I have a confession to make.

Despite having generally "nerdy" interests, I hadn't seen *Star Wars* until last spring.

When I watched the movies then, I loved them instantly – so much that I've now seen them five times. But there's this one line in *The Empire Strikes Back* that jars me every time.

Luke is faltering in his Jedi training. After a particularly bitter failure, Yoda – the oldest Jedi, the very paragon of wisdom – offers enlightenment, proclaiming:

"Luminous beings are we – **not** this crude matter!"

Here, Yoda dismisses a philosophical position known as *materialism* -- the view that the universe consists *only* of physical matter: atoms, and quarks, and so on. Nothing supernatural: no souls, no miracles.

I'm a philosophical materialist, so I disagree with Yoda about the facts – but I sympathize with his unspoken motivations. There *are* implications of materialism that people find uncomfortable, and these make it seem unsuitable for an inspiring movie scene.

According to materialism, our minds, our personalities, our very consciousnesses – all are products of *strictly material stuff*. It's this that people find unsettling. The exquisite rush that I get from a *Snow Patrol* song, the tenderness that accompanies a glance at someone I love – these and the billion other slices of any human mind feel far too ethereal to be the result of ions bumping around in our brains. And so it *seems like* matter and minds *must* be made of different stuff, and that our essential selves should be free from the physical laws that rule the realm of matter. *But materialism says no*. It suggests that – maybe our mental lives are as meaningless as random walks. Maybe we have no more free will than any billiard ball. Maybe we live for only as long as our bodies and then exist no more.

I've had my share of these dark anxieties. 8 years old, bawling into my parents' arms, *begging* them to *save me* from mortality. 18, moving to rebuke a friend's denial of free will – and realizing with a sudden cold dread that I had nothing to say.

I don't know whether there exist coherent escapes from these consequences of materialism. If there are, I don't have them.

What I do have is a different perspective – one that at least brings me *happiness*, instead of making me feel like the reluctant slave of an intellectual conviction.

As a molecular and cellular biology concentrator, I've learned about the nitty-gritty details of the mechanisms of life. Long story short – there are a *lot* of them. The single cell is silent host to an army of biological machinery of such vastness and intricacy that researchers spend *entire careers* trying to understand *one* or *two* of its *thousands* of proteins. The *smallest unit* of life is the product of countless processes, hopelessly subtle and interdependent, whirring away in the most complexly orchestrated concert imaginable.

Imagine more. Consider the human brain: 100 billion neurons; 100 trillion synapses. From somewhere within this mass – some lobe or wrinkle, some pattern of connectivity, somewhere or something that no one has even yet hypothesized – the gap between nothingness and what it's like to be is bridged.

When I consider my identity as a collection of atoms – the complexity of my body, the incomprehensible feat of *consciousness* that my brain performs – the dominant emotion that I feel is *awe*. Awe that, I would imagine, is similar to a spiritual experience: it clears my mind of anxiety. There is no room in me for fear when all I can feel is *wonder* that inert matter comprises a system so vital.

On one view, our sense of the disparity between common matter and our uncommon minds devalues the experiences that we hold most dear. We focus on the limitations that physical laws impose, mourning the loss of qualities – like immortality or metaphysical uniqueness – that we *feel* should apply to us. But it is *this* disparity between what we *actually are* and how it *feels* to be us that should heighten our awareness of how astonishing our very existences are. That we who can dread the looming of death are made at the smallest scales from nothing that even knows what it means to be alive – to my distinctly materialistic mind, *that* is something like a miracle.

So let's revisit Yoda's attempt at encouraging the wayward Skywalker. If, *instead*, he had said

"Luminous beings are we – and made of this crude matter!"

Put this way, with the *essential wonder* of materialism *front and center* – would you *really not* be inspired?