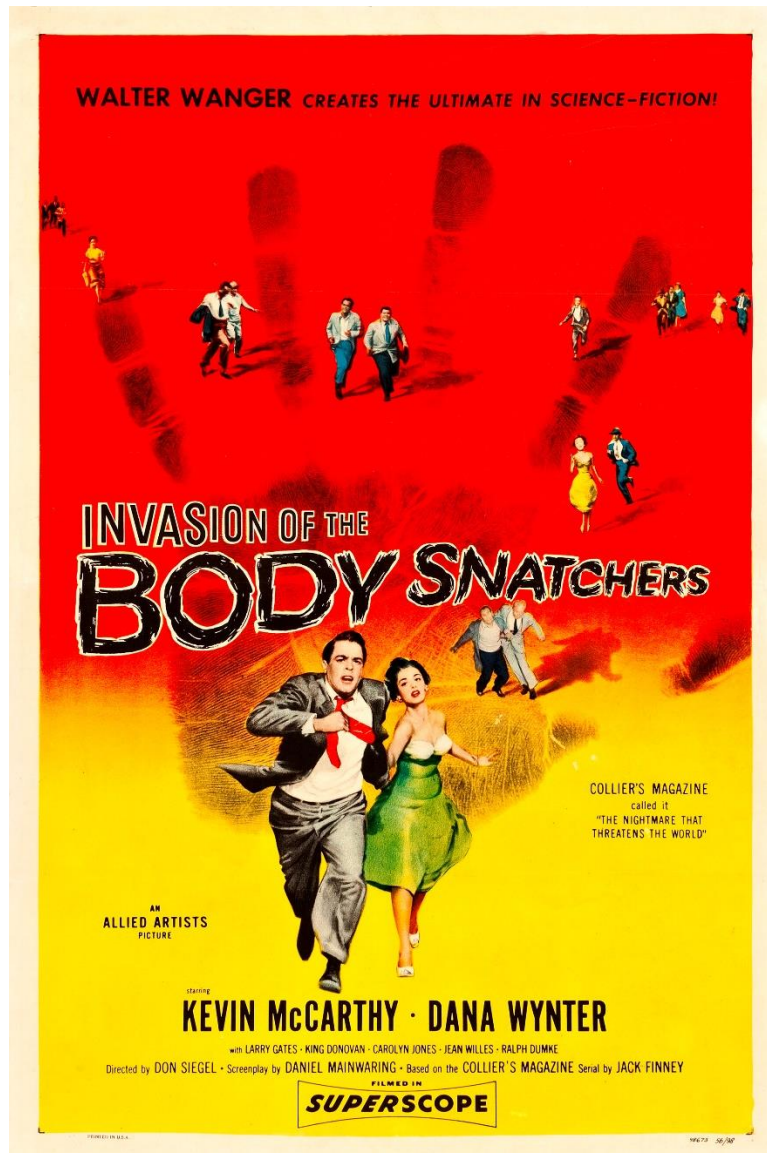


# Invasion of the Mind Snatchers, Or, The Easy Solution to the Problem of Chatbots in Higher Education

*Robert Hanna*



(Wikipedia, 2023)

I'm a veteran of the teaching wars in higher education. I started teaching philosophy to undergraduates as an undergraduate sophomore (second-year) teaching assistant at a Canadian university in the Fall of 1976, and then proceeded to do assistant-teaching, or to teach my own courses, almost continuously—with a two-year gap when I attended a university that didn't have undergraduate teaching assistants, another two-year gap

when I was the managing editor of a professional academic philosophy journal, and a one-year gap when I held a PhD dissertation fellowship—until 2016, so for 35 years altogether (i.e., 40 years minus 5 years for gaps). Eventually I taught philosophy to (I suppose) thousands of undergraduate students and graduate students at seven different universities, including Yale and Cambridge, in five different countries: Canada, USA, England, Luxembourg, and Brazil (Hanna, 2023a). I generally enjoyed teaching, and also was generally quite good at it, especially teaching juniors (third-years) and seniors (fourth-years) and graduate students. But although I had many terrific students over the years, some of whom are still frequent correspondents and good friends, quite frankly, *I don't miss teaching at all, not even for a second*, principally because of worsening conditions for teaching over those forty years. The ultimate causes of those worsening conditions for teaching were, and are, (i) *ever-increasing neoliberalization of colleges and universities*, especially including the rise of a profit-driven, micro-managing managerial class, i.e., increasingly large and increasingly well-paid administrators, many of them recruited from the professoriate, aided and abetted by large human resources (HR) bureaucracies, monitoring and policing all aspects of professional academic life, together with the knock-on destructive, deforming effects of these on students and teaching faculty alike (Maiese and Hanna, 2019: ch. 4), and (ii) *ever-increasing restrictions on academic freedom in teaching*, by means of coercive and moralistic, free-speech-intolerant, social-justice-warrior-driven, identitarian or multiculturalist demands and rules about what can be taught, what cannot be taught, what must be taught, what can be said to students, what cannot be said to students, and what must be said to students, thereby both inflaming and also pandering to student hyper-sensitivities, and so-on (Rorty, 1994; Mann, 2019).

And in fact, all the problems generated by those two ultimate causes have spiralled out of control over the last seven years, while I've observed the professional academy from the outside with amusement, critical interest, and detachment.

But now, with the rollout in November 2022 of Large Language Models (LLMs) or chatbots, especially ChatGPT, teaching at institutions of higher education *has finally crashed and burned*. For the primary instrument of teaching for at least the last 20 years, *the essay or other written assignment, written and submitted by means of digital technology*, has now become in effect impossible to insulate from the constant, covert or overt, mindless use of LLMs or chatbots.

Notice that I'm *not* saying that *cheating or plagiarism* is the primary problem here, even though of course cheating and plagiarism entail moral dishonesty and culpable laziness, and also effectively undermine the assembly-line, conveyor-belt, social-institutional system of getting-&-giving grades for the purposes of receiving college and university degrees, professional accreditation, and other qualifications for jobs. Instead,

the *primary* problem is that a great many and indeed increasingly many, perhaps even a majority, of all students at institutions of higher education are now *simply refusing to think and write for themselves*, with grave and indeed tragic consequences, namely, *misusing, neglecting, and even impairing their innate mental capacities for autonomous critical reasoning and authentic human creativity* (Hanna, 2023b). And of course *this* problem fully generalizes over students at institutions of primary and secondary education as well, and *also* fully generalizes over people of all ages who use digital technology, *whether inside or outside* institutions of primary, secondary, or higher education, including, of course, professional academic philosophers (Hanna, 2023c). So it's *everyone's* problem.

In the first version of his autobiography, Frederick Douglass brilliantly points out that, without in any way discounting or downplaying the horrific *physical* evils and oppressions of slavery, we must also recognize that it's the *mental* evils and oppressions of slavery that above all promote and sustain that essentially immoral social institution:

I have found that to make a contented slave, it is necessary to make a thoughtless one. It is necessary to darken his moral and mental vision, and, as far as possible, to annihilate the powers of reason. He must be able to detect no inconsistencies in slavery; he must be made to feel that slavery is right; and he can be brought to that only when he ceases to be a man. (Douglass, 1845/1995)

In Douglass's later writings and public lectures, he makes it clear that by "only when he ceases to be a man," he means *only when the unified set of innate mental capacities that constitutes everyone's human dignity is disrespected, extinguished, or at least inherently undermined* (Hanna, 2023d). Correspondingly, and now updated to the third decade of the 21<sup>st</sup> century, our excessive use of and reliance on LLMs or chatbots, with grave and indeed tragic consequences—namely, *misusing, neglecting, and even impairing our innate mental capacities for autonomous critical reasoning and authentic human creativity*—is *mental slavery without physical slavery*, and also *an attack on everyone's human dignity*, and more generally, it's what I call *invasion of the mind snatchers*—and they're coming for *you*.

Now I've already proposed one solution to everyone's problem, which I'll call *the hard solution*: through democratic processes, *get the government to ban LLM or chatbot research and technology* while it's still in its infancy, just as we should have, through democratic processes, *gotten the government to ban nuclear weapons research and technology*, while it was still in its infancy (Hanna, 2023e). Of course, sadly, under the worldwide contemporary political system of advanced or late technocratic capitalism and neoliberalism, *this isn't going to happen*, just as the banning of nuclear weapons research

and technology while it was still in its infancy, didn't happen, thereby producing a permanent existential threat to humankind and the Earth. So much for democracy.

But in fact there is what I'll call *the easy solution* to the problem of chatbots, at least as it afflicts higher education; and the easy solution can also be appropriately and smoothly extended to primary and secondary education. This easy solution has three parts.

**First**, require all undergraduate students who are physically capable of handwriting, whether by means of printing or in cursive script (and of course special arrangements can be made for the small number of students who don't have this physical capability) to do all their written assignments for the purposes of active learning, evaluation, and grading, *during class-time and in handwritten format*, including short-answer pieces, brief opinion pieces, short essays, medium-length essays, and creative writing. I'll call this *the return of the blue books*.<sup>1</sup>

**Second**, require all undergraduate students who are physically capable of handwriting, whether by means of printing or in cursive script (with the same qualifications as per the just-previous paragraph), to do at least *some* of their written assignments in the following way: use a chatbot to generate a text that "completes" the assignment, print it out, carry it with them in hard copy, and then write up a critique of what the chatbot has generated, *also during class-time and in handwritten format*, which they then submit for evaluation and grading along with the hard copy of the chatbot's text. I'll call this *the critique of the chatbots*.

The return of the blue books and the critique of the chatbots would *also* apply to all graduate students. *Impossible!, and destructive of the very idea of graduate education*, you say? Not so, and in fact, diametrically to the contrary, for the easy solution *also* proposes, **third**, that any undergraduate students who wanted to do independent research and write long essays or honors theses by means of digital technology, and also any graduate students who wanted to do independent research and write long essays, master's theses, or PhD dissertations by means of digital technology, would all be permitted to do so, *but only for their own sake as intellectual projects*. None of these intellectual projects would ever be required in order to complete programs or receive degrees, nor would they ever be

---

<sup>1</sup> "Blue books" are, of course, booklets with blue covers, consisting of roughly twenty empty lined pages, that have traditionally been used for handwritten assignments and examinations at colleges and universities. For those with messy or ungainly handwriting—I'm one of these—it's highly recommended to use double-spacing. Double-spacing also allows for easy additions, corrections, and revisions. So it's highly recommended all-around. (As you can see, 35 years of teaching leaves its mark on you.)

evaluated or graded. For *all* evaluation and grading would be restricted to handwritten writing assignments during class-time, and to other familiar non-digital classroom or extra-classroom assignments like oral presentations, small group discussions, experimental or fieldwork assignments, and so-on. Students who opted for these intellectual projects, however, would *also* have the right to have their work critically yet also collegially discussed with them by one faculty member of their choice, or by a committee of faculty members, if they wanted to. But these optional exercises would *not* be examinations—only critical and collegial intellectual discussions for their own sake. Therefore, using chatbots and/or committing plagiarism for the purposes of undertaking any of these wholly optional yet also highly worthy intellectual projects would be entirely pointless, and the temptation to do so would wither away. I'll call this *the return of research-&-scholarship for its own sake*.

The return of the blue books, together with the critique of the chatbots, together with the return of research-&-scholarship for its own sake, would fully enable undergraduate and graduate students alike *to think and write for themselves again*, and thereby develop, exercise, nurture, and sustain their innate mental capacities for autonomous critical reasoning and authentic human creativity. For it's a well-established empirical fact that learning and creating by means of handwriting, as opposed to typing or digital technology, produces significant cognitive benefits (see, e.g., Plebanek and James, 2022: esp. the list of References). Above all, however, it would be *a liberation from digitally-driven mental slavery*. Moreover, as a secondary beneficial effect, the easy solution would also *effectively end all cheating and plagiarism by means of digital technology*. And at the same time, longer research and writing projects like long essays, theses, and dissertations done by means of digital technology would still be really possible for those who cared enough to pursue them for their own sake. Higher education would thereby not only be saved from destruction by invasion of the mind snatchers, but also flourish.<sup>2</sup>

---

<sup>2</sup> What about applications to colleges and universities, to graduate schools, and for professional academic jobs? As extensions of the tripartite easy solution I've proposed, these would all be principally based on evaluations of and grades received for handwritten, in-person essays and other assignments, alongside other familiar non-digitally-achieved qualifications. College admissions essays and graduate school application letters can be undetectably generated by chatbots, so they would have to be done in handwritten format and in person at designated locations for completing such applications. As for professional academic career advancement by means of publications in peer-reviewed journals, it's clear that since many or even most currently published papers in mainstream journals could be undetectably generated by chatbots, this system would have to be replaced by a radically better and different system in which career advancement is based on teaching and other non-digital achievements, research-&-scholarship is done for its own sake, and all publishing by means of digital technology is done for its own sake and for the sake of the general advancement of human knowledge, either by means of self-publishing on platforms like academia.edu, or within the framework of small research groups. The current system of scholarly book publishing would also have to be revised accordingly. When I say that the tripartite easy

To be sure, the tripartite easy solution to the problem of chatbots in higher education would be quite labor-intensive for teaching faculty at colleges and universities, and also involve more class-time per course, perhaps even extending many courses from one semester courses to full-year courses, as well as ruling out much labor-saving, pandemic-induced “distance learning,” insofar as many class hours would have to be devoted to having the students do handwritten assignments in person. But correspondingly, there’s also what I’ll call *the easy solution to the hardships of the increased workload for teachers*: hire more teaching faculty, and pay faculty who are teaching full courseloads significantly more money than those who do only research and no teaching, or do only a little teaching as part of their research.

In order to find the money and the people-power to do this, administrators could be paid significantly less than teaching faculty; administrations and HR bureaucracies could be radically reduced in overall size; and all faculty members could be required to teach full courseloads in order to receive the significantly higher salaries. And if those who currently do only research and no teaching, or do only a minimal amount of teaching as part of their research, or else have been already recruited into the administrative army, didn’t like it, then they could either (i) as we used to say, “just blow it out their ears,” stay inside the professional academy, and earn less money, (ii) exit the professional academy and avoid all that teaching, in order to become independent researchers and scholars who do research and scholarship for their own sake, with little or no remuneration,<sup>3</sup> or (iii) exit the professional academy and avoid all that teaching, in order to do something else non-research-involving and non-scholarly that remunerates them much better.

By way of conclusion, it must be admitted and recognized that the easy solution to the problem of chatbots in higher education, together with the easy solution to the hardships of the increased workload for teachers, would not, in and of themselves, fix or remove the ultimate causes of the worsening conditions for teaching in higher education over the last 47 years—namely, the ever-increasing neoliberalization of colleges and universities, and the ever-increasing restrictions on academic freedom in teaching—except indirectly, by radically reducing the sizes of the administrative army and the HR bureaucracy. But perhaps some effective solution or solutions in the same spirit and along the same lines as what I’ve proposed here, for fixing or removing those ultimate causes, could also be devised and implemented. —Or not, in which case higher education will

---

solution to the problem of chatbots in higher education is “easy,” I mean that *it’s really possible for it to be done by those belonging to the social institution of higher education without recourse to our getting governments to ban LLM or chatbot research and technology by means of democratic processes*, not that it’s not radical.

<sup>3</sup> Of course, there might be the occasional independent researcher and scholar who writes books that sell well, or who receives significant remuneration for writing that’s published in newspapers, journals, or other mainstream venues, or who is amply crowd-funded: but those would certainly be the exceptions.

simply continue to go to hell in a handbasket. In any case, I'll be amused and critically interested to observe all this with detachment from the outside, thank kant.<sup>4</sup>

---

<sup>4</sup> I'm grateful to Dennis Earl and Martha Hanna for thought-provoking correspondence or conversations on and around the main topics of this essay.

## REFERENCES

(Douglass, 1845/1995). Douglass, F. *Narrative of the Life of Frederick Douglass*. New York: Dover.

(Hanna, 2023a). Hanna, R. *Curriculum Vitae*. Available online at URL = <https://colorado.academia.edu/RobertHanna/CurriculumVitae>.

(Hanna, 2023b). Hanna, R. "Creative Rage Against the Computing Machine: Necessary and Sufficient Conditions For Authentic Human Creativity." Unpublished MS. Available online at URL = [https://www.academia.edu/101633470/Creative\\_Rage\\_Against\\_the\\_Computing\\_Machine\\_Necessary\\_and\\_Sufficient\\_Conditions\\_for\\_Authentic\\_Human\\_Creativity\\_May\\_2023\\_version](https://www.academia.edu/101633470/Creative_Rage_Against_the_Computing_Machine_Necessary_and_Sufficient_Conditions_for_Authentic_Human_Creativity_May_2023_version).

(Hanna, 2023c). Hanna, R. "Why Mainstream Contemporary Professional Academic Philosophy Could Be Done By Chatbots." Unpublished MS. Available online at URL = [https://www.academia.edu/99876451/Why\\_Mainstream\\_Contemporary\\_Professional\\_Academic\\_Philosophy\\_Could\\_Be\\_Done\\_By\\_Chatbots\\_April\\_2023\\_version](https://www.academia.edu/99876451/Why_Mainstream_Contemporary_Professional_Academic_Philosophy_Could_Be_Done_By_Chatbots_April_2023_version).

(Hanna, 2023d). Hanna, R. "Frederick Douglass, Kant, and Human Dignity: A Three-Step Argument That Kant's Moral Philosophy *Isn't* Racist." Unpublished MS. Available online at URL = [https://www.academia.edu/97518662/Frederick\\_Douglass\\_Kant\\_and\\_Human\\_Dignity\\_A\\_Three\\_Step\\_Argument\\_That\\_Kant\\_s\\_Moral\\_Philosophy\\_Isn\\_t\\_Racist\\_May\\_2023\\_version](https://www.academia.edu/97518662/Frederick_Douglass_Kant_and_Human_Dignity_A_Three_Step_Argument_That_Kant_s_Moral_Philosophy_Isn_t_Racist_May_2023_version).

(Hanna, 2023e). Hanna, R. "Hinton & Me: Don't Pause Giant AI Experiments, *Ban Them*." Unpublished MS. Available online at URL = [https://www.academia.edu/97882365/Hinton\\_and\\_Me\\_Don\\_t\\_Pause\\_Giant\\_AI\\_Experiments\\_Ban\\_Them\\_May\\_2023\\_version](https://www.academia.edu/97882365/Hinton_and_Me_Don_t_Pause_Giant_AI_Experiments_Ban_Them_May_2023_version).

(Maiese and Hanna, 2019). Maiese, M. and Hanna, R. *The Mind-Body Politic*. London: Palgrave Macmillan. Available online in preview at URL = [https://www.academia.edu/38764188/The\\_Mind-Body\\_Politic\\_Preview\\_Co-authored\\_with\\_Michelle\\_Maiese\\_forthcoming\\_from\\_Palgrave\\_Macmillan\\_in\\_July\\_2019](https://www.academia.edu/38764188/The_Mind-Body_Politic_Preview_Co-authored_with_Michelle_Maiese_forthcoming_from_Palgrave_Macmillan_in_July_2019).



(Mann, 2019). Mann, D. "The New Inquisitors." *Against Professional Philosophy*. 4 March. Available online at URL = <<https://againstprofphil.org/2019/03/04/the-new-inquisitors/>>.

(Plebanek and James, 2022). Plebanek, D.J. and James, K.H. "Why Handwriting is Good for Your Brain." *Frontiers for Young Minds*. 6 April. Available online at URL = <<https://kids.frontiersin.org/articles/10.3389/frym.2022.623953>>.

(Rorty, 1994). Rorty, R. "The Unpatriotic Academy." *New York Times*. 13 February. Available online at URL = <<https://www.nytimes.com/1994/02/13/opinion/the-unpatriotic-academy.html>>.

(Wikipedia, 2023). Wikipedia. "Invasion of the Body Snatchers." Available online at URL = <[https://en.wikipedia.org/wiki/Invasion\\_of\\_the\\_Body\\_Snatchers](https://en.wikipedia.org/wiki/Invasion_of_the_Body_Snatchers)>.