

A Day in the Life of a Student in the Year 2012 A.D.

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Predictive Paper Reprint

That morning Joe Parkinson woke at seven o'clock; the Song of the "Hypertexas" University was heard in the students' rooms, distributed by the local millimetric wave network. He switched on his luminescent wall panels which reconstituted natural light, and, wanting a rural atmosphere, chose the "Park" light combination which turned the panels into a perspective of green leaf and flowers pretty well in their natural colors. The only two panels which remained dark were that reserved for telephone communication and that for college instruction, brought round by television.

Gathering his spirits, Joe realized he had a slight headache and remembered that a new vaccine had been pricked into him the previous day. The diseases of former times, tuberculosis, polio, and even cancer had been suppressed by preventive vaccines which were compulsorily applied, as was shown on his identity card registered with a series of eleven figures and three letters; a mere look at this arithmetical group gave the complete story of the individual, from his blood group to the results of his vaccinations, his diseases and his operations. In the University's central register, a punched card in his name, processed by the specialized computers, was to forecast Joe's behavior in his varying states of health. But from a few months back an unknown virus was playing havoc, especially among young people, in the form of mental troubles which had become the principal plague of Man.

The first symptom was an almost complete loss of memory and the new disease was attended by insensitivity to color. These deficiencies had first been attributed to a system of television reception in which the nerves were directly excited by electrodes connected to the receiver and placed on the temples, at points fixed by the electrical topology of the brain: vision by means of panels had thus been done away with, the optic nerves being brought directly into action. This system had had a considerable application but had finally been prohibited. And so students were subjected to special vaccination and Joe directed a

troubled eye on his registration number, to which another group of two figures had been added: now three letters, and thirteen figures. What was the outlook in 50 years' time?

Throwing these dark thoughts to one side, Joe dressed, went to his kitchenette where by pressing the "breakfast" button on his automatic cooker, he received after an interval of 30 seconds a balanced, practically tasteless, but medically perfect meal.

The signals physics course was due to begin at eight o'clock. Joe was one of the nine hundred and fifty students entered for this special course, among so many others, between which the thirty-six thousand students of the Hypertexas University were spread out. The University buildings and grounds extended over a wide area, formerly desert land, so that it had been possible to plan the layout in a completely rational way. Utilization of solar energy and of the natural underground water resources had transformed the area, not only into parkland, but also into cultivated land and breeding farms, scientifically conducted in hot houses at constant temperature and illumination cycles. The Hypertexas students were thus brought up, intellectually and physically, under perfectly definite conditions, in accordance with standards gradually perfected many years back. Many countries were represented at the University.

Joe gave another look at his syllabus. The signal physics course was transmitted over channel 23 of the millimetric network, distributed by dielectric cables to all the students' rooms. He pushed down key 23 on the keyboard mounted on his desk; the title of the lecture appeared on the television wall panel; on the dot of 8 o'clock Joseph A. H. Faraway, the outstanding professor, began the sixteenth lecture on cable matching for a given rate of information. These masterly lectures were recorded on magnetic tape and transmitted from the University's Technical Center, an extensive center from which all basic instruction was distributed. For lecture theatres had long been abandoned; this system had been rendered ineffective due to the increasing number of students and had been replaced by broadcast lectures and by grouping students in teams of 30 or so round a task master. The task master's role had become fundamental, through

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his explanations of the course, his choice of subjects of application and the conduct of practical work in the laboratories and workshops set aside for the course. Prof. J. A. H. Faraway himself collected the task masters round him—thirty in this particular case—to discuss the way the course was going with the students and to decide on such adjustments as might have been shown to be necessary in the light of observations made by his group.

And so Joe was in task master A. 17's group. During Faraway's lecture he took notes on his coded typewriter. With the telewriter, which was also coded, and permanently connected with the task master, he raised questions on points which did not seem clear, either at the time or on reading over his notes. At the other end, in the office of taskmaster A. 17, the questions raised were recorded on magnetic tape to be examined as a whole.

At 9 o'clock the lecture ended. Joe scanned over his notes, which he easily decoded since, from his earliest youth, he had been trained to substitute groups of letters for the propositions of normal language, thus the proposition "the wave is propagated at phase velocity v " took the form WPv , this code having been internationalized. As he came to it, he verified on his miniature algebraical computer which had taken the place of grandfather's slide rule, the solution of an equation given by the professor without justifying development, since the solution of even the most complex equation, including partial derivatives, was obtained by machine and no longer by the old methods, taught only to advanced students anxious to dig into the history of sciences, or to specialists engaged on the construction of the computers.

For some ten minutes or so, Joe was engaged on physical drill recommended for his health according to a perfectly definite daily routine. That particular day he had some difficulty, perhaps because of his recent vaccination, in pedaling a stressed spring into tension in a set time, so that he had to have recourse to the immediate absorption of an irradiate vitamin tablet.

At ten to ten, Joe walked out for the first time that day and proceeded by the traveling platform, after a number of changes, to the buildings of the signals laboratories and workshops, and on to the room A. 17. At ten o'clock the thirty students of group A. 17, standing around their task master, discussed and exchanged views on the fifteenth lecture, in the light of questions raised by the students during the lecture. This was followed by practical work on that lecture. The laboratory and workshop were provided with perfect equipment; over the last 10 years it had finally been realized that the most productive national investment was that applied to teaching the young in all kinds of subjects: scientific, technical or "literary." In the same way, past differences between "workmen" and engineers had changed in their nature. On the one side automatic machines had levelled aptitudes and functions of the personnel in carrying out their separate tasks; for instance, the automatic machines for the production of signal receivers delivered the product with its cost, the value of stocks and all other items of management, so that the staff was almost entirely

occupied in maintenance. And steps had had to be taken to arrange for the training of the staff set apart for scientific research, for instruction and for development, and to see about the corresponding machines and the way in which problems should be put to them. The class of engineers and physicists, who on their part were in a position to design and operate the larger systems, such as telecommunication system, had considerably increased in numbers.

Joe was preparing for that class, as well as others in his group, and the practical work for the day consisted in determining with three of his fellow students the best way of utilizing a given bandwidth to provide the individual television links between n individuals geographically distributed in accordance with a given law of population density.

At one o'clock, practical work being finished for the day, Joe stepped once more on the traveling platform on his way to the cafeteria, an immense building with a capacity of thirty thousand meals per hour, thanks to the automatic self-service system which dealt out four menus, prepared in a few seconds by the electronic cookers. Joe hurried on more than usual, for the Hypertexas-Hypercolumbia baseball match transmitted throughout the world was due to begin at two o'clock. But the signals department had been unable to reproduce the atmosphere of the stadium of fifty thousand seats, so that from the dim past, circus acts remained the permanent feature of human culture. Players were carefully picked after repeated tests and specially trained, on appropriate diet, so that the match should end honors all, a most satisfactory result from everybody's point of view.

At 4 o'clock Joe was sitting in his personal study room following a lecture on the history of industrial techniques: the subject was the construction of television receivers in the year 1960. Joe marvelled at his ancestor's expert handling, their nimble positioning of the most diverse parts, the way they handled enormous vacuum tubes, and the deft handling of the old-fashioned soldering iron. All this recalled films he had seen on the building of the pyramids, or the work of the lace makers with their long pins stuck in taut-drawn cushions.

At 5 o'clock he passed to another workshop of group A. 17 where the group was to produce, by its own means, but using modern processes, a working stage of a micro-module amplifier. The work had been in hand for some time, but on that particular day it had been cut short for Joe wanted to return to his room to watch on his screen an automatic news item transmitted at 18:30 hours by a satellite engaged in the examination of Saturn. Actually, several events of this kind had already been broadcast from other planets; and these had rather upset our views on these things, but Saturn had so far always resisted investigation, perhaps on account of the nature of its rings. In point of fact reception was disappointing, jammed as it was by incomprehensible signals. The question remained open.

After a short rest, Joe proceeded to an outdoor feast which was the rage among the youth of both sexes. It was called "Antique Barbecue"; it was actually an outdoor meal at which students, lads and lassies, roasted whole sheep spitted

on a wooden pole so that the beast could turn in front of fires which they themselves had prepared. That evening, some five-hundred students were in the clearing, and twenty sheep prepared and wrapped in "Do it yourself" plastic bags, were turned over to the twenty groups. The occasion was a merry one, for there was a roasting and carving dexterity competition. The laughter and joyful shouting which, so we are told, reproduced old World atmosphere was muted while attention turned to a large television screen, visible to all, where the finals of a rally of rockets to the moon were being displayed; ten rockets flying the colors of the ten world universities which had successfully completed successive heats were competing, and the broadcast was enthralling. Unfortunately, the Hypertexas rocket had to drop out, one of its ionic engines having died half way. The American continent had 2 representatives, so far well placed, but there was a certain amount of anxiety on account of the unknown characteristics of certain foreign competitors. The race was something like the regatta of former days, the rockets had to assemble at a given moment at a particular point of space and move around so as to be in a favorable position at the starting signal. The arrival of rockets launched from various points on earth was easily followed, thanks to transmissions from fixed satellites which broadcast every launching; each rocket was manned

by 2 operators, keen racing men ready to win by all recognized means, as in Roman games. The moon's very surface had to be reached in the shortest possible time, measured from the earth by Doppler equipment on nearing the time of arrival, while the tapes were checked with the utmost care. The entrants remained in communication with the public and strove their utmost in the clamor of their supporters.

The race was well up to its reputation. Contrary to all expectations, it was a so-called small country whose rocket was the winner, the resourcefulness and daring of its pilot having overcome some technical weaknesses. The return was uneventful, each team having this time been able to return to its base.

And the day ended as in old times, the lucky ones received their winnings, the others made the best of it, while some rather abnormal types decided to get back home on foot, their eyes turned to the heavens where they tried to distinguish between true stars and false planets.

Back in his room, Joe slept. He dreamed. And in his dream he saw what a former reading had taught him: a stream, a modest house, standing quiet in its surroundings of green leaf and flowers, far from everywhere, where by his log fire, with his books as companions, he felt his own master.

For the first time that day he was truly happy.