

Mushroom Mysteries: The Rewards of Indiscriminate Mycophagia

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THIS SUMMER we were in Labrador City, picking mushrooms along Vello's Trail. One day we found a beautiful colony of *Coprinus atramentarius*. I fried up some onions in butter until they were just turning a golden brown, then added the *Coprinus*. While cooking, Maria and I enjoyed some very nice Australian shiraz. We finished the rest of the bottle with supper, *Coprinus* for me and lamb chops for my lamb chop, a sort of controlled experiment on the effects of alcohol and coprinotoxin.

"Foolhardy," you say. "You purposely invite an Antabuse reaction. It will serve you right, and you get no sympathy from me!"

"Not so," some of you may retort. "He's searching for Truth, conducting a scientific experiment. He'll report the result to our society, and we will all be more knowledgeable because of his sacrifice. How heroic to offer his own body for the general good!"

Indeed! The annals of scientific pursuit are filled with anecdotes of investigators, driven by a twisted personal madness, who have mutilated their own bodies in many spectacular ways to satisfy their curiosity. But examined at close range, none of these sensational feats has advanced mankind in a significant way. Major advances come from the less narcissistic scientist, pursuing a more abstract question in an imaginative manner.

No, I accept neither "foolhardy" nor "heroic," yet am not surprised at these attempts to explain behaviour. We fail to understand our fellow man because most often we explain what we perceive based on brief observation, interpreted through our own limited experience. To truly understand, we need the history that led to the observed event

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and an intimate knowledge of what motivates a man's actions. For example, my seemingly strange action was motivated by neither foolhardiness nor heroism, but by a much loftier aim: a five-year desire to right an injustice where I unwittingly played a part. To understand this, we must go back from the opening scene five years in time and some four hundred kilometers to the east, to Goose Bay, Labrador.

For a mycophile there are many good things about Goose Bay. Within twenty minutes by foot is one of the largest patches of *Cantharellus cibarius* I have ever imagined. In addition, the environs boast a generous abundance of tasty boletes (even the occasional *edulis*), again in amounts greater than you can eat or pick. As well, Goose Bay has its own resident mycophile, the intrepid Wieslaw, a knowledgeable lover of boletes, familiar with local mushrooms and happy to help in identification, opinion, or forays. Oh yes, there are other mushrooms as well.

There we were, then, Maria and I, in mushroom heaven, picking, eating, drying, picking, eating, drying. One morning we found some *Coprinus atramentarius*, uncommon around Goose Bay. Then I found a prize, the most beautiful *Boletus edulis* I had ever seen: large, firm, proud, statuesque, and no worms, truly worthy of its appellation, "The King"! As I walked out of the bush with my prize, I was surprised by a sudden squeal of tires. A German tourist driving by braked hard, left his car in the middle of the road, door ajar, rushed out to admire my mushroom and, with a bow, solemnly offered his hand in reverent congratulation. He confirmed this to be the most *wunderbar Steinpilz* he had ever seen. On the way home, we stopped by Wieslaw's, who in turn stared at the King with envy, eyes the size of saucers. The nicest one he had ever seen, no doubt about it. As it was a big mushroom, we offered to share it for lunch with him. He almost wept when forced to turn us down, as unfortunately he had another commitment. At



Figure 1. *Boletus huronensis* by Roger Smith

home, Maria quickly had some onions fried, to which she had added the *Coprinus*. This I ate up as an appetizer, and then on to the *edulis*! It looked exactly like any *edulis* I had ever seen before and yet so magnificent that it was like no *edulis* ever seen before by man. Its slicing was an act of holy sacrifice. It was distinctive with a pale golden flesh befitting its regal name, not the usual white or cream of more common *edulis*. Maria had had a late and heavy breakfast and did not want lunch, so I fried half of it in butter for myself. Delicious, absolutely grand! The other half went into our home-rigged dryer—even here it retained its beautiful shape and golden yellow colour. Whereas other mushrooms we cut into smaller pieces before drying, the King was preserved in intact slices because of its impressive size and shape.

Thus well fed, off I went to work. One thing led to another and I did not get home until about eleven in the evening. Maria was just finishing a glass of wine while watching the end of the day's broadcast of the Olympics. Seeing her hero come home from battle so late and tired, she offered me the last of her glass while she went to the kitchen to make supper. Too tired to eat, I said I'd be happy just to sit down and finish her half glass of wine and relax before going to bed. Totally forgetting

about the *Coprinus*. The few drops left in the glass did not take long, even when sipped slowly.

About fifteen minutes later I did not feel entirely well and thought I had better get to bed. Nothing really wrong, perhaps tired, just not entirely well. I started off upstairs. Within seconds all contact with the world was lost. There was no horizon. My feet were not on the ground (stairs, in this case). There was no upstairs to reach, no downstairs to leave. Everything spun like a crazy top, like an amorphous hurricane. Then it stood still and I spun. I was part of a universal screen saver, ever spinning, whirling, changing shape, colour and direction to a brownian agenda. An incredible feeling of illness and profound weakness suffused me. I could not go on. In an effort to quell this overpowering loss of contact and surroundings, I let myself fall, so as to be supported by ground. I did not know where ground was, but let myself loose, trusting gravity to find it for me. When I felt it beneath my body, I spread my arms out and hung on. And spun. I refused to, couldn't move. Thus my wife found me, draped over the last few steps at the top of the stairs, an integral part of chaos theory. Too weak to move an inch, refusing to be moved for fear of the spinning vortex.

Then I felt a deep, overwhelming nausea fill

my body. I felt so miserable, so weak, so ill. Everything spun and I had to vomit. So with Maria's help I made the last effort to get to the bathroom. On my knees, head into the toilet bowl. Violent heaves, all my insides coming out. And the world still spinning, spinning. Covered in cold sweat. Momentary reprieve. Wash my face with cold water, stumble into bed, Maria helping to undress me. The spinning again. Now painful stomach cramps. And heaves. To the toilet. Dangerous to lean over the toilet bowl, while spinning out of control. So sit on toilet, vomit into sink, chest against it and hands wrapped around it. Lucky, because fierce stomach cramps also set in and while heaving to empty out the top, violent eruptions burst out the bottom. Would have been all over the shop, had I not sat on the toilet, as I had no control. More cold sweat. Try to get back to bed, turn around half way. Repeat performance. For several hours. Finally make it to bed again. Chills, rigours, whole bed shaking. Then sweats. Cold, so cold. Maria wraps several blankets around me and holds me to keep me warm. Fever. Pulse racing, heart fluttering like a leaf. Doze. Awakened by more chills. Then spin returns, as does immediate need for weakened rush to toilet. Spend another hour or so there. Pain, cramps, rigours, spinning. Both ends spouting what by now is only foul-smelling, bitter-tasting, watery slime. Misery. Wish for death. Back to bed. Back to toilet. Bed. Toilet. Fall asleep on toilet, head in sink. Get to bed. Sleep a little.

By sunrise, a little better. No more nausea. A few spurts of diarrhoea, then cramps let off. No more fever. Even manage smile for wife. She's not smiling—hubby covered in sweat, puke and more, as is a trail between the totally smeared bed and the totally sprayed toilet. Weak from dehydration, tired. Sleep some. Wake up weak like a rag, but otherwise well. No spinning, no cramps, no pain, no fever, no sweats, no chills! Slowly and gingerly get up. Last bowel movement, totally controlled, even if liquid, without cramps, just a little urge. Thirsty, but scared to drink. Take few mouthfuls of water from cold water tap. It stays down. Step into tub and turn on shower. Wash. Feel good to be clean. Step out of tub—action of spreading legs to clear tub loosened last vesuvian eruption all over tub, floor, bathmat and self. The bathroom smells! But, all said, I feel wonderful! So, I rest a bit, then stoop and clean it all up with my wet towel. Then back

for second shower. Get dressed, go downstairs. No breakfast. I call work and say I won't be in, had a bout of stomach flu and don't feel well. Then lie down and sleep on the sofa. Wake before lunch and start drinking water, juice, whatever. By evening, feel fluids restored. Few loose bowel movements, totally controlled, nothing else abnormal all day. Normal sleep and normal breakfast the next day and off to work I go. Recovered and no worse for the experience.

Next comes the dissection, the analysis, the autopsy. And the anxiety. Could there have been a more serious poison, whose lethal effects are yet to return? What happened? Surely not the *edulis*, the King? No, can't be. It cannot be mistaken. Swallowing my pride, I consult Wieslaw. He saw the mushroom before consumption.

"No way," he agrees. "That was the most beautiful *edulis* I have seen, the King of Kings. The gods will punish you again, if you even suggest it made you sick."

Anxious, I phone a few mushroom experts at Memorial University in St John's on the Rock.

"No," they all agree, "you cannot mistake an *edulis*, and all you describe suggests it's an *edulis*. Yes, we do get them with yellowish flesh around here, and yes, I have picked along the coast of Labrador also. But think, did you not eat any other mushrooms at all? No, eh? Well, did you pick others and take them home in the same bag; maybe something rubbed off. Sometimes it does not take too much . . ."

"Indeed," my wife remembers, "we did pick that *Coprinus* . . . and . . . aah . . . I fried it for you before you ate the *edulis*."

"And then you/I had my/your half glass of wine!" we both remember together.

So I phone mycologists again, asking for details of coprinotoxin activity with alcohol. I also check with the medical school profs about Antabuse. Yes, all agree, what I describe could indeed be a case of coprinotoxin interaction with alcohol. What a foolish man to be so careless!

Explanation, confirmation, and relief. It's human to feel relieved when we can affix blame with certainty. *Coprinus* is guilty.

We complete our stay in Goose Bay and return home with five gallons of dried mushrooms, untold packages of berries—fresh, frozen and cooked into jam, and many other goodies. A

bounty to last us for several years, to be used for special occasions, special dinners. And new respect for Antabuse, along with a story of trots to trot out for those same dinners.

In an effort to understand motive behind the opening scene, we now move forward two years, to Toronto. Our oldest boy meets a wonderful girl, falls in love, and plans to marry. To meet our future in-laws, a pleasant American couple, we invite them for a visit. Definitely a special occasion, calling for special food, a veritable feast. We plan to offer our best. Roe of Alaskan Copper River king salmon with champagne. Arctic char from the northern coast of Labrador with Ontario chardonnay, muskox from Inuvik with wild mushroom, onion and partridgeberry sauce from our Goose Bay treasures with an old amarone, cheesecake with bakeapple sauce with an Ontario gewürtztraminer ice wine, cognac, and a fine Havana. And the wild mushrooms for the sauce were to be used from the special jar containing our King. To date we had used other jars, but the King's jar was left untouched, waiting for a special occasion—and this was it.

Our daughter flew in from Vancouver for this occasion. By the time we got home from work, she was trembling like a leaf in bed. Fever. Vomiting. The room was spinning. In fact, re-read paragraphs 9–11 of this story to see how she felt. Naturally we were worried, not knowing what was wrong and she was too violently ill to speak. The symptoms seemed vaguely familiar, but I did not connect them to mine. Fortunately by morning she was clearly getting better. And then the story came out:

While we were at work she, as always, examined the old homestead for signs of change between her absences. In the pantry she happened onto several gallon jars of dried mushrooms. Having heard how we had gone on about the wonderful wild mushrooms from Goose Bay, she felt she must taste one. So she opened a jar and looked for the nicest. And indeed in one jar there were several beautiful yellow slices of a large and inviting mushroom. She took the biggest and nibbled on it like a biscuit, while she continued with her exploration of the house. Yes, it was the yellow-fleshed big and beautiful one. Yes indeed! Our King.

Well, we had been making sauces, soups, lasagnas and other good things from our mushrooms

and had eaten them with no ill effects. But the jar with our pride and joy, the King, the world's most beautiful *edulis*, we had saved for a really special occasion. Our special American guests, our young couple, and various clan members were to get an introduction and welcome through the services of the King. Can you imagine the impression we would have made? "Welcome to the family! We look forward to many such get-togethers!" Hell, with that many people in the house, we would not have had enough toilets. A party to remember, indeed!

The cause of my illness was solved, but no time for reflection now. We removed all yellow-fleshed mushrooms from our dried stock and sent them to the Department of Agriculture in Ottawa for identification, with a description of why our interest. Our daughter made a full recovery, and we made the wild mushroom sauce using a jar we had used before with no ill effects. The evening and meal were memorable and enjoyed by all for all the right reasons. Some seven months afterwards a formal letter came from Ottawa saying that the mushroom submitted could not be identified; would we please send a fresh specimen and a larger sample. Right. Government—just keep indexing your pensions, boys. As far as boletes are concerned, we have continued to enjoy the rest of the dried mushrooms, until this year, five years after the picking, we finally used up the last. And as for *edulis*, I have eaten it before and after the described event with no ill effects and marked enjoyment. So go figure.

Well, in the next three years, you can imagine the guilt I suffered! Go back to that scene five years ago. How ready I was to worship at the feet of glittering royalty, totally forgetting about the dinky inky. Didn't even remember eating it. I have never yet seen traffic screech to a halt for a mere *Coprinus*, so how easy it was to let this insignificant and downtrodden weakling take the blame, when disaster fell, and fingers of the mighty and powerful pointed in its direction. Admittedly, it was not I who pointed the finger at the lowly *Coprinus*. Nevertheless, I felt sullied, violated even, for being used by the powerful as the vehicle whereby they could safely cast their pernicious aspersions on this modest but naively innocent inky. A battle of epic proportions raged in my soul. Is it not every man's noble duty to protect the meek, not vilify them? Is

it not my duty to repudiate the unfair besmirching of one so humble he already turns black and coalesces?

Clearly, there remained only one way to completely exonerate the unjustly maligned *Coprinus*: eat it with alcohol and show it does not cause the horrible illness I suffered. After three years, the innate nobility of my soul won: I offered my body on the altar of justice, to set the record straight. So you see, don't be too quick to judge your fellow. Look to the motive. Who dares call the need to right a wrong foolhardy?

Now back to Labrador City this summer: *Coprinus atramentarius* and Australian shiraz. For my gesture of grandeur the gods rewarded me. I have never enjoyed a nice meal as much or had a better night's sleep. The next day we both had some *Rozites caperata*, washed down with a beautiful bottle of Ontario gewürtztraminer. Absolutely delicious! And I've never felt better. Maria felt fine too, but not as fine as I, for she did not benefit from the coprinotoxin preloading, which obviously enhances the enjoyment of alcohol as well as promotes purity of the soul and a clear conscience. The last sentence is not written to advocate imprudence or to suggest there is no coprinotoxin-alcohol effect. It may just be that in my old age I'm immune to Antabuse. Why not? After all, in my youth I went through periods when it seemed I was immune to alcohol. Turnabout's fair play.

The lesson for you, dear reader, is not to judge your fellow man too harshly, until you have walked in his shoes. And if you do not want to go through both the physical and mental anguish I have suffered, do not worship resplendent royalty with uncritical fawning obsequiousness, cowlike devotion in your limpid eyes. Do not overlook the humble of this world, for most often they are willing to serve you better and with more loyalty than the exalted. Lastly, when disaster falls, resist the temptation to run with the mob to blame the meek.



Editor's note: For some people *Coprinus atramentarius* (now formally known as *Coprinopsis atramentaria*) can cause a very disturbing effect if alcohol is consumed with the meal or even a few days afterwards. The syndrome is characterized by rapid heartbeat and palpitations, tingling in the arms and legs, flushing and sometimes headache, heavy limbs and salivation. The symptoms are caused by coprine, an amino acid with a very unusual structure. Coprine was investigated as a possible substitute for Antabuse® (disulfiram), given to alcoholics to keep them off the bottle. Disulfiram is also used to vulcanize rubber, as a seed disinfectant, and as a fungicide and is problematical as a drug, so a substitute was desired. However, when tested in Beagles, Coprine caused testicular damage and so was abandoned as a potential drug. Thus quite aside from the potential to cause an alcohol reaction, I do not eat *Coprinus atramentarius*. *Coprinus comatus*, on the other hand, does not contain coprine and is safe to eat—though a very few people do suffer gastrointestinal distress and sweating, sometimes with muscle spasms and chills if they consume alcohol with their meal of “Shaggy Manes.”

So what did Andrus Voitk consume for that fateful lunch? In Maine in August of 2008 a man and his son each consumed two forkfuls of *Boletus huronensis*. The symptoms were remarkably similar to the symptoms experienced by Andrus Voitk; and as you can see from Figure 1, morphologically *Boletus huronensis* is remarkably similar to *Boletus edulis*. In September of 2008 *Boletus huronensis* was introduced to Andrus for the first time at the Foray Newfoundland and Labrador by Bill Roody. Was that the culprit? We will never know, but Andrus thought it looked uncomfortably familiar and dusted off this old story, thinking that Bill's find may finally have brought the story to a close. I, for one, am certainly going to learn the distinguishing features of *Boletus huronensis* before I collect and eat species of *Boletus* in northeastern North America. I am also going to make certain that any “*Boletus edulis*” I eat has white flesh that does not bruise any colour.