

KNOWABLE

#3

March 1963

"The world and its laws are fully knowable; our knowledge of the laws of nature, tested by experiment and practice, is authentic knowledge having the validity of objective truth; there are no things in the world which are unknowable, but only things which are as yet ~~not~~ known, but which will be disclosed and made known by the efforts of science and practice."

- Joseph Stalin

AND IN THE NEXT INSTALLMENT...

Two serialized features appear in this issue: Part III of "Science Made Too Easy", and the second installment of The Story. Both will continue in future KNOWABLES. The next two installments of "Science Made Too Easy" will misinform the reader about chemistry and astronomy respectively. Too late for inclusion in this issue's account of oversimplified mathematics was the following graffiti which I found on an advertising poster on the northbound train's side of the 168th Street IRT station:

$$a^n + b^n = c^n$$

No solutions exist for a , b , c , and n integers and $n > 2$.

I have just found an interesting and ingenious proof of this theorem which I append: -

Oops - here comes my train.

P. Fermat

Chapters 3, 4, and 5 of The Story are all of my authorship, and carry further the adventures of Sir Tinly the Purest and his squire Dumbert. Several other personages around the royal court are introduced: Jehane ap Crockett, a Welsh scullery maid; Iysenconius, the court wizard; his graduate student Hogglothwaite; and the dandified Lord Tasselyard. The next three chapters will appear in KNOWABLE #4, and will introduce Lilith the witch, Sir Cumerence, the formidable Sir Tindeth, the accomplished seducer Sir Inge, and some outdated political satire about a certain villanous Irish knight who rides with a devil whispering advice into his ear, and throws bog mud at his adversaries.

I have no further information about forthcoming conventions, so the information in the last issue will have to stand for the time being.

QUALITATIVE

March 1963

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"The world and its laws are fully known; our knowledge of the laws of nature is a constant and practice is authentic knowledge having the same truth; there are no things in the world which are unmanageable, but only things which are as yet known, but which will be discussed and made known by the efforts of science and practice."

ANALYSIS

WHAT DOES THE "F" STAND FOR?

A SENSE OF FAPA: Selections from the Mailings of the Fantasy Amateur Press Association. Edited by Richard H. Eney, 417 Fort Hunt Road, Alexandria, Virginia.

In July 1937, Donald A. Wollheim conceived the idea of an amateur press association among fans, which organization was modeled after several mundane apas already in existence. (Page 1 of this anthology of FAPA material is a copy of Wollheim's flyer suggesting the idea.) Every 3 months for the past 25 years, with some delays owing to editorial inactivity, a bundle of fanzines has gone out to the now 65 members of FAPA, and it is from those hundred bundles that Eney with the aid of several other members has culled the selections in this volume. After some initial years of bitter political controversy, FAPA's left wing withdrew in 1945 leaving the field to Jack P. Speer, who has essentially dominated the association ever since. In 1947, and again in 1958, Speer gave FAPA the constitution under which it operates.

The nature of Speer's domination of FAPA appears on p. 2 in his introduction. In describing events of 1944, he writes: "The most interesting political development... was an amendment to expel from FAPA anyone expounding the doctrine that there were inferior races; it missed adoption by a hair. Your freedom of speech was also dearly won." Rejoice, O FAPA! You are free to distribute the most offensive and disgusting sort of racist propaganda, and no man may say you nay!

Needless to say, Speer himself exercises considerable freedom of speech in his attacks upon his opponents in FAPA. On p. 12 he writes of Donald A. Wollheim: "In nationality, he is a German Jew. He has lived all his life in New York, and tho he has travelled around quite a bit, in point of fact knows little of anything but New York City and New York City thoughts." Now I had supposed that anyone born in the United States has only American nationality. It must be wonderful to be a lawyer and know just what nationality everyone has.

Let no one accuse Speer of being a reactionary, however. In 1939, he was a dozen years ahead of his time with promiscuous red-baiting. Wollheim and Fred Pohl are called Communists on p. 13, and Robert Lowndes is added to their number on p. 15.

On p. 278 we see Speer open up on a few other targets. He says: "Moreover, rejecting as we do communism with a small c,

we deny the need for labor unions to exist". But on the next page he returns to his ideological first love, with the shocking words: "It has been our observation that virtually all Caucasians have minds capable of quite deep thinking at times." Presumably No Others Need Apply.

Younger fans are treated to a correction of history on p. 310 by Speer. If you have been laboring under the delusion that the aggressive acts of the Axis powers against Europe's democracies finally led to their attack on the United States, forget it. The real villain of the piece was Franklin Delano Roosevelt. Speer told us so, 'way back in 1940. "Last night the President spoke from Charlottesville and, as was expected, went a step beyond previous pronouncements and a step nearer the declaration of war."

Also included in the FAPA anthology is an account of the Great Elitzkrieg of 1947, which could have been the subject of a libel action had a sometime Official Editor decided to make a fight of it, and a long and bitter attack on Los Angeles fandom by F. T. Laney. Laney blasts the alleged immoral sexual activity of L. A. fans, and then turns around and confesses that, though he himself was married at the time, he was going out with a married woman.

Beginning on p. 306 is the text of the famous speech written by John B. Michel and delivered by Wolfheim at a Convention in Philadelphia in 1937. This is the speech that convinced Sam Moskowitz, according to his Immortal Storm, that the Reds had to be cleaned out of fandom. A re-reading of the speech, "Tutation of Death", at this late date leaves one wondering what all the fuss was about. A world-wide catastrophe was coming. Within five years, American armies would be fighting the same foes as "the heroic defenders of Madrid and Shanghai, defenders of democracy", extolled by Michel. There is nothing exceptional in Michel's resolution "opposing all forces leading to barbarism, the advancement of pseudo-sciences and militaristic ideologies" and supporting "all forces working for a more unified world, a more Utopian existence, the application of science to human happiness, and a saner outlook on life".

A Sense of FAPA includes one of the best descriptions for the non-scientist of scientific method that I've ever read. It's physicist Milton Rothman's contribution, on pp. 283 and 297, to a debate with Roger Phillips Graham. (The protagonists may be more easily recognizable by their pro pen names of Lee Gregor and Rog Phillips.) Graham, anent the shaver theory, takes up the cudgels in defense of the proposition that orthodox scientists are stuffy old fogies who wouldn't recognize a new idea if the ether blew it into their faces. In reply, Rothman spells out the conditions that a new theory must meet before it is accepted.

The anthology also contains a selection of art work, from the high quality of Bill Rotsler's and Bjo Trimble's drawings to (wouldn't you know it?) Speer's scrawled "stick-figures".

Present FAPA politics are described by George Soithers in Fantasy Rotator 122: "Having watched the FAPA from a vantage point next to the current officials for a few months, I'll be damned if I can figure out how FAPA keeps any sort of reputation for square dealings... FAPA has a reputation of democracy and an elaborate system of officials and constitutions. The

result? Backstabbing runs wild. Rules are waived for the "in" guys, and are twisted to drive the unpopular into outer darkness, while the officials piously quote the FAPA constitution. Jack Speer has builded well.

"VIRTUALLY ALL CAUCASIANS HAVE MINDS..."

DOUBLE BILL Vol. 1, #2, December 1962 (Bill Mallardi and Bill Bowers, 214 Mackinaw Ave., Akron 13, Ohio; 20¢)
KIPPLE #31, February 6, 1963 (Ted Pauls, 1148 Meridene Dr., Baltimore 12, Maryland; 20¢)

One of fandom's more interesting sports is guessing where Buck Coulson's next batch of fanzine reviews will appear. The last recipient of this dubious blessing was Double Bill, wherefore I received a copy. Under the same cover is an article by Mallardi which savagely attacks Negroes as not ready for integration because of the acts of two specified Negro criminals. I would have discoursed on this attitude at some length here, except that Ted Pauls has already done so very well in the latest Kipple cited above. Rather than duplicate Ted, I satisfied myself by handing Mallardi's article to Elliot Shorter and telling him, "Did you know that you're responsible for a 19-year-old baby-sitter's murdering one of her charges?"

(Elliot belongs to a race whose ability of deep thinking is under severe doubt by Jack Speer.) Coulson's reviews, incidentally, will be themselves reviewed in the next issue of Steve Stiles' SKREW-WISE IN TIME.

THE HEADS OF CERBERUS by Francis Stevens (pseud. of Gertrude Bennett), Polaris Press, Reading, Pa., 1952.

If most fans are asked the name of the first story using the concept of parallel time-tracks, they will cite Murray Leinster's "Sidewise in Time". I was surprised to discover, in the Queens Public Library, an un-numbered copy of what purports to be one of 1500 numbered copies of The Heads of Cerberus, a 1952 reprint of Stevens' 1918 novel. Not only are the characters of Stevens' novel transported from their own Philadelphia to the same city in another time-track, but moved 200 years into that Philadelphia's future. There they find the city's ward-bosses and grafters evolved into the Servants of the Great God Penn, ruling over a city of anonymous "Numbers". Philadelphia fans will be particularly amused by the description of the city and its City Hall under the rule of the Servants.

PSIONCE FACT

The trumpets have sounded, and forth comes the new Analog. This time, instead of the title, the format has been changed. Editor Campbell has compounded his magazine as a combination of Scientific American, Fate, and National Review. The scientific aspect is provided by a Campbell article on the possibilities of mining the planets for ore. The lead story, a serial by Mack Reynolds, illustrates the editorial

policy with which Campbell has been running a once-great magazine into the ground. First he writes an editorial exalting a caste-structured society ruled by an elite. Then the writers who hope to break into his magazine write stories in which Campbell's political and pseudo-scientific prejudices are part of the story line. Naturally, these stories appear in due course in Analog. It has come to the point that the perceptive reader can predict from a Campbell editorial what will be the theme of the lead stories five or six months hence.

Such stories are of course loaded with goodies which appeal to J. W. Ghod's Weltanschauung. Reynolds writes: "Unions...became some of the largest business organizations in the country. And eventually they came to be run, like any other business, for the benefit of those who owned or controlled them. The professional labor leader evolved, motivated by his own interests and finally becoming, in his despotic control of the union, backed by goon squads and gangsters, as powerful a man as was to be found in the country. Seldom were strikes any longer held to better the condition of the individual union members. Instead, the issues were contracts which allowed for fabulous sums to go into the union coffers where they were at the disposal of the union officials." It is doubtful whether Reynolds actually believes this nonsense, but he has to make a living by selling fiction to someone who does.

Gerald W. Page's "The Happy Man" and Richard Olin's "All Day Wednesday" offer some hope for improvement. Both of these stories could have appeared in the old Unknown, and are causes for speculation that perhaps that ghost of that magazine is creeping in through the back door of Analog.

But Christopher Anvil's "Not in the Literature" returns us to Campbell's great Cause: the revival in scientific guise of all the primitive beliefs in magic, telepathy, and the spirit world which were swept away by the scientific revolution. Campbell claims that this mess is a science which "orthodox" scientists stubbornly refuse to recognize. Anvil accordingly writes a story of a world in which the science of physics never developed. Its hero is a home handiworker who discovers electricity and presents his discovery to a Campbellian orthodox scientist who stuffily dismisses it because the Humble Hero doesn't have an orthodox scientific education. We are supposed to believe that the current crop of pseudoscientific mystics are also Humble Heroes.

This issue of Analog (March 1963, 50¢) is embellished by a Nat White cover which apparently shows a bicycle headlight and a silver-plated quince heading for Jupiter. The magazine also contains what appear to be astrological weather forecasts. At this rate, the April Analog (telepathed directly to all subscribers) will contain a diagram of an alkahest still and advertisements for slaves.

PLAYBOY IN SPACE

From a science-fiction magazine trying to be slick we turn to a slick magazine trying to be scientific - and succeeding at it. Playboy (usually 60¢, or \$6 a year from 232 East Ohio St., Chicago 11, Ill.) is most commonly regarded as a journal devoted to luxurious penthouse living among women encumbered by neither

brains, weighing, individuality, and reluctance. But the high quality of the fiction, non-fiction, and panel discussions more than make up for this monotonous view of the human female.

In particular, there is Arthur C. Clarke's article, "Beyond Gravity", on p. 71 of the February issue. There has been a lot of slippery thinking circulated about the nature of gravity, and as a gravitational field theorist I find it a relief to see as concise and accurate an explanation as Clarke's in a general circulation magazine. He is up to date on current speculation and research in the general theory of relativity (gravitational field theory). He refers, though not by name, to Prof. Joseph Weber's current attempts at the University of Maryland to generate and/or detect gravitational radiation. He also disposes, though not by name, of the Dean machine. ("Though everyone agrees that you can't lift yourself by a steady pull on your bootstraps, perhaps a series of properly timed jerks might have a different result. Put this way, the idea seems completely absurd...") - and, with a probability of 99.999% is, as Clarke goes on to say.) Nor is Cavorite treated any more gently. He also carefully establishes the distinction between anti-matter (which does exist) and negative matter (which may or may not occur). Such speculation as Clarke engages upon concerning anti-gravity is rigorously controlled by the scientific probabilities of such devices as presently understood. It is my intention to recommend this article to my physics classes, to supplement the textual and lecture material on gravitation.

Playboy missed a good bet by not commissioning for the same issue a translation of Pierre Boulle's short story "L'Amour et le Pesanteur". This tale is in the form of an interview by a French reporter of an American engineer who assembled the first space station in orbit. All the parts were sent up to him except the motor which would give the station a spin, and hence an artificial gravity; this assembly got lost in transit. At last the station is completed; to celebrate the occasion, the engineer's fiancée comes up to meet him and they are married in orbit. Then the wedding guests depart, leaving the couple to spend their honeymoon in the space station. The remainder of the story deals with the difficulties of conducting a honeymoon under conditions of zero gravity. Newton's Third Law takes over...

OPEN BEUL, INSERT RECEL

The most tragic civil wars are those in which one has friendships or sympathies on both sides. It regretfully appears as if the first overt shot in such a conflict has been fired in the March issue of Fantasy and Science-Fiction. Prof. Isaac Asimov's regular science column deals this month with chemical nomenclature, and this explanation of the long names of some organic compounds is entitled "You, Too, Can Speak Gaelic". Editor Avram Davidson introduces it as "yet another one of Dr. Asimov's insufferably tedious articles".

Well, what can you say? Isaac Asimov's last Foundation story began in the issue of Astounding that hooked me on science-fiction, and I promptly began to haunt old magazine shops for the issues containing the earlier adventures of the Terminans. I have found in Asimov's many articles and popularizing books thorough explanations of fields of biology and chemistry in

SCIENCE MADE TOO EASY - III

II. Mathematics

Mathematics is called "the queen of the sciences" by mathematicians, who believe it to be an art. It is divided into Pure and Applied Mathematics, which have nothing in common.

Mathematicians differ from other scientists in requiring very little equipment. All they generally need are pencil, paper, and a ten-million-dollar electronic computer.

Advanced mathematics is further subdivided into Algebra, Geometry, and Analysis. Addition and Subtraction are not popular these days.

Algebra

The purpose of algebra is to find out what X equals. After centuries of effort, mathematicians are no closer to the answer to this question.

The principal characteristic of algebra is the vast number of symbols it requires. The Latin and Greek alphabets have nearly been exhausted. Some progressive algebraists have recently begun inroads upon Hebrew.

Some algebras are non-commutative. This means that A plus B is not the same as B plus A. This makes sense if you consider that taking a deep breath and jumping into the water is not the same as jumping into the water and taking a deep breath.

Geometry

Elementary students think that geometry is concerned with points, lines, angles, and other plane and solid figures that you can draw pictures of. Later on they learn better.

Geometry teaches that the shortest distance between two points is a straight line. Mathematicians are not agreed on what a straight line is. Projective geometry further teaches that a line and a point are really the same.

Topology

Elementary topology is concerned mainly with the Möbius strip, which cannot be pronounced correctly. This is a piece of paper with one side and one edge. If you cut it down the middle, it remains one piece of paper, but it now has two sides and two edges. You can cut it down the middle again if you like, but it won't do much good.

Two Möbius strips can be joined together to form a Klein bottle. The inside of a Klein bottle is the same as the outside, so you must be very careful in drinking from it.

Later on, topology students leave the Möbius strip and get bogged down in Greek letters. This isn't nearly as much fun.

Calculus

Students who haven't taken differential equations think calculus is terrible. Calculus is divided into two parts, Integral and Differential. Integral calculus is concerned with

integration, and is not popular in the South. Differential calculus is concerned with differentiation, and is not popular anywhere.

Differential Equations

Differential equations are more useful to physicists than to mathematicians, except for the mathematician who is teaching the course. If seven or eight determined physics students work together, they sometimes succeed in getting a differential equations instructor to give examples of what he is talking about.

The best way to solve differential equations is by guessing. The hard ones can be turned over to the nearest UNIVAC.

Vectors

A vector is a quantity which is going somewhere.

Tensors

A tensor can be constructed from two or more vectors which are going nowhere.

Complex Variables

All variables are complex, but some are more complex than others.

Real Variables

This course sounds like it might be a little easier than complex variables. It isn't.

THINGS THAT GO BUMP IN THE MAILBOX

GARY DEINDORFER, 121 Boudinot Street, Trenton 8, New Jersey: Your Chicon impressions were nice. Re the Apa X doll, I'm not sure whether we're denying we exist right now or not. I haven't got the latest directive. I guess I'd best be safe and say that we don't.

DICK ENEY, 417 Fort Hunt Road, Alexandria, Virginia: In seven years the Arab-Israeli war may be over and those \$50 transoceanic trips may have come in, so some fannish kibbutzim can propose: "Sodom is fine in '69!"...Who thought up the Simplified Science pages, Ralph Edwards? ((Who's Ralph Edwards? "Science Made Too Easy" is All My Own Work.))

GEORGE COWGILL, 15 Evergreen Avenue, Auburndale 66, Mass.: Last week ((14-17 November 1962)) was the Annual Meeting of the American Anthropological Association, held at the Pidr-Congress hotel in Chicago...We suffered from somewhat rundown rooms, facilities for the meetings that were ridiculously small relative to the (predictable) number of people trying to hear papers, and considerable disorganization.

THE STORY

CHAPTER III

by John Boardman

Their tankards emptied, Sir Tinly the Purest and his squire Dumbert arose and walked towards the door of the dim, foul-smelling inn. The haggard, dissipated dragon attempted to follow them, but the landlord grabbed him by the scruff of the neck, hauled him to the rear entrance, and with a resounding kick on the backside sent the beast flying. The dragon limped around to the front and rejoined Dumbert as he mounted his alert little donkey Harlequin. As he passed under an upper window, the slackjawed idiot youth emptied a pail of slops on him.

"Therefore, young sir, I implore you..." the dragon began. Dumbert did not hear him; his mind was elsewhere. The eerie atmosphere of the inside of the wayside tavern, crawling with peasants, toads, fleas, rats, lice, and dragons (at least one, Dumbert reflected) as well as abstruse, if not obtuse, ideas, still preyed upon him. He scratched idly, discovering that the dragon was not the only beast which had accompanied him from the tavern.

Dumbert rode off behind Sir Tinly, and the dragon followed. He continued to speak, but Dumbert quickly found that a nod of the head or a vaguely mumbled reassurance every time the almost whining flow of pleas paused was sufficient to hold up his end of the conversation.

In such wise they proceeded until it lacked but an hour of sunset, and the towers and turrets of the royal castle gleamed in the late afternoon sun not two miles off. Here two roads joined, and they fell in with Sir Cumstance and his squire Pompey, returning from a diplomatic embassy to the two border lords, Earl Itubed and Earl Ituryse.

Sir Cumstance was five years Sir Tinly's senior, and had served with distinction two years ago in the wars in Egypt against King Farea. His page Pompey came from a village close by Dumbert's home, and the two had known each other from the numerous football games and snowball fights of childhood. Both had become squires the previous year.

The two knights formally saluted each other and proceeded onward together in complete silence. Five lengths behind them their squires matched the strides of their mounts.

"Hi, Pomp?" called out Dumbert. "How's the world treatin' you?"

"Fine, Dumbert," Pompey replied. "Where've you been?"

"Oh, Sir Tinly's cut up a giant named Borborygnis. Somebody'd been complaining about his keeping maidens locked up in his castle. Usual stuff."

"Maidens?" leered Pompey.

"By knightly courtesy, yes," said Dumbert.

"What'd he do after he killed the giant?" Pompey asked.

"Tipped his helm to them, sent serfs to notify their families, and rode off."

"He would!" said Pompey bitterly. "Just like Sir Cumstance."

"Now, on the other hand, Sir Cumference..." Dumbert began.

"Boy, you said it!" Pompey exclaimed. "Did you hear about

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the last time he and the Duchess...

"Oh, say," Dumbert interrupted him, "we stopped at the Duchess's last night."

"What's new with the old girl?" Pompey asked. "We haven't been by there since last St. Bernard's Eve, when the peasants thereabout place tiny kegs of brandy about the necks of their dogs to ward off the cold."

"She's got a new second scullery maid," replied Dumbert, going on to describe the merits of that serving-wench, and his prowess with her.

"Say, where'd you pick up the lizard?" Pompey interrupted, noticing the dragon for the first time.

"Oh, he tried to tell me his troubles when we stopped at the Cone and Shine for a drink this noon," Sir Tintly's page replied. He then leaned over and whispered to Pompey, "I suppose I'll have to do something for the poor old bum if he doesn't give up soon and go away."

"How far did you get with that second scullery maid when Sir Tintly came in?" asked Pompey, his tongue lolling out between his teeth.

"As far as the little Dutch boy did," Dumbert replied.

"Then Sir Tintly lifted me up by the ear and carried me out." The squire rubbed the insulted organ, where a memory of the pain still lingered.

"Yeah," said Pompey. "Sir Cumstance is the same way. I wonder what they were like when they were squires."

"Stiff-necked as ever, I'd bet," said Dumbert. "Say - I wonder what Sir Cumference was like when he was a squire." Pompey quickered, to be cut short by a backwards glare from Sir Cumference.

"You know," said Pompey, "I wouldn't be surprised if he was that scullery maid's father!"

"Maybe he's her grandfather, too!" exclaimed Dumbert. Pompey started to laugh, but Dumbert pointed to their two masters. The squires muffled their mirth in folds of their cloaks.

"Hm," said Dumbert after a pause. "Suppose he were her father and her grandfather. That'd make a good riddle."

"How so?"

"Half of a man's ancestors are men, and half are women, are they not?"

"Yes."

"So you could say that the ancestry of any person is one-half male and one-half female."

"Sure."

"Then rode me this riddle - How can the ancestry of a person be three-fourths male, and moreover, that three-fourths is all one man?"

"Eh, that's pretty good; better than some of the things old Lysenconius has been getting off at dinner lately. If you were a knight, you could tell it after dinner tonight."

"I think I'll tell it to Lysenconius. Then, as court wizard, he can tell it to the company after dinner."

"Good enough."

They rode onward in silence until they came to the royal castle. There the guard at the drawbridge challenged them.

"Who goes there?"

Sir Cunstance, as senior, replied, "Sir Cunstance, Sir Tinly, and squires returning from knightly deeds."

The guard signaled for the drawbridge to be lowered. As the squires followed their masters into the courtyard, the guard detained them.

"One moment, lads," said the soldier. "Is that dragon with you?"

"Oh, let him come along," said Dumbert.

"Thank you, thank you, sir," said the dragon. "My gratitude to you, for condescending to hear my plea, shall be..."

As the guard walked off the drawbridge, he trod on the dragon's tail. In despair, the dragon waved his antenna friendly at the crocodiles in the moat, who turned up their muzzles and sneered at him. Slowly he turned and began to creep into the courtyard, but the ascending drawbridge exceeded the angle whose tangent was equal to the coefficient of friction between his claws and the wooden boards, and he slid protesting to an indecorous landing on his nose.

CHAPTER IV

by John Boardman

By the time they had removed their masters' armor, and stabled and fed the horses, Dumbert and Pompey were too late for dinner at the great royal table. Therefore, after having attended the meals of Sir Tinly and Sir Cunstance in their rooms, the two squires went down to the kitchen to see what could be scraped up in the way of leftovers.

The royal kitchens were a flurry of activity. Scullery lads and maids were washing pots and dishes under the supervision of Wouter van Dumpling, the fat, irascible, thundering Dutch cook. At the back door old Piers Flownose, the shine-herd, was emptying the garbage into the pigsty, which conveniently stood just behind the kitchens. Three Negro slaves, Shadrach, Meshach, and Awaywego, a gift from the Caliph of Cordova, vigorously mopped the stone floor as quickly as a nine-year-old scullery lad, reputed to be an illegitimate son of Sir Cunference, sluiced water over it. Above all rose the Teutonic roar of Heer van Dumpling.

"Angus, you dam Scotchky, you preak anudder dish andt I preak your t'ick skull! You, pig-ears, vatever your name iss, don't t'row oudt dat ham! If idt's too shpoiled for de knights, ve'll gif idt to de shqviere. God-fer-dam it, Chehane, you godt to gedt dem dam keddles cleaner, or I scrob dem wid your red hair!"

"Up your nose, Dutchky!" shouted the fiery Jehane, arms immersed to her elbows in dishwater.

Dumbert and Pompey found the remains of a roast goose, and other leftovers, and attacked them with gusto. By the time they had washed down the meal with two tankards of beer filched from the great hogshead in the wine-cellar, most of the kitchen work was done, and some of the scullery lads had started a game of farthing-ante in the pantry.

After losing sixpence-ha'penny, Dumbert emerged, thoughtfully chewing on a pickled herring. The morning of the following day would undoubtedly be spent in jousting practice, which he detested. Having had no workouts during Sir Tinly's latest journey, he would undoubtedly be out of practice and rusty, and after a successful quest the Pure Knight was accustomed to be

even more strict and self-righteous in his role of mentor than usual. The squire resolved to see Lysenconius in the afternoon, as a welcome relief from the jousting field. The old wizard was tolerant and good-natured towards all who shared his distaste for the glories of knighthood, and Dumbert had frequently visited him in his fascinating and mysterious chambers high in the east wing of the royal castle.

The main kitchen was deserted except for Jehane, who was frying a couple of eggs for a late evening snack. The red-haired girl was about Dumbert's age, and came from the hills along the Welsh border. (She was reputed to be the daughter of the notorious border bandit David ap Crockett, surnamed King of the Wild Frontier.) Freckles, fiery hair, and peppery disposition aside, she was a not unattractive girl. Dumber walked up to her and familiarly patted her behind, to be promptly deluged with two half-fried eggs.

"Try that again and you get the pan instead!" she spat.
"May you marry a ghost and bear him a kitten!" Dumbert replied with a standard imprecation, as he washed his face in a crock of milk which was setting to stew for tomorrow morning's pancakes.

Two entire wings of the castle were reserved for quartering such knights as were residents or visitors at the royal castle. Those in royal favor, such as Sir Tinty the Purest, had permanent, well-appointed apartments. On the side of the hall opposite the quarters of the knights was a long, low dormitory occupied by their squires; thither Dumbert repaired.

"Where you been?" asked Pompey, who had been cleaned out at the card game about half an hour earlier.

"Downstairs making out with Jehane," Dumbert replied. Pompey was eager for details, and Dumbert rapidly invented them, meanwhile wondering how rumors got started about the pliability of serving-maids and peasant girls towards knights and squires, when he himself fared so infernally badly at such pursuits. Finally, having satisfied his fellow-squire's salacious curiosity, he pulled off his tunic and shoes, and crawled into his rickety cot. Finding two toads and a scorpion there, he hurled them across the room and fell asleep.

CHAPTER V

by John Boardman

As the center of the activities of knightly derring-do which occupied the time of the upper classes of the kingdom, the royal castle and its environs were mostly given over to such things as practicing for jousts, tourneys, and wars; making and repairing armor, swords, and lances; and stabling and training the great chargers which bore the knights on their quests and errands. Almost every day the courtyards hummed with activity of this sort, and in the evening the knights would tell around the great dinner table of battles fought, giants and brigands slain, infidels scattered, and tourneys won.

In this setting the chambers of Lysenconius, court wizard to the King, were an egghead island in a sea of chivalrous and military disdain for learning. (Indeed, many of the knights were not only incapable of signing their names, but proud of the fact.) The wizard occupied a suite of rooms high in the

east tower of the oldest part of the castle, where he ate, slept, read, and performed his feats of magic far above the heads of the knights and ladies of the court.

Thither Dumbert wended his way on the following afternoon, climbing dusty stone staircases and walking through silent halls long since deserted by the nobility and knights for the newer and more fashionable parts of the castle. Only once did the squire stop, at a rusty suit of armor which had once belonged to Theobald the Bald, great-grandfather of the present king. Dumbert dropped into the open vicer six large cockroaches from the royal kitchens; delighted ultrasonic squeaks came from the nest of bats within.

Higher and higher he climbed, lighted only by the late afternoon sun which shone in dust-flecked shafts through the slits which served as windows; for the oldest part of the castle had been built at a time when danger of attack necessitated only such aperture as a bowman could fire through. At last Dumbert reached the huge bronze-bound oaken door of Lysenconius's laboratory, and respectfully knocked three times.

"Come in!" a voice from within cried.

Dumbert entered the room. He saw that the desk of Lysenconius was surrounded by a pale blue cloud, impenetrable to the sight, from which occasionally emerged flashes of lurid pale green light, pungent spicy odors, and a rumbling noise like a giant breaking wind under water. At another desk sat Hoggletwaite, a graduate student of Lysenconius. It was he who had bade Dumbert enter.

"Magister Lysenconius is busy right now," Hoggletwaite explained in a thick Yorkshire accent. "He's engaged in a magic-by-correspondence contest with Swami Longalingam, court wizard to the Maharajah of Swettipore. 'E should be done soon: sit tha doon a bit."

"Thanks," Dumbert replied. Hoggletwaite returned to copying figures from an ancient parchment scroll into a notebook.

While waiting for the wizard to emerge from the cloud, the squire idly looked around the laboratory. Dumbert enjoyed his visits to Lysenconius; he was fascinated by the odd objects and the atmosphere of occult and arcane learning which were to be found in the wizard's chambers. Turning, he read the labels on the bottles that stood, row upon row, in a rack on the wall. Aqua distillata, aqua fortis, aqua regia, aqua vitae - Dumbert uncorked this last bottle and sniffed (for Lysenconius was sometimes careless with his labelling), then took a couple of swigs - muriate of magnesia, alkahest, aurum potabile, essence of Phlogiston, dimethylglyoxime...

The blue cloud dissolved with a sound not dissimilar to the sneeze of a horse, and a pterodactyl flew out the window with a parchment scroll clasped in its claws. Lysenconius rubbed his hands in satisfaction.

"That'll do it," he said. "And if old Longy accepts that gambit, I'll be able to employ Bleise's Counter-Incantation and win in ten moves at the most. Now, Dumbert, what can I do for you?"

"Messire Lysenconius," the squire began, "I have a riddle for you to propose at table tonight."

"Say on, lad," the old man replied.

Dumbert told Lysenconius the riddle he had composed with Pompey.

"Excellent, lad, excellent," Lysenconius chortled. "Three-fourths male, and that all one man. 'Twill set to brain-racking all the company, save perhaps those pompous puritans such as your own master. Ah, you should come up more often, Dumbert. 'Tis dull here, and Hoggletwaite will be gaining his Magister in A'tibus soon, to leave me alone here. And when I do get a visitor, 'tis either a page from the King to request some piddling trick o' magic, or some foppish young gallant asking for a love-potion. Love-potion, indeed, as if I were a common traveling warlock, belike unlicensed, who deals in three-penny spells at county fairs? Now, what can I do for you else?" And the old wizard rubbed his hands, muttered a few words, plucked a silver crown out of Dumbert's left ear, and threw the coin into the air, where it flew apart and fell as ten sixpences.

"'Twas a simple matter," said Lysenconius. "Hoggletwaite could do it before he attained his baccalaureate, eh?"

"Observe," the graduate student replied. He made a pass at an inkwell on his desk, which rose four feet and hung in midair. Then it overturned and poured out a stream of milk, which vanished an inch above the floor.

"Very good," said Lysenconius. He made a pass, and the milk changed to wine. Hoggletwaite replied by turning the wine into beer. Alternately the two magicians changed the stream to water, blood, urine, ammonia, perfume, gravy, and molten bronze. Finally Lysenconius permitted the bronze to fall to the floor, where it collected into a small dagger. The old man handed the weapon to Dumbert.

"Take care of it, lad," said Lysenconius. "'Tis a serviceable dagger, for those who have need of such things, but touch it not against iron, lest it vanish as snow in the spring."

"Trismegistos's Law of Ferrodissolution," said Hoggletwaite, "whereby heat is generated equal to the energy that went into the casting of the spell, minus hysteresis losses."

"Correct," Lysenconius replied. "Now if you are so glib at your orals..."

"Excuse me, sir," said Dumbert, "but I had best return to Sir Tinly, lest he call for me."

"Aye, so, so," murmured the old man. Dumbert turned and left, closing the heavy door behind him. Outside the chamber he met Lord Tasselyard, an overdressed, affected young nobleman who wore eight peacock feathers in his velvet cap.

"One side, boy," said this worthy. "I have come to procure of Messire Lysenconius a love-potion."

Dumbert proceeded downstairs. About three minutes later, Lord Tasselyard fled down past him, his cap transformed into a small but tightly gripping octopus.

Jack Chalker, 5111 Liberty Heights Ave., Baltimore 7, Md., reports that the Clark Ashton Smith memorial volume for which he was taking orders at Chiccon III will be delayed by an as yet undetermined amount of time. There seems to be some sort of confusion in the Smith estate.

Prieto is more reticent about the whereabouts of the Chiccon annual. Dare we hope that it will be out before the Discon?

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ULTIMA RATIO GREGUM

In the spring of 1901, two British fleets moved towards Scandinavia. Almost simultaneously, there was a general mobilization throughout Europe, as two systems of diplomatic alliances engaged each other in war.

Russian and German fleets also converged on Scandinavia, to secure positions of advantage in the North. Further south, French and German forces converged towards Alsace-Lorraine and the low countries. Austro-Hungarian and Turkish forces seized the Balkans and prepared to resist the southward advance of two Russian armies and the Tsar's Black Sea fleet. Italy, always suspicious of Austria even in alliance, stationed an army on the northeastern frontier and moved the rest of her forces against France.

By fall, the situation in Scandinavia had stabilized. Denmark was under German occupation, and war material was flowing southward to support the Kaiser's forces. England had seized Norway and was moving by the northern route towards a clash with Russia. The Tsar's Baltic fleet, now based on Stockholm, prepared to cut British support with an attack on Norway. France secured her rear in Spain and Portugal while preparing to resist a German-Italian invasion. The Russian Black Sea fleet controlled Rumania, but the rest of the Balkans were firmly in the hands of the Turks and Austrians.

The major event of the spring of the second year of the war was a German offensive through Belgium. German forces were now poised all along the French border. Fighting in the North was less conclusive, as an indecisive Anglo-Russian clash left the Arctic Sea and Norway in British hands. The Balkan front also remained stable. The war had now resolved into two conflicts, with Russia beset by England, Austria-Hungary, and Turkey while France faced Germany and Italy. A Turkish army in Armenia threatened the opening of yet another front, in the Caucasus.

The fall of 1902 was a season of successes for the Quintuple Alliance. The German Baltic Fleet immobilized the Russian occupying fleet in Stockholm, causing the British northern offensive to seize the Russian capital. At the same time, the Russian Black Sea Fleet was annihilated by an Austro-Turkish offensive which left those powers supreme in the Balkans. The German western offensive continued, striking deep into France. Both the Atlantic and the Mediterranean knew no navies but those of the Quintuple Alliance, and two Italian fleets menaced French control of Iberia.

* * *

No, this is not an excerpt from an "alternate time-track" story. It's a sample game included in the rules of Diplomacy. This is a board game for from 3 to 7 players, in which each player handles the forces and diplomatic maneuvers of a European power, based on the boundaries which existed in 1914. There is no element of chance in this game; each player makes or breaks alliances and orders his armies and fleets as the turn of the play dictates. Players first try to capture supply centers in neutral countries, and then to outmaneuver their opponents' forces and cause them to retreat. The first player to have a majority of all the pieces on the board is the winner.

Before each move there is a period for diplomacy, in which alliances are formed or broken, and joint operations are agreed upon. Then, each player orders his forces to move or to support

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moves of other units. The players compare their orders, and see whether any battles or retreats are forced, and what supply centers change hands.

This game would lend itself easily to being played by mail. Each player would get a set (\$7.50 from a department store or from Games Research Inc., 48 Wareham St., Boston 18, Mass.), which includes a set of maps on which strategy can be plotted. A time limit is set for each move, and the moves are sent by mail to a referee. The referee decides which moves are possible, and informs the players of the outcome of each turn. Players may plot alliances and double-crosses by mail among themselves, or even engage in espionage to discover one another's plans.

I would like to hear from anyone who wants to start a game of postal Diplomacy, or is further interested in the game.

THROUGH HILBERT SPACE WITH SWEET FANNY ADAMS - V

When Fanny Adams visited Planet U in 2456 she learned that a portion of the population could turn into dogs after dark. The planet's Emperorissimes had long ago banished such people to the half of that world which was in perpetual night, to prevent their returning to human form. Little by little these man-dogs had been restricted: first they were forced into ghettos, then they were made to run races for the amusement of the nobility, and finally they were deprived of all control over their own lives. The only freedom granted to the homocanines was the right to select among themselves who should have post position in their races, and in which order the others should start next to him.

This tyranny inspired Fanny Adams to preach revolution to the down-trodden man-dogs. In one memorable phrase, she reminded them how oppressed they were, and touched off the revolution that won them their liberty: "Were-curs of the World U night! You have nothing to choose but your lanes!"

QUALITATIVE ANALYSIS (continued from page 6)

which I had only the skimpiest formal education. I don't know how comprehensible his articles may be to someone with no background in the sciences, but I have never found them difficult or tedious.

I know and like Avram Davidson, and criticism of him does not come easily. The stories that he writes, and the stories that he buys for F&SF, are more weighted towards fantasy than towards science-fiction. But I do not buy the argument that a scientist must necessarily prefer s-f to fantasy, and many of Davidson's stories are among my favorites. My major criticism with F&SF under his administration is that few of its fantasy stories are as good as his. In the fantasy field, F&SF is now facing a strong challenge from Fantastic, but it should not jettison science articles and s-f stories in meeting that challenge.

IT'S HUGO TIME AGAIN

Nominations for the 1963 Hugos close on 15 April 1963. Send them to Dick Eney, 1417 Ft. Hunt Road, Alexandria, Virginia. A vote for "No award" will be allowed on the ballot this year. The categories (with my recommendations) are:

1. Best Novel. I was strongly tempted to write "No Award" here - a choice that should have been open to fans last year. If, as Buck Coulson suggests, we must consider entertaining hack, I found Ward Moore's and Avram Davidson's Joyleg more entertaining than H. Beam Piper's Little Fuzzy. JOYLEG piles one unlikelihood on another - virtually every wild or domestic animal that has become extinct in the past four centuries turns up around the Tennessee village where the last survivor of the American Revolution holds perfectly valid title deeds to the land on which both the U. S. A. and the U. S. S. R. have built their biggest atomic power installations, and so forth, and so forth. (I wouldn't have been surprised to see a woolly mammoth come out of the woods carrying Charley Ross, Judge Crater, Amelia Earhart, and Virginia Dare, and pursued by a mixed pack of Tasmanians and Neanderthals.)

2. Best Shorter Fiction. Jack Vance's "The Dragon Masters" is several spider-jumps ahead of the field.

3. Best Prozone. Fantastic, though spotty, gets the nod here on the basis of the improvement it's shown since Cele Goldsmith took over the control panel. And fandom needs to do some kind of penance for its choice of last year.

4. Best Artist. Krenkel, Krenkel, Krenkel!!! (Has anyone noticed that the architecture of his buildings is as impressive as the architecture of his women?)

5. Best Dramatic Presentation. I propose to exercise the Eney Alternative. No Award.

6. Best Fanzine. Amra is long overdue for this award. Xero is good, but I feel a Hugo winner should appear a little more frequently. Incidentally, watch Bruce Felt's Spoolman for the 1963 award. The last issue contains not only Fritz Leiber's talk at the Chicon, but also the first of a series of articles by Madeleine Willis.

RAISEKAYNE OF MARS

Robert Heinlein has temporarily abandoned politics and gone back to nymphets. (Podkayne of Mars, serialized in If, and probably soon to be published by some paperbacker who thinks all you need to sell a book is a Name.) He was more readable when he was advocating military dictatorship or salvation by orgy.

* * * * *

CHANGE OF STATE

- MOVED - Ben Orlove, 845 East 14th Street, Brooklyn 30, N. Y.
- MOVED - Mike McQuown, 115 East Main Street, Mason, Ohio
- NEO - Fred Lerner, 414 Livingston Hall, Columbia College, New York 27, N. Y.
- MOVED - Charlie and Marsha Brown, 2719 Morris Ave., Bronx 68, N. Y.

for the 1963 Hurd class on 12 April 1963

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tertaining than H. Beam Piper's Little Fuzzy. Joyful does not
unlikehood on another - virtually every wild or domestic ani-
mal that has become extinct in the past four centuries turns up
around the Tennessee village where the last survivor of the
species is being bred. The author holds perfectly valid title deeds to the
land on which the U. S. A. and the U. S. R. have built
May be the best of the best power installations and so forth, and so
forth. I wouldn't have been surprised to see a woolly mammoth
in the woods carrying Charley Ross
of Tasmanians and Neanderthals.)
5. Best Shorter Fiction. Jack Vance's
"The Golden Age" is a masterpiece of the field.
6. Best Fantasy. Fantastic though some
of the best of the improvement it's a
fantasy over the control panel. And random pieces to do some
of the best of last year.



noticed that the architecture of his buildings is as impressive
as the architecture of his women?
5. Best Dramatic Presentation. I suppose to exercise the
any alternative. No Award.
6. Best Fantasy. Amn is long overdue for this award.
7. Best Science Fiction. Amn is long overdue for this award.

KNOWLEDGE is published irregularly, and is available for trade, contribution, hard cash, letter of comment, free books for reviewing (I should live so long), as a sample, because you're mentioned herein, or because I happen to feel like it. Subscriptions are \$1 for five issues, of which this is in your case issue number 19.

- Great
- Intervals
- This
- Appears
- To
- Inflame
- Optic
- Nerves

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CHANGE OF STATE

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