

# *On The Nature of Things*

*...As They Seem*

A Didactic Poem in Stichic Form  
Composed of Joined Elegiac Quatrains

And Inspired by the Great First-Century-BC Roman  
Didactic Poem of Epicureanism, *De rerum natura*  
("On the Nature of Things," in 7,400 Dactylic Hexameters  
Divided into Six Untitled Books [and Probably Unfinished])  
by Titus Lucretius Carus (c. 99-c. 55 BCE)

*Though More Fundamentally* Motivated by the  
Counter-Intuitive Nature of Our World  
Revealed to Us by Embodied Cognitive Science

**D**esire drives the way our world's made  
By us from out those crucial bits our nerves  
Evolved to read – a narrative, portrayed  
Electrochemically in flesh, that serves  
To steer us through the blur of useless facts  
In which priorities of sustenance  
And safety are obscured, lest they detract  
Our chance to pass on genes toward subsequence.  
The antecedent of this mortal force,  
Before the workings of biology  
Emerged from properties at physics' source,  
Is, basically, *attraction* – gravity,  
Electromagnetism, and so on –  
Found everywhere but most suggestive of  
This recent earthly process we see drawn  
Between two sentient beings, long called "love."

[10]

Lucretius sang a version of this song  
 Two thousand and some years ago but failed  
 To make it quite cohere, since he was wrong  
 (As was this Epicurus he unveiled) [20]  
 About reality – *as are we all*  
*By sheer necessity.* For, how could he,  
 Or *anyone*, back then or now, *not* fall  
 For the *illusion* of reality,  
 Which is *constructed*, not out there as shown?  
 Yes, nervous systems studied have revealed  
 That what's outside our skull cannot be *known*  
 Within but only *guessed at* – our best yield  
 With what weak instruments we've been bequeathed  
 By evolution's strict priorities, [30]  
 Through which we're shaped by needs of our own niche  
 As ecological economies.  
 This is to say that sugar is not sweet  
 To anything but brains evolved to find  
 It so. And colors are but how we greet  
 Specific wavelengths (when not color *blind*)  
 Because our species has developed three  
 (Or, rarely, four) such cone cells to detect  
 Those lengths of radiation waves most key  
 To *our* survival – *not* to mean "correct" [40]

Though, as is shown with other species' eyes,  
Which see things differently with more or less  
Of these same types of cells. And this applies  
To every sense a species might possess,  
Such as magnetic fields or heat, or tastes  
Of acid, gas, or other signals shown.  
These differences reveal how things are *traced*  
And *not* how they exist out on their own.  
In simpler words that have been said before  
So often, yet so rarely understood: [50]  
We all experience these things explored  
*Not* as they are but as *we* are. Why should  
The fact that two observers will agree  
On what they'd just observed mean *both* are right  
When all the while *neither* can but see  
Past their endowment, which just *seems* keen sight?  
This strange delusion of sufficient range  
Of vision confidently felt by each,  
*Despite their flagrant lack*, is just what brains  
Do best: pretend their models *have* no breach [60]  
Among their inputs, so to best maintain  
A user interface from out this wealth  
Of data simplified enough to frame  
A unifying agency called "self."

Now, this unlikely, though convincing, sense  
Of unity we feel, somehow, amidst  
The chaos of diversities immense  
At work beneath the hood, is how we're fixed  
Neuronally to better navigate  
This world that is our simulacrum's hold. [70]  
For, networks of robotics long innate  
To our embodied brains distinguish old  
From new till higher functions can then ascertain  
From our environment what might upset  
That equilibrium we'd need maintain  
*And choose alternatives of lesser threat.*  
More yet, this unity we feel belies  
The fact our cells all die and are replaced,  
At varied rates, non-stop. And this implies  
That we're composed today of stuff that's based [80]  
Upon the plan of former stuff now gone,  
Like all those planks of wood that over time  
Were substituted with their like out on  
That ship of Theseus, maintained as shrine  
Across the centuries, until it came  
To seem a paradox to thinkers who  
Now pondered if it should be called the same  
Ship that our long-dead hero really knew.

For, by replacing its components, one  
By one, until there were not any now [90]  
Original once all was said and done,  
What *was* it in this vessel, from its prow  
To stern, that could be reasonably thought  
“The same”? Of course, it is the thing’s *design*.  
And while this leaves it a mere copy wrought  
Of something that is gone, *we redefine*  
*This likeness as authentic*, which but shows  
How any whole is worth more than its parts,  
And how each *part* from which it is composed  
Contains *its* meaning where its *pattern* starts. [100]  
Yes, take an organ from a body, say.  
Its value as an object cannot be  
As flesh itself but as its *role* to play  
Within a working *process*. This is key  
To everything in life, down through those cells  
From which all living tissue’s made. The bits  
They’re made of have no meaning by themselves;  
They’re only seen as what their *use* permits  
Within some higher system’s functioning.  
And by the time we’ve reached true *agency* – [110]  
That scope in which an organism brings  
Self-reasoned causal power’s currency

To bear upon the world – it's shown quite clear  
That things themselves mean less than what their *role*  
Is in a certain process's career.

*(The meaning of the part is in the whole.)*

But back to choosing – in it we carve out  
Our few degrees of freedom from what's *thought*  
Should be determined strict as fate about  
Us, as Determinism's wrongly taught. [120]

Yes, these same experts say we have no will  
That's free because to pick an option turns  
Upon all prior happenings fulfilled  
For which the picker has no claim discerned.  
In other words, said author of this act  
*Herself* depends upon such things realized  
That made *her* action possible, in fact,  
*And that she couldn't have done otherwise.*

And this is but *exquisitely* untrue,  
Of course, despite the solid craftsmanship [130]  
Of such deductive logic, as its view  
Depends on blind acceptance that one skips  
Causality's determined laws each time  
An agent chooses to control the way  
Said laws effect the course of *her* design,  
As if just *one* trajectory's in play.

But picture to yourself how this might work:  
Without that element of choosing left  
From right upon some forking path, we'd shirk  
All chance to use what knowledge we'd assessed, [140]  
Resulting in a state where knowing things  
*Were just the same as not*, since all was fixed  
To play out rigidly on puppet strings  
Regardless of an agent's well-planned twists.  
No, choosing between options that may *each*  
Themselves be found within causation's chain  
Does *not* entail some necessary breach  
Of laws through which our nature is constrained.  
Determinism, after all, is *not*  
The same as *predetermining* a fate. [150]  
It is compatible with our best shot  
At how a certain system's future state  
Derives, *at length*, from out its current one  
Without an intervention *from outside*,  
Which doesn't rule out alternates that run  
*Within* said system, *causally* supplied.  
The difference has to do with *meaning* – *that*  
Through *information* on these future states,  
Discriminating between options at  
Each fork that possibility creates. [160]

In other words, although we cannot cause  
 Or pause the wind itself, we *can* control  
 The way its course effects our own with laws  
 That help us trim our sails toward our best goal.  
 And this control upon determined things  
 Is no more contradictory than how  
 A thermostat restrains unwelcome swings  
 Of temperature within that realm endowed  
 It. Yes, that human agent who'd employed  
 Its mechanism to respond to change [170]  
 From out some chosen stasis best enjoyed  
 Is sharing that control within *her* range.  
 Another way to word all this about  
 The type of freedom agency can wield  
 Is this: Although those choices found throughout  
 Our world may be, *in of themselves*, revealed  
 As but determined, such does not entail  
 That we, as knowing agents, are not free  
 At least to *choose among them* in that pale  
 Of outcomes possible when they're foreseen. [180]  
 Now, back to our observers, whom we'd left  
 In some agreement as to what *they'd* seen.  
 Historically, concordance of such heft  
 Was viewed as proof of some "objective" being—

Past the noise subjective bias rings  
Upon the seasoned scientific ear –  
But *neither* viewer had observed those things  
*An sich* – external to how *they* appear  
Portrayed by *fleshly* means – but just within  
*Their* ken, which had itself evolved to meet [190]  
Quite different needs back while some fen had been  
Their habitat instead of poured concrete.  
All this is just to show that it's desire  
Rather than causality that draws  
Reality's ontology, inspiring  
Life from out of information's laws.  
Its impetus pervades the fabric of  
That top-down modelling of how things can  
Become – which, bottom-up, is tweaked by stuff  
The senses furnish that refine the plan. [200]  
Yet note: This "will" cannot be *truly* "free,"  
Especially in that ghostly sense Descartes  
Had spooked us with, wherein the very key  
To how our bodies move is in the cards  
Played seance-like *beyond* what physics moves,  
Like cats or rats, whom he would grant no soul  
*And would be right*: They don't, *which further proves*  
*The same for us*, their cousins in this whole

Descent we've made from out those very first  
Prokaryotes on earth three billion-some [210]  
Odd years ago. Of course, to those more versed  
In nitpicking, we should concede the dumb  
But valid point that "soul" can also mean  
Another thing as well, like character  
Or personality, when we are keen  
On it in someone. But we must demur  
When told these traits can then ascend from out  
The body that created and conserved  
It, just to flourish in thin air, no doubt,  
Where nothing feeds such circuitries of nerves [220]  
That are the stuff of which all thought is made.  
And given this, we see our every thought  
Is *physical* and leaves a proven change  
Upon the brain in which it had been wrought,  
Which means, of course, these products of the mind –  
*Which is the process of a working brain*  
*And nothing more* – cannot be reassigned  
To flesh outside these neurons' own domain,  
Where they'd developed in connection, full  
Reciprocally, with that same body it [230]  
Had grown with from the start – "dyed in the wool"  
Inseparably through interaction's fit.

And even harder to explain by far  
Is how this pattern of emergence, where  
These nerves had done their work, could somehow start  
Again *without them*, fostered by pure air.  
Now, think about this in a different key:  
Just take an engine simpler than a brain  
*By far* – say, one that changes energy  
Into some movement's use, not ascertains [240]  
A thing like *meaning* – yes, and then observe  
Its work continued *once it's been destroyed*.  
How different is this process made by nerves  
Once *they're* removed from how they'd been employed?  
If products such as these could be sustained  
Without all that machinery that built  
Them, why expend the efforts that had framed  
Their prospect well before this milk was spilt?  
Such industry, expended without need  
Of any kind, acutely contradicts [250]  
A law of nature that, from smallest seed  
To largest forest, never fails: a strict  
*Economy* that underwrote the first  
Cell viable and, through it, then constrained  
The many consequences *it* dispersed  
Engaging with this world it now attained.

Yet this consistency of nature's laws,  
So necessary to the way things work  
Within a world where each effect has cause,  
Is often, like some nonessential perk, [260]  
Ignored when inconvenient to respect.  
And in its place, we're offered at such times  
The lower-hanging fruit that **FAITH** collects  
In order to explain its own designs.  
I mean, of course, this business of "God's hand"  
One finds so often dealt to circumvent  
Whatever's difficult to understand  
Without the help of science (or plain sense).  
For, quite unlike our own, this hand, it seems,  
Can infiltrate causality's fine weave, [270]  
Knit tight by physics' laws, and like those dreams  
Where pigs can fly, coerce us to believe  
There is no incongruity in it.  
The hand withdraws from where it interfered  
And, magically, each severed strand is fixed  
Again, till these same laws may be revered  
Once more as tamperproof, and all is well—  
At least to those who're willing to pretend  
For God's sake, or a seamless fear of hell,  
That this is something reason can defend. [280]

Intelligence of the creative kind –  
From which each artwork, theory, building, or  
Whatever novel world you'd wish designed –  
Should, in itself, be viewed as something more:  
A RECENT feature of our universe.  
That's right, from out so many billion years  
Of gas and rock that could not plan, rehearse,  
And execute some change in their careers,  
It wasn't till biology emerged –  
And, eons later, nervous systems too – [290]  
That agency evolved to ride an urge  
Toward choices that result in something new.  
This needs the mechanisms of a brain  
Within a body in environment  
And its strict competition to maintain  
That fragile balance toward which life is bent,  
All subtly tweaked continually by chance  
Intrusions of miscopied code, through which  
New prospects can emerge into the dance  
That influence its tempo, flow, and pitch, [300]  
Effecting that next toss of chance's dice  
Against *this* information's likely reach  
Of *new* experience that proves the price  
Of living in *its* everchanging niche.

And thus, from out this mix of unique strands  
Of memory's constructions comes that weave  
Sustained by meaning's ever-seeking hands,  
Which, *via metaphor*, help us conceive  
The future that we dream from out the past  
(Remembered as the present), where a thing [310]  
That hadn't worked before might be at last  
Compared with options through remembering.  
Creative intellect of *any* kind –  
Why, even fashioning some twig to nurse  
An insect from a hole, so never mind  
*Complexities like our whole universe!* –  
Cannot *precede* the evolution of  
A thought, which cannot live in gas or rock  
Or charge, no matter whether named as "love  
Or "god" or even "the eternal clock." [320]  
It takes a complex system that can change  
In order to sustain such simple thought  
As "on or off," quite let alone so strange  
A concept as redemption as is taught.  
And so, illogical as it may be  
To contemplate some merest *concept* made  
By rocks and gas and charge, to try and see  
Intelligence back then that could *create*,

Instead of just *encompass*, nothing less  
Than our entire universe, is down- [330]  
Right counter to the way we've come to test  
Our inner model of what's all around  
(And in) us, which we call "reality."  
So inconsistent is this top-down view  
Of how this world we live in came to be  
Without that bottom-up to which it's due,  
It's difficult to understand how we  
Have come to privilege *so* this type of quick  
Design without slow change (which *can't* prove key  
To how things got this way without some trick). [340]  
That wider menu of tomorrow's born  
From chance as thrown against the stuff that's here  
Already, not to mention how it's worn  
Away the while by entropy's career.  
For, though a single human can design  
Top-down, a great cathedral in a plan,  
Another version made without a mind  
By termites, bottom-up, *as all began*,  
Shows how we're biased blind by how we've come  
To see what we can do. The end result [350]  
Of all this insect work, derived but from  
Robotic mindlessness, we should exult

As loudly as we do our own: Behind  
What these same termites have achieved in theirs,  
Though not through synthesis of one great mind,  
Is found the answer to survival's cares,  
And maybe even *better* than does ours.  
For though *our* great cathedrals may supply  
The ambience we need toward *our* best powers,  
They don't come even near the reasons why [360]  
The insect's great design is so sublime –  
Such as thermodynamically to start –  
As might compare with ours, which but provides  
Us cool and quiet and a place for art.  
As said above, these termites have amassed  
Their triumph of contrivance not through "Art"  
That's synthesized within one mind – from past  
And future goals – but with mere *mindless* parts,  
Just like those mindless nerve cells in our brain  
That nonetheless conspire to perform, [370]  
Collectively, a complex network's chain –  
Intentionality – that's now our norm.  
It could be argued that the realized work  
Of termite and of man but constitutes  
A vast amount of time in which was learned  
The skills required through these different routes

And that what came to be hard-wired in  
Each insect after generations of  
Mistakes had its own correlate within  
That single human mind we praise above [380]  
The most impressive group of simpler jobs.  
But even if the termite's version proves  
Superior to ours in housing mobs,  
Our bias toward the top-down plan behooves  
Us to respect far more the architect  
Than all the expert craftsmen she's employed –  
All this despite the fact their end effects  
Obtained are but comparably enjoyed.  
But wait, I hear you say, remembering now  
What I'd just writ that neither gas nor rock [390]  
Nor energy had Agency and how,  
Therefore, these lacked the consciousness to block  
Or cause events top-down. How can that be,  
You ask, when consciousness itself, it's said,  
Is downright "fundamental" – *underneath*  
The fabric made by physic's laws instead  
Of just *contingent* – through our universe,  
In *everything*, down to its smallest quark?  
Some thinkers, wishing to avoid the curse  
That substance dualism casts so dark [400]

Upon good reputations now, yet still  
Prepared to eat that cake that's made in part  
With stuff that *isn't* physical, will thrill  
To savor things from off that tidbit cart  
Of mental-yet-*non*-physical clichés,  
As if one really can but have it both  
Ways, as they seemed back in idealist days  
Of Plato, Berkeley, and the rest whose oath  
Was that the physical is but the fruit  
Of some great *mental* fundament and *not* [410]  
The other way around. This deft salute  
To that old hunger to transcend this rot  
Of flesh called Death was named by desperate Greeks  
Way back "Panpsychism," a name that now  
Affords the desperate dualist who seeks  
To *seem a monist* his own holy cow.  
The mantra of these mentally obsessed  
Is: "*How* can consciousness emerge from parts  
That *in themselves* are lacking consciousness,  
Like something made from nothing's deck of cards?" [420]  
This question *sounds* seductively "slam dunk,"  
Like any syllogism might, where sense  
Deduced through reason makes good thinkers drunk  
With faith that their respondent lacks defense.

But when you really *think* about it – out  
Beyond where language ties one up in knots  
So many times – you’ll find beyond a doubt  
This question fails to really connect dots.  
And that’s because it’s lacking in respect  
For that which we most otherwise abide: [430]  
*Emergence*. Yes, there’s few who would object  
When told the whole is more than just the tidy  
Sum of all its parts because the play  
*Between* these bits imbues the full event  
With something new that didn’t even weigh  
Among the features that such parts present.  
To pick among the lowest hanging fruit,  
Try water: It has features absent from  
The molecules it’s made of – attributes  
Like slipperiness and more that but become [440]  
What hydrogen and oxygen cannot  
Out on their own. Yet no one says that to  
Create this slippery substance from its lot  
Of parts *that aren’t slippery* is due  
To inconsistencies of nature’s laws,  
Like magic tricks. No, science shows us how  
The bonding of these molecules gives cause  
Toward making new *through what these rules allow*.

And these new features that emerge from out  
The mix of said components lacking them [450]  
Is what we're faced with when we call in doubt  
That consciousness could be that thing that stems  
From *combinations* of robotic parts  
Despite the lack of consciousness within  
Each one in of itself – before it starts  
In concert with those others as *they'd* been.  
But I digress. This look at how design  
As our own species thinks of it cannot  
Apply to how our world seems divined  
Now brings us back to a most salient spot: [460]  
Lucretius tell us that the gods exist  
But cannot intervene in our own lives –  
This to say, as dualists will insist,  
The gods are just not physical and strive  
With not a footprint left, to waft *above*  
Our world, like weightless thoughts that we perceive.  
But this just misconstrues the nature of  
A thought, which *is* but physical indeed,  
As each, regardless of its content – love,  
Regret, whatever – *leaves a change* to read [470]  
Within the brain that formed it in its stride.  
It is the *process* of a network, keyed

Quite physically: A thought can't live outside  
A working brain, though it can be *replayed*  
In other brains that have but read, as guide,  
Its recipe from which it's then *remade*.  
That other brain to which it's been conferred  
Must reconstruct that networking that tied  
Together just those strands on which that word,  
Sound, image, action, feel or such allied [480]  
Themselves toward meaning in brain "a" back then.  
In other words, when brains die, so do thoughts –  
Unless they're reconstructed once again  
In other brains to which they have been taught.  
So, gods then, since not physical, are just  
Ideas too that brains create. They die  
When not remade in other brains; they must  
Unless such narratives are writ to buy  
More time for them in memories that tell  
Of why the world should be how it seems. [490]  
And since it seems unjust and cruel as hell,  
These must be painted bright within our dreams.  
And here's where **FEAR** comes in to save the day.  
Because embodied brains evolved this sense,  
Refined beyond all others, that relays  
To us those endless ways our best defense

Might fail our warding off our certain DEATH,  
We tag those thoughts involved with gaudy hues  
To trigger actions that could cost our breath  
But save our life, in order to but choose [500]  
That narrative in which we read our world  
Toward safest end. And gradually we came  
To want that rush itself we had unfurled  
Each time we learned a bit to save our game.  
And so, we've come to like those stories that  
Can replicate that feel of knowing how  
Things work enough to navigate our vat  
Of life and bypass death – except that now  
We privilege that same *feeling* over what  
Might *really* be the truth of how things work [510]  
And sacrifice with ease such truths that shut  
This feeling off, till we now *love the murk*.  
Yes, fear has helped us do all this and more:  
It's helped us spawn our many gods to take  
Responsibility for our bad score  
In knowing what's best done toward our best sake,  
Till we can savor that smooth feel enjoyed  
While thinking that we know just how things are  
*The whole time we do not*. But gods employed  
As such will soon take on our own bizarre [520]

Misunderstandings till they look and act  
Just like we do and fight among themselves.  
And so, some groups of us would soon change tack  
And kill off all these gods like needless elves,  
Except for ONE, of course, in whom to trust  
With all our former needs. The beauty here  
Is that we'd now transfer this inborn lust  
For sweet delusion round our every fear  
From out the baffling chaos of this lot  
Of them into an easier design [530]  
That serves as *single* parent figure – God,  
That is – in whom the rest have been combined.  
Yes, more than one sage thinker has declared  
We're *all* but atheists regarding Zeus  
Or Thor these days; it's just that some have dared  
Go *one god more* and find such faith no use  
In of itself. Now, some of these preferred  
To keep the trappings of their creed to skip  
The sense of vulnerability incurred  
Withdrawing from celestial guardianship. [540]  
For, manifest authority, enforced  
With in-group solidarity, helped mold  
Rough moral choices smoother, since endorsed  
From high above where fate had been controlled.

Now, suddenly bereft of dogma, they  
Are faced with all the complications brought  
By contemplating context and its grey  
Shades, all no use to God in judgements wrought  
Against His disobedient through **SIN**,  
A concept theologians have supplied [550]  
With endless shelves of doctrine that could spin  
Your head at all the ways they have denied  
Their flock the dignity of living life  
As nature shaped it—just like children spanked  
For insubordination, though now rife  
With petty selfish greed for being thanked.  
This notion quickly falls apart without  
The patriarchal certainty of fact  
That God can lend, discerning *without doubt*  
What's right from wrong and therefore how to act [560]  
In every case like model children do.  
The problem is, of course, that kids who meet  
Ideals like this are usually untrue  
To their own sense of self and play the sweet  
Submissive sheep they learn will satisfy  
(For now) some angry parent's thirst for full  
Control. But learning only to comply  
And not to reason pulls proverbial wool

Around their eyes, unfit as they'll then be  
 To go engage in what is real out there. [570]  
 Yes, they've grown ill-equipped for living free  
 Of cruelty where all they know is prayer  
 And punishment. No, thinking critically  
 Is crucial toward developing as fair  
 And just compassionate adults – the key  
 To *their* success in raising kids who care.  
 Conversely, those who're taught the practice of  
 Morality-by-wrote learn that their crimes  
 Of deed or thought are scrutinized above  
 By top authorities, then redefined [580]  
 In terms of proper reparations to  
 This church that had but codified it all.  
 Extortion comes to mind, like when you do  
 A thing that's disapproved till it's judged small  
 Once payment's made to those who'd called it wrong  
 To start. As if not bad enough, this dire  
 Thought for which they're charged had seemed so long  
 An innate *healthy* type, such as DESIRE.  
 Yes, this feeling that began it all –  
 Not just our poem but *that very course* [590]  
*Of life it would exalt* – foretells the fall  
 Of man to those God wants to feel remorse.

Of course, *like anything*, indulgence in  
 A feeling past what's good for others whom  
 We'd live with should invite restraint, but SIN  
 Goes way past that by virtue of its gloom:  
 We're told to *feel ashamed* of what's innate  
 Instead of just control what doesn't work —  
 As if our *feelings*, by themselves, create  
 The problem, not that *we'd* been such a jerk. [600]  
 Delight is something we'd evolved to feel  
 As part of learning — till this God of theirs  
 Showed up to claim it contraband and deal  
 It back to us at higher rate through prayers  
 And penance for His mercy. Keep in mind  
 That this delight *was ours to start* — yes free  
 To us through evolution's slow design.  
 Yet now we're told it's ours *but for a fee*,  
 A payment that's coerced from us by threat  
 Of punishment, no matter whether here [610]  
 Or ever after, till we're in such debt  
 We cannot pay it off except through fear  
 And guilt, self-condemnation, and despair,  
 And all but due toward blessings by the church  
 For our own joy that now, it's been declared,  
 Is given *us*. Now, *there's* a joy besmirched!

This very notion that we'd need to go  
*Apologize* for our desires – pay  
 For them in guilt *and* money – should but blow  
 Our mind: That's racketeering *any day* [620]  
 When viewed without a church put in between!  
 Yes, like a prism breaking purest light  
 Into bedazzlement, "God's word" is seen  
 By true believers simply as what's right –  
 Regardless of the lack of sense it makes  
 To our innate morality. So, when  
 God tells good Abraham to go forsake  
 HIS OWN BELOVED SON just for some yen  
 That jealous gods like Him cannot resist –  
 That need to test one's subjects' loyalty [630]  
 Against those *other* gods that don't exist –  
 We're shown just how AMORAL He can be  
 Who needs to threaten members of His flock  
 With punishment for disobedience  
 That's merely thinking for themselves, *ad hoc*,  
 As each new context tries their common sense.  
 Enough though! For, pathology is not  
 The *only* way to deconstruct how things  
 Should run in health. Yes, though such petty gods  
 Reveal the workings of each mind that brings [640]

Them into being (and are, therefore, worth  
The studying, if but to better know  
*Ourselves*), our poem aims to cut a berth  
Around our lust for *judging* what they show.  
(*Too late, or ineffective at the least,*  
You say, who find the passage just conveyed  
A thing of judgement surely – just, a piece  
Of propaganda damning faith – one made  
To disaffect those wholesome citizens  
Who, out of fear, still harbor gods within [650]  
The attic of their reason. My defense  
Is that it's not and that your skin's too thin.)  
So, let's return to our Desire once  
Again for deeper understanding how  
It constitutes the means with which life hunts  
Its hallowed moment in the here and now.  
Among biology's machinery,  
Few mechanisms prove more valuable  
Toward furtherance of what's conveyed by genes  
Than pleasure does. The weight that it can pull [660]  
In prodding organisms to survive  
And launch their traits toward future flourishing  
Is unsurpassed in fruitfulness of drive  
Except, perhaps, for pain's didactic sting.

Indeed, all earthly creatures have evolved  
To find their life sustained between these two  
Most fundamental promptings that resolve  
Poor choices of the past from those proved true.  
Attraction and repulsion should be seen,  
Therefore, as guardrails used by living things [670]  
To keep on track with life and not careen  
Into oblivion on reckless wings.  
Yes, everything that lives, from simple cells  
To those complexities from which they're made,  
Depends on what their system can foretell  
Of nourishment and risk and how they're weighed.  
All this is gleaned from what's then learned anew,  
*On top of* what's inherited, from those  
Past lives whose traits have been bequeathed to you —  
All information changing as it flows [680]  
Two ways within the context of a life  
Developing amid environment.  
It's this that makes each living being rife  
With possibilities past all events  
Predictable from out of physics' laws  
Alone. For, these same "laws" (which are, of course,  
Just *tendencies observed* amid the "cause"  
Thought driving matter, energy, and force)

Comprise that language *we've* developed to  
Describe phenomena we sense are there [690]  
Though cannot *know* first-hand since filtered through  
The tissue of biology's dark lair.  
And this is true of mathematics too:  
No matter how you squint, you'll never find  
It in the world "out there," as it's construed  
By *us*, re-membered into stuff of minds  
From out the dialogue of things and how  
They're represented in our nest of nerves.  
It's but a *language* we've developed out  
Of need to speak more subtly of the swerves [700]  
Of space, time, matter, energy and force  
With which our universe is woven so  
Minutely from necessity's own source  
In chance, wherein a sudden moment's throw,  
Potentiality can realize, from  
A singularity of happening,  
Complex trajectories that can become,  
From pregnant nothingness, our everything.  
Yes, mathematics is that language we're  
Creating, step by step, to better read [710]  
Relationships at play all round us here  
Within this universe that sprang with speed

From its potential. And, yes, like those "laws"  
Of nature that they measure, it's not *there* —  
Out in the world, without a mind to cause  
Its body-governed form from out thin air —  
But in our heads, another product of  
Biology examining its past.

And while we're on the subject, the above  
Applies to all those other fields amassed [720]  
By human culture, like morality  
And ethics, justice, faith, and beauty — laws  
And customs of all sorts we've honed as key  
To our best being, even with their flaws  
(By which I mean those prices paid for them  
In the economy of focus that's  
The brain of each beholder, as each gem  
Of insight costs *some* blur elsewhere, I'd add.)  
But now I need your full attention, please.

Despite the great respect we surely owe [730]  
Lucretius, who endeavored to bequeath  
To us what Epicurus had bestowed  
By singing it deep into memory,  
We also need to recognize the stuff  
In it that makes no sense. For, now we see  
Through scientific method well enough

To better understand the way things work  
Out there (as well as here inside where they're  
Constructed into "laws") until what lurked  
In mystery, like gods, dissolves in air. [740]

Now, these fine things that Epicurus taught  
Were saved by our Lucretius in his verse  
And proved a balm to lives that had been fraught  
With fearful supplication to the worst  
That superstition offers those it lures.  
For they found solace in the atomists'  
Belief that while the gods themselves endure,  
They cannot either hinder or assist  
Us mortals in the living of *our* lives  
And are but the repositories of [750]

The basest fears and qualms a mind contrives  
By reading omens in each hawk and dove.  
But then our poet seems to disregard  
Such sage advice with invocations to  
Those gods and muses whom he prays real hard  
Might help him see his lofty poem through.  
The inconsistency in this is clear  
As day and is explained, I think, by those  
Conventions that our poets still revere  
In that they're part of how their art arose. [760]

I mean, of course, through ritual – by means  
Of incantations that had long been used  
To mollify our fears into routines  
And transmute seeming sense from what confused  
Them. When a verbal formula was voiced  
Within the ceremony of concern  
Around some mystery, one could rejoice  
Within the feel of having (somehow) turned  
Some chaos into order. Words became  
The pageantry through which to gain control [770]  
Of what they feared, and through their sounding, tame  
It in the splendor of their spoken whole.  
And this is why just how a thing is said  
Is so much part of how it comes to mean  
And why, therefore, a poem can, instead  
Of prose, make better sense of *how things seem*.  
And this is why *our* poem does not dare  
Attempt to paint for you "reality"  
As had Lucretius's, as you're aware.  
For, just as how he saw the "seed" as key [780]  
To how things were and worked – yes, used this trope  
To help explain quite everything he saw –  
Someday the scientific facts I hope  
Explain it now will *too* be shown as flawed.

And so, since greater minds than mine by far  
 Have failed achieving a consensus on  
 What really is this key to how things are,  
 My song will only sing of how *they're drawn*  
*By us in thought*. On this is what the whole  
 Of all we know must ultimately rest: [790]  
 How things are *represented*. That's the goal  
 In which all meaning's made, and hence our quest.  
 Yes, as was said above – or then *before*  
 For those not reading this but *hearing* it  
 Recited – all we ever *can* explore  
 Of this, our world, is *not* the slightest bit  
 That might exist *outside* biology's  
 Translation into impulses on nerves,  
 But rather just some *likeness* of it we  
 Can *represent* this way, such that it serves [800]  
 Within that inner model brains construct.  
 And this brute fact is one we always bump  
 Against (though rarely recognize as such)  
 While moving through our world, as every clump  
 That matters most is rendered seamlessly,  
*Though meagerly*, within our flesh, because  
 That's what brains do: They strive to make us see  
 Whatever keeps us in the game. All flaws

In the fidelity of what is sensed,  
Therefore, prove less important, said and done, [810]  
Than that attention bought at their expense  
To muster agency toward what's best won  
In sustenance and safety, love, and sex.  
And our best proof of all these shortcuts made  
By brains prioritizing what affects  
Survival is the ease with which we're swayed  
By "magic" tricks and others that dispose  
Things to us only as we'd *reconstruct*  
Them. Optical illusions, such as those  
Employing shadows cast with crafty pluck [820]  
To seem a different tone, are still contrived  
By brains to be believed as "seen" *despite*  
*Our being shown just how they'd been derived.*  
What better proof is needed to indict  
Our senses for collusion in false truths?  
How can we just assume that we can "know"  
*The nature of things* when, as shown, brains soothe  
Themselves with what they're looking for and throw  
Away the truly obvious instead?  
The answer's found on evolution's trail, [830]  
Of course, along which every brain's been led  
Without its knowing, so it may prevail.

Yes, brains evolved to solve the problems of  
That niche their bodies strive in – that complex  
Reciprocal ecology above  
Which nothing matters more, as one expects.  
Their job at first was merely to maintain  
Their body's balanced state inside against  
Conditions ever-changing by constraint  
Of the environment outside its fence. [840]

But as the arms race of competing life  
Would ratchet up the vital need to choose  
Among an option menu growing rife,  
Those brains whose niche allowed it grew to use  
Discriminations ever more refined,  
Enabling them, through memory, to plan  
Tomorrow with but yesterday in mind,  
Where conscious, focused agency began.  
But all along this slowly-curving path  
Of learning (well *below* this conscious thought) [850]

We've thus acquired strengths that helped such tasks  
Once key to what our ancestors had sought.  
Now, many of said things we don't still need  
Yet nonetheless still seek because we're now  
Equipped to do so. Take the taste for sweet  
Our forebears had acquired that endowed

Them with more chance to last through bleakest times.  
We have inherited this appetite,  
Though not the lesser menu that had primed  
It, and today indulge in sweets *despite* [860]  
The lack in most of us to really need  
Them. So, in short, *the byproducts of change*  
*Are who we are today*; what worked to feed  
Survival once becomes our comfort range  
In better times. And what is crucial here  
Is how the same dynamics of our brain's  
Vast legacy predicts results in spheres  
Of life quite unrelated. This explains,  
For instance, why the networking of nerves  
That help us to hallucinate a self [870]  
Amid some cockpit in our skull, now serves  
At certain times, like trauma or poor health,  
To make us feel that this same entity  
Has left the very body it's been made  
By, and is part of, to transcend quite free  
Of any laws the body had obeyed.  
Now, such experiences *are* profound;  
They *have* changed lives and should not be dismissed.  
There's no sense holding forth that they can't sound,  
Look, feel as they're described — as they exist — [880]

Just not for reasons that are proffered by  
Most folks who've undergone them (and who hope  
These prove that our deep essence cannot die  
And will live on within some timeless scope).  
But evidence abounds to demonstrate  
Just how this out-of-body sense becomes  
Experienced. One needs but activate  
Some certain neurons (where the juncture runs  
Between two certain lobes) whose job it is  
To integrate perspectives of inside [890]  
And out (the *I* with *other*, *mine* with *his*),  
Thus throwing our vestibular off stride.  
Experiences of this special type  
Can be *predictably induced* by means  
Of some disturbance to this zone to swipe  
Away, pro tem, this weighing of what seems  
The difference between *inside* looking out  
And vice versa as it's reckoned by  
This tiny bit of brain. To go about  
Achieving this disturbance one can ply [900]  
A probe into that very spot, or else  
Magnetic stimulation, or just starve  
It of the oxygen within its cells,  
Such as the reach of death in its slow carve.

Instinctively we're biased to resist  
This mechanistic view, of course, because  
It jars with that whole notion of some gist  
Of life released from out its husk (while laws  
Of physics mold in convenient haste)  
To but return to "purest consciousness," [910]  
Which, we have heard (and craved) might soon be traced  
Right back to the beginning: Nothing less  
Than *fundamental* to the universe –  
Yes, that from which the physical *derives*,  
We've read – to be rejoined with those dispersed  
Before us (with exceptions, like ex-wives)  
For all eternity as part of one  
Undying being, pure and clear as air  
That's lit forever by a deathless sun....  
[A long pause here to let our minds repair.... [920]  
O.K., Sam. May we have the lights back on?]  
To those who *liked* how this last bit commenced  
And wished *the rest* had been as finely drawn,  
I say: *You missed the point! It made no sense!*  
The problem I was getting at was **HOPE**.  
Now, nothing wrong in wanting what feels good,  
But holding out for it when you can't cope  
With inconvenient truths is understood

To be delusion, which can't help but numb  
You to this world we're living in and paste [930]  
A happy face on fears you have succumbed  
To rather than engaged with. What a waste!  
To squander this brief spurt of time on earth  
Endured as just some deadly-boring queue  
In which to wait and trade it for rebirth  
*Without your brain* is profligate, if true.  
Far better would it be to live life *now*,  
While still you have your brain intact, and not  
Postpone enjoyment till you won't know how  
To hold a spoon, albeit it, *stir the pot!* [940]  
How is a life lived once you're dead – without  
A hippocampus – any different than  
Attempts to taste your cake without a mouth?  
The body is where *everything* began:  
Sensation, action, metaphor – the whole  
Of *anything* we can experience.  
So, seeing it as some mere husk a "soul"  
Then sheds and leaves behind makes no damned sense,  
*As this ignores the way things came to be.*  
From that first living cell to that first meme [950]  
That could be shared among the most elite  
Of complex brains had run a steadfast scheme –

An algorithm where near clones compete  
To test their fitness in a certain niche.  
And this same fundamental process can't  
Be just left out, as if it were unleashed  
From what it had produced, so we might then  
Pretend the latter came to be by fate,  
Top-down design by God, or, once again,  
Divorced from how such processes create. [960]

So, let's exult in the reality  
That each of us have played a vital part  
In this great chain of being that we see  
All round us stemming from this simple start.  
The merest fact, statistically, that we  
Exist at all, among such massive chance  
That we might not, should by itself cut free  
From us that morbid fear of death's advance.  
Yes, death is saner viewed as that excuse  
To live *the more intensely* here and now [970]  
*Because* there is no life awaiting use  
*As us* once we, our bodies, die. Let's bow  
Our heads in gratitude – not to some god  
We've dreamed up to explain it all, but to  
This gorgeous *mindless* process that, by odds  
So vast, included us among the few

Who can appreciate it as the gift  
It is. Yet, such a bounteous legacy  
As this is not required to exist  
As something given *from* one entity [980]  
Or other *to* another, as this sense  
Depends upon a teleology  
In which there's underlying "reason" whence  
It's come or gone. And such necessity  
Is but irrelevant to any laws  
Describing what life is, how it began,  
Or even what it means – all this because,  
*As process, it has being since it can.*  
In other words, life needn't be a part  
Of something larger, with a certain goal [990]  
Intended, like perfection or the start  
Of some trajectory toward what some "soul"  
Might find as outcome of behaving such  
Or such a way. We have no parent in  
The sky; just lots of planets, stars, and much,  
Much more that cannot care about what sins  
Or virtues we read into life. For, these  
Are but the constructs of embodied brains,  
*Which have evolved by fleshly means and, by degrees,*  
Created, *through desire*, all each one attains. [1,000]