ADVERBS AND DEMONS

Geoffrey K. Pullum

For the sake of a good action-packed story I'll cut an author a lot of slack. For instance, I'll ignore Dan Brown's cluelessness about academia. He has his fictional Professor Robert Langdon in *Angels and Demons* spends weekends around Harvard "lounging on the quad in blue jeans, discussing computer graphics or religious history with students" (as if!), and eating an apple while lecturing (try it and you'll know why we professors don't do it). Langdon even complains that it's hard to make trips to Italy on "a teacher's salary." (Come on! The average pay for Harvard professors is now over \$135,000. That would get him a few Boston–Rome round trips each year even if Harvard was stingy with travel grants, which it's not.)

Dan knows even less about the world of physics. He confuses "discrete particle physics" (that would be fluid mechanics applied to the flow of granular substances like sand) with elementary particle physics (the high-energy atom-smashing that Maximilian Kohler oversees); he thinks "GUT" (Grand Unified Theory) stands for "General Unified Theory"; and so on. But I'm prepared to set all that aside.

Even if some of the details of Rome's churches, passages, archives and art were inaccurate, it would hardly spoil one's reading pleasure: *Angels and Demons* is driven by its plot action, and that is Dan Brown's forte.

What I just can't forgive is that Dan can't seem to write descriptive prose that makes sense. He drops phrases in front of the reader that simply boggle the mind with their confused klutziness. He does things to English that would be illegal if done to animals. And that really does interfere with our reading pleasure.

Direct contradictions, for example, always come as a bit of a shock (because to believe them you have to be insane). Maximilian Kohler is described as having "ventured" some remark "assuredly". To venture something is precisely to risk saying it when you are *not* assured that you're right. You simply cannot venture an opinion assuredly.

At another point we read: "It was once in a lifetime, usually *never*, that a cardinal had the chance to be elected Supreme Pontiff." Now which is it? Once? Or never? There's a big difference. (Both statements are false, incidentally: plenty of cardinals see more than one papal election conclave, and could in principle have been candidates.)

We run into flat-out ungrammaticality, too. I don't mean violations of those stupid old traditional usage prohibitions (split infinitives and sentences ending with prepositions and all that nonsense). I mean real descents into gibberish. Here's a relatively subtle example: "His reputation for secrecy was exceeded only by that of his deadliness" (from an early passage about the mysterious Hassassin). What does "that of his deadliness" mean? His reputation of his deadliness? Doesn't sound right. His reputation for secrecy of his deadliness? Worse. We can guess what was in Dan's mind (that his reputation for secrecy was exceeded only by his reputation for deadliness), but in its effort to avoid repeating 'reputation' the sentence has blundered into a syntactic lobster trap and is unable to find the way out.

Much less subtle abuses of grammar abound. You could perhaps dismiss some as mere idiosyncrasies: Langdon experiences an "intense chill ... raking through his body" (I'm not at all

sure a chill can rake, but maybe; and when Vittoria heard of her father's death "grief strafed into her heart" (strafing is raking the ground from low-flying aircraft with close-range machine-gun fire, and I'm not sure grief can strafe). But others are much more clearly incorrect.

- Langdon is described as having had "a toned, six-foot physique that he vigilantly maintained." But your physique is the general state of musculature, proportions, and appearance of your body; it's abstract, it doesn't have a height. You may be six feet tall, but your physique isn't.
- We learn at one point that the Illuminati "had infiltrated English parliament" (British, actually, it's not just for England). But a phrase like 'British parliament' needs the definite article: 'had infiltrated the British parliament' is what he meant. Omitting 'the' definitely makes the sentence ungrammatical.
- During the early stages of the hunt for the antimatter that is set to blow the Vatican and the entire College of Cardinals right up to heaven, Commander Olivetti of the Vatican Guard remarks optimistically: "I am faithful Captain Rocher will find the canister." But the adjective 'faithful' doesn't take finite subordinate clause complements! No one says 'I'm faithful Sally will be back soon with the groceries,' no matter how much faith they have in Sally. Replace 'faithful' by 'sure' in either example and you have grammatical English, but as it stands, you don't.

Some of these wrong uses of words show unmistakable signs of incautious thesaurus use. Composition and rhetoric teachers sometimes very unwisely recommend the practice of taking a grammatical and appropriate ordinary English word or phrase and looking it up in a thesaurus to find something more fancy to replace it. But if you do this, you must check whether the new word fits grammatically in the context. It may not, because *words of similar or identical meaning can have different grammatical behavior*.

For example, shaking and quaking are basically the same thing — the ground can shake and it can quake; but although we can talk about an earth tremor shaking a building, we can't describe it as quaking a building. (To get technical for a second, "shake" takes a direct object; "quake" doesn't.) So you can't randomly replace "shake" by "quake" just because they are both mentioned in the same thesaurus entry.

I am pretty sure Dan Brown has occasionally substituted fancy words without checking. For example, lecturing is basically just standing at a lectern and saying things. But that doesn't mean you can replace 'say' with 'lecture' anywhere you please. There's a key difference: 'lecture' isn't actually a verb of saying. Yet Dan writes, in a passage where Langdon is recollecting a seminar on terrorism that he sat in on: "Terrorism,' the professor had lectured, 'has a singular goal." But that's ungrammatical! Compare with: "The United States', Chomsky lectured, 'has frequently supported tyrants'." If you replace 'lectured' by 'said' in either example you have grammatical English, but as it stands, you don't.

Or consider the passage where Vittoria is explaining to Kohler that her father solved the problem of creating and storing anti-matter: "Kohler spoke as though emerging from a fog. His voice sounded suddenly precarious." Now, I don't know the exact timbre the voice acquires when one is emerging from a fog, but I do know that a voice can't be precarious. Things that are precarious depend on chance, or unknown conditions, or uncertain future developments. There's simply no such thing as a voice sounding precarious.

Dan simply meant that Kohler sounded uncertain (Vittoria was enlightening him about some facts of physics he didn't know). But Dan opened up a thesaurus at some word like 'uncertain' and looked for an alternative word.

A good thesaurus will separate the words out into groups with particular senses, but many just jumble together a long list of possible equivalents. 'Uncertain' can mean doubtful or dubious, but it can also mean unstable or variable. 'Precarious' means something like the latter, but not the former. So you can't just replace random occurrences of 'doubtful' by occurrences of 'precarious'! Yet that's apparently what happened.

'Precarious' isn't the only odd way in which Kohler's voice is described, incidentally. It is the subject of one of a large number of appallingly ill-chosen similes in the book. In an early scene Kohler and the claustrophobic Langdon are travelling way down in an elevator to Vetra's lab: "Six stories,' Kohler said blankly, like an analytical engine." How do you speak like an analytical engine? (The phrase is an odd anachronism: 'analytical engine' was the name Charles Babbage gave to the mechanical calculating device he endeavored to build in the 18th century; it had cogs and gears and spindles, it didn't work, and it sure didn't talk.)

The Hassassin gets a puzzling voice simile too. "His words were as hard as the rock walls", says Dan. The Hassassin has just gotten through saying "Si; perfettamente." So the Italian words for 'yes' and 'perfectly' are like a rock wall? I hope you can hear that in your mind's ear, because I can't.

Vittoria gets an even stranger voice description. She says something to Commander Olivetti with "her voice like boiling lava." Think about that. What does lava sound like? Was she rumbling? Hissing? Belching steam and ash?

Olivetti's arrival shortly before, however, had involved even more dramatic pyrotechnics: "The door of the Swiss Guards' security center hissed open. The guards parted as Commander Olivetti entered the room like a rocket." No wonder the guards parted. Rockets travel at speeds that reach thousands of miles per hour, spewing flame behind them as they rise.

Later on, having ceased flying about like a rocket, the Commander is in the presence of the pope's chamberlain, and we read: "Olivetti stood rigid, his back arched like a soldier under intense inspection." Well, it would certainly attract some intense inspection if he arched his back, because is head would be down near his knees. Soldiers' backs are meant to be straight. It is frightened cats who arch their backs.

And so it goes on. So many of the similes, metaphors, and other descriptive devices in *Angels and Demons* fall between the wincingly hopeless and the positively ludicrous. They tell us what we don't need to know and conceal what we do need. They fail utterly in their task of enabling us to visualize the scene.

The weirdest examples in the book have to do with strange eyeball tricks. The camerlengo's eyes, for example, can ask questions ("His green eyes demanding an explanation") or fill up with flames ("His green eyes seemed filled with a new fire"). But let's just concentrate on getting a sense of Commander Olivetti's eyes, since they perform an unusual array of stunts.

We learn first that Olivetti's eyes "burned with the kind of hardened determination only obtainable through years of intense training." I can't recall ever seeing that hardened, highly trained, determined burning, but it sounds impressive.

Then someone says something he doesn't like, and we read, "Olivetti's pupils seemed to recede into his head. He had the passionless look of an insect." What kind of insect does that trick with the pupils? A praying mantis? The book doesn't say. It also doesn't say whether the pupils came back out again. We can assume they did. But they're soon gone again: Langdon asks him an innocent question (whether he's heard of the Illuminati), and: "His eyes went white, like a shark about to attack." Scary!

A few pages on, "Olivetti's eyes stabbed like bayonets." Ouch! After that he fixes his dangerous ocular weapons on Vittoria, and "his eyes bored through her." Yow!

And still we are not done with the Commander's visual special effects. Slightly later, "Olivetti wheeled to the camerlengo, his insect eyes flashing rage."

Let's take stock at this point. Olivetti has insect eyes (possibly those compound ones that you see in *The Fly*?) that can flash like lights, stab people like daggers, bore holes in people like drills, and go white like those of an attacking shark. And these strange insectoid/ichthyoid visual appendages have pupils that can recede into the skull. This man is a space alien!

Or is it just that Dan Brown cannot write a sensible description of someone's appearance to save his immortal soul?

It's interesting that as the pace picks up, the writing gets much less distractingly bad. Dan Brown's strength is in story-line twists and action sequences. His plotting, like Langdon's criss-crossing of Rome trying to save cardinals from horrible deaths, is guided by angels from above; but sometimes his prose seems to be in the grip of dark forces from the other place, his adverbs selected by demons.

Geoffrey K. Pullum is a linguist specializing in English grammar. He contributes frequently to the popular Language Log site (www.languagelog.com), and has authored or co-authored over 200 articles and a dozen books. His more entertaining books include *The Great Eskimo Vocabulary Hoax* (1991) and *Far From the Madding Gerund* (with Mark Liberman; 2006), and the most serious of them is a large-scale English reference grammar, *The Cambridge Grammar of the English Language* (with Rodney Huddleston; Cambridge University Press, 2002), which in 2004 won the Leonard Bloomfield Book Award.