

Octopus Army

Issue #6 · Optics · June 15, 2003



Free in NYC, everywhere else \$2.00

Dearly Beloved Reader,

Despite what some mean-spirited people have said, going as far as to brand our fine publication *The Two Flaky Polish Girls Zine*, *Octopus Army* has persevered and we are pleased to thumb our noses at our detractors and give them the fig and call them dirty words in Polish and announce that this, the sixth issue, marks the anniversary of our fine and (mostly) timely publication. We would like to thank all of our contributors and everyone who has lent us their assistance in matters technical, artistic, and moral. We thank especially those of you who had faith in us and those of you who didn't but managed to fake it believably. And thank you, dear reader, wherever, whenever you are. Without your eyes to decipher the words herein inscribed, they would have no meaning.

We are, with great respect Reverend Sirs,
Your faithful humble servants,

Ms. Magdalena Krzywicka and Ms. Agnieszka Krajewska, The Editors

Copyright 2003 by *Octopus Army*.
All Rights Reserved.

Text Editor

Agnieszka Krajewska

Layout & Graphics Editor

Maggie Krzywicka

Octopus Army logo

Gary Kwan

To receive your own free copy of *Octopus Army*, please visit our website for a list of locations where you may find it or send a 6x9 self-addressed stamped envelope.

Octopus Army merchandise can be procured through our website. You may give us donations to help cover the cost of paper and printing. Donations of octopus related toys are also gladly accepted.

Now accepting submissions for issue #7, deadline is July 31st, 2003. The theme is **Ancient Civilizations**.

We accept short original unpublished or previously published pieces for which you retain the copyright. No politics or pop culture references are allowed. We do not distinguish between fiction and non-fiction articles.

Submissions will not be returned unless you include a S.A.S.E. with proper

postage. If you are reading this after July 31st 2003, please visit our website for the current theme and guidelines.

Compensation is in the form of free issues and glory.

Submissions By Post:

Octopus Army

3739 Balboa Street #103

San Francisco, CA 94121

Include a printout and a digital copy if possible on disk or CD. If submission is too large to include on disk (in case of digitally-created art), please specify a URL where it can be retrieved.

Submissions By E-Mail:

Send text submissions only in the body of the message to:

submissions@octopusarmy.org.

Send art submissions in tiff, psd, or high-resolution jpeg or gif format to:

submissions_art@octopusarmy.org.

Please specify in the body of the message the contents of the attachments.

General E-Mail:

contact@octopusarmy.org

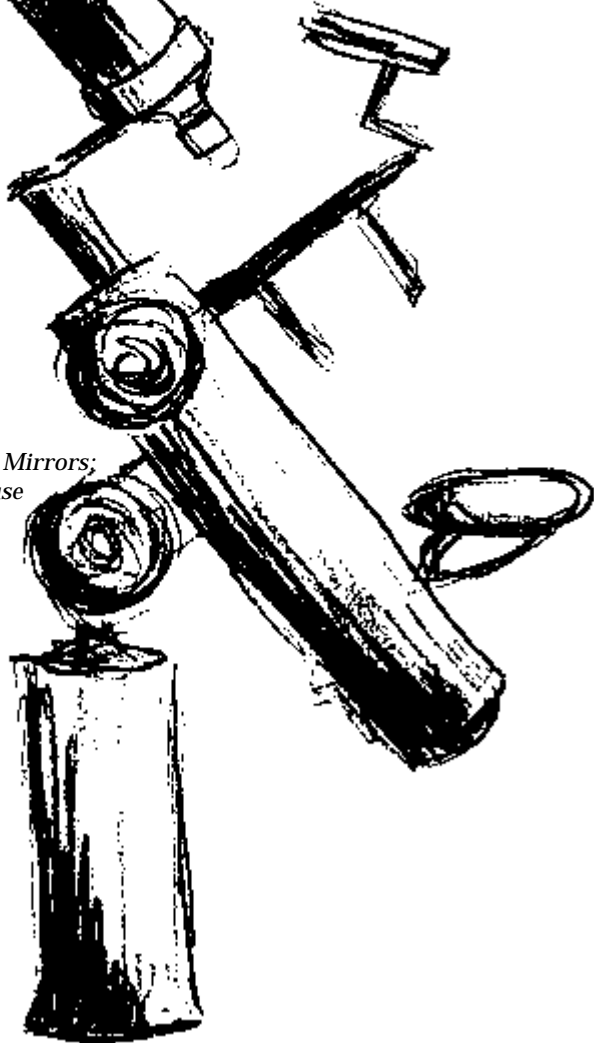
Our Website:

<http://www.octopusarmy.org>



Table of Contents:

front	<i>Optician</i> by Lauren Spitzberg
3	<i>Microscope</i> by Maggie Krzywicka
4	<i>Bacon Oculus</i> by Johnson Hal
5	<i>Blind</i> by Ken Franco
6	<i>Homemaker's Corner</i>
7	<i>Octupal Illusion</i> by Maggie Krzywicka
7	<i>Shadow Theater</i> by Maggie Krzywicka
8	<i>Reflective Guns and Other Mirrors; James Bond in the Funhouse</i> by Robert Scott Martin
10	<i>Top Five List</i> by Maggie Krzywicka
10	<i>Optician #2</i> by Lauren Spitzberg
11	<i>Hotel Escher</i> by Jay
11	<i>A Moment of Science</i> by An Actual Scientist
back	<i>Laser Storm</i> by Christopher Coleman



Octopus Army has been recently mentioned on Tonmo.com - **The Octopus News Magazine Online.** Thanks to Tony Morelli for letting us know.

Bacon Oculeus

by *Johnson Hal*

According to legend, Roger Bacon, the father of modern science, wrote his three major works while in prison for the promulgation of heresy-science, in this case. In a bid to secure his freedom, Bacon wrote the Pope assuring him that science was not heretical, but would rather (as Aquinas had argued) support and confirm the glory of God and the Church, as the Pope would understand could he but see Bacon's writings proving the supposition; the Pope (or at least a cardinal) wrote back calling his bluff and requesting a copy of said writings. Which did not as yet exist. So although denied pen and paper by his jailers, Bacon had some smuggled in and wrote these seminal treatises in secret and by memory (a feat matched only by Enrico Fermi, who wrote physics textbooks in pen and without consulting any reference books, not because of hardship or imprisonment, but simply because of some natural perversity)-he then had the finished works smuggled out and sent to Rome. The Pope received them and was in the admittedly lengthy process of perusing them when he died. Bacon stayed in prison another ten years; but he had given the world his *Opus Maius*, *Opus Minus*, and *Opus Tertium*.

Now, it is also said that Bacon sought

ere many years or days be past,
To compass England with a wall of brass,¹

and had once freed a man who had sold his soul to Satan in return for the expunction of his debts by arguing that Satan had left the man with one debt viz. his debt to the Satan himself-but these may be exaggerations. Let us to restrict ourselves to facts.

What is certain is that Bacon argues in his works for the primacy of vision, "for by hearing we can learn what others have taught while by vision we can discover for ourselves."² With the primacy of vision comes the primacy of optics, a science Bacon put great store in. A thorough summary of Bacon's optical thought would run

some five pages or more; let us substitute for such excess a brief note.

Geometry (O favorite of Medieval mathematics!) is the fundamental behind Bacon's optical thought. For our purposes, all that must be understood of the "epiphyny" (if I may be permitted the coinage, for even so does geometry support its optical cousin) is that the geometry of refraction was well understood by our man Bacon (and by his Islamic sources). The angle of refraction, calculated by the distance between where an object seen through a glass appears to be and where it is, is here less important than the fact the refraction was seen as weakening light...

Of primary importance to all Medieval investigators of optics was the question of how the appearance of an object manages to get from the object to one's eye. Bacon struck upon, or copied, a novel solution. Each object, it transpires, constantly emits from every point of itself a steady stream of miniature intangible replicas, called species. These species zip through the channels of light in a straight line until they strike a wall, say, or the human eye.

It is the nature of species (which does not seem exotic to us, by analogy to our understanding of light) to be absorbed by some materials, to pass through some materials, and to bounce off some materials. (We call these materials respectively opaque, transparent, and reflective.) And should the species pass through it is refracted-unless (the geometry informs us) it pass through perpendicularly. (A demonstration involving the mensuration of angles is left to the reader.)

The crystalline humor of the human eye, being transparent, permits passage of the species, which is then transmitted through small tubes to the seat of understanding.

But: Since the air is "ever aswarm with teeming infinitudes of species,"³ any number of which from a single object may strike the eye, how is it then that we are not all stumbling through a chaos worse than blindness, a glut of information as, we read, the autistics suffer? Bacon's (or his source's) answer is wonderful in its simplicity. A million species of a chair, say, or of the curve of a young girl's wrist, may

Blind

by Ken Franco

strike the viewer's eye; but only one will strike it perpendicularly. The other species, coming in at various angles, are refracted and therefore weakened; sufficiently weakened that they "fall below the threshold of perception,"⁴ as some dark objects do at dusk. Therefore only one line, the straight line, falls upon the eye true. Whereupon the "butt end" of the crystalline humor (roughly, the lens) refracts all that multitude of different species (an entire field of vision!) that pass the first test of perpendicularity down a tube (roughly, the optic nerve) that intersects with the other tube of the other eye. At this junction is perception effected.

The marvelous wrist alluded to above would therefore produce a host of species, most of which fly away as seed spilled on barren ground, while a select few, one from each point, soar true to the watcher's eye. A conic shape can be traced, with its point (not truly a point but a convexity, to accommodate the shape of the eye, which is curved to permit numerous perpendiculars) at the watcher's eye and its wide base along the wrist.

William of Ockham, born six years after Bacon's death, scoffed at this optical legion of species, and fashioned his famous razor: "Let us not multiply things beyond necessity."⁵

But in the legends and poems of the fourteenth and fifteenth century, many of which featured "Bacon the Doctor Mirabilis," Roger Bacon got the last word. "Occam," says he in one, "barbatus erat"; "Ockham had a beard."⁶

Sources from which are gleaned quotations:

1. Robert Greene, *Friar Bacon and Friar Bungay*.
2. Bacon, *Opus Maius*.
3. W'm Welton, *Oculiad*.
4. J. R. Strayer, ed., *Western European Optics*.
5. Ockham, *Quodlibeta* & trad.
6. anon., *Fabula Mira Baconis*.

I have taken out my eyes so that I may better see. Well, I didn't actually take them out. I wanted to see more clearly, not disfigure myself. I simply blinded them. This way I'm still good-looking, just not good-seeing. Once I figure out how to smoke a cigarette without burning my fingers I'll have achieved perfection.

My friend Sarik helped me do it. He's a rogue optometrist and a mystic healer of tormented souls. Like mine. The last thing I saw was his bright white and surprisingly sterile-looking operating room. He put me under with some sort of gas and when I woke up I had successfully become blind. He explained it to me, something about severing neurons behind my eyes or something, which would leave me unscarred but blind and free. Also he gave me a prescription, but I can't read what it's for and haven't had the time just yet to have it filled.

I did it because I wanted to be able to fully appreciate the things around me, instead of letting my eyes trick me into believing that everything is just as it appears. My other four senses will now work in concert to give me a kind of super-perception, more complete by far than my overbearing eyesight would have allowed. Think about it: what's the first thing you say to someone you know when you meet with him for the first time in a long time? "I haven't seen you in ages." "It's so good to see you." As if the act of seeing the person somehow legitimizes your relationship to him. But sight is no basis for human interaction. It is the most easily deceived and least reliable of the five senses. I'm just happy that I was able to realize this truth at such a young age, with so much of my life left to live, liberated as I now am. And I would never have known enough about myself to become free in this way if it hadn't been for Charlene, my love.

She said that she loved me but she had to leave me. That she needed to search for a deeper bond, a more profound love. That I was too in love with her physical beauty

to form a connection with her soul, so she could never be sure I wouldn't abandon her in the face of temptation from a more attractive woman. It all started because she said she couldn't ignore seeing her roommate constantly flirting with me. Not even something that I'd done. She could have just gotten a new roommate, but she said that she couldn't forget. She trusted me but not my eyes, and she was right. I love her more deeply now than I ever could have before.

I have to go see her. I mean, I have to go make her see me, even though she told me she never wanted to again. I'm sure that when she sees I'll never see her again she'll know that that's what she really wanted all along. That I've made the decision to live without sight rather than live without her will convince her of my dedication.

I found my way to Charlene's apartment. It took me twice as long as it used to, but now I feel I understand the distance between us in ways I never could before. It felt like twice as long anyway, I never have any idea what time it is anymore.

I knocked on the door and she answered. Her voice was strange to me, hearing it as I was for the first time without the disadvantage of looking at her lips or some other part of her body. I told her she sounded beautiful.

"What do you mean, 'I sound beautiful'?"

"Oh, I'm blind now." And I proceeded to tell her what I'd done for her, and how happy it's made me. Then I started to cry

for some reason. Probably my eyes reacting to their new uselessness.

"Oh my God," she said. I could hear tears in her voice. "That's the most incredible, beautiful thing I've ever heard. No woman deserves you."

"You do," I answered quietly. Then I felt her hand on the back of my neck and her lips against mine. The hand was warm and stroked gently up and down the back of my head. Her lips tasted sweet and her tongue met mine enthusiastically. It struck me that she'd started using a different toothpaste. Her hands moved down and undid my button fly, then slid my jeans off. We made love for what felt like several hours.

It was an entirely new sensual experience. Losing my sight must have freed my mind to explore sexual possibilities I had never imagined. Losing my sight certainly caused her to abandon her usual tameness. She seemed determined to help my remaining four senses celebrate their new promotion in importance.

Lying in bed with her afterwards was the happiest time of my life. I had sacrificed eyesight for happiness and my true love had proved to me that I'd made the right decision. The thought that I had reached paradise kept repeating in my head.

And then Charlene came home. I'm glad I didn't have to see the look on her face when she found me naked in bed with her roommate. I hope I can find my way home. I hope my shirt is on right.

The End

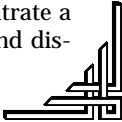
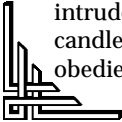


Homemaker's Corner



Helpful Household Tip

Every house should have a high-power magnifying glass. The best sort are of heavy glass in a sturdy metal frame. A good magnifying glass has a myriad of uses aside from the obvious. You can use it to read the obituaries when searching for a rich husband, to kill ants, to start a fire, to search for traces of the previous text in a palimpsest cookbook, to burn resin incense without the nasty smell of charcoal, to give your self a frightening appearance by raising it to one eye, to brain an intruder (this is why we recommend a heavy magnifying glass), to concentrate a candle flame when the lights go out, to squish plantain cakes, and to blind disobedient children.

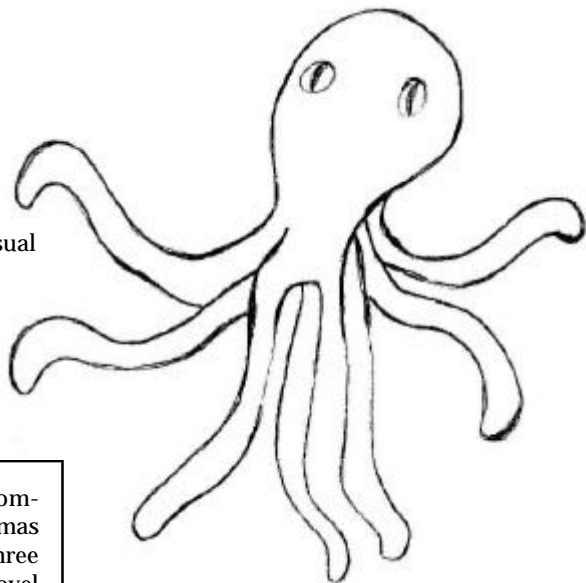


Octupal Illusion

by Maggie Krzywicka

optical illusion, n. - a visually perceived image that is deceptive or misleading; an optical phenomenon that results in a false or deceptive visual impression.

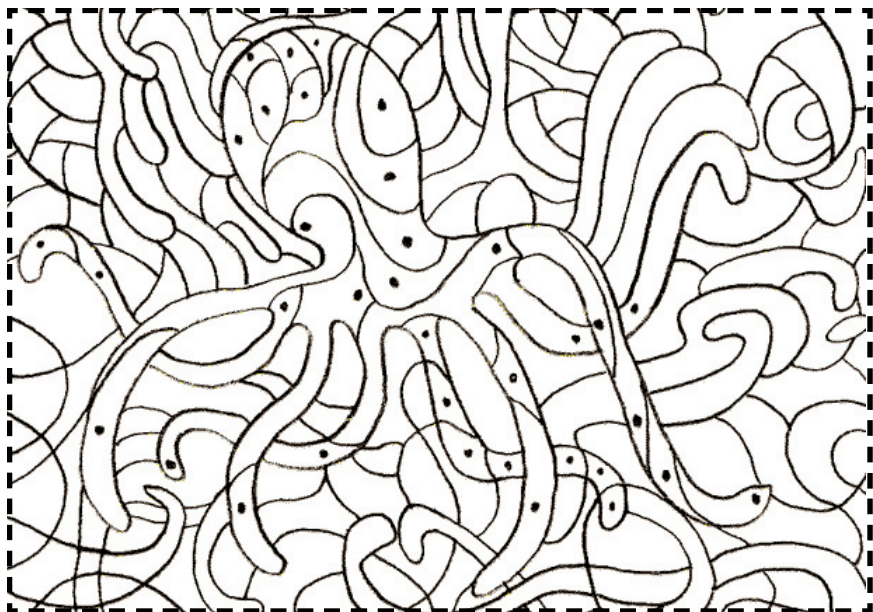
Now, having said that, how many arms does this octopus have?



Maggie Krzywicka also recommends *Gravity's Rainbow* by Thomas Pynchon. If you have more than three years to spare, please read this novel and discover countless characters in pursuit of an insane plot, a rocket, banana pancakes, love in the time of war, poop showers, and many other things you probably won't understand. Reading *Gravity's Rainbow* will allow you to dazzle your friends with your heightened level of pretension and to alienate even more enemies.

Maggie Krzywicka recommends that you read Haruki Murakami's *The Wind Up Bird Chronicle*. Often called the only plausible sequel to Albert Camus' *The Stranger*, *The Chronicle* offers a vision of a scary modern world where cats and wives disappear, weird marks appear, and money rains into wells. Beware of water.

Color in the marked fields to see a secret image.



Reflective Guns and Other Mirrors: James Bond in the Funhouse

by Robert Scott Martin

A matter can be both "serious" and "amusing." In the words of S.J. Lee: "Men do not take amusement seriously. Like the man who would not admit to being dead because the pistol that shot him was shaped like a guinea pig."

- Oreste Del Buono, *The Bond Affair*

In much the same sense that every Rilkean angel is "terrible," every James Bond movie is strange, especially *The Man With the Golden Gun* (1974). Often dismissed by fans as "the worst of the Bond movies" and forgotten by everyone else, the film follows the franchise's already eccentric narrative conventions so slavishly that it inverts their significance (the letter kills, but the spirit gives life), transforming what an otherwise kitsch Bond adventure into an alchemical meditation on duality, identity and the Other.

The film's defining obsessions are mirrors and binary logic. After a dreamlike gunfight in a hall of mirrors (raising the old question of whether every fight scene is a suicide attempt in an interconnected universe), title character Scaramanga becomes entangled with Bond, his mirror image or negative twin¹, by eliminating Double O Two completely off camera.

The oddly gestural plot appears to exist only as an excuse for describing the interaction between Bond and Scaramanga, particle and antiparticle. Sophisticated and portrayed as sexually irresistible, both characters are professional killers differentiated by the degree of individualism they bring to their work (Bond uses a mass-produced Walther to kill in the service of government policy, here vaguely

defined; Scaramanga kills on a freelance basis with rarefied custom weapons and bullets). Off the job, both display similar taste in cars, women, fashion, wine and food².

As a polarized inversion of Bond, Scaramanga emerges with a fully ramified system of auxiliary characters, all reflections of the familiar Bond supporting cast: a boss (Hai Fat, the Hong Kong mercantilist shadow of M) a munitions specialist (Lazar, the Portuguese Q analogue), a female companion (the evocatively named "Andrea Anders," or "Feminine Other"), and the mysterious Nick Nack, who serves as both subordinate and, within Scaramanga's demimonde, as surrogate adversary³, the shadow's shadow.

Like "cybernetic hero" Bond, who exists to counter the plots of others but harbors no such world-shaking ambitions himself, Scaramanga is a relatively self-contained entity who spends his time achieving goals set by his employers. Only a series of accidents and third-party machinations and the increasing weight of Bond's presence leads him to break this pattern, murder his employer, and become a fully realized actor. Despite some surface disobedience to M (who refuses to allow Scaramanga and 007 to come into contact), Bond remains passive, reflective throughout.

Unfortunately, this leaves the film in the unstable position of being suspended between two nearly perfect mirrors. With no protagonist and no active antagonist, the narrative thread threatens to shrink into insignificance, or rather to sublimate into a conventionalized series of abstract encounters and misplaced comic relief. Even at the end, when 007 defeats Scaramanga by posing as his own static reflection in a second hall of mirrors set piece, the conflict is strangely bloodless, forced, unsatisfying.

In fact, the conflict (and thus the film) is forced because shadow and self,

1. Christopher Lee, who plays the character with typical understated menace and intelligence, refers to Scaramanga as "the dark side of Bond," the hero's shadow.
2. In short, all the important dimensions of "civilian" identity in Fleming's universe.
3. On the surface, Nick Nack tries to betray Scaramanga on two separate occasions, but both times it is unclear whether this represents a deeper service to his master (as the filmmakers themselves believe) or a sincere desire to eliminate him and rule in his place.

Scaramanga and Bond would not have occurred at all without the intervention of a third agent. Almost unique among Bond films, it is the "Bond Girl" here - Andrea Anders -who puts events in motion by alerting Bond to Scaramanga's activities, effectively introducing the two men to each other and facilitating the interaction that follows⁴. Who is this Other (Anders)-as-Feminine (Andrea) who maintains some level of independence from the Bond/Scaramanga system of affiliations that everyone else in the movie obeys?

She serves as Scaramanga's muse of murder, bringing him his special bullets and having sex with him on the night before he kills. And he's started to scare her. Otherwise, we know absolutely nothing; if Bond and Scaramanga are facing mirrors in a boys' world, the Other-As-Feminine almost perfectly absorbs light. By diverting a golden bullet to Bond (golden bullets behave strangely within the film's symbolic economy, disappearing and reappearing as needed like particles carrying an attractive force), she breaks the homeostatic tension that kept the two men separated, launching the spiral of mutual reaction that eventually allows Bond to eliminate his double and have a good night.

Before that point, Bond and Scaramanga are well aware of each other's existence, but attribute no emotional charge to it; they have no *relationship*. Bond briefs M about the million-dollar assassin, rather than the other way around. Scaramanga rates Bond highly enough to add a wax likeness of 007 to his mirror gallery of gun heroes, but never thought they'd meet (despite moving in the

same circles, much like Clark and Superman). Only after Bond impersonates him (as a mirror image, getting the superfluous nipple on the wrong side) does Scaramanga realize that the man is his double, and from then on he becomes obsessed with the idea. "We have so much in common, Mr. Bond. We have so much to discuss."

But while two men can enter, only one can leave the stage. After the bullet emerges, Bond and Scaramanga both become uncharacteristically concerned with solar power and the odd need to monopolize it, to achieve *solitary* authority over the sun. The golden bullet disappears from the story, transformed into the *solex agitator* or solitary mover, the axis around which the year (007 as July, Scaramanga as icy January, month of the binary god: the seasonal champions) spins.

If not for Andrea Anders, shadow and self might have remained in isolated awareness of one another without coming into contact. As Scaramanga wistfully tells Bond, "I feel I know you, although I never thought we'd really meet."

Why the obsession with gold among Bond villains and other shadows? Gold is the metal of the sun. It reflects light, and it concentrates it too, becoming the Bond villain weapon of choice, the "laser."

And alone among Bond girls, Andrea Anders may die like every other woman 007 (love and death, kiss kiss and bang bang) encounters, but she, like Bond himself, will return in another adventure. Maud Adams will be reborn as Octopussy: crime lord, queen of acrobats and dancers, eight-armed oceanic Kali herself.

4. Structurally, The Man With the Golden Gun is Jules et Jim with different car chases.

Agnieszka Krajewska vehemently urges you to read *The Book of the New Sun* by Gene Wolfe. While it was originally published as four separate novels, it is best to treat it as one very long book. In a future so distant that the sun has become a red giant, Severian, the disgraced journeyman torturer, travels the

Urth, working as a free-lance torturer, seducing women, working miracles, and providing the reader with the eyes through which to view a highly advanced and extremely decadent world that is a strange mix of amazing technology, feudalism, and Byzantine intrigue.

Top Five Characteristics of an Octopus Eye

by Maggie Krzywicka

1. The eye of an octopus develops as an in-pocketing of the skin and not an extension of the brain as in vertebrates.
2. The cephalopod eye has rotational ability.
3. The cephalopod eye is related to gravity.
4. The pupils of an octopus' eye are slit-shaped. Due to No. 3, an octopus can always keep the pupils in a horizontal position.
5. Octopuses have polarized vision so they're able to see almost transparent prey like ctenophores and jellyfish.

Lauren Spitzberg recommends *Things to Do Before You Die* by Lauren Spitzberg. "I like this book because it is fabulous." Its author is modest and yet it must be said that this is the must-read (yet still unpublished) sensation of the year. Destined to be a classic after the author expires from aggravation.

Lauren Spitzberg also recommends *The Willow's Approach* by Anonymous. A page-turning thriller of a young woman's demise. The time warp device and mind-bending chronology add to the salacious mix of sex, tourism, and a behind-the-scenes look at the culinary arts.



Hotel Escher

by Jay

For one weekend every March, the New York Science Fiction Society, AKA the Lunarians, hold Lunacon. It is a science-fiction convention with discussion panels, art galleries, fan kitsch sales and special guests. Lunacon also has a 24-hour anime room and a masquerade on Saturday night. Every year the convention is held in the Hilton in Rye Brook, New York. The Rye Town Hilton hotel is affectionately known to Lunacon attendees as Hotel Escher.

Between the people playing Filk in the hallways and the demos of sword fighting, the hotel is a maze that would make the late Dutch artist M. C. Escher proud. Famous for his works that played with spatial orientation, Escher could have designed the Rye Town Hilton. Its official description on the Hilton Hotels website states that the hotel "perfectly combines the relaxed setting of a resort with the facilities of a full service business hotel." After spending time in this hotel myself, I believe that anyone who would use it as a business retreat would find themselves out of a job on Monday morning. The Rye Town Hilton is impossible to navigate.

The confusion sets in when upon entering the hotel through the main entrance you find yourself on the second floor. After going up a flight of stairs near the front desk, you are on the fourth floor. The third floor just vanishes! On the fourth floor, you will encounter what Lunacon haunts have dubbed the transdimensional corridor. Simply walking down this corridor takes you from the fourth floor to the seventh floor. Walking down a grand flight of stairs from the seventh floor lands you on the fifth floor. By walking through the ballrooms on the fifth floor, you end up right where you began, on the second floor.

From what I have been told, the hotel was not intended to be laid out like the mess it is. The first, second, third, and

fourth floors all lie in the Eastern Complex. This part of the hotel was built first. The Eastern Complex floors are all accessible by elevator from the second floor. A few years later, the Western Complex was built. The Western Complex is the home to the fifth, sixth, seventh, and eighth floors. The transdimensional corridor and the fifth floor ballroom were built to connect the two wings. Regardless of what floor you are on, all the hallways are long and have several sharp turns and twists in them. The hotel floor plan that is given to you at the door is useless and you will need a guide to navigate the hotel for the first two days at least.

I can see why the Lunarians desire such a wacky location. First, it is a test of the quality of fen they attract. In addition, by being in a poorly designed structure, it gives the illusion that everyone is on some sort of enemy spacecraft about to be blown up. Finally (and I think more importantly), it was picked so that all the people who get completely smashed on Friday and Saturday nights at the convention will stumble around for hours trying to find their way back to their rooms. After getting hammered my first year at Lunacon, I could have sworn that the floor jumped right out in front of me. Everyone likes laughing at spectacles like that at Lunacon. Hotel Escher provides a decent forum for ridiculing drunks.

A Moment of Science

by *An Actual Scientist*

The use of Fourier Transform Spectroscopy (FTS) as a precision spectroscopy tool dates from early experiments by Michaelson using the interferometer that bears his name. Though Michaelson did not use the fully characterized FTS he was able to resolve doublets and triplets in the spectrum by looking at its averaged Fourier Transform, or partially characterized FTS.

