

As background to his story Bruce Elliott, himself a topflight magician and an able amateur of topology, envisions a glum future, a time when the grand old guild of illusionists and prestidigitators is down to its last active member. And, although this one is a megalomaniacal scoundrel, we addicts of the impossible escape and the beautiful-lady-sawed-in-two can't help admiring his efforts to compete with interplanetary TV. Even so, genius does not justify villainy and the nimblest legerdemain will not prevail against the inexorable laws of justice . . . and topology.

The Last Magician

by BRUCE ELLIOTT

HE WAS the last one. I guess there's always something interesting about the last anything. The last dinosaur, the last auto, the last gas-powered plane, yes, he fits right into that museum of last things. He was the last magician.

He was good, too. I've seen the old celluloids of the great ones of the past, Houdini, Blackstone and Thurston, and he was like all of them rolled into one and more, much more. They functioned in a time when people still had a hankering to believe that there was such a thing as magic but he burst forth in our time like a nova. He revived interest in his hanky panky art and he scared the hell out of people. He may have been a charlatan and paranoid and all the other things they called him but he sure walloped the bejesus out of an audience and that's something very few performers do these days.

I never knew why he chose the place he did for his debut except that it was good publicity-wise and that was something that he knew all about. He could sure pick his shots when it came to attracting public attention.

You know what vaudeville has become in our time, an intellectual's plaything, a cult for the avant garde. These vaudemanés sit and talk about tap dancers that were great hundreds of years ago and discuss crosstalk comics, whatever they were, and in general sit and drool about their dear, dear, dying art form.

I don't know much about art forms and I have a sneaking feeling that anything that can't support itself by public interest doesn't amount to much. Certainly vaudeville would be nonexistent if it wasn't subsidized by

these cultists. But I made my living cooking up props for these phoney shows and that was good enough for me. Until I joined Duncen as a prop man I had always worked with my hands and you know that means I'm good because you have to be better than a machine to get a license to work with your hands today.

But I was telling you about Duncen. He walked out on the little stage where we put on our "vaudevilles," completely unannounced. His appearance sure made everyone sit up and take notice. Heaven knows where he got his outfit because it was a real costume piece. Black cape swirling around his tall, lean frame; a curious kind of butterfly-shaped thing at his neck that was surrounded with a high white band, a completely non-functional jacket that was cut away in the front and dropped down like tails in the rear and a shirt that looked as if it was made of some stiff plastic. It would have looked funny on anyone else but it didn't on him.

I suppose the hair he had on his lip and chin was fake because all males have their face hair extirpated at puberty now, but I never saw him without it. He called the hair a mustache and goatee and it did strange things to his hollow checked face.

He walked out to the center of the stage and bowed obsequiously to the handful of avant gardists that made up the audience. But somehow, even the bow, even the mock humility was an insult. It was as though he was just pretending to be humble because he knew he was superior. He could get under your skin like that in a million ways but I didn't learn that till later.

I could hear a little rustle in the audience as they looked through their programs trying to figure out who Duncen was. They didn't have much time for that though, because as he bowed he swept off his cape and gracefully showed both sides of it.

His curious lip-tilted grimace that was halfway between a smile and a sneer appeared as he draped the cape over his arm. Suddenly there was a form under it. When he whipped the cloth away a Martian girl, naked, stood shyly revealed. Duncen looked at the audience out of the corners of his eyes as though trying to gauge the effect and then plucked a wand out of the air. This is a long black stick with white tips. It is an adjunct that old time magicians always used.

Gesturing at the girl with the "wand" he then snapped his fingers. Suddenly a brassiere appeared clothing her breasts. Another snap of those long, thin fingers and her legs and thighs were covered. Then he gestured around her with the "wand" and she was fully dressed. The cloth seemed to come from nowhere, seemed to be produced at the tip of the "wand."

From then on she assisted him as you have seen her do on TV. The only

reason I'm telling you about this first opening is that they never let him repeat it on the air. The Martian ambassador complained and there was some kind of a stink; I don't know what it was all about, but Duneen never started his show that way again.

You remember the rest of his act, of course; the sawing of the Martian girl in half with a G-ray and her restoration after you would have sworn she was dead. The way he would cause her to vanish from an hermetically sealed rocket blast tube and the way he produced her from a previously shown empty Liane lizard shell. All these things became household words and that was just the trouble.

Just because he was the last of the magicians, just because he had such a terrific effect on show business, he had to keep topping himself. He had to keep inventing newer and more amazing tricks and it almost drove him crazy.

Then there was the other reason which had been true since the beginning of TV. TV is a bottomless maw into which entertainment is shoveled only to vanish like one of Duneen's tricks. Centuries ago, when the TV audience was just made up of millions of people, you could repeat yourself once in a while, I suppose, and figure that not everyone had caught you the first time. But now, when the audience is up in the hundreds of millions, the problem has become so bad that lots of performers crack under the strain.

The old time magicians used to meet their audiences bit by bit through the years and if there was any overlapping it didn't matter very much. But now, today, you meet all the people in the world with one performance.

I've read in the old magic text books that magicians could, and did, do the same tricks over and over for the length of their professional careers. Imagine that!

But Duneen, of course, could never repeat himself, even once. He had to keep inventing more and more exciting variations on his basic tricks.

That was where I came in, me and my capable hands. I guess maybe I wouldn't have helped him if it hadn't been for Aydah, his Martian girl assistant — but I felt sorry for her. He was nasty to her most of the time, but he was at his worst when he was wracking his brain trying to cook up a new pseudo-miracle.

I heard her crying one day. Heard it right through even the thick walls of the dressing room at the TV studio. You could say it was none of my business but I busted in anyway and said, "Can I help, Aydah?"

You wouldn't think a girl seven feet tall and so thin that her veins stood out like cords could look wistful and appealing, but she did. Her bright red eyes were glistening with tears which she certainly could ill afford to waste, considering how dehydrated Martians are.

She said, "What can you do? What can anyone do?" Luckily she was sitting down, sort of scrunched over because I put her head on my shoulder and patted the long, thin white hair, which I certainly would not have been able to do without a ladder if she'd been standing, and said, "Tell me about it."

"Mr. Barrow," she gulped, "I guess I sort of love him or I wouldn't stay on — but how can I love and hate someone at the same time?"

I patted her head and was silently sorry for her.

She asked, "Don't you know? I've read all the Earth books I could find, all that have anything to do with love and I can't find any answer." She sobbed, "They don't explain it at all. Can't you tell me?"

That was a poser all right. I'm past the age where sex or love or any of that sort of nonsense means very much to me, but I have a good memory. . . .

"Whatever possessed you to fall for an Earthman, Aydah?" It was a stupid question but I was just making conversation.

She lowered her head and rested it on my chest. I kept patting it sort of ineffectually while she talked. "I don't really know. He came along when I was the right age and mother had always kept me away from Martian boys. She kept saying I wasn't old enough . . . she didn't see any danger in an Earthman, I guess. But Duneen isn't fat like you, Mr. Barrow, or like most Earth people. He's almost as thin and handsome as a Martian. And he can talk so beautifully . . . when he wants to." She was off in racking sobs again.

That was when Duneen stalked in. He was in high, low and medium dudgeon. He said, "Why you — Martian gutter snipe! I take you in and this is the way you behave the first time my back is turned. Carrying on with an old man! Why you . . ."

He looked all set to beat her up so I intervened. I said, "Look, Duneen, you know that I've come up with some good ideas for your show."

He nodded. At least I had his attention. I went on quickly, "I think I have a brand new idea for an escape."

Jealousy faded before his interest in a new trick. He asked, "What's the gag?"

"You've escaped from every kind of gadget that anyone could think up. You've challenged people to think of restraints that will hold you for more than five minutes, right?"

"Of course," Duneen said impatiently. "I've escaped from things that would have killed that old timer, Houdini!" He grunted. "That old faker! I get mad every time I read about him!"

He did too. He seemed to be furious because he had come too late in

time to match wits with the great magicians of the earlier days. He felt, and I guess he was right, that he could have topped any of them.

"What is it?" he asked impatiently, turning back to face Aydah.

I said quickly, "How about escaping from a Klein bottle?"

"What? What's that?"

I sighed. Sometimes his stupidity about anything outside of his own field appalled me. I made it as simple as I could. "Look," I said, picking up a narrow strip of paper, "you know what a Moebius strip is?"

He looked unsure so I glued one end of the strip to the other end making the half twist in the paper that has to be made in order for the topological principle to work. Using a pencil I showed him how a line could be drawn on both sides of the paper despite the fact that I didn't lift the pencil from the paper. I said, "See? It's a one-sided figure!"

He grunted. "Oh that!" He picked up a pair of scissors and cut around the loop of paper. It formed into two interlocked circles, of course. He said, "This is the Afghan bands. Why didn't you say so?"

"Maybe that's what magicians used to call it," I said, "but it's a Moebius strip and it will help . . ."

He was scowling now, all thought of Aydah gone from his mind. He asked, "What's all this got to do with me? I can't escape from a strip of paper. That's ridiculous!"

"No, of course not. But if you think of this strip of paper as a two dimensional object that has strange properties because of the twist in it, which is in the third dimension, it will help you to think about the Klein bottle."

He raised his eyebrows.

"Look," I said, "a Klein bottle is a fourth dimensional equivalent of the Moebius strip. Picture a bottle made out of a hard rubbery substance. Now bend the neck of the bottle down and around, and push the mouth of the bottle through the side of the bottle without breaking the surface of the bottle."

He really wasn't too stupid. He said, "That's the point at which it goes through the fourth dimension, eh?"

"Yes, now suppose I made up a bottle like that big enough for you to get into. . . ."

"So what's so good about escaping from a bottle? That has no drama, no excitement!"

"You don't get it! According to topological laws which were proved the first time they made a real Klein bottle 50 years ago, a fly walking on the surface of the bottle is on the inside-outside of the bottle and can never get in or out of the bottle. Any school boy knows that!"

He whistled through his teeth. "I think you have something there. Not that the basic idea is much good, but I'll build on it. I'll make this the most sensational escape that has ever been done. Houdini! Phooey!" A sudden thought stopped him. "What's the gaff?"

I said, "Huh?" But I knew what he meant. He always irritated me, using show business terms that had been obsolete for many years, although I've noticed lately that he has me doing it too.

"What's the gaff," he repeated, "how do I escape the fate of the fly?"

"You're not thinking, Duneen. If you ever climbed into a real Klein bottle that would be the end of you. You'd be alive-dead. Halfway between here and the fourth dimensional world — you'd be stranded!"

"So?" he asked.

"So we have to rig up a substitute bottle. A fake."

"Okay, it's a deal. You get to work on it." He turned his attention back to Aydah. He said, "Now you, listen to me!" She cowered away from him.

She had to listen to him. I didn't. I left but I was mad. Bullying Aydah was about on a par with kicking a sick puppy. If I could, I would have taken a punch at him, not that it would have done any good.

He could sneer all he wanted to at Houdini and the other old timers, but he had learned their lesson well. His publicity on the Klein bottle escape was a masterpiece. By the time I had constructed the two bottles, the real and the fake one, he had everyone talking about Klein bottles and how foolhardy he was, how he was defying the most dreadful fate a man had ever faced. He planted pieces in the news about topology. He had planes drop hundreds of thousands of Moebius strips and each strip had DUNEEN DEFIES DEATH! lettered on it along with instructions about the strip. He bombarded the press services with handouts. He challenged Miklav and Ronner, the two top topologists of the day, to figure out how he would escape. He bet them 10,000 credits that he would escape in five minutes, with a proviso that he would pay a thousand credits a minute to their favorite charity for every minute over five that he was stuck in the bottle.

The harder he worked the worse he treated Aydah. I had to keep out of the way or I would have hung a punch on his long, aquiline nose.

It seemed as if every time I turned around I'd find her hiding in some corner, crying. The loss of water through her tears began to tell on her. I finally had to call in a doctor and have some saline solution injected intravenously or she would have just faded away. It was when she was stretched out getting the intravenous that I first noticed that her ordinarily concave stomach was getting a little convex.

I guess that was when I began to get really mad at Duneen. Mad enough to do something about the whole bloody mess . . .

But she never really complained, not out loud anyway. That one outburst to me was all. She would just mope around and look at Duneen hopefully, and then her eyes would fill up with tears and off she'd go for another quiet cry.

I tell you it got me down. But there was nothing I could do, not even when I found out what was back of it all. I spotted Duneen one night with another girl, an Earth girl, but I couldn't see where it would do any good to tell Aydah that. So I just kept busy on my props, getting everything ready and keeping my fingers crossed.

If you were anywhere within eyesight of a TV set that night you saw what happened, at least from out front. But I know what happened backstage and that's what I wanted to tell you about.

Everything went off like clockwork and you can believe me when I say that he was magnificent. With all his faults, with all his pettiness, despite his charlatanry, or maybe because of it, he was great. The last of the magicians and the greatest!

Naturally, he didn't open with the escape. That was to be his climax. He prefaced it with little run-of-the-mill items like an endless production of Martian geezers, those cute little six-legged creatures with the red eyes and white hair. They always reminded me of Aydah and that night I was more aware of the resemblance as he kept reaching into his tall hat and producing the little things as though the supply was endless. Then it was pure poetry when he plucked obsolete coins of every denomination out of the air and sent them clattering into a metal bowl. You know: parlor tricks, simple little things, but he did them with such an air!

Backstage the technicians kept a wary eye on the real Klein bottle which I had ready. I could see that they wanted no part of it or of the fate of the man who was supposed to escape from it.

When Duneen was sure that he had milked every bit of suspense out of his act he stopped and held up his hands in that corny, theatrical gesture of his and said, "Ladies and gentlemen, next — I present the challenge escape of all time! I shall enter a Klein bottle. . . ."

He gestured at it as it was wheeled on stage. There was no sound as the stage hands placed a three-fold screen around the bottle. Duneen went on, "I will escape from that bottle in five minutes or . . ." He was a good enough showman not to finish the sentence.

He had Miklav and Donner come on stage and examine the bottle. They seemed oddly out of place, these men of science, these topologists, as they examined the bottle.

Duneen said, "Gentlemen, do you agree that the bottle is a true Klein bottle?" They nodded.

Duneen went off stage. He was sure enough of himself to leave the stage empty while he changed into trunks. His excuse was to show that he had no gadgets on his person to aid him. He always performed his escapes that way. But I never thought that this was the real reason he stripped. I think he liked to hear the shocked gasp when people saw his skeletally thin frame. Of all earthmen I've ever seen, he came closest to looking like a Martian. Seeing him that way I could understand a little better why Aydah had fallen in love with him.

I was off stage, left. I had nothing to do but keep an eye on things. Nothing much could go wrong because I had decided that the best way to switch the real and the fake Klein bottles would, after all, be the simplest way. I had made two trap doors in the stage. I don't suppose anyone has used traps for tricks for centuries. That's why I was sure the hoary old gag would fool the audience. Duneen agreed with me and he was never wrong about what would fool people.

The arrangement was merely this. The real Klein bottle was on stage and would stay there until the experts had examined it and pronounced it to be indubitably what it was, a fourth dimensional bottle. Once they had pronounced it legitimate, Duneen would conceal it behind a three fold screen; pressure on a button would activate the trap doors. The real bottle would sink out of sight. A fake Klein bottle, which looked real enough but did not have the properties of the topological figure, would rise up to replace the genuine one.

As you can see, the mechanics of the trick were a cinch. But, according to Duneen, that was the real secret of good magic. Complexity, he maintained, is no good. People can dope it out. You must use a simple device, so simple that your audience discards it as a possibility just because of its simplicity.

Duneen stood next to me in the wings, breathing deeply, bracing himself for his appearance on stage. The button that made the trap doors work was near us, on the wall. He pressed the button. Aydah ran over to join us as, outside, on stage, the announcer was saying, "And now—we have the honor and privilege of presenting . . ." There was a long drum roll and then, "Duneen!"

That was the cue. He stalked out on stage. Aydah was next to me. We both watched him. Duneen was bowing to the audience. He blew a kiss to a girl who was sitting down front. She was the earth girl I had seen him with. I was near enough to Aydah to feel her thin body stiffen. Then she did know about Duneen and . . .

On stage center Duneen motioned for the stage hands to remove the screen that had masked the man-sized bottle. He gestured at it. His grin was at its most sardonic as he lifted one of his spidery legs and placed it around

the shoulder of the bottle. The stage hands stood ready with the screen and as he nodded to them they stepped forward with it. He lifted his other leg preparatory to mounting the bottle like a horse.

Aydah shivered and then sobbed, "I can't . . . I can't let him do it!" The screen was almost around the magician now. She reached over my shoulder and tried to press the button that would switch the bottle.

"What are you doing?" I asked.

"I . . ." Her eyes were frantic. "I can't do it! I switched the bottles before! That's the *real* Klein bottle he's . . ."

It was too late to press the button. She said hastily, "I'll go tell him to stall! Then when the screen hides him completely, you press the button and switch back the fake bottle! How could I have been so cruel!" She ran out on stage.

Darting to his side she whispered to him. Even then, with the eyes of the world on him, he almost cuffed her. I saw his hand start up, saw her back away, before he caught himself and remembered where he was. He managed to turn his grimace of hatred into a smile as he turned to face the audience.

"Ladies and gentlemen, my 'invaluable' assistant tells me that there are some reporters back stage who would like to be out here as a committee. I extend my welcome to them!"

It was a good stall. I don't think anyone knew what had really happened. The stage hands surrounded the bottle with the screen while Duneen bowed to the reporters.

Aydah ran to my side. "Press the button."

She watched me while I did so and then turned and made a motion for Duneen to proceed. The side of his face to the audience was smiling, but there was black and bitter loathing in his eyes when he turned away.

He faced the bottle again. The screen was brought forward. Mounting the bottle, his arms and legs straddled the shoulder of it. Then, as he allowed himself to slide down towards the spot where the mouth of the bottle went through the side of it, a curious thing happened.

He seemed to become rubbery. One moment he was all on the outside of the bottle, the next, a cross section of him seemed to be inside it. That was all anyone saw as the screen cut off the view.

Aydah sobbed at my side. "Let him go to her. I have no hold on him. We're not married . . . we could never marry, not with the law about miscegenation between Mars and Earth people. Let her have him."

"None," I agreed, "except for the fact that he has condemned you to death!"

Involuntarily she looked down at her little belly. Then she looked at me. "You knew?"

"Sure, I could see you were pregnant a month ago. And there's no escape from the death penalty for miscegenation." I patted her shoulder. "He should have had you aborted while there was still time."

"It's too late now," she said and turned her back. I knew that as well as she did.

On stage the reporters were eyeing their watches. The music, keyed for suspense, was getting nerve wracking as the minutes dragged by. The audience became restive. The two professors of topology looked frightened. One of them, I think it was Miklav, broke away from a friend who tried to restrain him. Miklav shouted, "What do I care about any bet! That man is in trouble!"

He shoved aside the screen and, of course, he was right. Duneen was in real bad trouble. He was half in and half out of the Klein bottle. He was on the inside-outside, never-come-right-side of the bottle. There he was, and there he is now. In the museum with all the other last things. And there he'll stay. They can't break the bottle because that would divide him. And since they can't break the bottle there he will remain, not alive and not dead — suspended midway between here and there. Wherever *there* is in the fourth dimension.

It isn't very pretty. But then neither was what he did to Aydah. I might have felt just a little pity for him, but I saw her die. She killed herself just before the authorities got around to it.

I knew she would have to die . . . That was why I had pressed the button that switched the bottles the first time, before she ever did . . . That cancelled out the later switch when she thought she was saving him . . . It made an odd sequence.

Get it? The real bottle was up there on the stage when the topologists looked at it. I switched it for the fake one so, when Duneen made *his* switch, it was the real one that came up! Aydah almost screwed up the works when she pulled her switch and brought the fake bottle back up on stage. It turned out okay, though. She thought the real bottle was up there and when she begged me to make the change — the real Klein bottle was ready and waiting for Duneen!

Sometimes when I go the museum of last things to look at him, I think of the old stories about evil genies and the way they were stuffed into bottles. I guess I must be getting old; lately I've taken to wondering about King Solomon. He knew so much, I wonder if he knew about Klein bottles . . .

