

ROBOT WRITING

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This panel is concerned with language. And language is metaphor. Teddy Roosevelt's "big stick" and JFK's "defense posture" are more than stylistic decorations, luxuries, or political grace notes. They are, in fact, extreme examples of the marrow of language. But if metaphor communicates our thoughts and feelings, it also exposes them. It reveals hidden but pervasive attitudes that shape our view of the world.

Behind Teddy's "big stick" stood a world forever gone — simple, tough, and nostalgically appealing (at least to those who own a stick). Today, in contrast, JFK's "defense posture" casts a typically complex and sophisticated shadow worthy of our present crisis, where bombs are refined but never dropped, where the size of a stick is less important than its reputation as a deterrence factor, and where war will not come as long as the enemy knows that you know that he knows that you know that anti-anti-missiles have optimal feasibility indices.

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The metaphor I want to talk about today is even more revealing than these, and in fact includes the second of them. It's quite old, gaining strength every day, and steadily eroding our minds. It is the metaphor identifying the universe (and therefore humanity) with a machine. The effects of this metaphor are countless, but the one that should concern us here is that on language.

A writer — even a technical writer — especially a technical writer! — who is hypnotized by the mechanical metaphor inevitably produces robot writing — a separate language, distantly related to the prose of Darwin, Huxley, Jeans, and Einstein. Where they were clear, fresh, and graceful, the robot writer is hard, dull, and clumsy. Where they were merely human, the robot writer is infallible, prefabricated, impersonal, and irresponsible. These four characteristics are interlinked. An example of one usually illustrates the other three. But for convenience let's look at each in turn.

Of course the robot writer is infallible. His pedantry invokes the awe one feels watching a cyclotron. He is filled with what George Orwell called the "resounding commonplaces." There is something noble about any project that is "brought to satisfactory conclusions deserving of serious considerations." Few will protest that such a phrase has more sound than significance. And even those few will probably surrender to the robot vocabulary, which is formidable. One never goes, begins, or gets; one proceeds, initiates, and secures. One never watches instruments — only instrumentation. The latter, like all -tion nouns, has a magic about it. Instruments can break, but instrumentation is Platonic.

Certain words are especially dear to the robot writer because they not only sound machine-like (and therefore infallible), they also, when carefully used, can mean absolutely nothing. Favorites are: basis, case, degree, element, factor, field, function, instance, and line. Thus, he can write about "an hypothesis on an atmospheric basis." Not only is this impressive, it's positively opaque. It might mean "concerning the atmosphere," "drawn from analogies with the atmosphere," or any dozen other human phrases. This kind of ambiguity is known in certain circles as the "multi-meaning bonus factor."

Now of course there's obviously nothing wrong with genuinely necessary, precise technical vocabulary — or even neologisms. The editor, recognizing this, must nevertheless take arms against a sea of barbarisms. He must swim against the currents, but know how to float out a tidal wave. Linguistically, he can be neither a Goldwater nor a Stevenson. He must be an Eisenhower Modern Republican, and say, "Yes, let's have change. But not now!"

Another way the robot writer achieves infallibility is through an inhuman thoroughness. Many technical reports are like the zoology text the little boy immediately returned to the library, saying, "This book tells me more about frogs than I want to know." Jacques Barzun attacked this as a deadly sin of pedantry. "It is intellectually right," he said, "not to try to know or tell more than a subject contains of significance... Knowledge is not an absolute homogenous good, of which there cannot be enough."

This is why I felt virtuous about editing the following paragraph:

The structure of a planetary atmosphere is of interest for numerous reasons. The study in detail of the earth's atmosphere (i.e., meteorology) has provided us with a delineation of the important characteristics of a planetary atmosphere, namely the character in space (or in longitude, latitude, and altitude) and in time of atmospheric composition, temperature, density, pressure, and circulation.

I changed this to:

Meteorology describes five aspects of an atmosphere: composition, temperature, density, pressure, and circulation.

In Hamlet, there's a villain named Claudius who understands this problem better than most technical writers. He says:

My words fly up, my thoughts remain below.
Words without thought never to heaven go.

Robot writing, like all cheap machines, is prefabricated. It's a language made of interchangeable parts. True prose, as every freshman English teacher learns, is an art demanding knowledge of syntax and a gift for fitting the right words in the right order. At the very least, it's as difficult to produce as a hand-made watch. Robot writing is like an old Ingersoll dollar-watch I once had. Its factory-stamped wheels kept almost approximate time, but since I was only five I loved it; nor did I mind its tractor-like tick or the fact that its sheer mass stretched my left arm an extra inch or so. Technical editors should not be so easily pleased.

For example, since English is a human language, it opposes the verb to restrict with the verb to free. Not robot writing! It prefers to de-restrict. See how it works? You merely attach Prefix Q to Verb J, and clunk! — a robot word. We see the same things in the current plague of verbs ending in -ize. We finalize, optimalize,

suitablize; all we have to do is take an adjective and izeize it. Adverbs, of course, can be created with the flick of a -wise. And the appeal of and/or is not that it's convenient (since it also happens to be ugly and ambiguous); it's that it sounds marvelously like a machine. And/or: push-pull: click-click.

But if single words can be molded in this way, even easier is the manipulation of stock-phrases; almost always wordy and clumsy by themselves, they are welded together into junk heaps by the robot writer as though they were parts off an assembly line. This is why I'm so interested in the current rise of a new science — Linguistics. Much of it is devoted to creating machine grammars for English. Of course the more convenient one makes a language for a machine, the less useful it becomes for Man — less useful because it is cruder and less versatile. Writers who are geared (and the verb is appropriate) for machine translation remind one of Hollywood writing for the mythical 12-year-old mentality. If they continue to pamper the machine at the expense of human readers, one day we'll all wake up healthy, wealthy, and moronic — wise-wise, that is.

This leads directly into the next characteristic — impersonality. If a robot writer can't limit himself to abstractions, he'll gladly settle for things. Just as long as they aren't people or actions. The highest compliment you can pay him is to say he's "eliminated the human factor." Now I would be the first to admit that science served all of us when it revealed the operation of natural laws and discarded the old anthropomorphic, demonic interventions. But this achievement has now been exaggerated into a travesty.

The principal disaster is the loss of verbs. Robot writing will always prefer the third-person, the passive, the there are/it is constructions, and, if possible, a rock-pile of nouns. Nor can one noun possess another noun. That would be unscientific. As Ben Keller pointed out in your magazine several years ago, an engineer will never speak of the "set's angular accuracy" when he can write "the set angle accuracy."

You can search through volumes of technical prose, and on every page nothing is happening; everything is a process. There is no author; ideas "suggest themselves," "are rejected," and "are proved satisfactory." Even you, the reader, do not exist; the report was written in a perfect vacuum; it belongs to the ages. Like the dinosaurs. In its presence, you're as ashamed of your human doubts and puzzlements as a man standing before a wax dummy of Rock Hudson is ashamed of his own pot-belly and varicose veins.

Remember, though, eventually even the handsomest wax dummy is nothing but a bore. We're all mortal — even technical writers. And if they would only remember it, their reports might gather more laurels and less dust.

Why is robot writing irresponsible?

Well, what do you do with a sentence like this?

Since in many cases liquid propellants are known to possess demonstrated weapon effectiveness, the exploitation of their advantages in these instances is recommended.

You could rewrite it:

Use liquid propellants when they allow more effective weapons.

Unfortunately, though, then the meaning is clear.

Why does anyone write,

Careful consideration of relevant data is imperative before the procedure most conducive towards a realization of the desired outcomes can be determined.

Is it because he's afraid to say,

We must examine the evidence before deciding on the solution.

You see, a writer whose prose is infallible, prefabricated, and impersonal need feel no responsibility for his ideas — no matter how simple-minded, fearful, or untruthful they may be. This is why governmental prose, especially in a totalitarian society, is always robot writing. Nazi memos slaughtered men and women, but the pages were antiseptic, innocent, inevitable. Individual deaths were "necessary liquidations." The extermination of six million people was "The Final Solution." On trains to death camps, such magic, mechanical phrases were the narcotic clatter of the wheels, soothing the guilty sleep of bureaucratic butchers.

How sad that science, the search for truth, should so often sleep with Goebbels. Unintentionally? Yes. With the best of motives? Often. But as the judge said, "That's no excuse." There's an old short story by Kipling called, "The Lord of the Dynamo." In it, a man builds a machine, begins to worship it, and ends by being eaten by it.

Moral? Let's help stamp out robot writing. After all, we're only human.