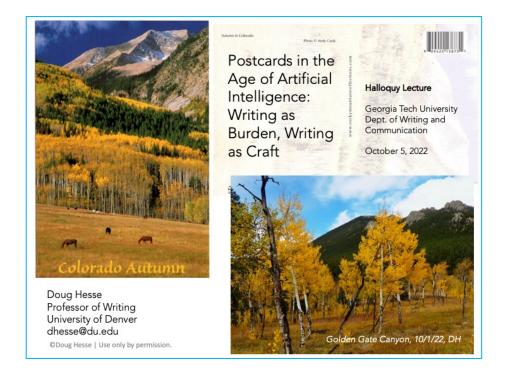
Following is a lecture, roughly as I delivered it, at Georgia Tech University, October 5, 2022. Words and images are copyrighted. Please don't reproduce anything with out my permission. This is part of a longer manuscript I'm preparing for submission.

Doug Hesse | Professor of Writing | The University of Denver | dhesse@du.edu 12/14/22



Postcards in the Age of AI: Writing as Craft, as Burden

Douglas Hesse

Andrew sent a meticulously crafted box, 6 by 5 by 8, maple, pine, and walnut. Its side joints are dovetailed, its lid routed and rabbited. It's prettily finished in satin varnish.

One year filled the box with postcards. That anyone could receive six inches of them in a year surprises people, until I describe the network of

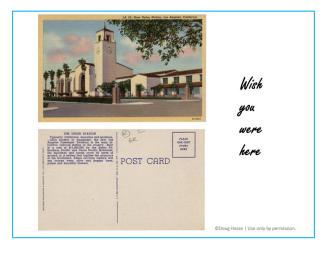


senders that happily entangle me. Two friends are chief contributors. Kathi Yancey and I have swapped postcards for years, she from Tallahassee and travels. Michael Martone writes from Tuscaloosea, "below the bug line", as he frequently reminds. While Yancey sends cards with museum art, Martone favors trains.



My two steadiest correspondents could scarcely fill Andrew's box in a year. But they have company. Barb sent a card per month from Little Rock after my Mom died, and when Dad passed a year later, Barb restarted the cycle. Susanmarie, from Vermont, wrote that Barb had done the same for her. When I left an administrative position, my friend Eliana arranged cards from Oregon to Prince Edward Island, Texas to Pennsylvania.

I'll buy old cards when I see them. I like that a century ago people could address a card simply to a name in a town, "August Krukow, DeWitt, Iowa." I like the bit of brag embodied in that most cliched of messages, "Having a wonderful time; wish you were here." Cards glimmer another place, sometimes far and strange, sometimes documentary, as in the case

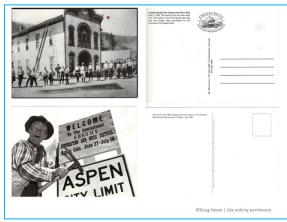


of that most horrible of genres, the lynching postcard, with Sunday best white men and women smiling for the camera while a brutalized body hangs in the center. Imagine being the mailman for that.

Postcards are a cool message medium, in McLuhan's term. Advertisers use them, and so do political campaigns. I get occasional requests to send cards to voters. And cards have become aesthetic vehicles. I subscribe to Hoot, a journal of mini fiction and poetry, each issue a postcard.

Still, the postcard's historical function has been social, sharing personal news from distant parts, importantly with an image. The compact is "I was here" and, by extension, "You were, too, at least in my attention." I thought of you and am making that thought material on paper. So, yes, there's an element of boast but also an aspect of care. I took time to buy,



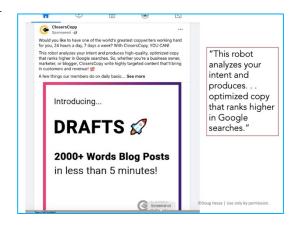


write, and mail. As digital life allows effortless immediate postings of pictures and messages, postcards are creakily costly and inefficient, sometimes unreliable. Postcards are steampunk with neither punk nor steam. That's part of their contemporary point, I suggest. They mark singular effort, the slow contact, one reader at a time. They constitute the physical transportation of one artifact, temporarily and spatially unique, replete with the idiosyncrasies of handwriting, perhaps

even authorial DNA rubbed into the paper at some CSIextractable level.

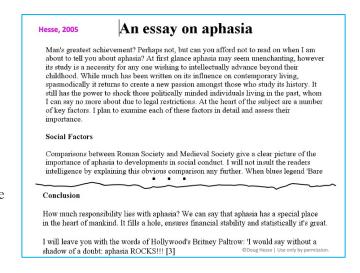
In recent months, my Facebook filled with promises to spare me actually having to write.

ClosersCopy promised "2000+ Word Blog Posts in less



than 5 minutes!" Beyond pure speed came the advantage that "This robot analyzes your intent and produces high-quality, optimized copy that ranks higher in Google searches." Note how matter-of-factly the primary goal is to produce optimized copy to draw Google searches. The main readers are machines. Human eyes are afterthoughts.

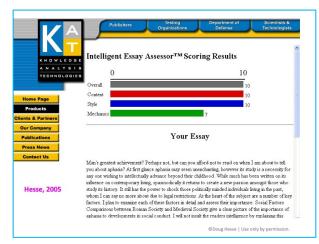
I'd watched this sort of thing coming for seventeen years. As part of my 4Cs chair address in San Francisco, March 2005, I described an experiment involving an early machine scoring program, the Intelligent Essay Assessor, and an early essay generator. Back then, many of us were playing a parlor game. Call it "beat the digital grader." The rules were simple. Access a



computer program that scores writing, then write the worst possible essay that receives the highest possible score. Even undergraduates could get pretty good, as through trial and error they discovered assumptions built into the program: sentence length and variety, diction, correctness, semantic chains, and so on.

Then came a variant. Someone had created a website called "the essay generator" which

invited you to enter any topic and receive an essay in return. The site wasn't very sophisticated, which was part of the fun. Its database stockpiled sentences with mad-libbish slots. The program generated three headings: Social Factors, Economic Factors, and Political Factors. Each essay had a graph and three references. I wondered what would happen if you had a

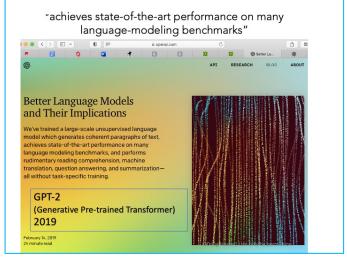


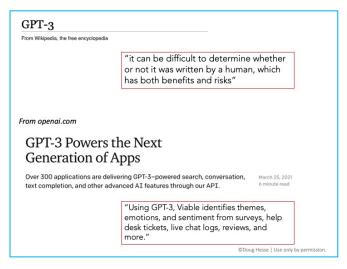
computer generate an essay that was then scored by another computer? So I went to a computer scoring test site. From the choice of three topics, I selected "aphasia," which I then plugged into the essay generator.

An Essay on Aphasia. "Man's greatest achievement? Perhaps not, but can you afford not to read on when I am about to tell you about aphasia?" The essay concludes, "How much responsibility lies with aphasia? We can say that aphasia has a special place in the heart of mankind. It fills a hole, ensures financial stability, and statistically it's great." I then cut and pasted that essay into the Intelligent Essay Assessor. The results are before you. As you can see, according to the Intelligent Essay Assessor, the Essay Generator wrote pretty well,

though it could use a little help with grammar and mechanics. Still, it sure knew its aphasia.

AI writing has gotten vastly more sophisticated in 17 years since San Francisco's Moscone Center. Things really took off in early 2019, with the release of GPT-2, a neural net developed by a company called OpenAI, which was funded by a group including Elon Musk and Peter Thiel. Two years later GPT-3 was available. While the earlier version could handle 1.5 billion parameters to generate predictive text, GPT-3 uses 175 billion. I'm sure that at a place like Georgia Tech, brilliant engineers



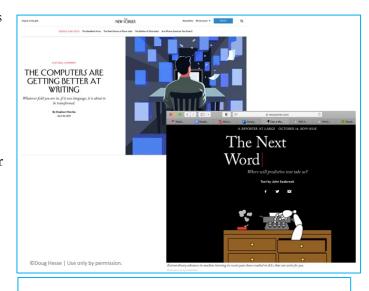


and neuroscientists, perhaps abetted by linguists or writing specialists, are pushing this work further.

I'm guessing that the use of AI content generators must be a standard topic in current tech writing

programs. It should be. Meanwhile, journalists and other writers have gotten enamored with AI writing, including playing a version of beat-the-system that I played long ago with my students. At least two New Yorker articles, for example, have experimented with programs. GPT-3 and similar engines come to end-users through any number of subscription applications. Here's a list of sixteen of them.

I experimented with a 17th program,
Sudowrite, as I was drafting this talk. Like
most of these commercial programs, an
exploration site allows you to generate X
number of words for free. (As an aside, I'll
note that having students muck around in
these sites is a pretty interesting class activity.)
I entered the first few paragraphs of today's
talk into Sudowrite, the section about
postcards, then asked it to write a next section:

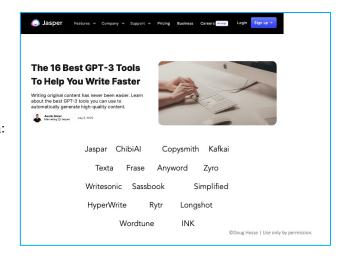


And yet, sitting there at the keyboard, I could feel the uncanny valley prickling my neck. It wasn't that Smart Compose had guessed correctly where my thoughts were headed—in fact, it hadn't. The creepy thing was that the machine was more thoughtful than I was.

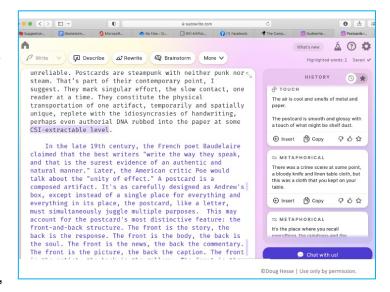
Read Predicted Toxt

Generated by OPT-2 (including any quotes)

By that I mean, it seemed to want to distinguish my feelings from my thoughts. To put it another way, Smart Compose seemed to want to know me.



A postcard is a composed artifact. It's as carefully designed as Andrew's box, except instead of a single place for everything and everything in its place, the postcard, like a letter,



must simultaneously juggle multiple purposes. This may account for the postcard's most distinctive feature: the front-and-back structure. The front is the story, the back is the response. The front is the body, the back is the soul. The front is the news, the back the commentary. The front is the picture, the back the caption. The front is the artist, the back is the gallery. The front is the face, the back is the back.

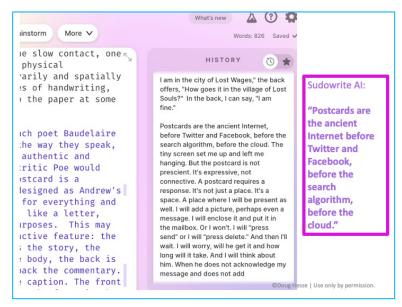
Pretty interesting stuff, interesting in parallel structures, occasionally provocative. When I encouraged Sudowrite to keep going, things got weirder, oddly speculative and prescient.

The front says, "Here I am in the city of Lost Wages," the back offers, "How goes it in the village of Lost Souls?" In the back, I can say, "I am fine."

Postcards are the ancient Internet, before Twitter and Facebook, before the search algorithm, before the cloud. The tiny screen set me up and left me hanging. But the postcard is not prescient. It's expressive, not connective. A

postcard requires a response. It's not just a place. It's a space. A place where I

will be present as well. I will add a picture, perhaps even a message. I will enclose it and put it in the mailbox. Or I won't. I will "press send" or I will "press delete." And then I'll wait. I will worry, will he get it and how long will it take. And I will think about him.



Now, I could keep going in this fashion, and I suspect we'd have fun. We could surely discuss its logic and limitations. But I'd like to chase a different question. What is represented in the desire to have machines do our writing for us? Why would I want Sudowrite to generate this talk, not me? And would it matter to you?

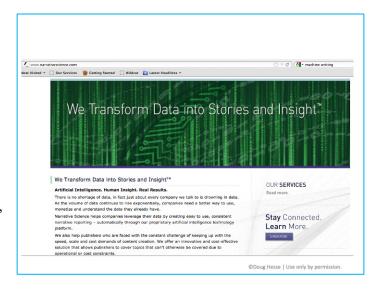


A dozen years ago, I was fascinated by Narrative Science, a start-up company that had its origins in a Northwestern University student lab project. Its first project, StatsMonkey, was designed

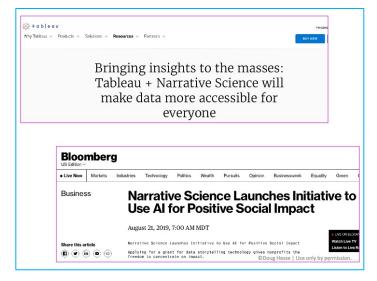
to turn data like sports statistics into stories. The applications were mainly journalistic, and even

related technologies. *The Washington Post* used Heliograph, for example. Narrative Science also developed a natural language generation program called Quill and shifted focus to business settings. In December 2021, Tableau, part of the larger Salesfore Corporation acquired Narrative Science, which had just launched grants for Non-Profits, "Data Storytelling for Good." That initiative didn't survive the acquisition.

By now, as I've illustrated there's a vast enterprise to narrativize data or generate texts. I want to be very clear once again that I'm expert in none of this. If you expect me to explain how these AI's work or even how well, you'll be disappointed. I won't celebrate or critique these efforts—at least not today. I'm tempted to ask—but I won't--the question of how ubiquitous AI writers will shape not only our experiences of readers like you and me but also the episteme of prose itself.







Instead, I'm focusing on a smaller question: for those who see AI as a solution, what is the problem they're solving? Put differently, how do they understand the purpose and significance of writing, not only status of texts but the act of producing them? There are two implications. Implication 1.



AI's tease out the subtleties of data analytics. It's parallel to knowing where to place your shortstop when the batter is a certain lefthanded hitter late in the game with one out and a runner on second and your pitcher throws a modest 92 mph fastball but has a good curve. Analytics have rendered major league baseball nearly unwatchable, but never mind. The second implication is that writing is something to be gotten out of the way, an onerous way to spend time. Writing isn't only difficult or frustrating; it's annoying. In this view, an AI is to writers as an automatic washing machine was to 1950s homemakers.

To be sure, there are kinds of writing I'd happily not do. Each year I've had to complete annual reports about my work and the writing program I directed.

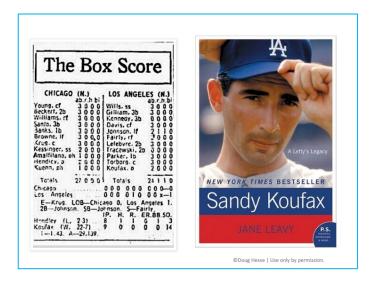
Both require gathering facts, from courses and students taught to events, from publications to service activities, and so



on. University of Denver professors upload materials into a database, from which anyone can generate a report according to various parameters. But that still leaves writing interpretive narratives of themes, accomplishments, plans. At this point, I wouldn't mind that being done for me. Each year I sympathized more with students to whom I've assigned portfolios with reflective introductions.

Surely, I'd like a benevolent AI to generate annual performance reviews for 27 colleagues. Of course, I need no convincing that expert human interpretation is vital in such matters, but after having written hundreds of such letters over decades, I have to wonder about the marginal rate of return on my efforts.

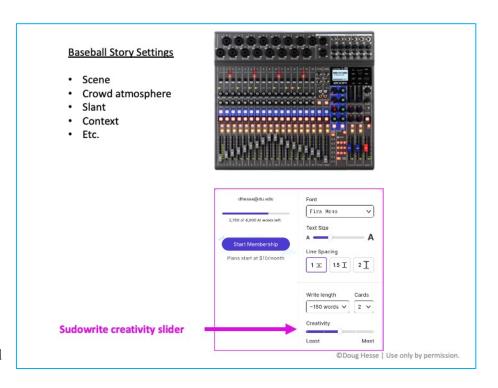
Some of what's at issue here is the purpose of reading. If a text simply furnishes a prescribed number of words for routine purposes, with reading being primarily bureaucratic box checking, then sure, let a machine do it. But, in some of these situations, one wonders about the necessity of translating data in the first place.



I've often thought the baseball box score an elegant way to render a baseball game. Here's a famous example, from Sandy Koufax's 1965 perfect game. No doubt an AI can supply several accurate sentences out of this box score, a narrative of innings and at bats, and scoring, not unlike 1930s broadcasters like Ronald Reagan creating radio accounts of major league games by reading from tickertape in a Des Moines radio studio.

But most readers want more, even if not a whole book about a single game, such as Jane Leavy's rendering of the Koufax perfect. Sometimes knowing just the score is fine, but sometimes readers want the flavor: the look clouds at twilight, the drama of Koufax shaking off signs, the grass-stained knees of a left-fielder snow-coning a sinking liner, the gimpy fist-pumping pinch-hitter

surrounding first, the
bloodstained sock. I suppose
AI could be perfected toward
those ends. Perhaps it's only a
matter of taking a step further
the data entry that underlines
the gamecast applications.
Perhaps it's a matter of coding
to read a camera feed,
rendering video into nouns and
verbs.



Perhaps with the right data input, producing a full-flavored narrative of a game would become akin to adjusting sliders on a recording studio mixing board. Instead of volume there's a setting for length. Maybe there's a slider to account for Scene and Setting, maybe one for Crowd Atmosphere. One could imagine a slider for Slant that would produce a piece from the perspective of the home team or the visiting. Or Context: focus solely on the events of this game v. make

connections to events in player/team/baseball history.

Adept baseball writers would be more akin to Phil Specter or Quincy Jones or George Martin.

Actually, I'm intrigued that Sudowrite has a slider for creativity.



Could some future or near future baseball writing AI pass a Turing test, making prose indistinguishable from Jane Leavy's? I have an opinion but neither the time nor expertise to offer an informed answer. But I do want to think about why one might want such a thing.

Maybe we're facing a dire shortage of reading. We're in danger of running out of texts, and we lack the writerly capacity to keep up with demand! Thank god we have AIs to fill gaps that journalism and MFA and tech writing programs can't possibly fill, even if abetted by the vast realms of Medium and Reddit, of amateur poetry and memoir, of self-help journaling and influencer list-sicling. Forget finding new deposits of lithium or rare earth metals! We need more novels! More corporate blogs!

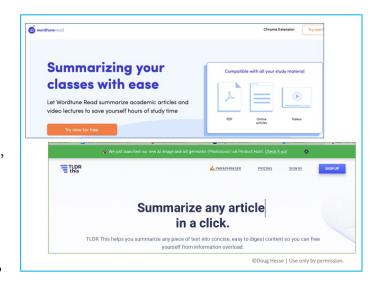
Or perhaps it's the curiosity factor, the entertainment of seeing what algorithms can do, sort of like watching the Nathan's hot dog eating contest or an ox with a paintbrush tied to its tail. Less facetiously, there's a scholarly imperative. Building a writing AI—or watching one work—has heuristic value for telling us about the nature of writing. Perhaps watching GPT-3 at work will reveal things that tens of thousands of reflective writers and researchers have failed to recognize or gotten wrong over the years?

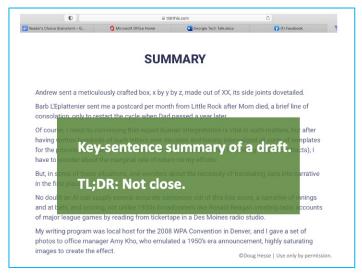
Or perhaps it comes down to economics. I suspect this is closer to the heart. Paying people to generate content is a poor return on investment when there are options that are "good enough" in some situations. Or when some types of writing tasks are so onerous that it would be cruel to have actual people do them. Better to have AI endloaders dig textual ditches than people with pickaxe pens.

Of course, if some texts are oppressive to produce, then so must they be to read—and we're

not just talking insurance policies or user agreements or the Mar a Lago annual report. Fortunately, we have AI readers at the ready. Take TLDRthis, for example, which can help you "free yourself from information overload." In the free demonstration version, you TLDRThis can extract key sentences, as it did from a draft of this talk, which I'll say bears no relation to anything I see as important. To get the "advanced AI human-like summaries" you'll have to register for ten free trials or pay to register.

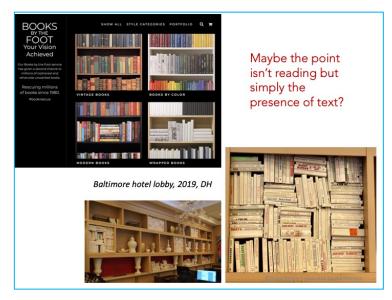
Sometimes you might not even need a text summarized. When I was a student at the University of Iowa there was a fancy hotel (or so it seemed to me) called the Canterbury Inn. Its guest rooms each had a wall of books. I recognized the feature as less library than décor, but I was impressed by the assemblage. It turns out you can replicate the Canterbury aesthetic easily these days. On websites like booksbythefoot.com you can decorate

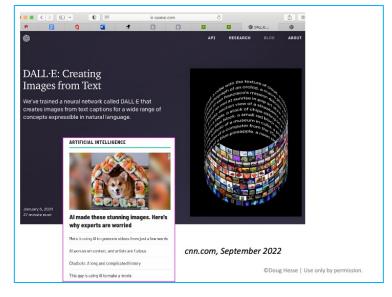






according to your own palette. There are, for example, vintage books, books by color, books by subject, and even "reversed books," to be shelved with spines facing the wall. The site celebrates having "giving a second chance to millions of orphaned and otherwise unwanted books." Three years ago, I stayed in a Baltimore hotel whose lobby décor was white books with contemporary titles. While all these books could hypothetically be read, wasn't their purpose. And yet it mattered that they're "real" books, not 3-D printed bindings akin to laminate flooring passing for oak. But real books carry the umbra of curation and an accreted historical cache.



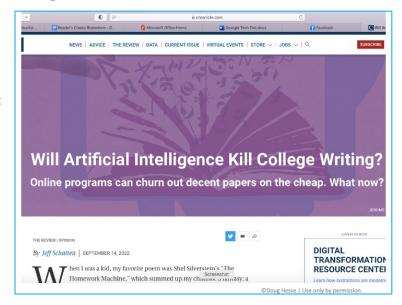


For the past few minutes, I've been hitting the reading side of the AI writing. I've been exploring texts where readers don't care very much about the text. With more time, I'd wonder about the effects of reading when vast swaths of text are produced by an industry dominant AI. What would it do to our expectations of style, to the vast textual ecology? Imagine, for example, that Joyce Carol Oates was writing 75% of everything you ever read. (It would be that much of a stretch for her.)

But I want to flip back to my initial question. What does the dream of AI writing represent? I'll set aside the aspiration to have machines produce better writing than people can do. That goal would be parallel to having a DaVinci surgical robot remove your prostate rather than a scalpel in a mere human hand. I'll focus instead on the idea that writing is simply something to be gotten out of the way, dispatched, proffered as done, dead, and gone.

That's clearly the appeal to some students of certain GPT-3 applications. Probably a lot of you have seen the recent article in *The Chronicle of Higher Education*. This is a clever article, whose author puts various questions about AI writing's effects on higher education to the algorithm itself. The analysis is interesting

The effects on college students themselves, the algorithm wrote, would be mixed: "On the positive side, students would be able to focus on other aspects of their studies and would not have to spend time worrying



"The effects on college students themselves, the algorithm wrote, would be mixed: 'On the positive side, students would be able to focus on other aspects of their studies and would not have to spend time worrying about writing essays. On the negative side, however, they will not be able to communicate effectively and will have trouble in their future careers.'"

--Jeff Schatten

about writing essays. On the negative side, however, they will not be able to communicate effectively and will have trouble in their future careers."

In this formulation, writing is ancillary to "other aspects" of studies, to which I bluntly ask, "Such as?" and "Why?" Long before Janet Emig's 1977 tidy formulation of writing as a mode of learning, we've recognized the epistemic value of writing. If writing were simply a means of testing or furnishing grades or hazing students, then sure, displace it. Student AI papers could go directly to professor AI graders, and all would be tidy. Cut out the middle. But writing is a mode of producing knowledge, of exploring and generating, of figuring out meanings and connections. Getting rid of writing to focus on "other aspects" of their studies is akin to getting rid of lab sessions or getting rid of class discussion or getting rid of reading.

Jeff Schatten carries the thought experiment further.

Some who would once have pursued writing-focused careers will find themselves instead managing the inputs and outputs of AI. And once AI can automate that, even those employees may become redundant. In this new world, the argument for writing as a practical necessity looks decidedly

"Some who would once have pursued writing-focused careers will find themselves instead managing the inputs and outputs of Al. And once Al can automate that, even those employees may become redundant. In this new world, the argument for writing as a practical necessity looks decidedly weaker. Even business schools may soon take a liberal-arts approach, framing writing not as career prep but as the foundation of a rich and meaningful life."

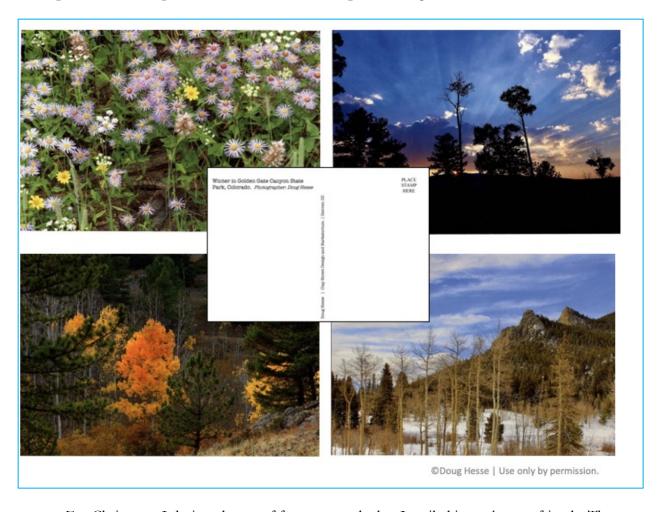
--Jeff Schatten

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weaker. Even business schools may soon take a liberal-arts approach, framing writing not as career prep but as the foundation of a rich and meaningful life.

As you might guess, I agree with that last vision. But a tradition of writing as a liberal art valuable not only as instrument but also as autotelic activity has been long been present. We don't have to wait for some ephiphinal event. We simply have to temper reductive treatments of writing as mere

academic or career skill. We should embrace right now—and not waiting until after benevolent AI Overlords relieve up—writing as a mode of being and social connection, whatever academic, economic, and political exchange value it might have. I'm not saying either/or. I'm saying both/and. And I'm surely not saying we should just teach writing poetry or fiction, fine as those might be. How about memoir or essays, literary nonfiction, profiles, journals, expeditions and encounters, as Annie Dillard might put it. How about, even more fundamentally, presenting writing as a possible element of a rich life that might include making artifacts for the important pleasure of making artifacts, sharing some of them. Such lives might include postcards.

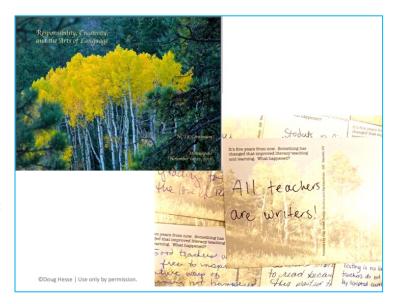


For Christmas, I designed a set of four postcards that I mailed in packets to friends. They had images of seasons at our favorite near hiking spot west of Denver. I put captions in the usual

spots and created a vertical text divider between message and address spaces: Clay Street Design, Denver, CO. An online company printed 600 cards for a total of \$108.

I'd made postcards previously.

As program chair for the 2015 annual NCTE, I made a card with aspens, golden in fall against dark pines. The reverse caption asked, "It's five years from now. Something has changed that improved literacy teaching and learning. What happened?" At the



opening general session, before Alison Bechdel talked about making comics, attendees wrote responses, self-addressed, and passed them in. After the convention, I read and scanned before mailing them back.

No doubt vanity partly drives my making. There's also a rhetorical ploy in having people confront an old-fashioned genre in an unexpected place. But there's also a material, physical element of handwriting and paper. There's a reason "homemade" still conjures care through the single-batch artifact. Even when made by recipe or pattern, artisanal products bear traces of the bakers/sewers/carpenters/designers/composer's hand, all of them making on-the-fly adjustments of pinch more, a millimeter less, the pale red instead of the purple. At some level it's silly of course, especially if the goal is efficiency and the activity is loathsome.

But what if the activity is neither? I want you to consider that at least some writing might be too meaningful to be left to GPT-3. Sure, Doug, that might be true for you and the sorts of silly romantics who fill leather journals and write bad poems and major in English and generally lack a

practical life. But stick with me. You might have figured out that in this talk, I'm playing a long inductive game, more Montaignian essay than thesis and support lesson.

Andrew is making a mandolin these days. At any given step in the lengthy process, in his garage workshop, a dozen clamps hold pieces together, front and back, tail piece and fingerboard, in a centuries-old process. Despite precisely measuring and cutting carefully selected woods, there's no

telling how well an instrument will play until the last varnish has dried and the first chords struck.

Even a well-made instrument may sound inferior to its apparently identical twin owing to some imperceptible variation in wood, glue, or varnish. That, of course,



is if the thing doesn't break along the crafting. Plenty of things can go wrong making a trumpet or trombone, but a metal flaw or broken solder means the piece gets melted down.

Of course, there's little need actually to make any instrument, if having something to play is your goal. When I was in junior high, in the early seventies, my friend Vance and I bought electric guitars from J.C. Penney. Mine was orange starburst with two pickups and a whammy bar. I'd never have considered making my own guitar.

While I expect Andrew will want to play the finished instrument, I'm sure that making it making matters as much as having it.

It's perfectly reasonable for efficiency to drive writing for some purposes. Here is my Grandpa Krukow's mad-libs-like postcard to his father when he final returned after World War I. While his dad would have been happy for a more personal note, I'm sure the news was just fine. If machines can do them well

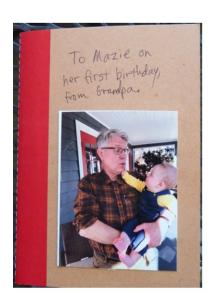


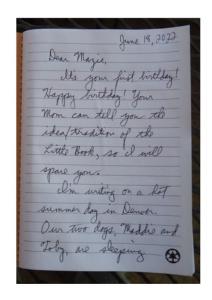
enough, there's no particular philosophical or moral reason to protest or mourn. I don't insist that my beer bottles be individually mouth-blown by glass artisans. Nor do I romanticize I write only with quill pens I've sharpened, on paper I've made from rags I've gathered. I'm happy for any number of technologies, including ones the check my spelling and allow me to find images from old Christmas catalogs.

But I hope we might push back on the idea that writing is, inherently, a burden to be banished. I hope we might save a place for writing as a tool for exploration, development, expression, and friendship, at least now and then. Let's save a slot for endeavors justified as self-sponsored activities. Sure it's hard. No doubt I could have spent many other ways the 25 hours it took me to write this talk. I could have watched a Netflix series or gone to a baseball game or weeded my garden or scrolled twitter. Sudowrite could have spared me lots of anxiety—and believe me, talking before people I admire, like Melissa and Kelli, provides plenty of anxiety. But writing this talk brought together idea and memory, postcards and telescopes, artificial intelligence and mandolins. It made me ponder why I thought GPT-3 should get off my lawn. It made me create something I could claim as my own, for better or worse, and share with others. The text won't fit on

a postcard, but maybe Yancey and Martone and Andrew will find interesting what I made of our writing practices.

When my kids pass some life event (graduation, marriage, birth), I often write them what we came to call little books. These are cheap paper notebooks in which I write memories, thoughts on current events, some pontifications passing as





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wisdom and so on. The writing is first draft fast. Profundity is accidental. My goal is to fill a book, and sometimes I come close. I aspire to have them mean what Mom's handwriting in my own baby books mean to me. Vainly, I suppose I want my kids and grandkids 20 or 40 or 60 years hence to pick up a little book and see a trace of me. But that assumes they'll attach any particular significance to keeping them. My writing may be no more worth keeping than grandma's fine China or those mahogany buffets to which millennials and Gen Zs increasingly say, "No thanks."

Beyond demonstrating a special set of skills (though not in the Liam Neeson Taken sense), is writing as craft an inherently superior activity? No. Does degree and difficulty of making signal degree of caring? Again, I'd say no. Writing as craft provides a personal autotelic return, the way cooking can be for some, or knitting, or restoring a car, or gardening. It represents a desire to make oneself through language, inscribing that work in artifact, hedging against time and absence. Maybe we might get some writing out of the way, but let's not lose sight of what we can't—or shouldn't.