

## Chapter 24

### The Natural History of the Selenites

The messages of Cavor from the sixth up to the sixteenth are for the most part so much broken, and they abound so in repetitions, that they scarcely form a consecutive narrative. They will be given in full, of course, in the scientific report, but here it will be far more convenient to continue simply to abstract and quote as in the former chapter. We have subjected every word to a keen critical scrutiny, and my own brief memories and impressions of lunar things have been of inestimable help in interpreting what would otherwise have been impenetrably dark. And, naturally, as living beings, our interest centres far more upon the strange community of lunar insects in which he was living, it would seem, as an honoured guest than upon the mere physical condition of their world.

I have already made it clear, I think, that the Selenites I saw resembled man in maintaining the erect attitude, and in having four limbs, and I have compared the general appearance of their heads and the jointing of their limbs to that of insects. I have mentioned, too, the peculiar consequence of the smaller gravitation of the moon on their fragile slowness. Cavor confirms me upon all these points. He calls them "animals," though of course they fall under no division of the

classification of earthly creatures, and he points out "the insect type of anatomy had, fortunately for men, never exceeded a relatively very small size on earth." The largest terrestrial insects, living or extinct, do not, as a matter of fact, measure six inches in length; "but here, against the lesser gravitation of the moon, a creature certainly as much an insect as vertebrate seems to have been able to attain to human and ultra-human dimensions."

He does not mention the ant, but throughout his allusions the ant is continually being brought before my mind, in its sleepless activity, in its intelligence and social organisation, in its structure, and more particularly in the fact that it displays, in addition to the two forms, the male and the female form, that almost all other animals possess, a number of other sexless creatures, workers, soldiers, and the like, differing from one another in structure, character, power, and use, and yet all members of the same species. For these Selenites, also, have a great variety of forms. Of course, they are not only colossally greater in size than ants, but also, in Cavor's opinion at least, in intelligence, morality, and social wisdom are they colossally greater than men. And instead of the four or five different forms of ant that are found, there are almost innumerable different forms of Selenite. I had endeavoured to indicate the very considerable difference observable in such Selenites of the outer crust as I happened to encounter; the differences in size and proportions were certainly as wide as the differences between the most widely separated races of men. But such differences as I saw fade absolutely to nothing in comparison with the huge distinctions of which

Cavor tells. It would seem the exterior Selenites I saw were, indeed, mostly engaged in kindred occupations--mooncalf herds, butchers, fleshers, and the like. But within the moon, practically unsuspected by me, there are, it seems, a number of other sorts of Selenite, differing in size, differing in the relative size of part to part, differing in power and appearance, and yet not different species of creatures, but only different forms of one species, and retaining through all their variations a certain common likeness that marks their specific unity. The moon is, indeed, a sort of vast ant-hill, only, instead of there being only four or five sorts of ant, there are many hundred different sorts of Selenite, and almost every gradation between one sort and another.

It would seem the discovery came upon Cavor very speedily. I infer rather than learn from his narrative that he was captured by the mooncalf herds under the direction of these other Selenites who "have larger brain cases (heads?) and very much shorter legs." Finding he would not walk even under the goad, they carried him into darkness, crossed a narrow, plank-like bridge that may have been the identical bridge I had refused, and put him down in something that must have seemed at first to be some sort of lift. This was the balloon--it had certainly been absolutely invisible to us in the darkness--and what had seemed to me a mere plank-walking into the void was really, no doubt, the passage of the gangway. In this he descended towards constantly more luminous caverns of the moon. At first they descended in silence--save for the twitterings of the Selenites--and then into a stir of windy movement. In a little while the profound blackness had made his eyes so sensitive that he began to see more and

more of the things about him, and at last the vague took shape.

"Conceive an enormous cylindrical space," says Cavor, in his seventh message, "a quarter of a mile across, perhaps; very dimly lit at first and then brighter, with big platforms twisting down its sides in a spiral that vanishes at last below in a blue profundity; and lit even more brightly--one could not tell how or why. Think of the well of the very largest spiral staircase or lift-shaft that you have ever looked down, and magnify that by a hundred. Imagine it at twilight seen through blue glass. Imagine yourself looking down that; only imagine also that you feel extraordinarily light, and have got rid of any giddy feeling you might have on earth, and you will have the first conditions of my impression. Round this enormous shaft imagine a broad gallery running in a much steeper spiral than would be credible on earth, and forming a steep road protected from the gulf only by a little parapet that vanishes at last in perspective a couple of miles below.

"Looking up, I saw the very fellow of the downward vision; it had, of course, the effect of looking into a very steep cone. A wind was blowing down the shaft, and far above I fancy I heard, growing fainter and fainter, the bellowing of the mooncalves that were being driven down again from their evening pasturage on the exterior. And up and down the spiral galleries were scattered numerous moon people, pallid, faintly luminous beings, regarding our appearance or busied on unknown errands.

"Either I fancied it or a flake of snow came drifting down on the icy

breeze. And then, falling like a snowflake, a little figure, a little man-insect, clinging to a parachute, drove down very swiftly towards the central places of the moon.

"The big-headed Selenite sitting beside me, seeing me move my head with the gesture of one who saw, pointed with his trunk-like 'hand' and indicated a sort of jetty coming into sight very far below: a little landing-stage, as it were, hanging into the void. As it swept up towards us our pace diminished very rapidly, and in a few moments, as it seemed, we were abreast of it, and at rest. A mooring-rope was flung and grasped, and I found myself pulled down to a level with a great crowd of Selenites, who jostled to see me.

"It was an incredible crowd. Suddenly and violently there was forced upon my attention the vast amount of difference there is amongst these beings of the moon.

"Indeed, there seemed not two alike in all that jostling multitude. They differed in shape, they differed in size, they rang all the horrible changes on the theme of Selenite form! Some bulged and overhung, some ran about among the feet of their fellows. All of them had a grotesque and disquieting suggestion of an insect that has somehow contrived to mock humanity; but all seemed to present an incredible exaggeration of some particular feature: one had a vast right fore-limb, an enormous antennal arm, as it were; one seemed all leg, poised, as it were, on stilts; another protruded the edge of his face mask into a nose-like organ that

made him startlingly human until one saw his expressionless gaping mouth. The strange and (except for the want of mandibles and palps) most insect-like head of the mooncalf-minders underwent, indeed, the most incredible transformations: here it was broad and low, here high and narrow; here its leathery brow was drawn out into horns and strange features; here it was whiskered and divided, and there with a grotesquely human profile. One distortion was particularly conspicuous. There were several brain cases distended like bladders to a huge size, with the face mask reduced to quite small proportions. There were several amazing forms, with heads reduced to microscopic proportions and blobby bodies; and fantastic, flimsy things that existed, it would seem, only as a basis for vast, trumpet-like protrusions of the lower part of the mask. And oddest of all, as it seemed to me for the moment, two or three of these weird inhabitants of a subterranean world, a world sheltered by innumerable miles of rock from sun or rain, carried umbrellas in their tentaculate hands--real terrestrial looking umbrellas! And then I thought of the parachutist I had watched descend.

"These moon people behaved exactly as a human crowd might have done in similar circumstances: they jostled and thrust one another, they shoved one another aside, they even clambered upon one another to get a glimpse of me. Every moment they increased in numbers, and pressed more urgently upon the discs of my ushers"--Cavor does not explain what he means by this--"every moment fresh shapes emerged from the shadows and forced themselves upon my astounded attention. And presently I was signed and helped into a sort of litter, and lifted up on the shoulders of

strong-armed bearers, and so borne through the twilight over this seething multitude towards the apartments that were provided for me in the moon. All about me were eyes, faces, masks, a leathery noise like the rustling of beetle wings, and a great bleating and cricket-like twittering of Selenite voices."

We gather he was taken to a "hexagonal apartment," and there for a space he was confined. Afterwards he was given a much more considerable liberty; indeed, almost as much freedom as one has in a civilised town on earth. And it would appear that the mysterious being who is the ruler and master of the moon appointed two Selenites "with large heads" to guard and study him, and to establish whatever mental communications were possible with him. And, amazing and incredible as it may seem, these two creatures, these fantastic men insects, these beings of other world, were presently communicating with Cavor by means of terrestrial speech.

Cavor speaks of them as Phi-oo and Tsi-puff. Phi-oo, he says, was about 5 feet high; he had small slender legs about 18 inches long, and slight feet of the common lunar pattern. On these balanced a little body, throbbing with the pulsations of his heart. He had long, soft, many-jointed arms ending in a tentacled grip, and his neck was many-jointed in the usual way, but exceptionally short and thick. His head, says Cavor--apparently alluding to some previous description that has gone astray in space--"is of the common lunar type, but strangely modified. The mouth has the usual expressionless gape, but it is unusually small and pointing downward, and the mask is reduced to the size of a large flat nose-flap. On either side

are the little eyes.

"The rest of the head is distended into a huge globe and the chitinous leathery cuticle of the mooncalf herds thins out to a mere membrane, through which the pulsating brain movements are distinctly visible. He is a creature, indeed, with a tremendously hypertrophied brain, and with the rest of his organism both relatively and absolutely dwarfed."

In another passage Cavor compares the back view of him to Atlas supporting the world. Tsi-puff it seems was a very similar insect, but his "face" was drawn out to a considerable length, and the brain hypertrophy being in different regions, his head was not round but pear-shaped, with the stalk downward. There were also litter-carriers, lopsided beings, with enormous shoulders, very spidery ushers, and a squat foot attendant in Cavor's retinue.

The manner in which Phi-oo and Tsi-puff attacked the problem of speech was fairly obvious. They came into this "hexagonal cell" in which Cavor was confined, and began imitating every sound he made, beginning with a cough. He seems to have grasped their intention with great quickness, and to have begun repeating words to them and pointing to indicate the application. The procedure was probably always the same. Phi-oo would attend to Cavor for a space, then point also and say the word he had heard.

The first word he mastered was "man," and the second "Mooney"--which Cavor on the spur of the moment seems to have used instead of "Selenite"



for the moon race. As soon as Phi-oo was assured of the meaning of a word he repeated it to Tsi-puff, who remembered it infallibly. They mastered over one hundred English nouns at their first session.

Subsequently it seems they brought an artist with them to assist the work of explanation with sketches and diagrams--Cavor's drawings being rather crude. "He was," says Cavor, "a being with an active arm and an arresting eye," and he seemed to draw with incredible swiftness.

The eleventh message is undoubtedly only a fragment of a longer communication. After some broken sentences, the record of which is unintelligible, it goes on:--

"But it will interest only linguists, and delay me too long, to give the details of the series of intent parleys of which these were the beginning, and, indeed, I very much doubt if I could give in anything like the proper order all the twistings and turnings that we made in our pursuit of mutual comprehension. Verbs were soon plain sailing--at least, such active verbs as I could express by drawings; some adjectives were easy, but when it came to abstract nouns, to prepositions, and the sort of hackneyed figures of speech, by means of which so much is expressed on earth, it was like diving in cork-jackets. Indeed, these difficulties were insurmountable until to the sixth lesson came a fourth assistant, a being with a huge football-shaped head, whose forte was clearly the pursuit of intricate analogy. He entered in a preoccupied manner, stumbling against a stool, and the difficulties that arose had to be presented to him with a certain

amount of clamour and hitting and pricking before they reached his apprehension. But once he was involved his penetration was amazing. Whenever there came a need of thinking beyond Phi-oo's by no means limited scope, this prolate-headed person was in request, but he invariably told the conclusion to Tsi-puff, in order that it might be remembered; Tsi-puff was ever the arsenal for facts. And so we advanced again.

"It seemed long and yet brief--a matter of days--before I was positively talking with these insects of the moon. Of course, at first it was an intercourse infinitely tedious and exasperating, but imperceptibly it has grown to comprehension. And my patience has grown to meet its limitations, Phi-oo it is who does all the talking. He does it with a vast amount of meditative provisional 'M'm--M'm' and has caught up one or two phrases, 'If I may say,' 'If you understand,' and beads all his speech with them.

"Thus he would discourse. Imagine him explaining his artist.

"'M'm--M'm--he--if I may say--draw. Eat little--drink little--draw. Love draw. No other thing. Hate all who not draw like him. Angry. Hate all who draw like him better. Hate most people. Hate all who not think all world for to draw. Angry. M'm. All things mean nothing to him--only draw. He like you ... if you understand.... New thing to draw. Ugly--striking. Eh?

"'He'--turning to Tsi-puff--'love remember words. Remember wonderful more than any. Think no, draw no--remember. Say'--here he referred to

his gifted assistant for a word--'histories--all things. He hear once--say ever.'

"It is more wonderful to me than I dreamt that anything ever could be again, to hear, in this perpetual obscurity, these extraordinary creatures--for even familiarity fails to weaken the inhuman effect of their appearance--continually piping a nearer approach to coherent earthly speech--asking questions, giving answers. I feel that I am casting back to the fable-hearing period of childhood again, when the ant and the grasshopper talked together and the bee judged between them..."

And while these linguistic exercises were going on Cavor seems to have experienced a considerable relaxation of his confinement. "The first dread and distrust our unfortunate conflict aroused is being," he said, "continually effaced by the deliberate rationality of all I do.... I am now able to come and go as I please, or I am restricted only for my own good. So it is I have been able to get at this apparatus, and, assisted by a happy find among the material that is littered in this enormous store-cave, I have contrived to despatch these messages. So far not the slightest attempt has been made to interfere with me in this, though I have made it quite clear to Phi-oo that I am signalling to the earth.

"You talk to other?' he asked, watching me.

"Others,' said I.

"Others,' he said. 'Oh yes, Men?'

"And I went on transmitting."

Cavor was continually making corrections in his previous accounts of the Selenites as fresh facts flowed upon him to modify his conclusions, and accordingly one gives the quotations that follow with a certain amount of reservation. They are quoted from the ninth, thirteenth, and sixteenth messages, and, altogether vague and fragmentary as they are, they probably give as complete a picture of the social life of this strange community as mankind can now hope to have for many generations.

"In the moon," says Cavor, "every citizen knows his place. He is born to that place, and the elaborate discipline of training and education and surgery he undergoes fits him at last so completely to it that he has neither ideas nor organs for any purpose beyond it. 'Why should he?' Phi-oo would ask. If, for example, a Selenite is destined to be a mathematician, his teachers and trainers set out at once to that end. They check any incipient disposition to other pursuits, they encourage his mathematical bias with a perfect psychological skill. His brain grows, or at least the mathematical faculties of his brain grow, and the rest of him only so much as is necessary to sustain this essential part of him. At last, save for rest and food, his one delight lies in the exercise and display of his faculty, his one interest in its application, his sole society with other specialists in his own line. His brain grows continually larger, at least so far as the portions engaging in

mathematics are concerned; they bulge ever larger and seem to suck all life and vigour from the rest of his frame. His limbs shrivel, his heart and digestive organs diminish, his insect face is hidden under its bulging contours. His voice becomes a mere stridulation for the stating of formula; he seems deaf to all but properly enunciated problems. The faculty of laughter, save for the sudden discovery of some paradox, is lost to him; his deepest emotion is the evolution of a novel computation. And so he attains his end.

"Or, again, a Selenite appointed to be a minder of mooncalves is from his earliest years induced to think and live mooncalf, to find his pleasure in mooncalf lore, his exercise in their tending and pursuit. He is trained to become wiry and active, his eye is indurated to the tight wrappings, the angular contours that constitute a 'smart mooncalfishness.' He takes at last no interest in the deeper part of the moon; he regards all Selenites not equally versed in mooncalves with indifference, derision, or hostility. His thoughts are of mooncalf pastures, and his dialect an accomplished mooncalf technique. So also he loves his work, and discharges in perfect happiness the duty that justifies his being. And so it is with all sorts and conditions of Selenites--each is a perfect unit in a world machine....

"These beings with big heads, on whom the intellectual labours fall, form a sort of aristocracy in this strange society, and at the head of them, quintessential of the moon, is that marvellous gigantic ganglion the Grand Lunar, into whose presence I am finally to come. The unlimited development

of the minds of the intellectual class is rendered possible by the absence of any bony skull in the lunar anatomy, that strange box of bone that clamps about the developing brain of man, imperiously insisting 'thus far and no farther' to all his possibilities. They fall into three main classes differing greatly in influence and respect. There are administrators, of whom Phi-oo is one, Selenites of considerable initiative and versatility, responsible each for a certain cubic content of the moon's bulk; the experts like the football-headed thinker, who are trained to perform certain special operations; and the erudite, who are the repositories of all knowledge. To the latter class belongs Tsi-puff, the first lunar professor of terrestrial languages. With regard to these latter, it is a curious little thing to note that the unlimited growth of the lunar brain has rendered unnecessary the invention of all those mechanical aids to brain work which have distinguished the career of man. There are no books, no records of any sort, no libraries or inscriptions. All knowledge is stored in distended brains much as the honey-ants of Texas store honey in their distended abdomens. The lunar Somerset House and the lunar British Museum Library are collections of living brains...

"The less specialised administrators, I note, do for the most part take a very lively interest in me whenever they encounter me. They will come out of the way and stare at me and ask questions to which Phi-oo will reply. I see them going hither and thither with a retinue of bearers, attendants, shouters, parachute-carriers, and so forth--queer groups to see. The experts for the most part ignore me completely, even as they ignore each other, or notice me only to begin a clamorous exhibition of their

distinctive skill. The erudite for the most part are rapt in an impervious and apoplectic complacency, from which only a denial of their erudition can rouse them. Usually they are led about by little watchers and attendants, and often there are small and active-looking creatures, small females usually, that I am inclined to think are a sort of wife to them; but some of the profounder scholars are altogether too great for locomotion, and are carried from place to place in a sort of sedan tub, wabbling jellies of knowledge that enlist my respectful astonishment. I have just passed one in coming to this place where I am permitted to amuse myself with these electrical toys, a vast, shaven, shaky head, bald and thin-skinned, carried on his grotesque stretcher. In front and behind came his bearers, and curious, almost trumpet-faced, news disseminators shrieked his fame.

"I have already mentioned the retinues that accompany most of the intellectuals: ushers, bearers, valets, extraneous tentacles and muscles, as it were, to replace the abortive physical powers of these hypertrophied minds. Porters almost invariably accompany them. There are also extremely swift messengers with spider-like legs and 'hands' for grasping parachutes, and attendants with vocal organs that could well nigh wake the dead. Apart from their controlling intelligence these subordinates are as inert and helpless as umbrellas in a stand. They exist only in relation to the orders they have to obey, the duties they have to perform.

"The bulk of these insects, however, who go to and fro upon the spiral ways, who fill the ascending balloons and drop past me clinging to flimsy

parachutes are, I gather, of the operative class. 'Machine hands,' indeed, some of these are in actual nature--it is not figure of speech, the single tentacle of the mooncalf herd is profoundly modified for clawing, lifting, guiding, the rest of them no more than necessary subordinate appendages to these important mechanisms, have enormously developed auditory organs; some whose work lies in delicate chemical operations project a vast olfactory organ; others again have flat feet for treadles with anchylosed joints; and others--who I have been told are glassblowers--seem mere lung-bellows. But every one of these common Selenites I have seen at work is exquisitely adapted to the social need it meets. Fine work is done by fined-down workers, amazingly dwarfed and neat. Some I could hold on the palm of my hand. There is even a sort of turnspit Selenite, very common, whose duty and only delight it is to apply the motive power for various small appliances. And to rule over these things and order any erring tendency there might be in some aberrant natures are the most muscular beings I have seen in the moon, a sort of lunar police, who must have been trained from their earliest years to give a perfect respect and obedience to the swollen heads.

"The making of these various sorts of operative must be a very curious and interesting process. I am very much in the dark about it, but quite recently I came upon a number of young Selenites confined in jars from which only the fore-limbs protruded, who were being compressed to become machine-minders of a special sort. The extended 'hand' in this highly developed system of technical education is stimulated by irritants and nourished by injection, while the rest of the body is starved. Phi-oo,



unless I misunderstood him, explained that in the earlier stages these queer little creatures are apt to display signs of suffering in their various cramped situations, but they easily become indurated to their lot; and he took me on to where a number of flexible-minded messengers were being drawn out and broken in. It is quite unreasonable, I know, but such glimpses of the educational methods of these beings affect me disagreeably. I hope, however, that may pass off, and I may be able to see more of this aspect of their wonderful social order. That wretched-looking hand-tentacle sticking out of its jar seemed to have a sort of limp appeal for lost possibilities; it haunts me still, although, of course it is really in the end a far more humane proceeding than our earthly method of leaving children to grow into human beings, and then making machines of them.

"Quite recently, too--I think it was on the eleventh or twelfth visit I made to this apparatus--I had a curious light upon the lives of these operatives. I was being guided through a short cut hither, instead of going down the spiral, and by the quays to the Central Sea. From the devious windings of a long, dark gallery, we emerged into a vast, low cavern, pervaded by an earthy smell, and as things go in this darkness, rather brightly lit. The light came from a tumultuous growth of livid fungoid shapes--some indeed singularly like our terrestrial mushrooms, but standing as high or higher than a man.

"'Mooneys eat these?' said I to Phi-oo.

"Yes, food.'

"Goodness me!' I cried; 'what's that?'

"My eye had just caught the figure of an exceptionally big and ungainly Selenite lying motionless among the stems, face downward. We stopped.

"Dead?' I asked. (For as yet I have seen no dead in the moon, and I have grown curious.)

"No!' exclaimed Phi-oo. 'Him--worker--no work to do. Get little drink then--make sleep--till we him want. What good him wake, eh? No want him walking about.'

"There's another!' cried I.

"And indeed all that huge extent of mushroom ground was, I found, peppered with these prostrate figures sleeping under an opiate until the moon had need of them. There were scores of them of all sorts, and we were able to turn over some of them, and examine them more precisely than I had been able to previously. They breathed noisily at my doing so, but did not wake. One, I remember very distinctly: he left a strong impression, I think, because some trick the light and of his attitude was strongly suggestive a drawn-up human figure. His fore-limbs were long, delicate tentacles--he was some kind of refined manipulator--and the pose of his slumber suggested a submissive suffering. No doubt it was a mistake for

me to interpret his expression in that way, but I did. And as Phi-oo rolled him over into the darkness among the livid fleshiness again I felt a distinctly unpleasant sensation, although as he rolled the insect in him was confessed.

"It simply illustrates the unthinking way in which one acquires habits of feeling. To drug the worker one does not want and toss him aside is surely far better than to expel him from his factory to wander starving in the streets. In every complicated social community there is necessarily a certain intermittency of employment for all specialised labour, and in this way the trouble of an 'unemployed' problem is altogether anticipated. And yet, so unreasonable are even scientifically trained minds, I still do not like the memory of those prostrate forms amidst those quiet, luminous arcades of fleshy growth, and I avoid that short cut in spite of the inconveniences of the longer, more noisy, and more crowded alternative.

"My alternative route takes me round by a huge, shadowy cavern, very crowded and clamorous, and here it is I see peering out of the hexagonal openings of a sort of honeycomb wall, or parading a large open space behind, or selecting the toys and amulets made to please them by the dainty-tentacled jewellers who work in kennels below, the mothers of the moon world--the queen bees, as it were, of the hive. They are noble-looking beings, fantastically and sometimes quite beautifully adorned, with a proud carriage, and, save for their mouths, almost microscopic heads.

"Of the condition of the moon sexes, marrying and giving in marriage, and of birth and so forth among the Selenites, I have as yet been able to learn very little. With the steady progress of Phi-oo in English, however, my ignorance will no doubt as steadily disappear. I am of opinion that, as with the ants and bees, there is a large majority of the members in this community of the neuter sex. Of course on earth in our cities there are now many who never live that life of parentage which is the natural life of man. Here, as with the ants, this thing has become a normal condition of the race, and the whole of such replacement as is necessary falls upon this special and by no means numerous class of matrons, the mothers of the moon-world, large and stately beings beautifully fitted to bear the larval Selenite. Unless I misunderstand an explanation of Phi-oo's, they are absolutely incapable of cherishing the young they bring into the moon; periods of foolish indulgence alternate with moods of aggressive violence, and as soon as possible the little creatures, who are quite soft and flabby and pale coloured, are transferred to the charge of celibate females, women 'workers' as it were, who in some cases possess brains of almost masculine dimensions."

Just at this point, unhappily, this message broke off. Fragmentary and tantalising as the matter constituting this chapter is, it does nevertheless give a vague, broad impression of an altogether strange and wonderful world--a world with which our own may have to reckon we know not how speedily. This intermittent trickle of messages, this whispering of a record needle in the stillness of the mountain slopes, is the first warning of such a change in human conditions as mankind has scarcely

imagined heretofore. In that satellite of ours there are new elements, new appliances, traditions, an overwhelming avalanche of new ideas, a strange race with whom we must inevitably struggle for mastery--gold as common as iron or wood...