

On the Three Most Important Words in the English Language

From: *Habits of the Creative Mind* by Richard E. Miller and Ann Jurecic

How do you know you're thinking?

This is the kind of question that stops you in your tracks. First, you think, who would ask about something so obvious? And then, well, then you're left with the challenge of putting into words a central facet of your mental life.

When we discuss this question in class, we are soon deep in the murk: there's mental activity, which takes place in any brain-equipped creature—the turtle sunning on the log is passively monitoring the surroundings, scanning for threats; there's instinct, the lightning quick response to inbound data—the cat pounces on the rustling in the bush killing, as the common phrase puts it, without thinking. There's dreaming; there's daydreaming. There's all this mental activity going on up there that one doesn't control, at least not consciously.

But what about the mental activity one does have some control over? You can't control what your eyes and ears take in, but you can exercise some influence over your own responses to that inbound data. So, while you can't unsee what your eyes behold, unhear the sounds that enter your ears and you can't unsmell, untouch, unfeel, you can change how you think about what your senses are reporting. While you can't exactly unthink a thought you've had, you can change that thought by rethinking it.

We're interested in that stretch of mental activity that you can influence. For the moment, we ask that you grant us the following proposition:

Thinking is the intentional act of making connections.

This act of connecting can take place in language, sound, and images; doubtless chefs would say it takes place in taste, perfumers in smell. We're open to the medium; what we want to focus on is the array of connections available to the thinker.

Now, we are pretty sure that you'll have reservations about this proposition, but we need you to forget those reservations for the time being. Don't worry, we'll come back to qualify and to complicate this proposition by and by; we promise.

Beginning writers, like beginning thinkers, tend to rely on one connector, "and." For the beginning writer, writing is the act of connecting like to like, with the thoughts or observations linked together via either the explicit or the implicit use of the coordinating conjunction "and":

The house I grew up in had a garden. It also had a garage. It had two floors. And an attic.

In this additive mode of composing, the beginning writer can expand the composition as much as the assignment requires. All that the writer needs to supply is more of the same:

It had two chimneys. It had three bedrooms. And one bathroom.

In the hands of an experienced storyteller, this additive mode of composing can serve as the foundation for an episodic epic poem:

After the end of the Trojan War, Odysseus heads home. On the way back, he and his men sack the city of Ismarus. And then they sail to the land of the Lotus Eaters. After they escape, they encounter the cyclops, Polyphemus. And then, and then, and then . . .

And in the hands of an experienced artist, the assumption that and links like to like can be exploited to create jarring juxtapositions that bring into being something unlike the two conjoined objects.



The piece above, *Monogram*, was made by 20th-century artist Robert Rauschenberg. The work brings together many elements that one does not associate with a painting, most notably a goat, a tire, and a tennis ball, and places them atop the canvas. Have the goat, the tire, and the tennis ball become part of the canvas? Or have the goat, the tire, and the tennis ball transformed this piece into a work of sculpture?

As you can see, when “and” is intentionally used to link like to unlike, surprising things can happen.

Beginning writers are more likely to make connections via addition (A and B and C) than via qualification (A and B, but not C). The machinery of the five paragraph thematic essay makes no room for thinking of this kind; there’s just the thesis, the three supporting examples (A and B and C), and the conclusion. Qualification muddies the waters.

It’s not that beginning writers have no access to the word “but.” Indeed, when we conference with beginning writers, we often find their minds are abuzz with qualifications, exceptions, contradictions, and confusions. However, little of this mental activity makes it onto the page because our students have been told repeatedly that the goal of writing in school is clarity. Equating clarity with simplicity, beginning writers avoid presenting anything that might complicate an argument that is straightforward and to the point. When this strategy of avoiding complications is rewarded, writing’s primary function is reduced to the activity of simplification and the goal of writing in school becomes nothing more than producing “arguments” that describe, recount, or summarize.

Obviously, writing has a communicative function (moving idea X from point A to point B), but this isn’t writing’s sole function. Writing can also serve as a technology for thinking new thoughts—thoughts, that is, that are new to the writer. We believe that this use of writing, as a heuristic for venturing into the unknown, is as important as its communicative use. Indeed, it is through learning how to use writing heuristically that one comes to have ideas that are worth communicating.

Beginning writers start with a thesis and then find evidence to support their position: writing is the process of reporting what fits and ignoring the rest. The problem with such writing is not that it is unclear, but rather that it is, from the outset, *too* clear: it says what it's going to say (thesis); it says it (three supporting examples); it says what it said (conclusion). Reading writing of this kind is like being plunged into the great echo chamber of nothingness.

This problem is easily solved.

We just insist that our students bring the coordinating conjunction **but** into their writing.

Things get messy right away and clarity, misunderstood as simplicity, gives way to qualification and complexity.

At the start, some of the qualifications are silly, others are improbable. But, over time, the qualifications become more meaningful and the prose begins to engage more productively with the complexities of lived experience. The writing begins, we say, to capture the shape of a mind at work on a problem.

But is the passkey for entry into critical thinking.

If you want to test out this assertion, we invite you to consider how different the Lincoln's Gettysburg Address would be if it ended after the second paragraph:

Four score and seven years ago, our fathers brought forth on this continent, a new nation: conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war — testing whether that nation, or any nation so conceived and so dedicated — can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

Lincoln speaks during the American Civil War at the dedication of the cemetery at Gettysburg for the Union troops who died in the battle. He invokes the nation as if it were one thing, but the nation is at war with itself. Those who have gathered for the dedication of the cemetery do so to recognize the sacrifice of those who died so that the “nation might live.”

If the speech ended here, it would end with the statement that recognizing the fallen is “altogether fitting and proper.” It's clear what Lincoln intends: it's appropriate to recognize those who have died in defense of the liberties of those who are still living. He's saying aloud what everyone present already knows; the point he is making is obvious to all.

But the speech doesn't end here. Lincoln continues:

But, in a larger sense, we cannot dedicate — we cannot consecrate — we cannot hallow — this ground. The brave men, living and dead, who struggled here have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember, what we say here, but it can never forget what they did here.

Everything hinges on the qualification that Lincoln introduces in the third—and final—paragraph of his speech. What those who are assembled are doing is “altogether fitting and proper,” *but* the living do not, in fact, have the power to do what those who have died have done.

With this qualification, Lincoln is able to shift the audience's attention from dedication, understood first as a commemorative event bounded in time, to dedication, redefined as an open-ended activity carried out by the living in the service of a vulnerable ideal:

It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us — that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion — that we here highly resolve that these dead shall not have died in vain — that this nation, under God, shall have a new birth of freedom — and that government of the people — by the people — for the people — shall not perish from the earth.

Lincoln’s use of “but” at the beginning of the third paragraph of his address connects dedication as a noun to the ongoing activity of being dedicated. The connection is not like to like: coming to the dedication is not the same thing as dedicating oneself to the preservation of the action. Without the “but,” we have a speech that thanks people for coming to a battlefield; with the qualification, we have a speech that links the deaths that took place on that battlefield to a larger set of ideas, values, hopes, and aspirations.

How do you get from critical thinking to creative thinking?

Here’s a rubric that oversimplifies to the point of distortion:

and	Foundation for thought	Basis for black and white, yes/no, binary thinking
but	Foundation for critical thought	Enables qualifications, exceptions, conditions, ambiguity, uncertainty.
or	Foundation for creative thought	Enables alternatives, possibilities; is future-oriented

We know this table can’t withstand rigorous critical examination. Indeed, we’d say the table predicts its own dismantling, since it assumes both a critical thinker who will respond to the clear-cut grid by qualifying the table’s assertions and a creative thinker who will imagine other grids or other ways of modeling the relationship between coordinating conjunctions and modes of thought.

So, just like the left/right brain distinction, our table doesn’t depict a neurological reality. It’s just a heuristic device for identifying different mental operations; it’s a way to get you to think about thinking as the process of making connections.

With those qualifications, we stand by this assertion:

Consciously introducing **but** and **or** to your mental activity is a good way to generate new thinking.