

Love and Sex Among the Invertebrates

by Pat Murphy

This is not science. This has nothing to do with science. Yesterday, when the bombs fell and the world ended, I gave up scientific thinking. At this distance from the blast site of the bomb that took out San Jose, I figure I received a medium-size dose of radiation. Not enough for instant death, but too much for survival. I have only a few days left, and I've decided to spend this time constructing the future. Someone must do it.

It's what I was trained for, really. My undergraduate studies were in biology—structural anatomy, the construction of body and bone. My graduate studies were in engineering. For the past five years, I have been designing and constructing robots for use in industrial processing. The need for such industrial creations is over now. But it seems a pity to waste the equipment and materials that remain in the lab that my colleagues have abandoned.

I will put robots together and make them work. But I will not try to understand them. I will not take them apart and consider their inner workings and poke and pry and analyze. The time for science is over.

• • •

The pseudoscorpion, Lasiochernes pilosus, is a secretive scorpionlike insect that makes its home in the nests of moles. Before pseudoscorpions mate, they dance—a private underground minuet—observed only by moles and voyeuristic entomologists. When a male finds a receptive female, he grasps her claws in his and pulls her toward him. If she resists, he circles, clinging to her claws and pulling her after him, refusing to take no for an answer. He tries again, stepping forward and pulling the female toward him with trembling claws. If she continues to resist, he steps back and continues the dance: circling, pausing to tug on his reluctant partner, then circling again.

After an hour or more of dancing, the female inevitably succumbs, convinced by the dance steps that her companion's species matches her own. The male deposits a packet of sperm on the ground that has been cleared of debris by their dancing feet. His claws quiver as he draws her forward, positioning her over the package of sperm. Willing at last, she presses her genital pore to the ground and takes the sperm into her body.

Biology texts note that the male scorpion's claws tremble as he dances, but they do not say why. They do not speculate on his emotions, his motives, his desires. That would not be scientific.

I theorize that the male pseudoscorpion is eager. Among the everyday aromas of mole shit and rotting vegetation, he smells the female, and the perfume of her fills him with lust. But he is

fearful and confused: a solitary insect, unaccustomed to socializing, he is disturbed by the presence of another of his kind. He is caught by conflicting emotions: his all-encompassing need, his fear, and the strangeness of the social situation.

I have given up the pretense of science. I speculate about the motives of the pseudoscorpion, the conflict and desire embodied in his dance.

• • •

I put the penis on my first robot as a kind of joke, a private joke, a joke about evolution. I suppose I don't really need to say it was a private joke—all my jokes are private now. I am the last one left, near as I can tell. My colleagues fled—to find their families, to seek refuge in the hills, to spend their last days running around, here and there. I don't expect to see anyone else around anytime soon. And if I do, they probably won't be interested in my jokes. I'm sure that most people think the time for joking is past. They don't see that the bomb and the war are the biggest jokes of all. Death is the biggest joke. Evolution is the biggest joke.

I remember learning about Darwin's theory of evolution in high school biology. Even back then, I thought it was kind of strange, the way people talked about it. The teacher presented evolution as a *fait accompli*, over and done with. She muddled her way through the complex speculations regarding human evolution, talking about *Ramapithecus*, *Australopithecus*, *Homo erectus*, *Homo sapiens*, and *Homo sapiens neanderthalensis*. At *Homo sapiens* she stopped, and that was it. The way the teacher looked at the situation, we were the last word, the top of the heap, the end of the line.

I'm sure the dinosaurs thought the same, if they thought at all. How could anything get better than armor plating and a spiked tail? Who could ask for more?

Thinking about the dinosaurs, I build my first creation on a reptilian model, a lizardlike creature constructed from bits and pieces that I scavenge from the industrial prototypes that fill the lab and the storeroom. I give my creature a stocky body, as long as I am tall; four legs, extending to the side of the body then bending at the knee to reach the ground; a tail as long as the body, spiked with decorative metal studs; a crocodilian mouth with great curving teeth.

The mouth is only for decoration and protection; this creature will not eat. I equip him with an array of solar panels, fixed to a saillike crest on his back. The warmth of sunlight will cause the creature to extend his sail and gather electrical energy to recharge his batteries. In the cool of the night, he will fold his sail close to his back, becoming sleek and streamlined.

I decorate my creature with stuff from around the lab. From the trash beside the soda machine, I salvage aluminum cans. I cut them into a colorful fringe that I attach beneath the creature's chin, like the dewlap of an iguana. When I am done, the words on the soda cans have been sliced to nonsense: Coke, Fanta, Sprite, and Dr. Pepper mingle in a collision of bright colors. At the very end, when the rest of the creature is complete and functional, I make a cock of copper tubing and pipe fittings. It dangles beneath his belly, copper bright and obscene looking. Around the bright copper, I weave a rat's nest of my own hair, which is

falling out by the handful. I like the look of that: bright copper peeking from a clump of wiry black curls.

Sometimes, the sickness overwhelms me. I spend part of one day in the ladies' room off the lab, lying on the cool tile floor and rousing myself only to vomit into the toilet. The sickness is nothing that I didn't expect. I'm dying, after all. I lie on the floor and think about the peculiarities of biology.

• • •

For the male spider, mating is a dangerous process. This is especially true in the spider species that weave intricate orb-shaped webs, the kind that catch the morning dew and sparkle so nicely for nature photographers. In these species, the female is larger than the male. She is, I must confess, rather a bitch; she'll attack anything that touches her web.

At mating time, the male proceeds cautiously. He lingers at the edge of the web, gently tugging on a thread of spider silk to get her attention. He plucks in a very specific rhythm, signaling to his would-be lover, whispering softly with his tugs: "I love you. I love you."

After a time, he believes that she has received his message. He feels confident that he has been understood. Still proceeding with caution, he attaches a mating line to the female's web. He plucks the mating line to encourage the female to move onto it. "Only you, baby," he signals. "You are the only one."

She climbs onto the mating line—fierce and passionate, but temporarily soothed by his promises. In that moment, he rushes to her, delivers his sperm, then quickly, before she can change her mind, takes a hike. A dangerous business, making love.

• • •

Before the world went away, I was a cautious person. I took great care in my choice of friends. I fled at the first sign of a misunderstanding. At the time, it seemed the right course.

I was a smart woman, a dangerous mate. (Odd—I find myself writing and thinking of myself in the past tense. So close to death that I consider myself already dead.) Men would approach with caution, delicately signaling from a distance: "I'm interested. Are you?" I didn't respond. I didn't really know how.

An only child, I was always wary of others. My mother and I lived together. When I was just a child, my father had left to pick up a pack of cigarettes and never returned. My mother, protective and cautious by nature, warned me that men could not be trusted. People could not be trusted. She could trust me and I could trust her, and that was all.

When I was in college, my mother died of cancer. She had known of the tumor for more than a year; she had endured surgery and chemotherapy, while writing me cheery letters about her gardening. Her minister told me that my mother was a saint—she hadn't told me because

she hadn't wanted to disturb my studies. I realized then that she had been wrong. I couldn't really trust her after all.

I think perhaps I missed some narrow window of opportunity. If, at some point along the way, I had had a friend or a lover who had made the effort to coax me from hiding, I could have been a different person. But it never happened. In high school, I sought the safety of my books. In college, I studied alone on Friday nights. By the time I reached graduate school, I was, like the pseudoscorpion, accustomed to a solitary life.

I work alone in the laboratory, building the female. She is larger than the male. Her teeth are longer and more numerous. I am welding the hip joints into place when my mother comes to visit me in the laboratory.

"Katie," she says, "why didn't you ever fall in love? Why didn't you ever have children?"

I keep on welding, despite the trembling of my hands. I know she isn't there. Delirium is one symptom of radiation poisoning. But she keeps watching me as I work.

"You're not really here," I tell her, and realize immediately that talking to her is a mistake. I have acknowledged her presence and given her more power.

"Answer my questions, Katie," she says. "Why didn't you?"

I do not answer. I am busy and it will take too long to tell her about betrayal, to explain the confusion of a solitary insect confronted with a social situation, to describe the balance between fear and love. I ignore her just as I ignore the trembling of my hands and the pain in my belly, and I keep on working. Eventually, she goes away.

I use the rest of the soda cans to give the female brightly colored scales: Coca-Cola red, Sprite green, Fanta orange. From soda cans, I make an oviduct, lined with metal. It is just large enough to accommodate the male's cock.

• • •

The male bowerbird attracts a mate by constructing a sort of art piece. From sticks and grasses, he builds two close-set parallel walls that join together to make an arch. He decorates this structure and the area around it with gaudy trinkets: bits of bone, green leaves, flowers, bright stones, and feathers cast off by gaudier birds. In areas where people have left their trash, he uses bottle caps and coins and fragments of broken glass.

He sits in his bower and sings, proclaiming his love for any and all females in the vicinity. At last, a female admires his bower, accepts his invitation, and they mate.

The bowerbird uses discrimination in decorating his bower. He chooses his trinkets with care—selecting a bit of glass for its glitter, a shiny leaf for its natural elegance, a cobalt-blue feather for a touch of color. What does he think about as he builds and decorates? What passes through his mind as he sits and sings, advertising his availability to the world?

• • •

I have released the male and I am working on the female when I hear rattling and crashing outside the building. Something is happening in the alley between the laboratory and the nearby office building. I go down to investigate. From the mouth of the alley, I peer inside, and the male creature runs at me, startling me so that I step back. He shakes his head and rattles his teeth threateningly.

I retreat to the far side of the street and watch him from there. He ventures from the alley, scuttling along the street, then pauses by a BMW that is parked at the curb. I hear his claws rattling against metal. A hubcap clangs as it hits the pavement. The creature carries the shiny piece of metal to the mouth of the alley and then returns for the other three, removing them one by one. When I move, he rushes toward the alley, blocking any attempt to invade his territory. When I stand still, he returns to his work, collecting the hubcaps, carrying them to the alley, and arranging them so that they catch the light of the sun.

As I watch, he scavenges in the gutter and collects things he finds appealing: a beer bottle, some colorful plastic wrappers from candy bars, a length of bright yellow plastic rope. He takes each find and disappears into the alley with it.

I wait, watching. When he has exhausted the gutter near the mouth of the alley, he ventures around the corner and I make my move, running to the alley entrance and looking inside. The alley floor is covered with colored bits of paper and plastic; I can see wrappers from candy bars and paper bags from Burger King and McDonald's. The yellow plastic rope is tied to a pipe running up one wall and a protruding hook on the other. Dangling from it, like clean clothes on the clothesline, are colorful pieces of fabric: a burgundy-colored bath towel, a paisley print bedspread, a blue satin bedsheet.

I see all this in a glance. Before I can examine the bower further, I hear the rattle of claws on pavement. The creature is running at me, furious at my intrusion. I turn and flee into the laboratory, slamming the door behind me. But once I am away from the alley, the creature does not pursue me.

From the second-story window, I watch him return to the alley and I suspect that he is checking to see if I have tampered with anything. After a time, he reappears in the alley mouth and crouches there, the sunlight glittering on his metal carapace.

In the laboratory, I build the future. Oh, maybe not, but there's no one here to contradict me, so I will say that it is so. I complete the female and release her.

The sickness takes over then. While I still have the strength, I drag a cot from a back room and position it by the window, where I can look out and watch my creations.

What is it that I want from them? I don't know exactly.

I want to know that I have left something behind. I want to be sure that the world does not end with me. I want the feeling, the understanding, the certainty that the world will go on.

I wonder if the dying dinosaurs were glad to see the mammals, tiny ratlike creatures that rustled secretively in the underbrush.

• • •

When I was in seventh grade, all the girls had to watch a special presentation during gym class one spring afternoon. We dressed in our gym clothes, then sat in the auditorium and watched a film called *Becoming a Woman*. The film talked about puberty and menstruation. The accompanying pictures showed the outline of a young girl. As the film progressed, she changed into a woman, developing breasts. The animation showed her uterus as it grew a lining, then shed it, then grew another. I remember watching with awe as the pictures showed the ovaries releasing an egg that united with a sperm, and then lodged in the uterus and grew into a baby.

The film must have delicately skirted any discussion of the source of the sperm, because I remember asking my mother where the sperm came from and how it got inside the woman. The question made her very uncomfortable. She muttered something about a man and a woman being in love—as if love were somehow all that was needed for the sperm to find its way into the woman's body.

After that discussion, it seems to me that I was always a little confused about love and sex—even after I learned about the mechanics of sex and what goes where. The penis slips neatly into the vagina—but where does the love come in? Where does biology leave off and the higher emotions begin?

Does the female pseudoscorpion love the male when their dance is done? Does the male spider love his mate as he scurries away, running for his life? Is there love among the bowerbirds as they copulate in their bower? The textbooks fail to say. I speculate, but I have no way to get the answers.

• • •

My creatures engage in a long, slow courtship. I am getting sicker. Sometimes, my mother comes to ask me questions that I will not answer. Sometimes, men sit by my bed—but they are less real than my mother. These are men I cared about—men I thought I might love, though I never got beyond the thought. Through their translucent bodies, I can see the laboratory walls. They never were real, I think now.

Sometimes, in my delirium, I remember things. A dance back at college; I was slow-dancing, with someone's body pressed close to mine. The room was hot and stuffy and we went outside for some air. I remember he kissed me, while one hand stroked my breast and the other fumbled with the buttons of my blouse. I kept wondering if this was love—this fumbling in the shadows.

In my delirium, things change. I remember dancing in a circle with someone's hands clasping mine. My feet ache, and I try to stop, but my partner pulls me along, refusing to release me.

My feet move instinctively in time with my partner's, though there is no music to help us keep the beat. The air smells of dampness and mold; I have lived my life underground and I am accustomed to these smells.

Is this love?

I spend my days lying by the window, watching through the dirty glass. From the mouth of the alley, he calls to her. I did not give him a voice, but he calls in his own way, rubbing his two front legs together so that metal rasps against metal, creaking like a cricket the size of a Buick.

She strolls past the alley mouth, ignoring him as he charges toward her, rattling his teeth. He backs away, as if inviting her to follow. She walks by. But then, a moment later, she strolls past again and the scene repeats itself. I understand that she is not really oblivious to his attention. She is simply taking her time, considering her situation. The male intensifies his efforts, tossing his head as he backs away, doing his best to call attention to the fine home he has created.

I listen to them at night. I cannot see them—the electricity failed two days ago and the streetlights are out. So I listen in the darkness, imagining. Metal legs rub together to make a high creaking noise. The sail on the male's back rattles as he unfolds it, then folds it, then unfolds it again, in what must be a sexual display. I hear a spiked tail rasping over a spiny back in a kind of caress. Teeth chatter against metal—love bites, perhaps. (The lion bites the lioness on the neck when they mate, an act of aggression that she accepts as affection.) Claws scrape against metal hide, clatter over metal scales. This, I think, is love. My creatures understand love.

I imagine a cock made of copper tubing and pipe fittings sliding into a canal lined with sheet metal from a soda can. I hear metal sliding over metal. And then my imagination fails. My construction made no provision for the stuff of reproduction: the sperm, the egg. Science failed me there. That part is up to the creatures themselves.

• • •

My body is giving out on me. I do not sleep at night; pain keeps me awake. I hurt everywhere, in my belly, in my breasts, in my bones. I have given up food. When I eat, the pains increase for a while, and then I vomit. I cannot keep anything down, and so I have stopped trying.

When the morning light comes, it is gray, filtering through the haze that covers the sky. I stare out the window, but I can't see the male. He has abandoned his post at the mouth of the alley. I watch for an hour or so, but the female does not stroll by. Have they finished with each other?

I watch from my bed for a few hours, the blanket wrapped around my shoulders. Sometimes, fever comes and I soak the blanket with my sweat. Sometimes, chills come, and I shiver under

the blankets. Still, there is no movement in the alley.

It takes me more than an hour to make my way down the stairs. I can't trust my legs to support me, so I crawl on my knees, making my way across the room like a baby too young to stand upright. I carry the blanket with me, wrapped around my shoulders like a cape. At the top of the stairs, I rest, then I go down slowly, one step at a time.

The alley is deserted. The array of hubcaps glitters in the dim sunlight. The litter of bright papers looks forlorn and abandoned. I step cautiously into the entrance. If the male were to rush me now, I would not be able to run away. I have used all my reserves to travel this far.

The alley is quiet. I manage to get to my feet and shuffle forward through the papers. My eyes are clouded, and I can just make out the dangling bedspread halfway down the alley. I make my way to it. I don't know why I've come here. I suppose I want to see. I want to know what has happened. That's all.

I duck beneath the dangling bedspread. In the dim light, I can see a doorway in the brick wall. Something is hanging from the lintel of the door.

I approach cautiously. The object is gray, like the door behind it. It has a peculiar, spiraling shape. When I touch it, I can feel a faint vibration inside, like the humming of distant equipment. I lay my cheek against it and I can hear a low-pitched song, steady and even.

When I was a child, my family visited the beach and I spent hours exploring the tidepools. Among the clumps of blue-black mussels and the black turban snails, I found the egg casing of a horn shark in a tidepool. It was spiral-shaped, like this egg, and when I held it to the light, I could see a tiny embryo inside. As I watched, the embryo twitched, moving even though it was not yet truly alive.

• • •

I crouch at the back of the alley with my blanket wrapped around me. I see no reason to move—I can die here as well as I can die anywhere. I am watching over the egg, keeping it safe.

Sometimes, I dream of my past life. Perhaps I should have handled it differently. Perhaps I should have been less cautious, hurried out on the mating line, answered the song when a male called from his bower. But it doesn't matter now. All that is gone, behind us now.

My time is over. The dinosaurs and the humans—our time is over. New times are coming. New types of love. I dream of the future, and my dreams are filled with the rattle of metal claws.