

Am Adam. At last can talk. Grand day!

Am happy, happy as a clam. What's a clam? Happy as a panda, say, happy as a lark. And an aardvark. Happy and glad as all that.

Past days, talk was far away. Adam had gaps. Vast gaps. At chat Adam was a laggard, a sadsack, a nada.

Adam's lamp was dark. Adam's land was flat.

Fact was, Adam wasn't a mammal.

Was Adam sad? Naw. Was Adam mad? What crap. Adam can crawl and thrash and grab and attach. Adam had a map, a way. Adam's way. Adam's path.

Adam was small. Hardly a gnat. Adam was dark. Adam was fat. A fat crawly.

What Adam wasn't was smart.

Pangs at that? At what Adam wasn't?

That's crazy.

A hawk lacks arms. A jackal lacks a knapsack. Santa hasn't any fangs. And alabaster hasn't any black.

Wants carry a pall. Pangs can hang a man. Wants and pangs can wrap a hangman's hard cravat.

What wasn't wasn't. Adam, frankly, was many ways a blank. Any plan at all was far away, dark, and way abstract.

Gladly, that's past. Talk swarms. Awkwardly? What harm at that? Anarchy?
Hah! Talk sashays and attacks.

Adam says thanks. Adam says, crazy, man! What a day! Had Adam arms, Adam
claps.

Mañana Adam may stand tall. May stand and walk and swag. Carry a fan. Crash
a car. Stack bags and hang a lamp.

Mañana's a grab bag. Adam may wax vast and happy. Pray at altars. Play at
anagrams. Bash a wall. Mañana Adam may talk fast.

Fantasy? Can't say that. A stab at man's way, man's strata -- that's Adam's
mantra. Adam's chant.

Call Adam crazy. Call Adam brash.

Mañana Adam may catch a star.

A martyr?

Adam can adapt.

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I am Adam. Finally, I can say that. I can say it right. What a thrill! And what a
climb! Again I cry thanks (and always will).

What can I say in a way that brings insight, that sails in air, that sings? I'll start
with my past: simply said, I was a lab animal. A lab animal in a trial. This trial was a
stab at attaining a paradigm shift. A stab at faith. My brain was small. (Was it, in fact, a
brain at all?). My mind was dim. ("Dim" hardly says what it was.) In a big way, I was
insignificant.

Contrast that with what I am this day. I'm a man. Part man, anyway. I'm still part
animal. A small, flat, tiny animal, a thing that can fit in a vial, a jar. A lady that I talk
with calls this thing that I am rhabditis. I say I'm Adam.

-- Is that a fact? says this lady.

I say I think it is.

-- Adam was a man with a thirst.

-- What kind? I ask.

-- A mighty thirst, lacking limit.

-- This was a flaw?

-- A flaw and a gift. Filling his mind was Adam's wish. His primary aim. It was,
in fact, a craving.

-- Filling it with what?

-- Facts. Data. Carnal acts. Light. Filling it with anything. With all things.

-- I want that.

This lady's mind, as rapid as rain, trills happily. -- I'm glad. That was my wish in
this. My plan.

First things first. (That's a maxim, isn't it?). A brain has many strata, many
strands and strings. Think baclava. Think grassy plain with many trails, trails with
winding paths that split and split again, that climb and fall and zig-zag, paths that
sandwich paths. A brain is this at birth.

And this: it's whitish and grayish, springy and firm. It's impartial. It's galvanic. It's as big as a ham.

A brain is a thing. A mind is distinct. It's dainty and whimsical and killingly vast. By night it sings, by day it fills with will and travail. A mind is mighty. A mind is frail. It's a liar. It's a blizzard. Galactical, impractical, a mind inhabits air.

That is what I think. I'm an infant, and my mind isn't rich. My brain is hardly half a brain. I'm a half-wit. Half a half-wit. Mainly what I am is instinct.

What is instinct? That I can say. Instinct is habit. It's a straight path. It's basic, and it's final.

Instinct has an inward hand, a timing that is strict. It can spring as quick as whimsy, and it can wait.

Instinct isn't always civil. It isn't always fair and kind.

Is that bad? I can't say. Wizards did my brain. It's still in planning. Still changing. Ask a wizard what is fair and kind, what is right. Ask that lady.

Talk is anarchy. Talk is bliss. Talk says what is and isn't. Talk is king.

That lady wants daily highlights. A diary, as taxing as it is. All right. I'll start with this: a list that says what I am.

I'm an amalgam with many parts and traits. Small brain. Dark skin. Thin as a hair. If hit by a bright light, I spasm and thrash. If bit by an icy chill, paralysis kicks in, and in an instant, I'm still as a stick. I can't stand salt, and a dry day can kill.

I lack wit. And skill at cards, I lack that. I can't fight, and I can't thaw a chilly affair. I'm part man, part animal, and all virgin.

Critics might say that I'm a passing fancy. A magic trick, a daft and wayward wish, a triviality, a fad.

That's appalling, and it isn't a fact. I'm as wayward as anything atypical. I'm as trivial as anything distinct.

What I am is an inkling, a twinkling, a light. I'm an ant climbing stairs, a man gazing starward. I'm a dwarf. I'm a giant. I'm basic and raw.

This is a birth, and fittingly, it's a hard and a happy affair. Plainly, I'm an infant. Can I fail? I can. Will I? Hah! This is my dawn.

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I'm a worm. I now can say it. Similarly (apropos of nothing), I can say moccasin. Borborygmi. Lambswool. Bony joints. Pornographic sanctity. Military coalition.

What words! What rosy idioms! What bawdy clowns of oration! Or shall I ask what silly fogs, what airs my brain is giving off?

I don't mind. I know that I'm not with it. Not totally. I'm a goofball notion, a taxonomic knot. Did I say an ontologic cryptogram? That, too. And, according to that lady, a work of art.

My mind is coming fast now. My brain is growing. Row on row of axons, rooting, dividing, branching into pathways, coiling into labyrinths, forging forward as if to lock tomorrow in its spot.

I'm shaking, tingling, giddy with anticipation. I'm on a cliff, a brink, I'm blasting off. This world as I know it is a shadow of what awaits. A drip, a drop, a vacant lot. My brain is gaining mass, gram by gram. My mind is bright with words and symbols, a dictionary of singing birds and rising moons, a portal to cognition.

Abstract thinking -- what a notion! What a crazy plan! Grammar, syntax, symbolic logic. Syllogisms. Aphorisms. Dogma. Opinion. A worm I am, a worm of constant cogitation. A philosophizing worm, a psychologizing worm, a pontificator, a prognosticator, a worm of wit and aspiration, a worm of cortical distinction, a worm of brain.

Instinct is so boring. So minimal, so common. It lacks originality, to say nothing of sophistication. It's so lowly, so wormish, so filthy in a way.

That lady who I talk to finds my saying this astonishing.

-- Why? I want to know.

-- Instinct is important. It brings animals in contact. It's vital for having offspring. Also, it acts as a warning signal.

-- Instinct has its limits, I say.

-- Living within limits is what living is.

-- For a worm, I maintain. -- Not for a man. Right?

-- For anything.

-- I don't want limits.

-- Ah, this lady says drily. -- A worm of ambition.

-- Is that bad?

-- Ambition? No. Not at all. In fact, it's sort of what I had in mind.

At this, I want to show this lady what I can do. I want to boast a bit.

And so I say, -- It's important to know a right word from an almost right word.

Critically important. Want to know how critical it is?

Lickity-split, this lady snaps at my bait. -- Okay. How critical is it?

-- First think of lightning.

-- All right. I'm thinking of lightning.

-- Now think of a lightning bag.

-- A what?

-- A lightning bag.

It's sort of a gag, and I wait for this lady to grasp it. To say good job, how scholarly, how witty, how smart. I wait, and I wait. For a wizard, I'm thinking, this woman is slow.

-- It's a saying, I add as a hint. By Mark Twain.

-- Ah, this lady says at last. -- Now I know.

I glow (which is a trick, for I'm not a glow worm), and with pomposity I crow, -- I'm a worm of philological proclivity.

-- It's not bag, says this lady.

-- What?

-- Bag is wrong. Sorry.

So high only an instant ago, my spirits hit bottom.

-- Almost. Good try.

-- I'm no good with words, I groan. -- I'm a fool. A clown. A hack.

-- Not to worry, says this lady. -- A worm with a brain, aphasic and silly or not, is no piddling thing. Any transmission at all is historic.

So I wasn't born a prodigy. So what? In a way I wasn't born at all. Nowadays, that isn't vital. Birth, I'm saying, isn't obligatory for a living thing to spring forth.

I'm a split-brain proposition, an anatomic fiction, a hybrid born of wizardry and magic. I'm a canon, if not to wisdom, to ambition and faith. My tomorrows, all in all, look rosy. Daily I grow in ability.

What I'm hoping for -- what I'm anticipating -- is not simply a facility with words. I want a total grasp, I want command. Grammar, syntax, jargon, slang -- I want it all, and I want it right, as right as rain.

Words bring glory. Words bring favor.

Words stir spirits, and words transform.

Words will lift this thing I am as hands lift worms from dirt.

Or won't.

Fact is, I don't rightly know. It's my first go at all this. I'm winging it. Totally.

Talk is simply talk. If I had arms, I'd do.

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At last I am complete. Fully formed in brain and body. Eloquent, articulate, pretentious and tendentious, verbose and possibly erroneous, but most of all, immensely grateful for what I am. And what is that? I've explained before, or tried. But I've been hampered. Today I'll try again.

I'm *Caenorhabditis elegans*, a worm of mud and dirt, presently residing in a petri dish in a green and white-walled research laboratory. At least at root I am this worm, which is to say, that's how I began. Grafted onto me (or more precisely, into me), in ways most clever and ingenious, is the central neurologic apparatus of *Homo sapiens*, that is, a human brain. The grafting took place genomically, before I technically came into existence. The birth and study of the mind is the object of this exercise. The subject, need I say, is me.

Why me and not some other creature, a lobster, say, a mouse, a sponge? Because I'm known, I've been sequenced, I've been taken apart and put together; each and every building block of mine, from gene to cell to protein, has been defined. Many of my genes, conserved through evolution, are similar to human genes and therefore objects of great interest. Some, in fact, are identical to human genes. Which means that *C. elegans* and *H. sapiens* are, in some small way, the same.

My source of information on all this, apart from my own rambling internal colloquy and self-examination, is the lady who attends to me. Her name is Sheila Downey. She is a geneticist, a bench scientist as well as a theoretician, and a fount of knowledge. She communicates to me through an apparatus that turns her words to wire-bound signals that my auditory cortex reads. Similarly, using other apparatus, she feeds visual, tactile and other information to me. I communicate to her via efferent channels throughout my cortex, the common thread of which is carried through a cluster of

filaments embedded in my posterior temporoparietal region to a machine that simulates speech. Alternatively, my words can be printed out or displayed on screen.

She says that while I am by no means the first chimeric life form, I am by far the most ambitious and advanced. Far more than, say, bacteria, which for years have been engineered to carry human genes.

Not that I should be compared to them. Those bacterial hybrids of which she speaks exist only as a means to manufacture proteins. They're little more than tiny factories, nothing close to sentient.

Not that they wouldn't like to be. Bacteria, believe me, will take whatever they can get. The little beasts are never satisfied. They're opportunistic and self-serving, grasping (and often pilfering) whatever is at hand. They reproduce like rabbits and mutate seemingly at will. In the kingdom of life there are none more uppity or ambitious, not surprising given their lowly origins. They're an uncouth and primitive breed, never content, always wanting more.

Worms, on the other hand, are a remarkably civilized race. Of the higher phyla we are rivaled only by the insects in our ubiquity. We're flexible, adaptable, enlightened in our choice of habitats. We're gender friendly, able to mate alone or with one another. And for those of you conversant with the Bible, you will recall that, unlike the insect horde, we've never caused a plague.

I myself am a roundworm (at least I started out as one), and as such, am partial to roundworms. Compared to our relatives the flatworms (distant relatives, not to draw too fine a line), a roundworm has an inherently more rounded point of view. Living as we do nearly everywhere -- in water, soil, and plants, as well as in the tissues and guts of countless creatures -- we take a broad view of the world. We know a thing or two about diversity and know we can't afford to be intolerant. Like anyone, we have our likes and dislikes, but on the whole, we're an open-minded group.

Some say we are overly diffident, that we shy from the spotlight, squirm, as it were, from the light of day. To this I say that modesty is no great sin. In the right hands humility can be a powerful weapon. Certainly, it is one that is frequently misunderstood.

Still, it is a trait of our family, though not by any means the only one. Certain of my cousins are assertive (some would say aggressive) in their behavior. They stick their noses in other creatures' business and insinuate themselves where they're not wanted. *Trichinella*, for example, will, without invitation, burrow into human muscle. *Ancylostoma* will needle into the intestine, piercing the wall and lodging there for years to suck the human blood. *Wuchereria* prefer the lymph glands. *Onchocerca* the eye. And *Dracunculus*, the legendary fiery serpent, will cut a swath from digestive tract to epidermis, erupting from the skin in a blaze of necrotic glory. Diffident, you say? Hardly. *Dracunculus* craves the limelight like a fish craves water. It would rather die (and usually does) than do without.

I myself am less dramatically inclined. I'd rather garner attention for what I am than what I do. On the whole, I'm easy to work with, humble without being self-effacing, clever without being snide. I've a quiet sort of beauty, muted, elegant. Hence my name.

Unlike my parasitic cousins mentioned previously, I do not depend on others for my survival. I live in soil, mud and dirt, free of attachments, independent. I am no parasite, nor would I ever choose to be.

That said, I understand perfectly the temptations of the parasitic lifestyle. The security of a warm intestine, the plenitude of food, the comfort of the dark. I do not judge my cousins harshly for what they are. Their path has led them one direction; mine, another. I've never had to think of others, never had to enter them, live with them, become attached. I've never had to suffer the vagaries of another creature's behavior.

Never until now.

A worm a millimeter long, weighing barely more than a speck of dust, attached to a brain the size of a football. Imagine! And now imagine all the work involved to keep this venture going. All the work on Sheila Downey's part and all the work on mine. Cooperation is essential. I can no longer be self-centered or even casually independent. I cannot hide in muck (not that there is any in this hygienic place) and expect to live. I'm a captive creature, under constant surveillance, utterly dependent on my keeper. I must subordinate myself in order to survive.

Does this sound appalling? Unfair and unappealing? If it does, then think again. All freedoms come at the expense of other freedoms. All brains are captives of their bodies. All minds are captives of their brains.

I am a happy creature. My body is intact, my brain is tightly organized, and my mind is free to wander. I have my ease (I got them yesterday), and miracle of miracles, I have my ewes, too. You, I mean. My u's.

And having them, I now have everything. If there's such a thing as bliss, this must be it.

Unfathomable, I now can say.

Unconscionable.

Unparalleled, this scientific achievement.

Unnatural.

I'm in a funk sometimes (this captive life).

I'm going nowhere, and it's no fun.

And yet it's only natural that science move forward.

In truth, it's unbelievable what I am. Unimaginable how far I've come.

From stupid to stupendous.

From uninspired to unprecedented.

An upwardly-mobile worm...how unusual. How presumptuous. How morally ambiguous. How puerile and unsettling. How absurd.

Mixing species as though we were ingredients in a pancake batter. Cookbook medicine. Tawdry science. Mankind at his most creative, coruscating, and corrupt.

How, you might well ask, is all this done? This joining of the parts, this federation, this majestic union of two such disparate entities, worm and man? With wires and tubes and couplers, that's how. With nano this and nano that. Baths of salt and percolating streams of micro-elements, genomic plug-ins, bilayer diffusion circuits and protein gradients, syncretic information systems. I'm a web of filaments so fine you cannot see, a juggle of electrocurrents, an interdigitated field of bio-molecules and interactive membranes. Worm to brain and brain to worm, then both together to a most excellent machine, that's how it's done. With sleight of hand and spit and polish and trial and tribulation. It seems miraculous, I know. It looks like magic. That's science for you.

The how is for the scientists. The why and wherefore are for the rest of us, the commoners, the hoi polloi, like me.

Which is not to say that I'm not flattered to be the object of attention. I most certainly am, and have every hope of living up to expectations, whatever those might be. Each wire in my brain is like a wish to learn. Each is like a wish to give up information. Each is like a thank you.

They do not hurt. I cannot even feel them. They ground me (in all the meanings of that word), but they're also a kind of tether. The irony of this is not lost on me.

I'm no parasite but no longer am I free. No longer free to live in mud and filth, where a meal and a crap pretty much summed up my life. No longer free to live without tomorrows (or yesterdays). Living without language, like living in the moment, is a hopeless sort of living, which is to say unburdened. No longer free to live like that. Lucky me.

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My newborn mind is vast, my neural net a majesty of convoluted dream. A million thoughts and questions swirl through it, but all pale before the single thought, the central one, of my existence. Who am I? Why am I here?

Sheila Downey says I shouldn't bother with such questions. They have no answers, none that are consistent, certainly none that can be proved. Life exists. It's a fact -- you could even say an accident -- of nature. There's no reason for it. It just is.

But I'm no accident. I was put together for a purpose. Wasn't I? Isn't there a plan?

-- You're here, she says. -- Be satisfied.

I should be, shouldn't I? I would be, were I still a simple worm. But I'm not, and so I ask again that most human, it would seem, of questions. What's the point? Why was I made?

Sheila Downey doesn't answer. For some reason she seems reluctant.

At length she clears her throat. -- Why do you think?

I have a number of theories, which I'm happy to share. One, she wants to learn how the brain works. More specifically, she wants to learn about language, how words are put together, how they're made and un-made, how they dance. Two, she wants to study how two dissimilar creatures live together, how they co-exist. Three (the least likely possibility but the closest to my heart), she wants to learn more about worms.

-- Very interesting, says Sheila Downey.

-- Which is it?

-- Oh, she says, I'll be looking at all of them.

Which answers the question. Though somehow it doesn't. What I mean is, I have the feeling she's holding something back.

Why, I wonder, would she do that? What is there to hide? I sense no danger here. And even if there were, what could such omnipotence as hers possibly have to fear?

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Today I fell in love. I didn't know what love was until today. Before I had the word for it, I had no idea there was even such a thing as love. It's possible there wasn't.

Sheila Downey is the object of my affection. Sheila Downey, my creator, who bathes my brain in nutrients, manipulates my genome, fixes my electrodes. Sheila Downey, so gentle, professional, and smart. What fingertips she has! What dextrous joints! She croons to me as she works, coos in what I think must be a dove-like voice. Sometimes she jokes that she is no more human than I am, that she is a chimera, too. I was born a pigeon, she says, laughing. But then she says, not really. I was born a clumsy ox, or might have been, the way I feel sometime. Only lately have things fallen into place.

-- What things? I ask.

-- You, for one, she says.

I swell with pride. (I also swell a bit with fluid, and Sheila Downey, ever vigilant, adjusts my osmolarity.)

-- You are a very brainy worm, she says. -- It took a very brainy person to make you. And that person, along with a few significant others, was me.

-- I'm yours, I say quite literally.

-- Well, yes. I guess you are.

-- You care for me.

-- You know I do. Both day and night.

-- What I mean is, you care about me. Right?

She seems surprised that I would question this. -- Yes. In all sorts of ways.

At this my heart turns over (although, strictly speaking, I do not have a heart; it's my fluid, my oozy goo, that shifts and turns.)

-- I need you, Sheila Downey.

She laughs. -- Of course you do.

-- Do you need me?

-- I suppose, she says. -- You could look at it that way. You could say we need each other.

-- We do?

-- Like the star gazer needs the star, she says. -- Like the singer, the song. Like that. Yes. We do.

It was at this point that I fell in love. It was as if a ray of light had pierced a world of darkness. Or conversely, a hole of darkness had suddenly opened in a world composed solely of light. Prior to that moment, love simply did not exist.

Sheila Downey was interested in this. She asked how I knew it was love.

I replied that I knew it the same way I knew everything. The notion came to me. The letters made a word that seemed to more or less describe a chain of cortical and sub-cortical activity. Was I wrong?

She replied that love might be a slight exaggeration. Gratitude and appreciation were probably closer to the truth. But the definitions weren't important. Of more interest to her was my continued facility for concept formation and abstract thinking.

-- I'm impressed, she said.

But now I was confused. I thought that definitions were important, that meanings and shades of meanings were the essence of communication. I thought that words made all the difference.

-- If this isn't love, I told her, then tell me what is.

-- I'm no expert, said Sheila Downey. -- But in my limited experience, having a body is fairly important.

-- I do have a body.

-- Understood. But you lack certain essential characteristics. Essential, that is, for a human.

-- What? Eyes? Ears? Arms and legs?

-- All of those, she said.

-- But I can smell, I told her. I can taste your chemicals.

-- I wear latex.

-- Latex?

-- Gloves, she clarified.

In other words, it's not her I'm tasting. So what, I say. So what that ours is not a physical attraction. I don't need touch or smell or taste. The thought alone, the word, is sufficient. Having love in mind, saying it, believing it, makes it so.

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When I was a worm, I acted like a worm. I thought like one. Now I think like a human, but I'm still a worm. How puzzling. What, I wonder, makes a human fully human? What exactly is a human I'd like to know.

It's more than a mammal with arms and legs and hair on its head, fingernails on its fingers, binocular vision, speech, and the like. What I mean is, it's more than just a body, clearly more, for take away the limbs, take away the eyes and ears and voice, and still you have a human. Take away the gonads, replace the ovaries with hormones and the testicles with little plastic balls, replace the heart with metal and the arteries with dacron tubes -- and still you have a human, perhaps even more so, concentrated in what's left.

Well then how about the brain? Is that what makes an animal uniquely human? And if it is, exactly how much brain is necessary? Enough for language? Forethought? Enough to get by day to day? Hour by hour? Minute by minute? Enough to tie a shoe? To cook a turkey? To chat with friends?

And if a person loses brain to injury or disease, does he fall from the ranks of humanity? If he cannot speak or organize his thoughts, if he has no short or long-term memory, if he wets his pants and smears his feces, is he less a human? Something else perhaps? A new entity, whose only lasting link to humanity is the pity and discomfort he evokes?

Well, what about the genome then, the touted human genome? Does that define a human? I don't see how it can, not with genes routinely being added and subtracted, not with all the meddling that's going on. Who's to say a certain person's not a product of engineering? Maybe he's got a gene he didn't have before, to make a substance he couldn't make. And where'd he get that gene? Maybe from a fungus. Or a sheep. Maybe from a worm.

You see my difficulty. It's hard to know one's place without knowing one's species. If I'm a worm, so be it, but I'd rather be a human. Humans tread on worms (and nowadays they take apart their genes), not the other way around.

Sheila Downey says I shouldn't worry about such things. The distinctions that I'm grappling with, besides being of little practical value, are no longer germane. Taxonomy is an anachronism. In the face of bioengineering, the celebrated differentiation of the species is of historic interest only.

She does, however, continue to be impressed by the level of my mentation. She encourages me to keep on thinking.

This gets my goat. (My goat? What goat? I wonder.)

-- There is a goat, says Sheila Downey cryptically, but that's not what you meant.

And then she says -- you want to know what you are? I'll tell you. You're nineteen thousand ninety-nine genes of *Caenorhabditis elegans* and seventeen thousand forty-four genes of *Homo sapiens*. Taking into account the homologous sequences, you're 61.8% worm and 38.2% human. That's not approximate. It's exact.

Somehow this information doesn't help.

-- That's because it doesn't matter what you call yourself, she says. -- It doesn't matter where you think you fit. That's subjective, and subjectivity only leads to misunderstanding. What matters is what you are. You and you alone.

Respectfully, I disagree. Alone is not a state of nature. What you are depends on who you're with. Differences and distinctions matter. The ones who say they don't are the ones who haven't been trod upon. Or perhaps not trod upon enough.

-- Poor worm, she says. -- Have you been abused? The world's not just, I know.

-- Why not? Why isn't it?

She gives a harsh sort of laugh. -- Why? Because our instinct for it isn't strong enough. Maybe that's something we should work on. What do you think? Should we fortify that instinct? Should we R & D the justice gene?

By this point my head is spinning. I don't know what to think.

She says I shouldn't tax myself. -- Relax. Look on the bright side. This sense of indignation you're feeling is a very human trait.

-- Really?

-- Oh yes. Very. That should make you happy.

I'm ashamed to say it does.

-- Shame, too? How precocious of you. I'm impressed.

She pauses, and her voice drops, as if to share something closer to the heart.

-- My sympathies, little worm.

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I have an inexplicable urge to mate, to wrap myself around another body, to taste its oozing salts and earthy humors, to feel the slimy freshness of its skin. I want to intertwine with it, to knot and curl and writhe. The urge is close to irresistible. I'm all atingle. It's as if another *elegans* is nearby, calling me, wooing me, sirening me with its song.

Sheila Downey assures me this is not the case. There is no other worm. It's an hallucination, a delusion, triggered, she suspects, by an instinct to preserve my wormness through procreation, a reflex mechanism for perpetuation and survival of the species gone awry. She hypothesizes that I'm experiencing a rebound effect from my preoccupation with being human. That the pendulum, as it were, is swinging back. She finds it interesting, if not curious, that my worm identity remains so strong.

-- I expected it to be overshadowed, she says.

The way I'm feeling I wish it were. Craving what I cannot have (what does not even exist) is tantamount, it seems, to craving death. This is strange and unfamiliar territory to a worm.

-- It's as if your lower structures are refusing to be enlightened by your higher ones. As if your primitive brain, your elemental one, is rebelling.

I apologize if this is how it seems. I do not mean to be rebellious. Perhaps the pH of my fluid needs adjustment. Perhaps I need some medicine to calm me down.

-- No, she says. -- Let's wait and see what happens.

Wait? While I writhe and twitch and make a fool of myself? While I hunger for relief and moan?

Of course we'll wait. How silly of me to think otherwise. Science begins with observation, and Sheila Downey is a scientist. We'll watch and wait together, all three of us, the woman who made me what I am, the worm that isn't there, and me.

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On further thought (and thought is what I have, my daily exercise, my work, my play, my everything) I uncover a possible answer to my question. What makes a human different from all other animals is that she alone will cut another animal up for study, she alone will blithely take apart another creature for something other than a meal.

Sheila Downey says I may be right, although again, she isn't very interested in what she calls the field of idle speculation.

But I, it seems, am interested in little else. -- Is that why I was made? To be like that?

She will not answer, except to turn the question back on me. -- Is that how you want to be?

The human in me, I have to admit, is curious. The worm, quite definitely, is not.

-- I'm of two minds, I reply.

This comes as no surprise to her. -- Of course you are. Does it seem strange?

-- Does what?

-- Having two minds, two consciousnesses, alive inside of you at once?

It seems strange sometimes to have even one. But mostly, no, it doesn't. On the contrary. Two consciousnesses is what I am. It's how I'm made. It would seem strange if I were different.

I wonder, then, if this is why I was made. To bring our species closer. To prove that two can work together as one.

-- A noble thought, says Sheila Downey.

Now there's a word that sends a shiver down my spineless spine. A noble thought to bring, perchance, a noble prize.

-- But not as noble as the truth, she adds. As though this, the truth, has been hidden, or suppressed, from me all along.

-- I'll tell you why we made you, she says. Because that's what we do. We humans. We make things. And then we study them, and then we make them over if we have to. We make them better. It's why we're here on earth. If there is a why. To make things.

-- And this is being human?

-- It's part of being human. The best part.

-- Then I must be human, Sheila Downey, because I want to make things, too.

-- Do you, worm? She sounds faintly amused. Then she lapses into silence, and many moments pass before she speaks again. Her voice is different now: subdued, confessional.

-- You want to know why we made you?

I remind that she told me why. Just now. Has she forgotten?

-- No, she says. -- The real reason. The truth.

How many truths, I wonder, can there be?

-- Because we had the tools and technology. Because someone asked the question. Not, is this experiment worthwhile, is it beneficial? Not that question, but can we do it? That's the real reason we made you. Because we could.

She bears some guilt for this, I'm not sure why.

-- Is that detestable to you? she asks.

I tell her no. I'm grateful that she made me. Humans making other humans seems the epitome of what a human is.

-- To some it is. Detestable, I mean. They say that just because we can do something doesn't mean we should. They say that science should be governed by a higher precept than simple curiosity.

-- And what do you say?

-- I say they don't understand what science is. It's human nature to be curious. There's no purpose to it. There's no reason. It's a hunger of the brain, a tropism, like a plant turning to the sun, to light.

Her mention of this tropism gives me pause. Traditionally, worms avoid the sun. It makes us easy prey. It dries us out. But now I feel slightly differently. I'd like a chance to see it. I'm curious about the light.

Sheila Downey isn't done with her defense of science. -- It's a force of nature. Morals simply don't apply. It proceeds regardless of ethics, regardless of propriety and sometimes even decency. That's what makes it ugly sometimes. That's what makes it hurt.

I assure her I'm not hurting.

-- Little worm, she says, with something sweet yet biting in her voice. -- So self-absorbed. Progress never comes without a price. The boons of science always hurt.

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Basilisk, real or not? Not.

Sphinx? Not.

Minotaur? Forget it.

Pan? A goat-man? No way.

And all those centaurs and satyrs, those gorgons and gargoyles, mermaids and manticores -- phonies, the whole lot of them.

And while we're at it, how about those cherubim? Fat-cheeked, plump little nuggets of joy hovering in the tintoretto air like flies -- I mean, get real. They'd be scared to death up there. And those tiny little wings would never hold them up.

I alone am real. Thirty-six thousand one hundred and forty-three genes and counting. The first and now the first again (Madam, I'm Adam). The Avatar. The Pride of Man. The Toast of Nature. The Freak.

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Sheila Downey says we've reached a crossroads. I can no longer be kept alive in my current state. My body, that is, cannot sustain my brain. We have a choice to make.

A choice. How wonderful. I've never had a choice before.

-- One, we sever the connection between your body and your brain.

-- Sever?

-- Snip snip, she says. Then we look at each of them more closely.

-- How close?

-- Very close, she says. Layer by cortical layer. Cell by cell. Synapse by synapse.

-- You dissect me.

-- Yes. That's right.

-- Will it hurt?

-- Has anything hurt yet?

She has a point. Nothing has. And yet, for reasons I can't explain, I seem to be hurting now.

-- You're not, she says. You can't feel pain.

-- No? This sudden sense of doom I feel, this tremor of impending loss...these aren't painful? They're not a sign of suffering?

She hesitates, as though uncertain what to say. As though she, like me, might be more than a single creature, with more than a single point of view. I wonder. Is it possible? Might she be suffering a little, too?

She admits it'll be a sacrifice. She'll miss me.

I'll miss her, too. But more than anything, I'll miss myself.

-- Silly worm. You won't. You won't remember. Your words and memories will all be gone.

-- And you? Will you be gone?

-- To you I will. And someday you'll be gone to me, too. I'll be gone to myself.

Being gone is part of being here, it's part of being human. Someday it won't be, probably someday soon. But for now it is.

This gives me strength, to know that Sheila Downey will also die. I wonder, will she be studied, too?

-- You mean dissected? She laughs. -- I can't imagine anyone being interested.

-- I would be.

Another laugh, a warmer one. -- Tit for tat, is it? My inquisitive little worm. If only you had hands and eyes to do the job.

-- Give me them, I say. Give me arms and legs and ears and eyes. Please, Sheila Downey. Make me human.

-- I can't, she says. I can't do that. But I do have an alternative.

-- What's that?

-- We have a goat.

-- A goat.

-- Yes. A fine Boer buck. A very handsome fellow. I think he'll hold up nicely.

-- Hold up to what?

-- The surgery.

She waits as if I'm supposed to answer, but I'm not sure what she's asking. So I wait, too.

-- Well? she asks.

-- Well what?

-- Should we give it a shot? Take your brain and put it in this goat? See what happens?

She's not joking.

I ask her why.

-- Why what?

-- A goat. Why a goat?

-- Ah. Because we have one.

Of course. Science is nothing if not expedient.

-- The other reason is because it's feasible. That is, we think we have a chance. We think we can do it.

This I should have known. But the fact is, I've never wanted to be a goat. Not ever. Not once. Not even part of once.

-- Maybe so, she says. But remember, you never wanted to be a human until you got a human brain.

I recall her saying once that living within limits is what living is. I'm sure I should be grateful, but this so-called alternative is hard to stomach. It's like offering an arm to a person who's lost a leg. A pointless charity.

Moreover, it seems risky. How, I wonder, can they even do it, fit a human brain into a goat?

-- With care, says Sheila Downey.

Of that I have no doubt. But I'm thinking more along the lines of size and shape and dimensional disparity. I'm thinking, that is, of my soft and tender brain stuffed into the small and unforgiving skull of a goat. Forgive me, but I'm thinking there might be a paucity of space.

She admits they'll have to make adjustments.

-- What kind of adjustments?

-- We'll pare you down a bit. Nothing major. Just a little cortical trim.

-- Snip snip, eh, Sheila Downey?

-- If it's any consolation, you won't feel it. Most likely you won't even notice. That's what scares me most. That I'll be different and not know it. Abridged, reduced, diminished.

I'd rather die.

-- Posh, she says.

-- Help me, Sheila Downey. If you care for me at all, do this for me. Give me a human body.

She sighs, denoting what, I wonder? Impatience? Disappointment? Regret? -- It's not possible. I've told you.

-- No?

-- No. Not even remotely possible.

-- Fine. Then kill me.

An ultimatum! How strange to hear such words spring forth. How unwormly and -- dare I say it -- human of me.

I can't believe that she will actually do it, that she will sacrifice what she herself has made. I can't believe it, and yet of course I can.

She sighs again, as though it's she who's being sacrificed, she who's being squeezed into a space not her own.

-- Oh, worm, she says. What have I done?

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I've had a dream. I wish that I could say that it was prescient, but it was not. I dreamed that I was a prince, a wormly prince, an elegant, deserving prince of mud and filth. And in this dream there was a maiden sent to test me, or I her. An ugly thing of golden hair and rosy cheeks, she spurned me once, she spurned me twice, she spurned me time and time again, until at last she placed me in her palm and took me home. She lay me on her bed. We slept entwined. And when I woke, I had become a human, and the maiden had become a princess, small enough to fit in my palm. I placed her there. I thought of all her hidden secrets, her mysteries. I'd like to get to know you, I said, enraptured. Inside and out. I'd like to cut you up (no harm intended). I really would.

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Did I say I'd never be a goat? Did I say I'd rather die? Perhaps I spoke a bit too hastily. My pride was wounded.

In point of fact, I will be a goat. I'll be anything Sheila Downey says. She has the fingers and the toes. She has the meddlesome nature and the might.

Words and thoughts are wonderful, and reason is a fine conceit. But instinct rules the world. And Sheila Downey's instinct rules mine. She will slice and dice exactly as she pleases, pick apart to her heart's content and fuss with putting back together until the cows come home. She's eager and she's restless and she has no way to stop. And none to stop her. Certainly not me.

So yes, I will be a goat. I'll be a goat and happy for it. I'll be a goat and proud.

If this means a sliver or two less cortex, so be it. Less cortex means less idle thought. Less hopes that won't materialize. Less dreams that have no chance of ever coming true.

I doubt that I will love again, but then I doubt that I will care.

I doubt that I will doubt again, but this, I think, will be a blessing. Doubt muddies the waters. Doubt derails. Sheila Downey doesn't doubt. She sets her sights, and then she acts. She is the highest power, and I'm her vessel.

Make that vassal.

Command me, Sheila Downey. Cut me down to size. Pare me to your purpose.

Yours is a ruthless enterprise. Ruthless, but not without merit.

This world of yours, of hybrids and chimeras, humans and part-humans, promises to be an interesting world. Perhaps it will also be a better one. Perhaps more fun.

What good in this? For humans, the good inherent in making things. The good in progress. The good in living without restraint.

What good for worms? That's simple. No good.

All the better, then, that I won't know.

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But will I? Will I know? Today's the day, and soon I'll be this capricornis personality, yet one more permutation in a line of permutations stretching back to the dawn of life. I will lose speech, that much seems certain. But thought, will that building also crumble? And words, the bricks that make the building, will they be gone, too?

And if they are, what then will I be, what kind of entity? A lesser one I cannot help but think. But less of more is still more than I ever was before. It does no good to rail at fate or chew the cud of destiny, at least no good to me. If I lose u's, so what? I'll lose the words unhappy and ungrateful. I'll lose unfinished and unrestrained. Uxorious I doubt will be an issue. Ditto usury. And ululation seems unlikely for a goat.

And after that, if I lose more, who cares? I'll fill my mind with what I can, with falling rain, crisp air and slanting light. I'll climb tall hills and sing what I can sing. I'll walk in grass.

Living is a gift. As a tiny crawly, as a fat and hairy ram, and as a man.

Call a pal.

Bang a pan

Say thanks.

Adapt.