to anyone who stood with his back to the window, but no one ever did. Anyway, the guards were too stupid to understand, and the sundial had given Newman a tremendous advantage over them. Most of the time, when he wasn't recalibrating the dial, he would press against the grille, keeping an eye on the orderly room.

„Brocken!“ he would shout out at 7.15, as the shadow line hit the first interval. „Morning inspection! On your feet, man!“ The sergeant would come stumbling out of his bunk in a sweat, cursing the other warders as the reveille bell split the air.

Later, Newman sang out the other events on the daily roster: roll-call, cell fatigues, breakfast, exercise and so on round to the evening roll just before dusk. Brocken regularly won the block merit for the best-run cell deck and he relied on Newman to programme the day for him, anticipate the next item on the roster and warn him if anything went on for too long—in some of the other blocks fatigues were usually over in three minutes while breakfast or exercise could go on for hours, none of the warders knowing when to stop, the prisoners insisting that they had only just begun.

Brocken never inquired how Newman organized everything so exactly; once or twice a week, when it rained or was overcast, Newman would be strangely silent, and the resulting confusion reminded the sergeant forcefully of the merits of co-operation. Newman was kept in cell privileges and all the cigarettes he needed. It was a shame that a date for the trial had finally been named.

Newman, too, was sorry. Most of his research so far had been inconclusive. Primarily his problem was that, given a northward-facing cell for the bulk of his sentence, the task of estimating the time might become impossible. The inclination of the shadows in the exercise yards or across the towers and walls provided too blunt a reading. Calibration would have to be visual; an optical instrument would soon be discovered.

What he needed was an internal timepiece, an unconsciously operating psychic mechanism regulated, say, by his pulse or respiratory rhythms. He had tried to train his time sense, running an elaborate series of tests to estimate its minimum inbuilt error, and this had been disappointingly large. The chances of conditioning an accurate reflex seemed slim.

However, unless he could tell the exact time at any given moment, he knew he would go mad.

His obsession, which now faced him with a charge of murder, had revealed itself innocently enough.

As a child, like all children, he had noticed the occasional ancient clock tower, bearing the same white circle with its twelve intervals. In the seedier areas of the city the round characteristic dials often hung over cheap jewellery stores, rusting and derelict.

„Just signs,“ his mother explained. „They don't mean anything, like stars or rings.“

Pointless embellishment, he had thought.

Once, in an old furniture shop, they had seen a clock with hands, upside down in a box full of fire-irons and miscellaneous rubbish.

„Eleven and twelve,“ he had pointed out. „What does it mean?“

His mother had hurried him away, reminding herself never to visit that street again. Time Police were still supposed to be around, watching for any outbreak. „Nothing,“ she told him sharply. „It’s all finished.“ To herself she added experimentally: Five and twelve. Five to twelve. Yes.

Time unfolded at its usual sluggish, half-confused pace. They lived in a ramshackle house in one of the amorphous suburbs, a zone of endless afternoons. Sometimes he went to school, until he was ten spent most of his time with his mother queueing outside the closed food stores. In the evenings he would play with the neighbourhood gang around the abandoned railway station, punting a home-made flat car along the overgrown tracks, or break into one of the unoccupied houses and set up a temporary command post.

He was in no hurry to grow up; the adult world was unsynchronized and ambitionless. After his mother died he spent long days in the attic, going through her trunks and old clothes, playing with the bric-à-brac of hats and beads, trying to recover something of her personality.

In the bottom compartment of her jewellery case he came across a small flat gold-cased object, equipped with a wrist strap. The dial had no hands but the twelve-numbered face intrigued him and he fastened it to his wrist.

His father choked over his soup when he saw it that evening.

„Conrad, my God! Where in heaven did you get that?“

„In Mamma’s bead box. Can’t I keep it?“

„No. Conrad, give it to me! Sorry, son.“ Thoughtfully: „Let’s see, you’re fourteen. Look, Conrad, I’ll explain it all in a couple of years.“

With the impetus provided by this new taboo there was no need to wait for his father’s revelations. Full knowledge came soon. The older boys knew the whole story, but strangely enough it was disappointingly dull.

„Is that all?“ he kept saying. „I don’t get it. Why worry so much about clocks? We have calendars, don’t we?“

Suspecting more, he scoured the streets, carefully inspecting every derelict clock for a clue to the real secret. Most of the faces had been mutilated, hands and numerals torn off, the circle of minute intervals stripped away, leaving a shadow of fading rust. Distributed apparently at random all over the city, above stores, banks and public buildings, their real purpose was hard to discover. Sure enough, they measured the progress of time through twelve arbitrary intervals, but this seemed barely adequate grounds for outlawing them. After all, a whole variety of timers were in general use: in kitchens, factories, hospitals, wherever a fixed period of time was needed. His father had one by his bed at night. Sealed into the standard small black box, and driven by miniature batteries, it emitted a high penetrating whistle shortly before breakfast the next morning, woke him if he overslept. A clock was no more than a calibrated timer, in many ways less useful, as it provided you with a steady stream of irrelevant information. What if it was half past three, as the old reckoning put it, if you weren’t planning to start or finish anything then?

Making his questions sound as naïve as possible, he conducted a long, careful poll. Under fifty no one appeared to know anything at all about the historical background, and even the older people were beginning to forget. He also noticed that the less educated they were the more they were willing to talk, indicating that manual and lower-class workers had played no part in the revolution and consequently had no guilt-charged memories to repress. Old Mr Crichton, the plumber who lived in the basement apartment; reminisced without any prompting, but nothing he said threw any light on the problem.

„Sure, there were thousands of clocks then, millions of them, everybody had one. Watches we called them, strapped to the wrist, you had to screw them up every day.“

„But what did you do with them, Mr Crichton?“ Conrad pressed.

„Well, you just—looked at them, and you knew what time it was. One o’clock, or two, or half past seven—that was when I’d go off to work.“

„But you go off to work now when you’ve had breakfast. And if you’re late the timer rings.“

Crichton shook his head. „I can’t explain it to you, lad. You ask your father.“

But Mr Newman was hardly more helpful. The explanation promised for Conrad’s sixteenth birthday never materialized. When his questions persisted Mr Newman tired of side-stepping, shut him up with an abrupt: „Just stop thinking about it, do you understand? You’ll get yourself and the rest of us into a lot of trouble.“

Stacey, the young English teacher, had a wry sense of humour, liked to shock the boys by taking up unorthodox positions on marriage or economics. Conrad wrote an essay describing an imaginary society completely preoccupied with elaborate rituals revolving around a minute by minute observance of the passage of time.

Stacey refused to play, however, gave him a non-committal beta plus, after class quietly asked Conrad what had prompted the fantasy. At first Conrad tried to back away, then finally came out with the question that contained the central riddle.

„Why is it against the law to have a clock?“

Stacey tossed a piece of chalk from one hand to the other.

„Is it against the law?“

Conrad nodded. „There’s an old notice in the police station offering a bounty of one hundred pounds for every clock or wristwatch brought in. I saw it yesterday. The sergeant said it was still in force.“

Stacey raised his eyebrows mockingly. „You’ll make a million. Thinking of going into business?“

Conrad ignored this. „It’s against the law to have a gun because you might shoot someone. But how can you hurt anybody with a clock?“

„Isn’t it obvious? You can time him, know exactly how long it takes him to do something.“

„Well?“

„Then you can make him do it faster.“

At seventeen, on a sudden impulse, he built his first clock. Already his preoccupation with time was giving him a marked lead over his class-mates. One or two were more intelligent, others more conscientious, but Conrad’s ability to

organize his leisure and homework periods allowed him to make the most of his talents. When the others were lounging around the railway yard on their way home Conrad had already completed half his prep, allocating his time according to its various demands.

As soon as he finished he would go up to the attic playroom, now his workshop. Here, in the old wardrobes and trunks, he made his first experimental constructions: calibrated candles, crude sundials, sand-glasses, an elaborate clockwork contraption developing about half a horse power that drove its hands progressively faster and faster in an unintentional parody of Conrad's obsession.

His first serious clock was water-powered, a slowly leaking tank holding a wooden float that drove the hands as it sank downwards. Simple but accurate, it satisfied Conrad for several months while he carried out his ever-widening search for a real clock mechanism. He soon discovered that although there were innumerable table clocks, gold pocket watches and timepieces of every variety rusting in junk shops and in the back drawers of most homes, none of them contained their mechanisms. These, together with the hands, and sometimes the digits, had always been removed. His own attempts to build an escapement that would regulate the motion of the ordinary clockwork motor met with no success; everything he had heard about clock movements confirmed that they were precision instruments of exact design and construction. To satisfy his secret ambition—a portable timepiece, if possible an actual wristwatch—he would have to find one, somewhere, in working order.

Finally, from an unexpected source, a watch came to him. One afternoon in a cinema an elderly man sitting next to Conrad had a sudden heart attack. Conrad and two members of the audience carried him out to the manager's office. Holding one of his arms, Conrad noticed in the dim aisle light a glint of metal inside the sleeve. Quickly he felt the wrist with his fingers, identified the unmistakable lens-shaped disc of a wristwatch.

As he carried it home its tick seemed as loud as a death-knell. He clamped his hand around it, expecting everyone in the street to point accusingly at him, the Time Police to swoop down and seize him.

In the attic he took it out and examined it breathlessly, smothering it in a cushion whenever he heard his father shift about in the bedroom below. Later he realized that its noise was almost inaudible. The watch was of the same pattern as his mother's, though with a yellow and not a red face. The gold case was scratched and peeling, but the movement seemed to be in perfect condition. He prised off the rear plate, watched the frenzied flickering world of miniature cogs and wheels for hours, spellbound. Frightened of breaking the main spring, he kept the watch only half wound, packed away carefully in cotton wool.

In taking the watch from its owner he had not, in fact, been motivated by theft; his first impulse had been to hide the watch before the doctor discovered it feeling for the man's pulse. But once the watch was in his possession he abandoned any thought of tracing the owner and returning it.

That others were still wearing watches hardly surprised him. The water clock had demonstrated that a calibrated timepiece added another dimension to life, organized its energies, gave the countless activities of everyday existence a yardstick of significance. Conrad spent hours in the attic gazing at the small

yellow dial, watching its minute hand revolve slowly, its hour hand press on imperceptibly, a compass charting his passage through the future. Without it he felt rudderless, adrift in a grey purposeless limbo of timeless events. His father began to seem idle and stupid, sitting around vacantly with no idea when anything was going to happen.

Soon he was wearing the watch all day. He stitched together a slim cotton sleeve, fitted with a narrow flap below which he could see the face. He timed everything—the length of classes, football games, meal breaks, the hours of daylight and darkness, sleep and waking. He amused himself endlessly by baffling his friends with demonstrations of this private sixth sense, anticipating the frequency of their heartbeats, the hourly newscasts on the radio, boiling a series of identically consistent eggs without the aid of a timer.

Then he gave himself away.

Stacey, shrewder than any of the others, discovered that he was wearing a watch. Conrad had noticed that Stacey's English classes lasted exactly forty-five minutes, let himself slide into the habit of tidying his desk a minute before Stacey's timer pipped up. Once or twice he noticed Stacey looking at him curiously, but he could not resist the temptation to impress Stacey by always being the first one to make for the door.

One day he had stacked his books and clipped away his pen when Stacey pointedly asked him to read out a piece he had done. Conrad knew the timer would pip out in less than ten seconds, and decided to sit tight and wait for the usual stampede to save him the trouble.

Stacey stepped down from the dais, waiting patiently. One or two boys turned around and frowned at Conrad, who was counting away the closing seconds.

Then, amazed, he realized that the timer had failed to sound! Panicking, he first thought his watch had broken, just restrained himself in time from looking at it.

„In a hurry, Newman?“ Stacey asked dryly. He sauntered down the aisle to Conrad, smiling sardonically. Baffled, and face reddening with embarrassment, Conrad fumbled open his exercise book, read out the piece. A few minutes later, without waiting for the timer, Stacey dismissed the class.

„Newman,“ he called out. „Here a moment.“

He rummaged behind the rostrum as Conrad approached. „What happened then?“ he asked. „Forget to wind up your watch this morning?“

Conrad said nothing. Stacey took out the timer, switched off the silencer and listened to the pip that buzzed out.

„Where did you get it from? Your parents? Don't worry, the Time Police were disbanded years ago.“

Conrad examined Stacey's face carefully. „It was my mother's,“ he lied. „I found it among her things.“ Stacey held out his hand and Conrad nervously unstrapped the watch and handed it to him.

Stacey slipped it half out of its sleeve, glanced briefly at the yellow face. „Your mother, you say? Hmh.“

„Are you going to report me?“ Conrad asked.

„What, and waste some over-worked psychiatrist's time even further?“

„Isn't it breaking the law to wear a watch?“

„Well, you're not exactly the greatest living menace to public security.“ Stacey started for the door, gesturing Conrad with him. He handed the watch back. „Cancel whatever you're doing on Saturday afternoon. You and I are taking a trip.“

„Where?“ Conrad asked.

„Back into the past,“ Stacey said lightly. „To Chronopolis, the Time City.“

Stacey had hired a car, a huge battered mastodon of chromium and fins. He waved jauntily to Conrad as he picked him up outside the public library.

„Climb into the turret,“ he called out. He pointed to the bulging briefcase Conrad slung on to the seat between them. „Have you had a look at those yet?“

Conrad nodded. As they moved off around the deserted square he opened the briefcase and pulled out a thick bundle of road maps. „I've just worked out that the city covers over 500 square miles. I'd never realized it was so big. Where is everybody?“

Stacey laughed. They crossed the main street, cut down into a long treelined avenue of semi-detached houses. Half of them were empty, windows wrecked and roofs sagging. Even the inhabited houses had a makeshift appearance, crude water towers on home-made scaffolding lashed to their chimneys, piles of logs dumped in over-grown front gardens.

„Thirty million people once lived in this city,“ Stacey remarked. „Now the population is little more than two, and still declining. Those of us left hang on in what were once the distal suburbs, so that the city today is effectively an enormous ring, five miles in width, encircling a vast dead centre forty or fifty miles in diameter.“

They wove in and out of various back roads, past a small factory still running although work was supposed to end at noon, finally picked up a long, straight boulevard that carried them steadily westwards. Conrad traced their progress across successive maps. They were nearing the edge of the annulus Stacey had described. On the map it was overprinted in green so that the central interior appeared a flat, uncharted grey, a massive terra incognita.

They passed the last of the small shopping thoroughfares he remembered, a frontier post of mean terraced houses, dismal streets spanned by massive steel viaducts. Stacey pointed up at one as they drove below it. „Part of the elaborate railway system that once existed, an enormous network of stations and junctions that carried fifteen million people into a dozen great terminals every day.“

For half an hour they drove on, Conrad hunched against the window, Stacey watching him in the driving mirror. Gradually, the landscape began to change. The houses were taller, with coloured roofs, the sidewalks were railed off and fitted with pedestrian lights and turnstiles. They had entered the inner suburbs, completely deserted streets with multi-level supermarkets, towering cinemas and department stores.

Chin in one hand, Conrad stared out silently. Lacking any means of transport he had never ventured into the uninhabited interior of the city, like the other children always headed in the opposite direction for the open country. Here the streets had died twenty or thirty years earlier; plate-glass shopfronts had slipped and smashed into the roadway, old neon signs, window frames and overhead wires hung down from every cornice, trailing a ragged webwork of disintegrating metal

across the pavements. Stacey drove slowly, avoiding the occasional bus or truck abandoned in the middle of the road, its tyres peeling off their rims.

Conrad craned up at the empty windows, into the narrow alleys and side-streets, but nowhere felt any sensation of fear or anticipation. These streets were merely derelict, as unhaunted as a half-empty dustbin.

One suburban centre gave way to another, to long intervening stretches of congested ribbon developments. Mile by mile, the architecture altered its character; buildings, were larger, ten-or fifteen-storey blocks, clad in facing materials of green and blue tiles, glass or copper sheathing. They were moving forward in time rather than, as Conrad had expected, back into the past of a fossil city.

Stacey worked the car through a nexus of side-streets towards a six-lane expressway that rose on tall concrete buttresses above the roof-tops. They found a side road that circled up to it, levelled out and then picked up speed sharply, spinning along one of the clear centre lanes.

Conrad craned forward. In the distance, two or three miles away, the tall rectilinear outlines of enormous apartment blocks reared up thirty or forty storeys high, hundreds of them lined shoulder to shoulder in apparently endless ranks, like giant dominoes.

„We’re entering the central dormitories here,“ Stacey told him. On either side buildings overtopped the motorway, the congestion mounting so that some of them had been built right up against the concrete palisades.

In a few minutes they passed between the first of the apartment batteries, the thousands of identical living units with their slanting balconies shearing up into the sky, the glass in-falls of the aluminium curtain walling speckling in the sunlight. The smaller houses and shops of the outer suburbs had vanished. There was no room on the ground level. In the narrow intervals between the blocks there were small concrete gardens, shopping complexes, ramps banking down into huge underground car parks.

And on all sides there were the clocks. Conrad noticed them immediately, at every street corner, over every archway, threequarters of the way up the sides of buildings, covering every conceivable angle of approach.

Most of them were too high off the ground to be reached by anything less than a fireman’s ladder and still retained their hands. All registered the same time: 12.01.

Conrad looked at his wristwatch, noted that it was just 2.45 p.m.

„They were driven by a master clock,“ Stacey told him. „When that stopped they all seized at the same moment. One minute after midnight, thirty-seven years ago.“

The afternoon had darkened, as the high cliffs cut off the sunlight, the sky a succession of narrow vertical intervals opening and closing around them. Down on the canyon floor it was dismal and oppressive, a wilderness of concrete and frosted glass. The expressway divided and pressed on westwards. After a few more miles the apartment blocks gave way to the first office buildings in the central zone. These were even taller, sixty or seventy storeys high, linked by spiralling ramps and causeways. The expressway was fifty feet off the ground yet the first floors of the office blocks were level with it, mounted on massive stilts that straddled the glass-enclosed entrance bays of lifts and escalators. The streets were wide but

featureless. The sidewalks of parallel roadways merged below the buildings, forming a continuous concrete apron. Here and there were the remains of cigarette kiosks, rusting stairways up to restaurants and arcades built on platforms thirty feet in the air.

Conrad, however, was looking only at the clocks. Never had he visualized so many, in places so dense that they obscured each other. Their faces were multi-coloured: red, blue, yellow, green. Most of them carried four or five hands. Although the master hands had stopped at a minute past twelve, the subsidiary hands had halted at varying positions, apparently dictated by their colour.

„What were the extra hands for?“ he asked Stacey. „And the different colours?“

„Time zones. Depending on your professional category and the consumershifts allowed. Hold on, though, we're almost there.“

They left the expressway and swung off down a ramp that fed them into the north-east corner of a wide open plaza, eight hundred yards long and half as wide, down the centre of which had once been laid a continuous strip of lawn, now rank and overgrown. The plaza was empty, a sudden block of free space bounded by tall glass-faced cliffs that seemed to carry the sky.

Stacey parked, and he and Conrad climbed out and stretched themselves. Together they strolled across the wide pavement towards the strip of waist-high vegetation. Looking down the vistas receding from the plaza Conrad grasped fully for the first time the vast perspectives of the city, the massive geometric jungle of buildings.

Stacey put one foot up on the balustrade running around the lawn bed, pointed to the far end of the plaza, where Conrad saw a low-lying huddle of buildings of unusual architectural style, nineteenth-century perpendicular, stained by the atmosphere and badly holed by a number of explosions. Again, however, his attention was held by the clock face built into a tall concrete tower just behind the older buildings. This was the largest clock dial he had ever seen, at least a hundred feet across, huge black hands halted at a minute past twelve. The dial was white, the first they had seen, but on wide semicircular shoulders built out off the tower below the main face were a dozen smaller faces, no more than twenty feet in diameter, running the full spectrum of colours. Each had five hands, the inferior three halted at random.

„Fifty years ago,“ Stacey explained, gesturing at the ruins below the tower, „that collection of ancient buildings was one of the world's greatest legislative assemblies.“ He gazed at it quietly for a few moments, then turned to Conrad. „Enjoy the ride?“

Conrad nodded fervently. „It's impressive, all right. The people who lived here must have been giants. What's really remarkable is that it looks as if they left only yesterday. Why don't we go back?“

„Well, apart from the fact that there aren't enough of us now, even if there were we couldn't control it. In its hey-day this city was a fantastically complex social organism. The communications problems are difficult to imagine merely by looking at these blank façades. It's the tragedy of this city that there appeared to be only one way to solve them.“

„Did they solve them?“

„Oh, yes, certainly. But they left themselves out of the equation. Think of the problems, though. Transporting fifteen million office workers to and from the centre every day, routing in an endless stream of cars, buses, trains, helicopters, linking every office, almost every desk, with a videophone, every apartment with television, radio, power, water, feeding and entertaining this enormous number of people, guarding them with ancillary services, police, fire squads, medical units—it all hinged on one factor.“

Stacey threw a fist out at the great tower clock. „Time! Only by synchronizing every activity, every footstep forward or backward, every meal, bus-halt and telephone call, could the organism support itself. Like the cells in your body, which proliferate into mortal cancers if allowed to grow in freedom, every individual here had to subserve the overriding needs of the city or fatal bottlenecks threw it into total chaos. You and I can turn on the tap any hour of the day or night, because we have our own private water cisterns, but what would happen here if everybody washed the breakfast dishes within the same ten minutes?“

They began to walk slowly down the plaza towards the clock tower. „Fifty years ago, when the population was only ten million, they could just provide for a potential peak capacity, but even then a strike in one essential service paralysed most of the others; it took workers two or three hours to reach their offices, as long again to queue for lunch and get home. As the population climbed the first serious attempts were made to stagger hours; workers in certain areas started the day an hour earlier or later than those in others. Their railway passes and car number plates were coloured accordingly, and if they tried to travel outside the permitted periods they were turned back. Soon the practice spread; you could only switch on your washing machine at a given hour, post a letter or take a bath at a specific period.“

„Sounds feasible,“ Conrad commented, his interest mounting. „But how did they enforce all this?“

„By a system of coloured passes, coloured money, an elaborate set of schedules published every day like the TV or radio programmes. And, of course, by all the thousands of clocks you can see around you here. The subsidiary hands marked out the number of minutes remaining in any activity period for people in the clock’s colour category.“

Stacey stopped, pointed to a blue-faced clock mounted on one of the buildings overlooking the plaza. „Let’s say, for example, that a lower-grade executive leaving his office at the allotted time, 12 o’clock, wants to have lunch, change a library book, buy some aspirin, and telephone his wife. Like all executives, his identity zone is blue. He takes out his schedule for the week, or looks down the blue-time columns in the newspaper, and notes that his lunch period for that day is 12.15 to 12.30. He has fifteen minutes to kill. Right, he then checks the library. Time code for today is given as 3, that’s the third hand on the clock. He looks at the nearest blue clock, the third hand says 37 minutes past—he has 23 minutes, ample time, to reach the library. He starts down the street, but finds at the first intersection that the pedestrian lights are only shining red and green and he can’t get across. The area’s been temporarily zoned off for lower-grade women office workers—red, and manuals—greens.“

„What would happen if he ignored the lights?“ Conrad asked.

„Nothing immediately, but all blue clocks in the zoned area would have returned to zero, and no shops or the library would serve him, unless he happened to have red or green currency and a forged set of library tickets. Anyway, the penalties were too high to make the risk worthwhile, and the whole system was evolved for his convenience, no one else’s. So, unable to reach the library, he decides on the chemist. The time code for the chemist is 5, the fifth, smallest hand. It reads 54 minutes past: he has six minutes to find a chemist and make his purchase. This done, he still has five minutes before lunch, decides to phone his wife. Checking the phone code he sees that no period has been provided for private calls that day—or the next. He’ll just have to wait until he sees her that evening.“

„What if he did phone?“

„He wouldn’t be able to get his money in the coin box, and even then, his wife, assuming she is a secretary, would be in a red time zone and no longer in her office for that day—hence the prohibition on phone calls. It all meshed perfectly. Your time programme told you when you could switch on your TV set and when to switch off. All electric appliances were fused, and if you strayed outside the programmed periods you’d have a hefty fine and repair bill to meet. The viewer’s economic status obviously determined the choice of programme, and vice versa, so there was no question of coercion. Each day’s programme listed your permitted activities: you could go to the hairdresser’s, cinema, bank, cocktail bar, at stated times, and if you went then you were sure of being served quickly and efficiently.“

They had almost reached the far end of the plaza. Facing them on its tower was the enormous clock face, dominating its constellation of twelve motionless attendants.

„There were a dozen socio-economic categories: blue for executives, gold for professional classes, yellow for military and government officials—incidentally, it’s odd your parents ever got hold of that wristwatch, none of your family ever worked for the government—green for manual workers and so on. But, naturally, subtle subdivisions were possible. The lowergrade executive I mentioned left his office at 12, but a senior executive, with exactly the same time codes, would leave at 11.45, have an extra fifteen minutes, would find the streets clear before the lunch-hour rush of clerical workers.“

Stacey pointed up at the tower. „This was the Big Clock, the master from which all others were regulated. Central Time Control, a sort of Ministry of Time, gradually took over the old parliamentary buildings as their legislative functions diminished. The programmers were, effectively, the city’s absolute rulers.“

As Stacey continued Conrad gazed up at the battery of timepieces, poised helplessly at 12.01. Somehow time itself seemed to have been suspended, around him the great office buildings hung in a neutral interval between yesterday and tomorrow. If one could only start the master clock the entire city would probably slide into gear and come to life, in an instant be repeopled with its dynamic jostling millions.

They began to walk back towards the car. Conrad looked over his shoulder at the clock face, its gigantic arms upright on the silent hour.

„Why did it stop?“ he asked.

Stacey looked at him curiously. „Haven’t I made it fairly plain?“

„What do you mean?“ Conrad pulled his eyes off the scores of clocks lining the plaza, frowned at Stacey.

„Can you imagine what life was like for all but a few of the thirty million people here?“

Conrad shrugged. Blue and yellow clocks, he noticed, outnumbered all others; obviously the major governmental agencies had operated from the plaza area. „Highly organized but better than the sort of life we lead,“ he replied finally, more interested in the sights around him. „I'd rather have the telephone for one hour a day than not at all. Scarcities are always rationed, aren't they?“

„But this was a way of life in which everything was scarce. Don't you think there's a point beyond which human dignity is surrendered?“

Conrad snorted. „There seems to be plenty of dignity here. Look at these buildings, they'll stand for a thousand years. Try comparing them with my father. Anyway, think of the beauty of the system, engineered as precisely as a watch.“

„That's all it was,“ Stacey commanded dourly. „The old metaphor of the cog in the wheel was never more true than here. The full sum of your existence was printed for you in the newspaper columns, mailed to you once a month from the Ministry of Time.“

Conrad was looking off in some other direction and Stacey pressed on in a slightly louder voice. „Eventually, of course, revolt came. It's interesting that in any industrial society there is usually one social revolution each century, and that successive revolutions receive their impetus from progressively higher social levels. In the eighteenth century it was the urban proletariat, in the nineteenth the artisan classes, in this revolt the white collar office worker, living in his tiny so-called modern flat, supporting through credit pyramids an economic system that denied him all freedom of will or personality, chained him to a thousand clocks...“ He broke off. „What's the matter?“

Conrad was staring down one of the side streets. He hesitated, then asked in a casual voice: „How were these clocks driven? Electrically?“

„Most of them. A few mechanically. Why?“

„I just wondered... how they kept them all going.“ He dawdled at Stacey's heels, checking the time from his wristwatch and glancing to his left. There were twenty or thirty clocks hanging from the buildings along the side street, indistinguishable from those he had seen all afternoon.

Except for the fact that one of them was working!

It was mounted in the centre of a black glass portico over an entranceway fifty yards down the right-hand side, about eighteen inches in diameter, with a faded blue face. Unlike the others its hands registered 3.15, the correct time. Conrad had nearly mentioned this apparent coincidence to Stacey when he had suddenly seen the minute hand move on an interval. Without doubt someone had restarted the clock; even if it had been running off an inexhaustible battery, after thirty-seven years it could never have displayed such accuracy.

He hung behind Stacey, who was saying: „Every revolution has its symbol of oppression.“

The clock was almost out of view. Conrad was about to bend down and tie his shoelace when he saw the minute hand jerk downwards, tilt slightly from the horizontal.

He followed Stacey towards the car, no longer bothering to listen to him. Ten yards from it he turned and broke away, ran swiftly across the roadway towards the nearest building.

„Newman!“ he heard Stacey shout. „Come back!“ He reached the pavement, ran between the great concrete pillars carrying the building. He paused for a moment behind an elevator shaft, saw Stacey climbing hurriedly into the car. The engine coughed and roared out, and Conrad sprinted on below the building into a rear alley that led back to the side-street. Behind him he heard the car accelerating, a door slam as it picked up speed.

When he entered the side-street the car came swinging off the plaza thirty yards behind him. Stacey swerved off the roadway, bumped up on to the pavement and gunned the car towards Conrad, throwing on the brakes in savage lurches, blasting the horn in an attempt to frighten him. Conrad sidestepped out of its way, almost falling over the bonnet, hurled himself up a narrow stairway leading to the first floor and raced up the steps to a short landing that ended in tall glass doors. Through them he could see a wide balcony that ringed the building. A fire escape crisscrossed upwards to the roof, giving way on the fifth floor to a cafeteria that spanned the street to the office building opposite.

Below he heard Stacey's feet running across the pavement. The glass doors were locked. He pulled a fire-extinguisher from its bracket, tossed the heavy cylinder against the centre of the plate. The glass slipped and crashed to the tiled floor in a sudden cascade, splashing down the steps. Conrad stepped through on to the balcony, began to climb the stairway. He had reached the third floor when he saw Stacey below, craning upwards. Hand over hand, Conrad pulled himself up the next two flights, swung over a bolted metal turnstile into the open court of the cafeteria. Tables and chairs lay about on their sides, mixed up with the splintered remains of desks thrown down from the upper floors.

The doors into the covered restaurant were open, a large pool of water lying across the floor. Conrad splashed through it, went over to a window and peered down past an old plastic plant into the street. Stacey seemed to have given up. Conrad crossed the rear of the restaurant, straddled the counter and climbed through a window on to the open terrace running across the street. Beyond the rail he could see into the plaza, the double line of tyre marks curving into the street below.

He had almost crossed to the opposite balcony when a shot roared out into the air. There was a sharp tinkle of falling glass and the sound of the explosion boomed away among the empty canyons.

For a few seconds he panicked. He flinched back from the exposed rail, his ear drums numbed, looking up at the great rectangular masses towering above him on either side, the endless tiers of windows like the faceted eyes of gigantic insects. So Stacey had been armed, almost certainly was a member of the Time Police!

On his hands and knees Conrad scurried along the terrace, slid through the turnstiles and headed for a half-open window on the balcony.

Climbing through, he quickly lost himself in the building.

He finally took up a position in a corner office on the sixth floor, the cafeteria just below him to the right, the stairway up which he had escaped directly opposite.

All afternoon Stacey drove up and down the adjacent streets, sometimes free-wheeling silently with the engine off, at others blazing through at speed. Twice he fired into the air, stopping the car afterwards to call out, his words lost among the echoes rolling from one street to the next. Often he drove along the pavements, swerved about below the buildings as if he expected to flush Conrad from behind one of the banks of escalators.

Finally he appeared to drive off for good, and Conrad turned his attention to the clock in the portico. It had moved on to 6.45, almost exactly the time given by his own watch. Conrad reset this to what he assumed was the correct time, then sat back and waited for whoever had wound it to appear. Around him the thirty or forty other clocks he could see remained stationary at 12.01.

For five minutes he left his vigil, scooped some water off the pool in the cafeteria, suppressed his hunger and shortly after midnight fell asleep in a corner behind the desk.

He woke the next morning to bright sunlight flooding into the office. Standing up, he dusted his clothes, turned around to find a small grey-haired man in a patched tweed suit surveying him with sharp eyes. Slung in the crook of his arm was a large black-barrelled weapon, its hammers menacingly cocked.

The man put down a steel ruler he had evidently tapped against a cabinet, waited for Conrad to collect himself.

„What are you doing here?“ he asked in a testy voice. Conrad noticed his pockets were bulging with angular objects that weighed down the sides of his jacket.

„I... er...“ Conrad searched for something to say. Something about the old man convinced him that this was the clock-winder. Suddenly he decided he had nothing to lose by being frank, and blurted out: „I saw the clock working. Down there on the left. I want to help wind them all up again.“

The old man watched him shrewdly. He had an alert bird-like face, twin folds under his chin like a cockerel's.

„How do you propose to do that?“ he asked.

Stuck by this one, Conrad said lamely: „I'd find a key somewhere.“

The old man frowned. „One key? That wouldn't do much good.“ He seemed to be relaxing slowly, shook his pockets with a dull chink.

For a few moments neither of them said anything. Then Conrad had an inspiration, bared his wrist. „I have a watch,“ he said. „It's 7.45.“

„Let me see.“ The old man stepped forward, briskly took Conrad's wrist, examined the yellow dial. „Movado Supermatic,“ he said to himself. „CTC issue.“ He stepped back, lowering the shotgun, seemed to be summing Conrad up. „Good,“ he remarked at last. „Let's see. You probably need some breakfast.“

They made their way out of the building, began to walk quickly down the street.

„People sometimes come here,“ the old man said. „Sightseers and police. I watched your escape yesterday, you were lucky not to be killed.“ They swerved left and right across the empty streets, the old man darting between the stairways and buttresses. As he walked he held his hands stiffly to his sides, preventing his pockets from swinging. Glancing into them, Conrad saw that they were full of keys, large and rusty, of every design and combination.

„I presume that was your father's watch,“ the old man remarked.

„Grandfather’s,“ Conrad corrected. He remembered Stacey’s lecture, and added: „He was killed in the plaza.“

The old man frowned sympathetically, for a moment held Conrad’s arm.

They stopped below a building, indistinguishable from the others nearby, at one time a bank. The old man looked carefully around him, eyeing the high cliff walls on all sides, then led the way up a stationary escalator.

His quarters were on the second floor, beyond a maze of steel grilles and strongdoors, a stove and a hammock slung in the centre of a large workshop. Lying about on thirty or forty desks in what had once been a typing pool, was an enormous collection of clocks, all being simultaneously repaired. Tall cabinets surrounded them, loaded with thousands of spare parts in neatly labelled correspondence trays escapements, ratchets, cogwheels, barely recognizable through the rust.

The old man led Conrad over to a wall chart, pointed to the total listed against a column of dates. „Look at this. There are now 278 running continuously. Believe me, I’m glad you’ve come. It takes me half my time to keep them wound.“

He made breakfast for Conrad, told him something about himself. His name was Marshall. Once he had worked in Central Time Control as a programmer, had survived the revolt and the Time Police, ten years later returned to the city. At the beginning of each month he cycled out to one of the perimeter towns to cash his pension and collect supplies. The rest of the time he spent winding the steadily increasing number of functioning clocks and searching for others he could dismantle and repair.

„All these years in the rain hasn’t done them any good,“ he explained, and there’s nothing I can do with the electrical ones.“

Conrad wandered off among the desks, gingerly feeling the dismembered timepieces that lay around like the nerve cells of some vast unimaginable robot. He felt exhilarated and yet at the same time curiously calm, like a man who has staked his whole life on the turn of a wheel and is waiting for it to spin.

„How can you make sure that they all tell the same time?“ he asked Marshall, wondering why the question seemed so important.

Marshall gestured irritably. „I can’t, but what does it matter? There is no such thing as a perfectly accurate clock. The nearest you can get is one that has stopped. Although you never know when, it is absolutely accurate twice a day.“

Conrad went over to the window, pointed to the great clock visible in an interval between the rooftops. „If only we could start that, and run all the others off it.“

„Impossible. The entire mechanism was dynamited. Only the chimer is intact. Anyway, the wiring of the electrically driven clocks perished years ago. It would take an army of engineers to recondition them.“

Conrad nodded, looked at the scoreboard again. He noticed that Marshall appeared to have lost his way through the years—the completion dates he listed were seven and a half years out. Idly, Conrad reflected on the significance of this irony, but decided not to mention it to Marshall.

For three months Conrad lived with the old man, following him on foot as he cycled about on his rounds, carrying the ladder and the satchel full of keys with which Marshall wound up the clocks, helping him to dismantle recoverable ones and carry them back to the workshop. All day, and often through half the night,

they worked together, repairing the movements, restarting the clocks and returning them to their original positions.

All the while, however, Conrad's mind was fixed upon the great clock in its tower dominating the plaza. Once a day he managed to sneak off and make his way into the ruined Time buildings. As Marshall had said, neither the clock nor its twelve satellites would ever run again. The movement house looked like the engine-room of a sunken ship, a rusting tangle of rotors and drive wheels exploded into contorted shapes. Every week he would climb the long stairway up to the topmost platform two hundred feet above, look out through the bell tower at the flat roofs of the office blocks stretching away to the horizon. The hammers rested against their trips in long ranks just below him. Once he kicked one of the treble trips playfully, sent a dull chime out across the plaza.

The sound drove strange echoes into his mind.

Slowly he began to repair the chimer mechanism, rewiring the hammers and the pulley systems, trailing fresh wire up the great height of the tower, dismantling the winches in the movement room below and renovating their clutches.

He and Marshall never discussed their self-appointed tasks. Like animals obeying an instinct they worked tirelessly, barely aware of their own motives. When Conrad told him one day that he intended to leave and continue the work in another sector of the city, Marshall agreed immediately, gave Conrad as many tools as he could spare and bade him goodbye.

Six months later, almost to the day, the sounds of the great clock chimed out across the rooftops of the city, marking the hours, the half-hours and the quarter-hours, steadily tolling the progress of the day. Thirty miles away, in the towns forming the perimeter of the city, people stopped in the streets and in doorways, listening to the dim haunted echoes reflected through the long aisles of apartment blocks on the far horizon, involuntarily counting the slow final sequences that told the hour. Older people whispered to each other: „Four o'clock, or was it five? They have started the clock again. It seems strange after these years.“

And all through the day they would pause as the quarter and half hours reached across the miles to them, a voice from their childhoods reminding them of the ordered world of the past. They began to reset their timers by the chimes, at night before they slept they would listen to the long count of midnight, wake to hear them again in the thin clear air of the morning.

Some went down to the police station and asked if they could have their watches and clocks back again.

After sentence, twenty years for the murder of Stacey, five for fourteen offences under the Time Laws, to run concurrently, Newman was led away to the holding cells in the basement of the court. He had expected the sentence and made no comment when invited by the judge. After waiting trial for a year the afternoon in the courtroom was nothing more than a momentary intermission.

He made no attempt to defend himself against the charge of killing Stacey, partly to shield Marshall, who would be able to continue their work unmolested, and partly because he felt indirectly responsible for the policeman's death. Stacey's body, skull fractured by a twenty-or thirty-storey fall, had been discovered in the back seat of his car in a basement garage not far from the plaza.

Presumably Marshall had discovered him prowling around and dealt with him single-handed. Newman recalled that one day Marshall had disappeared altogether and had been curiously irritable for the rest of the week.

The last time he had seen the old man had been during the three days before the police arrived. Each morning as the chimes boomed out across the plaza Newman had seen his tiny figure striding briskly down the plaza towards him, waving up energetically at the tower, bareheaded and unafraid.

Now Newman was faced with the problem of how to devise a clock that would chart his way through the coming twenty years. His fears increased when he was taken the next day to the cell block which housed the long-term prisoners—passing his cell on the way to meet the superintendent he noticed that his window looked out on to a small shaft. He pumped his brains desperately as he stood to attention during the superintendent's homilies, wondering how he could retain his sanity. Short of counting the seconds, each one of the 86,400 in every day, he saw no possible means of assessing the time.

Locked into his cell, he sat limply on the narrow bed, too tired to unpack his small bundle of possessions. A moment's inspection confirmed the uselessness of the shaft. A powerful light mounted halfway up masked the sunlight that slipped through a steel grille fifty feet above.

He stretched himself out on the bed and examined the ceiling. A lamp was recessed into its centre, but a second, surprisingly, appeared to have been fitted to the cell. This was on the wall, a few feet above his head. He could see the curving bowl of the protective case, some ten inches in diameter.

He was wondering whether this could be a reading light when he realized that there was no switch.

Swinging round, he sat up and examined it, then leapt to his feet in astonishment.

It was a clock! He pressed his hands against the bowl, reading the circle of numerals, noting the inclination of the hands .4.53, near enough the present time. Not simply a clock, but one in running order! Was this some sort of macabre joke, or a misguided attempt at rehabilitation?

His pounding on the door brought a warder.

„What's all the noise about? The clock? What's the matter with it?“ He unlocked the door and barged in, pushing Newman back.

„Nothing. But why is it here? They're against the law.“

„Oh, is that what's worrying you.“ The warder shrugged. „Well, you see, the rules are a little different in here. You lads have got a lot of time ahead of you, it'd be cruel not to let you know where you stood. You know how to work it, do you? Good.“ He slammed the door, bolted it fast, smiled at Newman through the cage. „It's a long day here, son, as you'll be finding out, that'll help you get through it.“

Gleefully, Newman lay on the bed, his head on a rolled blanket at its foot, staring up at the clock. It appeared to be in perfect order, electrically driven, moving in rigid half-minute jerks. For an hour after the warder left he watched it without a break, then began to tidy up his cell, glancing over his shoulder every few minutes to reassure himself that it was still there, still running efficiently. The irony of the situation, the total inversion of justice, delighted him, even though it would cost him twenty years of his life.

He was still chuckling over the absurdity of it all two weeks later when for the first time he noticed the clock's insanely irritating tick...

