

INHERITANCE

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As David said, when one falls on Africa from a height of two hundred and fifty kilometers, a broken ankle may be an anticlimax but it is none the less painful. But what hurt him most, he pretended, was the way we had all rushed out into the desert to see what had happened to the A.20 and hadn't come near him until hours later.

"Be logical, David," Jimmy Langford had protested. "We knew that you were O.K. because the base 'copter radioed when it picked you up. But the A.20 might have been a complete write-off."

"There's only one A.20," I said, trying to be helpful, "but rocket test-pilots are-well, if not two a penny, at any rate twelve for a dime."

David glared back at us from beneath his bushy eyebrows and said something in Welsh.

"The Druid's curse," Jimmy remarked to me. "Any moment now you'll turn into a leek or a perspex model of Stonehenge."

You see, we were still pretty light-headed and it wouldn't do to be serious for a while. Even David's iron nerve must have taken a terrific beating, yet somehow he seemed the calmest of us all. I couldn't understand it-then.

The A.20 had come down fifty kilometers from her launching point. We'd followed her by radar for the whole trajectory, so we knew her position to within a few meters-though we didn't know at the time that David had landed ten kilometers farther east.

The first warning of disaster had come seventy seconds after takeoff. The A.20 had reached fifty kilometers and was following the correct trajectory to within a few per cent. As far as the eye

could tell, the luminous track on the radar screen had scarcely deviated from the pre-computed path. David was doing two kilometers a second: not much, but the fastest any man had ever traveled up to then. And Goliath was just about to be jettisoned.

The A.20 was a two-step rocket. It had to be, for it was using chemical fuels. The upper component, with its tiny cabin, its folded airfoils and flaps, weighed just under twenty tons when fully

fuelled. It was to be lifted by a lower two-hundred-ton booster -which would take it up to fifty kilometers, after which it could carry on quite happily under its own power. The big fellow would then drop back to Earth by parachute: it wouldn't weigh much when its fuel was burnt. Meanwhile the upper step would have built up enough speed to reach the six-hundred-kilometer level before falling back and going into a glide that would take David halfway round the world if he wished.

I don't remember who called the two rockets David and Goliath but the names caught on at once. Having two David's around caused a lot of confusion, not all of it accidental.

Well, that was the theory, but as we watched the tiny green spot on the screen fall away from its calculated course, we knew that something had gone wrong. And we guessed what it was.

At fifty kilometers the spot should have divided in two. The brighter echo should have continued to rise as a free projectile, and then fallen back to Earth. But the other should have gone on, still accelerating, drawing swiftly away from the discarded booster.

There had been no separation. The empty Goliath had refused to come free and was dragging David back to Earth helplessly, for David's motors could not be used. Their exhausts were blocked by the machine beneath.

We saw all this in about ten seconds. We waited just long enough to calculate the new trajectory, and then we climbed into the copters and set off for the target area.

All we expected to find, of course, was a heap of magnesium looking as if a bulldozer had gone over it. We knew that Goliath couldn't eject its parachute while David was sitting on top of it, any more than David could use its motors while Goliath was clinging beneath. I remember wondering who was going to break the news to Mavis, and then realizing that she'd be listening to the radio and would know all about it as soon as anyone.

We could scarcely believe our eyes when we found the two rockets still coupled together, lying undamaged beneath the big parachute. There was no sign of David, but a few minutes later Base called to say that he'd been found. The plotters at Number Two Station had picked up the tiny echo from his parachute and sent a 'copter to collect him. He was in the hospital twenty minutes later, but we stayed out in the desert for several hours checking over the machines and making arrangements to retrieve them.

When at last we got back to Base, we were pleased to see our best-hated science-reporters among the mob being held at bay. We waved aside their protests and sailed on into the ward.

The shock and the subsequent relief had left us all feeling rather irresponsible and perhaps childish. Only David seemed unaffected: the fact that he'd just had one of the most miraculous escapes in human history hadn't made him turn a hair. He sat there in the bed pretending to be annoyed at our jibes until we'd

calmed down.

"Well," said Jimmy at last, "what went wrong?"

"That's for you to discover," David replied. "Goliath went like a dream until fuel- cutoffpoint. I waited then for the five-second pause before the explosive bolts detonated and the springs threw it clear, but nothing happened. So I punched the emergency release. The lights dimmed, but the kick I'd expected never came. I tried a couple more times but somehow I knew it was useless. I guessed that something had shorted in the detonator circuit and was earthling the power supply.

"Well, I did some rather rapid calculations from the flight charts and abacs in the cabin. At my present speed I'd continue to rise for another two hundred kilometers and would reach the peak of my trajectory in about three minutes. Then I'd start the two-hundred and-fifty- kilometerfalland should make a nice hole in the desert four minutes later. All told, I seemed to have a good seven minutes of life left-ignoring air-resistance, to use your favorite phrase. That might add a couple of minutes to my expectation of life.

"I knew that I couldn't get the big parachute out, and David's wings would be useless with the forty-ton mass of Goliath on its tail. I'd used up two of my seven minutes before I decided what to do.

"It's a good job I made you widen that airlock. Even so, it was

asq,- v space-suit. I tied the end of the safety rope to a locking lever and crawled along the hull until I reached the junction of the two steps.

"The parachute compartment couldn't be opened from the outside, but I'd taken the emergency axe from the pilot's cabin. It didn't take long to get through the magnesium skin: once it had been punctured I could almost tear it apart with my hands. A few seconds later I'd released the 'chute. The silk floated aimlessly around me: I had expected some trace of air-resistance at this speed but there wasn't a sign of it. The canopy simply stayed where it was put. I could only hope that when we re-entered atmosphere it would spread itself without fouling the rocket.

"I thought I had a fairly good chance of getting away with it. The additional weight of David would increase the loading of the parachute by less than twenty per cent, but there was always the chance that the shrouds would chafe against the broken metal and be worn through before I could reach Earth. In addition the canopy would be distorted when it did open, owing to the unequal lengths of the cords. There was nothing I could do about that.

"When I'd finished, I looked about me for the first time. I couldn't see very well, for perspiration had misted over the glass of my suit. (Someone had better look into that: it can be dangerous.) I was still rising, though very slowly now. To the northeast

I could see the whole of Sicily and some of the Italian mainland: farther south I could follow the Libyan coast as far as Bengasi. Spread out beneath me was all the land over which Alexander and Montgomery and Rommel had fought when I was a boy. It seemed rather surprising that anyone had ever made such a fuss about it.

"I didn't stay long: in three minutes I would be entering the atmosphere. I took a last look at the flaccid parachute, straightened some of the shrouds, and climbed back into the cabin. Then I jettisoned David's fuel-first the oxygen, and then, as soon as it had had time to disperse, the alcohol.

"That three minutes seemed an awfully long time. I was just over twenty-five kilometers high when I

heard the first sound. It was a very high-pitched whistle, so faint that I could scarcely bear it. Glancing through the portholes, I saw that the parachute shrouds were becoming taut and the canopy was beginning to billow above me. At the same time I felt weight returning and knew that the rocket was beginning to decelerate.

"The calculation wasn't very encouraging. I'd fallen free for over two hundred kilometers and if I was to stop in time I'd need an average deceleration of ten gravities. The peaks might be twice that, but I'd stood fifteen g before now in a lesser cause. So I gave myself a double shot of dynocaine and uncaged the gimbals of my seat. I remember wondering whether I should let out David's little wings, and decided that it wouldn't help. Then I must have blacked out.

„When I came round again it was very hot, and I had normal weight. I felt very stiff and sore, and to make matters worse the cabin was oscillating violently. I struggled to the port and saw that the desert was uncomfortably close. The big parachute had done its work, but I thought that the impact was going to be rather too violent for comfort. So I jumped.

"From what you tell me I'd have done better to have stayed in the ship. But I don't suppose I can grumble."

We sat in silence for a while. Then Jimmy remarked casually:

"The accelerometer shows that you touched twenty-one gravities on the way down. Only for three seconds, though. Most of the time it was between twelve and fifteen."

David didn't seem to hear and presently I said:

"Well, we can't hold the reporters off much longer. Do you feel like seeing them?"

David hesitated.

"No," he answered. "Not now."

He read our faces and shook his head violently.

"No," he said with emphasis, "it's not that at all. I'd be willing to take off again right now. But I want to sit and think things over for a while."

His voice sank, and when he spoke again it was to show the real David behind the perpetual mask of extraversion.

"You think I haven't any nerves," he said, "and that I take risks without bothering about the consequences. Well, that isn't quite true and I'd like you to know why. I've never told anyone this, not even Mavis.

"You know I'm not superstitious," he began, a little apologetically, "but most materialists have some secret reservations, even if they won't admit them.

"Many years ago I had a peculiarly vivid dream. By itself, it

wouldn't have meant much, but later I discovered that two other men had put almost identical experiences on record. One you've probably read, for the man was J. W. Dunne.

"In his first book, *An Experiment with Time*, Dunne tells how

once dreamed that he was sitting at the controls of a curious flying machine with swept-back wings, and years later the whole experience came true when he was testing his inherent-stability aeroplane. Remembering my own dream, which I'd had before reading Dunne's book, this made a considerable impression on me. But the second incident I found even more striking.

"You've heard of Igor Sikorsky: he designed some of the first commercial long-distance flying-boats-'Clippers,' they were called. In his autobiography, *The Story of the Winged-S*, he tells us how he had a dream very similar to Dunne's.

"He was walking along a corridor with doors opening on either side and electric lights glowing overhead. There was a slight vibration underfoot and somehow he knew that he was in a flying machine. Yet at that time there were no aeroplanes in the world, and few people believed there ever would be.

"Sikorsky's dream, like Dunne's, came true many years later. He was on the maiden flight of his first Clipper when he found himself walking along that familiar corridor."

David laughed, a little self-consciously.

"You've probably guessed what my dream was about," he continued. "Remember, it would have made no permanent impression if I hadn't come across these parallel cases.

"I was in a small, bare room with no windows. There were two other men with me, and we were all wearing what I thought at the time were diving-suits. I had a curious control panel in front of me, with a circular screen built into it. There was a picture on the screen, but it didn't mean anything to me and I can't recall it now, though I've tried many times since. All I remember is turning to the other two men and saying: 'Five minutes to go, boys'—though I'm not sure if those were the exact words. And then, of course, I woke up.

"That dream has haunted me ever since I became a test pilot. No—haunted isn't the right word. It's given me confidence that in the long run everything would be all right—at least until I'm in that cabin with those other two men. What happens after that I don't know. But now you understand why I felt quite safe when I brought

down the A.20, and when I crash-landed the A.15 off Pantelleria. "So now you know. You can laugh if you please: I sometimes do myself. But even if there's nothing in it, that dream's given my subconscious a boost that's been pretty useful."

We didn't laugh, and presently Jimmy said:

"Those other men—did you recognize them?"

David looked doubtful.

"I've never made up my mind," he answered. "Remember, they were wearing space-suits and I didn't

see their faces clearly. But one of them looked rather like you, though he seemed a good deal older than you are now. I'm afraid you weren't there, Arthur. Sorry."

"I'm glad to hear it," I said. "As I've told you before, I'll have to stay behind to explain what went wrong. I'm quite content to wait until the passenger service starts."

Jimmy rose to his feet.

"O.K., David," he said, "I'll deal with the gang outside. Get some sleep now-with or without dreams. And by the way, the A.20 will be ready again in a week. I think she'll be the last of the chemical rockets: they say the atomicdrive's nearly ready for us."

We never spoke of David's dream again, but I think it was often in our minds. Three months later he took the A.20 up to six hundred and eighty kilometers, a record which will never be broken by a machine of this type, because no one will ever build a chemical rocket again. David's uneventful landing in the Nile Valley marked the end of an epoch.

It was three years before the A.21 was ready. She looked very small compared with her giant predecessors, and it was hard to believe that she was the nearest thing to a spaceship man had yet built. This time the takeoff was from sea level, and the Atlas Mountains which had witnessed the start of our earlier shots were now merely the distant background to the scene.

By now both Jimmy and I had come to share David's belief in his own destiny. I remember Jimmy's parting words as the airlock closed.

"It won't be long now, David, before we build that three-man ship."

And I knew he was only half joking.

We saw the A-21 climb slowly into the sky in great, widening circles, unlike any rocket the world had ever known before. There was no need to worry about gravitational loss now that we had a built-in fuel supply, and David wasn't in a hurry. The machine was still traveling quite slowly when I lost sight of it and went into the plotting room.

When I got there the signal was just fading from the screen, and the detonation reached me a little later. And that was the end of David and his dreams.

The next I recall of that period is flying down the Conway Valley in Jimmy's 'copter, with Snowdon gleaming far away on our right. We had never been to David's home before and were not looking forward to this visit. But it was the least that we could do.

As the mountains drifted beneath us we talked about the suddenly darkened future and wondered what the next step would be. Apart from the shock of personal loss, we were beginning to realize how much of David's confidence we had come to share ourselves. And now that confidence had been shattered.

We wondered what Mavis would do, and discussed the boy's future. He must be fifteen now, though I hadn't seen him for several years and Jimmy had never met him at all. According to his father he was going to be an architect and already showed considerable promise.

Mavis was quite calm and collected, though she seemed much older than when I had last met her. For a while we talked about business matters and the disposal of David's estate. I'd never been an executor

before, but tried to pretend that I knew all about it.

We had just started to discuss the boy when we heard the front door open and he came into the house. Mavis called to him and his footsteps came slowly along the passage. We could tell that he didn't want to meet us, and his eyes were still red when he entered the room.

I had forgotten how much like his father he was, and I heard a little gasp from Jimmy.

"Hello, David," I said.

But he didn't look at me. He was staring at Jimmy, with that puzzled expression of a man who has seen someone before but can't remember where.

And quite suddenly I knew that young David would never be art architect.