**Technology and the Liberal Arts**

Those who think they can leave written instructions for an art, as well as those who accept them, thinking that writing can yield results that are clear or certain, must be quite naïve …. How could they possibly think that words that have been written down can do more than remind those who already know what the writing is about?

Plato, *Phaedrus*, 275c-d

1. **Teaching without technology**

I would like to begin by thanking Ellen Keohane for giving me the opportunity to share my thoughts with you. As she knows from experience, the only form of information technology I use in a classroom, apart from the books I read with my students, is a chalkboard. Even lecture notes are too high tech for me, since they keep me from being as fully present in what I have to say as I want to be. As a result, I have often been called a Luddite, a rather unlikely candidate to address a convention of IT workers. On the other hand, and this is something else Ellen knows, I am more than happy to acknowledge that modern technology has accomplished wonders and that, by doing so much of our hard labor, it has even helped establish the conditions of leisure that make it possible for so many young people to pursue a liberal arts education. When Aristotle described the leisured pursuit of the theoretical life, he pointed out that it was something made possible only by slave labor. Clearly, the cause of civilization has been advanced enormously when its conditions are established not by slaves but by machines – and when its fruits can be shared with the masses instead of hoarded by an elite few. With all of that in mind, and recognizing that many disciplines are more information-driven than my own, I certainly understand that information technology must constitute an important component of modern education.

That said, my intention today is to convince you that low-tech teaching is not be tolerated somewhere on the margins, but instead celebrated as constituting the very heart of what we do. By dispensing with this written text and speaking in a free and spontaneous manner, I want to make you aware of the power of direct speech. In addition, I want to explain why I think it is important for the liberal arts in general and absolutely indispensable for the humanities. In other words, I am speaking in defense of something more than a pedagogical strategy that happens to work well for me personally. What I want to show you is a form of discourse that liberal arts colleges have to keep alive, if they are to survive and flourish in this increasingly technological world of ours. As a rather lowly and uncelebrated teacher who works at an institution situated well out of the Harvard-to-Stanford zone, I can deliver, simply by talking, something essential that a MOOC can never replicate - and that PowerPoint would destroy. What I aim to do, in effect, is to draw a line around that sacred space where teacher meets student, a line that technology should never be allowed to cross. In the context of this lecture, that space will be defined by what transpires between me as I speak and you as you listen.

Because it is a space that lends itself so well to storytelling, I’ll start with the confession that the ax I am want to grind is one I have long been carrying. It started some 35 years ago when I was employed by the University of Maryland to teach history and philosophy courses at a variety of army bases in southern Germany. What set me up for my first curricular battle is that I was told to teach from a textbook. How could I do that, I asked, when the textbook that had been chosen for me reflected so little of my own understanding? The arguments I made at the time, directed against a textbook-approach to education, remain valid today – most obviously in the face of the MOOC, which a friend of mine has aptly described as offering a series of animated textbooks.[[1]](#footnote-1) In my own opinion, using a textbook (whether animated or not) is wrongheaded even for a course like calculus, where it in fact matters whether a given teacher understands the subject as simply a way of manipulating numbers – or whether he or she is able to see deeper, recognizing in the discipline the outlines of a sophisticated metaphysics of time and space.

Where the spirits divide on such issues is where *thinking* – and hence real education – begins. That we can develop educational television and Internet for the sake of sharing knowledge with the public at large is a fine thing, but we cannot allow such programming to encroach on what we do when we set out to teach the exceptional young men and women who have demonstrated a capacity to think for themselves. While I understand, of course, that, with the help of discussion leaders and online chat rooms, even the most massive online course can incorporate a dialogical moment, I still have reasons for thinking that true dialogue requires face-to-face encounters – and that these have to be direct. They cannot be mediated through a computer screen.

When I teach, then, I teach not as a neutral representative of an academic discipline, but as an embodied human being who is intent on sharing living insight with other embodied human beings. Embodiment, moreover, is not just a word I have thrown in. You will notice, for instance, that when I speak I pace back and forth on my feet and constantly do things with my *hands*. I use them to signal levels of importance in what I say. Even more, I use them to enact my allegiance to Socrates, that ancient archetype of the philosopher and the teacher, who thought of himself not as a conveyer of information but as a midwife of ideas. For a midwife, even a midwife of ideas, use of the hands is essential.

As Martin Heidegger (together with Wittgenstein one of the two great philosophers of the 20th Century) put it, thinking is a handicraft. Just as the cabinetmaker must be sensitive to the shapes that lie slumbering in different kinds of wood, the thinker must be sensitive to the thoughts that lie slumbering in other people – and in the world we all share. If this sounds a bit fanciful, one need simply relate it to the obvious: a good lecturer must be a good reader of faces and of postures. This is one reason why, although I have written the lecture you are now reading, the one I will actually deliver will have to be significantly different, depending on who I see before me – and who I experience myself to be, even as I speak. Like the classroom, the lecture hall is a place where a person speaks to other persons. In this situation, the highest demand is honesty. Instead of trying to show you how well I can package ideas I have stumbled across out there, I shall have to speak directly from my own understanding. The demand we make at wedding receptions, that speeches be delivered spontaneously and “from the heart” is a demand we should make wherever serious communication is at stake. “Don’t tell me what you think sounds good or will sound good to me,” I often tell my students, “tell me what you yourself think is true.”

There are those who say, of course, that the machinery that sustains the modern world has become so complex that, instead of indulging the luxury of discovering “what we think,” we should instead focus on communicating the knowledge and skills necessary to keep the machinery going. But as all of you will know so well, precisely because it is your *job* to do just this, the pace of change has become so fast that whatever “skills” a young person acquires in college will soon enough be outdated. What follows from this is that learning to learn, developing the instincts and habits, in other words, of a young *intellectual*, is now more important than ever. For this reason, college administrators have been wrong to import into liberal arts education assessment procedures from the world of business. What they have in effect done is to redefine the liberal arts. In their search for measurable results they have compromised the project of spiritual formation, regardless of how much lip service they still pay to it.

In opposition to contemporary attempts to *redefine* the liberal arts, I would like to make a plea for *renewing* it. What motivates me is not nostalgia. Instead, it is the realization that technology places more power at the disposal of human beings than they have ever had before. Where human beings, uneducated and uncivilized, make use of power simply to get the things they happen to *want*, they stand in danger of becoming enslaved to their desires. If once we prayed earnestly to our Lord, “lead us not into temptation,” we now expose ourselves, in the form of television and Internet advertising, to an unbroken stream of temptation. This should give us pause to think. If the norms of traditional culture had any merit whatsoever, then we have to concede that there is something profoundly problematic about the contemporary experiment of joining greater-than-ever power with a swelling flood of desire that has been systematically stoked and enflamed by that power. We should let the old adage that power corrupts shock us into some serious thought.

It is a theme that has great prominence in Plato’s *Republic*, where the ideal of a liberal arts education was first put before us. To explain the importance of that ideal, Plato invented the fiction of a magic ring that would enable a person to become invisible so that he or she could get away with anything, something like what happens when a person uses a computer to rob a bank on the other side of the world. The moral of the story, of course, is that the ring would turn us into monsters, unless, like Socrates, we possessed enough wisdom to hold our desires in check and cast aside the ring as useless. Whether Tolkien was right to suggest that someone as innocent as Frodo could also withstand the power of the ring is a good question, but of little relevance to the project of the liberal arts which seeks not to return the spirit to its natural simplicity, but to refine and educate it. Central to that endeavor is the ideal of wisdom, the ideal of a form of knowledge that cannot be mechanically represented, and for that reason cannot be taught, but can, however, be successfully *cultivated*. Wisdom differs from other forms of knowledge in precisely this respect: whereas knowledge enhances our power, wisdom sets limits to it – and tries to turn it in the right direction. The one who tempers and governs power has to stand free of its allure. This is why liberal arts colleges, devoted to the notion that our leaders must be wise, have been established as if they were oases, in the world but not of it. What they have always attempted to do is to cultivate the understanding that worldly success is not the proper measure of what makes a life good. A single Thoreau is worth more than all of the billionaire titans in history. And, by a proper measure, he has *accomplished* more. For he and others like him are the ones who have kept alive the spirit of civilization. And the astonishing truth is that, at least in certain times and places, civilization has actually been able to bring power under the rule and governance of law. As a concrete measure of what I mean, I can simply refer to the fact that, during World War II, America did not (at least openly and officially) sanction torture as a method of interrogation. That we sanctioned it from a “proper” distance, through a policy of fire-bombing civilians, shows how fragile civilization always remains – and why it is important to anchor law in the immediacy of face-to-face encounters between actual human beings. The person standing before me commands more respect than the image of that person on an LCD screen.

We need to remember that. In addition, we have to clearly understand that, as technology increases our level of power, our need for wisdom grows proportionally. There are large research universities where people work away at the project of growing our scientific knowledge and refining our technological capacity. Liberal arts colleges (whether or not they happen to be located within the framework of such a university) have a different mission – and they have to pursue that mission in a way that is as unaffected as possible by the interests of Apple and Microsoft, Google and Facebook. Such companies are engaged in the pursuit of profit. We, on the other hand, should be engaged in the project of determining the conditions under which wealth is a good thing – and understanding when it is an evil to be avoided. In the same way, we should be engaged in an examination of poverty, noting how it can stunt the growth of the human spirit – and how, rightly conceived and rightly embraced, it can foster and facilitate that growth. Indeed, if we were to better understand the virtuous dimension of poverty, we would be in a position to renew something of the stoicism and monastic simplicity of the traditional college dormitory. Doing so would not only make our colleges cheaper, it would make them better.

One virtue of simplicity is that there is so little in it that can distract our attention. Consider the simplicity of the basic educational triangle: a teacher, a book, and a student. While it is certainly true that an I-Pad is in many respects just an electronic book with a lot more pages than a book made out of paper, it does not follow that the extra pages, or the ease with which we can access them, make it better. For whereas a book rests silently in the hands and on the lap, an I-Pad is noisy and likes to show off. What makes the I-Pad better from a technological standpoint may very well make it worse from a pedagogical one.[[2]](#footnote-2)

Or consider PowerPoint. Think of those lost moments during a lecture or a presentation when people in the audience are trying to decide whether they should give their full attention to the speaker or to the brightly colored outlines and charts that have been projected above and behind the speaker. Not only are the moments themselves lost, but each of them has the potential to break one’s concentration so that everything that follows sounds increasingly incoherent. Little wonder, then, that listeners at that point so often compound the problem by switching on their own electronic devices, revealing them as the toys they are. Remarkable in our age is that, despite the fact that all of this has been so often observed, we still subject ourselves to PowerPoint presentations. In doing so, we are guilty of one of two things. Either we have succumbed to the idolatry of the new machine – or we have resigned ourselves to technology as if it were our fate. Neither option speaks well for us.

For whether we have been ensnared by utopian optimism or have fallen victim to sad resignation, we find ourselves pursuing whatever possibilities technology discloses, *whether or not they are helpful.* My remedy for what looks very much like an illness is not that we begin smashing our machines – but that we think about them carefully, adopting them only when they serve a very real need. Conducting workshops on the *possible* use of information technology is not the way to go. Educational institutions do not owe it to Apple and Microsoft to find a use for whatever gadget or program they try to sell. Nor do we have to work at positioning ourselves at the cutting edge, terrified that we might be left behind. Liberal arts education, I have already argued, has to be renewed, not redefined. If other institutions are engaged in an attempt to stay on the corporate bandwagon, a genuinely liberal arts institution will remember that its proper place is always somewhere on the outside, looking in. If a research institution rides the cutting edge to a new cure for cancer, a liberal arts college is the place where people can grapple with the question of how to make a long life meaningful. Everyone recognizes that the world is caught up in an ever-accelerating whirlwind of change and that *someone* has to slow down and think things through. Because this is the case, liberal arts colleges have never been in a better position to convince people that what they do is worthwhile. If, on the other hand, they continue to redefine themselves as if they were miniature research universities or business schools with some finishing-school polish added, then the only unique thing they will still have to offer is a country-club atmosphere, a nice place for rich kids to pursue the same education that poorer people will get a whole lot cheaper online.

What makes it so difficult, one asks, for liberal arts colleges to maintain their unique status as oases for calm reflection? Why are they vulnerable to such quick absorption in the dominant corporate culture, when they are so obviously needed as countercultural alternatives, places on the outside where the dominant culture can be examined and even questioned? To understand what is going on one has to understand that there is something intrinsic to technology that inclines it to a kind of imperialism. Empires represent an attempt to put an end to the messiness and unpredictability of history, where different cultures compete actively (and sometimes violently) with one another, by imposing a given order on everyone. What sets technology apart is that it represents the empire of reason itself, which is why the culture it gives birth to is global in reach. In other words, what is going on is about far more than the attempt of certain large companies to sell their products. If *they* control us by virtue of the fact they possess enough computer power to algorithmically process the Big Data that we place at their disposal every time we use a computer, they are in turn controlled by something else, what Heidegger referred to as an event of truth. the sudden disclosure of a new way of way of understanding reality, together with the excitement it engenders. Wittgenstein referred to the same thing as a “picture” that captures and holds us.[[3]](#footnote-3)

Consider, if you will, what has taken place during the last twenty years or so. The Internet has given us the sense that the world itself has been rendered fully accessible insofar as it possible to dump *everything* onto its digitalized grid: all of its color and sound, all of its silliness and triviality, its morbidity and raunchiness and even its moments of profound understanding , all of this and more can be fastened onto a binary code of on-off switches that is constantly renewed in the interaction of one machine with another, so much so that the stream of information seems to have taken on its own life, enjoying a kind of apotheosis “up there “in the Cloud. The power of computers has become so impressive that, if they were once built to behave like brains, they now serve neuroscience as models for what the brain itself must assuredly be. Nor does it stop there. Philosophically inclined computer scientists give serious attention to the idea of a “computational universe,”[[4]](#footnote-4) recognizing that even the randomness that has slowly constituted its richness (from the quantum leap of an electron to the mutation of a strand of DNA) can be understood as part of the program. So conceived, it becomes clear that the computer is not just one more tool added to the ever-growing inventory of tools . Instead, its power is so impressive that it has become a metaphor for reality as such.

To see this is to see why technology presents itself to us as if it were our fate. After all, it completes a logic that has been well in place since the start of the scientific revolution: what first disclosed itself as “clockwork,” the spinning wheels of the world outside us, has been refined until it now is said to include our very capacity to think. How, one wonders, can I possibly assert that *thinking* about technology, itself presumably a computational accomplishment of the brain, might place us in a freer relationship to it?

My answer is simple. The truth that technology discloses – even about something as close to us as the brain – is truth indeed . But it is far from being the whole truth. To take an obvious example, building a randomness principle into a computer might present an illusion of something that looks like freedom, but it has nothing to do with freedom as such. For freedom shows itself not when we *happen* to act in an unanticipated manner, but when we do so for reasons that are compelling, despite the fact that they form no part of whatever program we have been conditioned to perform. In this room, for instance, we could be “quantum leaped” into something really random, let us say, the formation of a liberal arts society of IT workers devoted to establishing the proper limits of the use of information technology in higher education. But as a chance and random event, such a decision would have no bearing on the issue of freedom. Freedom would be demonstrated only to the degree that enough of you became so convinced that this would be the right thing to do that you would place your jobs in jeopardy by standing up to Apple and Google – and to whatever college administrators think that “doing business” in accord to accepted corporate models is more important than keeping alive the spirit of the liberal arts.

When a truth reveals itself with such force that it conceals other truths, such as the fact that we are free and in possession of souls that neuroscience will never be able to peer into, it is legitimate to call the truth a myth. And indeed, the process I have just described is the way any myth grows and takes over the imagination. We see something that is true and impressive and before long we spin out the fiction that it is the key to reality as such. Prone to impressive fits of anger and rage, but also to moments of inspiration and love, the ancient Greeks spun out stories about the gods that eventually cohered into a comprehensive explanation of the whole world. Indeed, at the moment that the stories became *that* impressive, in other words, at the moment that the notion of “the whole world” took hold on consciousness, the deep foundation of modern science and technology had already been laid. This is a story that has often been told. The Greeks discovered reason and the moderns have imposed it on the rest of the world. If a myth, this is the myth of the one true reality. For centuries, it was theology that promulgated the myth in the form of the God of infinite power and infinite knowledge. With the dawn of modernity, it became science’s turn to vary that same myth by attributing to the universe itself the infinite attributes previously used to describe God. Unfortunately, neither God nor the universe was done a real favor by being thus conceived as absolute. Finitude, not infinity, is what makes things real. A God so complete that he has no life and no unfinished projects before him would not be a God anyone would have reason or occasion to pray to. This was the inclusion of the great debate between Leibniz and Newton that closed the 17th century. Against Newton, who believed that God was necessary to reach in and make adjustments to the clockwork of the universe, Leibniz held that a perfect God would not have made a universe consisting of gears and springs that need to be wound. A perfect God creates a universe so self-sufficient that God is no longer necessary. Nietzsche expressed the same idea under the slogan of the “Death of God.”

As confirmed by the development of computer technology (which originated, not at all accidently, in Leibniz’s dream of a *mathesis universalis*), power and knowledge are real – and they certainly are impressive. But they are not the whole of reality. There is no whole of reality. The future is not the extension of all that has led to the present. The future is the future. At its crown is a hole that is as empty as death. Myths are the creative attempts to fill in that hole. They always remain provisional for the simple reason that a hole without bottom can never be filled. The truth, and I can say this decisively, transcends every understanding of the truth.

When I teach, I try to get my students to understand that a world thus open and always in the making is a better world to live in than a world determined and fixed by reason or firm belief. Instead of trying to convince them that we adults have done a good job of figuring out the world and that their job is to learn enough from us to keep it going, I try to convince them that the work of creation always remains ahead of us. What I want them to sense is that *they* are the ones who make death acceptable. If one generation has to die so that another generation can be born, then death is what keeps life young. The vitality of youth is where I place my hope. Even so, I have something I need to say to young people before they head off on their own. There is nothing stored away in the Cloud, I want them to know, that can serve as a substitute for face-to-face interaction with the people around them. For in human interaction, we are granted the opportunity to do something that empirical science will never be able to do: to see into the soul of another, in other words, to receive an invitation to step out of the narrow circle of one’s self. In contrast, the more time one spends online, the more Google just steers one into the narrow box of expressed interests and desires. The danger here is solipsism. The more it seems that one has come into the know, the more lost in ignorance one becomes. For the knowledge we need is the realization that there will always be more information than one can conceptually contain, always more raw data than information, and always multifold hidden layers of Being that never register as data on anyone’s screen. What one needs under these conditions is not the illusion of a knowledge machine, but much rather an in-your-face teacher who is intent upon dismantling ideologies and self-certainties, someone who understands his or her role as provoking questions instead of giving answers. Wisdom, in other words, is not the intoxicating sense of power that comes with ever-expanding knowledge; wisdom is, now as always, knowing how very little we will ever be able to know.

It is for the sake of doing honor to the knowing enshrouded in not-knowing, which alone is real knowing, that I refuse to enter the classroom with even as much technology as a page of written notes. I have to show students that one thinks out of questions – and that, at times, the questions force us into silence. Teaching in this manner over many years, I have been impressed with one experience above all others. What I have observed is that students often appreciate halting speech more than speech that magically flows. If this is true, there is something essential, even beyond the face-to-face, that the well-produced MOOC will not be able to capture. If I were to record my lectures, I would focus in particular on those moments when everything falls smoothly together, when it seems as if I had been suddenly transported to a height so great that even the most intricate web of connections lies before me with a clarity that makes it possible for me to explain everything that requires explanation. Given that philosophy is the science of the whole, such moments can prove intoxicating: the inner heart thrown open, it is as if I recall having been there, together with God, on the day of the world’s first creation. What pours forth is a flood of words that students clearly appreciate, just as we all appreciate fireworks. But it is not what affects them most deeply. More important are those occasional moments when the right word refuses to come, when the flow of speech is interrupted, when I have nothing to say and they have nothing to say, leaving us with no choice but to share in a moment of silence: “what next? What next?”

What students appreciate in these otherwise awkward moments is, I think, the experience of shared humanity. None of us is really always “on.” None of us is really always in command. This is the experience that I want them to have, over and over. Yes, connection gets broken. Yes, one then feels alone in oneself. But no one is alone in his or her aloneness. This is the place where deep connection begins. Ten years out of college, students will remember little of what they read and studied a decade previously. But they will remember the teachers they loved. And from time to time, they will go back and re-read what once we all read together, searching, not as Google searches from a field of givens, but as a spirit searches, from question and *need*.

1. **Plato’s Phaedrus**

Let me now shift tactics somewhat and describe a book that I have often read together with my students – and which, as a matter of actual fact, a number of them have gone on to re-read long years later. The book is Plato’s **Phaedrus**. Like so many of the Platonic dialogues, it depicts Socrates in conversation with one of his students. Unlike other dialogues, however, it is set in the countryside, outside the town walls. Even so, it is not entirely technology-free. For young Phaedrus, it turns out, encounters Socrates just as he is leaving a workshop for aspiring young lawyers that was devoted to teaching the art (the *techne*) of persuasive speech. For homework, he has a written speech to devour. When he asks Socrates if he can spare the time for a walk, Socrates replies “Spare the time! … What business could possibly be more important?” And with that, they leave the hectic world of professional workshops (the serious world of business) behind and find, in a grove of trees, that magic space where suddenly one has all of the time in the world. As has often been observed, the Greek word for leisure (*schole*) became the Latin word for school (*schola*).

Anyone familiar with Socrates’ famous *Apology* will realize that the written speech that Phaedrus is carrying might become a serious bone of contention. For even when he was on trial and his life was at stake, Socrates refused to rely on any manner of a prepared speech . Remarkable about Socrates is not that it just so happened that he never wrote anything down, but that he declined to write out of conviction. Within the order of publish or perish, he would have perished and never again been heard of. But within the sanctuary of leisure (what I previously referred to as the liberal arts oasis), the refusal to write must be judged a virtue, for it gave us Socrates, the teacher of teachers.

On the face of it, the *Phaedrus* is a dialogue that is rather clumsily split into two topics: a metaphysical discourse on the nature of love, on the one hand, and a practical inquiry into the relative merits of speech and writing, on the other. In reality, however, the entire dialogue turns around one point only: Socrates’ concern that young Phaedrus is carrying a written speech in his hand and, mesmerized by the power of the new technology of writing, is in danger of losing his soul. The issue is not, of course, the technology as such. Socrates, although not a writer, was certainly a *reader*. He had no objection to writing as such, but rather to an ethos that comes with it: the idea that one should take control of one’s life in the same way that the writer takes control of his or her words. Implicit in this is Socrates’ understanding of what separates good writing from bad writing. Good writing is playful and does not take itself too seriously. Bad writing, on the other hand, is careful and contrived, much like the writing that scholars so often undertake: carefully crafted, indeed, but far too boring ever to be read. What Socrates fears for young Phaedrus is that the serious world of business he is about to enter could very easily sap the life out of him. He takes him for a stroll in the countryside. What he wants for him, to make use of a lovely and powerful metaphor of Jonathan Swift, is that he should discover himself not as a Spider (secure in a grey world of his own making), but as a Bee (freely bounding through the fields and the woods).

Once Socrates finds a suitable grove of trees he begins his lesson by having Phaedrus read aloud the speech he has been carrying. Composed by Lysias, the famous rhetorician, the speech defends the idea that the best way for a man to find a partner for sex is to convince him (or her, I might add) that, because he is not in love, things will not get messy. This is an issue that today’s students relate to easily, for Lysias’s thesis constitutes the core of the so-called “hook-up “ culture. Students are familiar with the issue in other ways as well, for they have been made aware (all too painfully) of the fact that prevailing conventions reflect similar assumptions when it comes to the production of scholarly literature. Students have been told to avoid the word “I” and, for the sake of objectivity, to write in a distanced and dispassionate manner. They are warned that it is a mean and dangerous world out there and that one should always be careful, footnoting anything that looks like an actual claim. Good scholarship, they learn, involves the disciplined attempt to make the self disappear. As I once heard a logic instructor enjoining his students, the goal is to “think like a machine.” What Lysias’s speech was supposed to show Phaedrus is that the best writing is done according to method, following the rules of good rhetoric. Little wonder, then, that he argued that the best way to manage one’s sex life is to adopt the same principle of calculation. In this context, Socrates needs to convince Phaedrus that, even though love comes always at the risk of a broken heart, a life with it is in every way better than a life without it. To convince him of this, he sets out to show him that, speaking in the spirit of love, he can spontaneously deliver a better speech than the one that Lysias had, with so much time and effort, carefully crafted and written out. I think he was on to something of utmost importance. For that very reason, for the purpose of this lecture, what I am now writing will be set aside once it is time to *speak*.

Before Socrates makes his speech, however, he first calls attention to some of the things that made Lysias’s speech too boring to be effective. The sentences were well-crafted, to be sure, but they were presented in a random order and to no clear purpose, rather like the list of “points” that Power Point has made into an institution. Stiff and mechanical, this is writing that has no soul. Because Lysias had only one thing to say (reason is safe, whereas love is dangerous), he ended up saying the same thing over and over, but with different words. Little wonder, then, that he had to write it all down! To speak well, one has to start with an insight that is true enough and deep enough that it can give rise to a coherent series of related insights. In this way, insight generates spontaneous speech that is varied and articulate – and, above all else, *alive*. A flat and one-dimensional idea can only be stated and restated. An idea with depth, by way of contrast, is an idea that transcends every attempt to reduce it to a statement. This is why I say that both good writing and good speech have to have “soul” – always that one thing, by the way, that, because it is no thing, a computer can never have.

Why, one might ask, do I speak of computers in the context of ancient philosophy? The answer is simple. Lysias, presumably afraid of life as he was so clearly afraid of love, had transformed himself into one at the very moment he embraced the principle that good speech can be generated by rules. What horrified Socrates was the dead and mechanical nature of what Lysias had to say. But what may have horrified him even more is the fact that the rules were good ones, enabling Lysias to turn his phrases with “clarity and shapeliness and precision.” Lysias’s speech *was* well crafted. It had certainly made a big impression on young Phaedrus, who had found it beautiful. What Lysias had achieved, then, is what contemporary marketers do routinely: take a bad idea and dress it up until it appears to be a good one. Rhetoric is about appearances, not truth. In making this observation, Socrates had in mind, of course, the law courts of his day. From a narrowly scholarly point of view, one stops with “what Socrates had in mind.” But the Socrates who is important when I teach my students is the Socrates who saw deeply enough that his intuitions retain resonance for our world as well as his. What is Power Point, after all, if not a technology that enables us to adorn even the dullest idea in the brightest of colors? AS Socrates responded to Lysias, I find myself responding to Power Point. “Look,” I want to say to the young people around me, “you don’t need to fall for the bells-and-whistles stuff. Why even I can do better than that, *simply by talking*.”

In the same manner, Socrates, after critiquing the speech of Lysias, sets out to show that he could argue , just as Lysias had, that one should be wary of the irrationality of love, but he could do so in a more engaging and convincing fashion. What motivates him to enter into the competition is the face of the young man he sees before him, someone he cares about and wants to save from cynicism. That he speaks spontaneously, and with apparent concern and affection, enables him in truth to engage Phaedrus more fully. The spontaneous word, which must be clearly distinguished from the idle chatter that simply passes on what one already has heard, engages by virtue both of its urgency and its fragility, the fact that it lacks any visible guarantee that it can be sustained.

And indeed, just where Socrates seems to have entered fully into the smooth flow of his speech, he suddenly stops and finds himself without words. The warnings he was delivering about love’s irrationality, the jealousy and intoxication, the potential for treachery that comes when one’s bond to another rests on nothing stronger than a feeling , are suddenly broken off. Socrates even covers his head in shame – and threatens to run away. The problem? Part of the answer is that he has no desire to continue playing the game of the debater, attempting to show that he can argue “one side as well as the other.” It is not that he doubts the truth in what he had been saying about the dangers of jealousy and treachery. It is that he knows that it is wrong to call those things love.

But the real reason he covers his head in shame goes much deeper. Socrates knows that the real reason he is able to wax eloquent on the dangers of lascivious desire is that he is prey to those desire. This is the significance of a remark that he made just before launching into his speech. Phaedrus had asked him whether he thought there might be a kernel of truth in certain old legends that were associated with the stream they had just crossed. Socrates said in effect, “if I were a scholar bent on collecting and analyzing such stories, I might have something of interest to say. But I don’t have time for such nonsense given that I face a more urgent task: coming to know *myself,* whether at heart I am a monster or something much better, a simple and noble soul.”[[5]](#footnote-5) That he is able to mime as well as he does the dubious speech of Lysias indicates that he has understood it from within. This understanding from within is what is crucial. We all know what it means to be tempted. We all know what Socrates meant by the monster we might be. We see it in the conundrum we face whenever we try to free ourselves from desire by feeding and satisfying it, only to discover that what have fed comes back hungrier than ever. We all know how this relates to the dialectic of power, whereby power remains power only by steadily surpassing itself. We see the result in the hellish figure of the billionaire titan consumed by greed, unable to enjoy his wealth because he not only has to protect it, but constantly expand it. When Adam Smith developed the theory of capitalism in order to solve the problem of scarcity (making it easier for us to “do our Christian duty”[[6]](#footnote-6)), he did not reckon with the fact that the wealthier a society becomes, the more it convinces itself that scarcity prevails and that Christian largess is something we can no longer afford. Time-saving technology leaves us with less time than ever. Wealth production leaves us impoverished. Only the “simple” soul remains free.

And indeed, this was the real problem with the speech of Lysias. The rational management of one’s sex life doesn’t work. What in theory should keep people from getting hurt in reality gets them hurt, over and over. The hook-up culture is not healthy. The cult of desire is monstrous. It is because Phaedrus senses this that he must implore Socrates to stay and begin his speech anew. And it is because Socrates sees his neediness, that goes on to deliver his second speech. As I will try to show, it has deep relevance to the age we live in. To understand it rightly, one must always bear in mind that what motivated it is a very concrete situation, a teacher and his student, face to face in a grove of trees, far removed from the city. Offline. Unconnected. In a quiet place, with hours and hours of sunlight still before them. It is a touchingly human context, the kind of thing that every liberal arts college has to struggle to preserve.

Finished with describing the dangers of a lust that masquerades as love, Socrates turns his attention to the nature of true love. In order to do so, he first has to show that the soul is grounded not in the economy of matter, but instead in the bedrock of eternity. Love is about more than chemistry, just as the self is more than a machine. What makes the self “more” is not determined by the information at its disposal, but by its interest in and engagement with what lies beyond the narrow band of intelligibility that constitutes the self-conscious identity of the individual. We seek constantly to learn more, because we intuit that we once somehow *were* more. The self is engaged in an ongoing project of uncovering more and more layers of what binds itself to the world. While it is true that what is conceptually clear can be translated into a stream of digitalized data, very little is conceptually clear. What we don’t know always infinitely surpasses what we know, which is why it is so important that we listen to others as if they might be oracles of some forgotten truth. Socrates describes all of this in terms of a mythical depiction of a world soul in which, before our births, we all once journeyed together in the vision of the revealed truth of the whole of Being. The rational basis for the story he tells is the intuition that, while specific movements can be understood as derived from the impact of other movements, movement as such cannot be understood as derivative. If we are alive (capable of moving ourselves about) this must be because the universe as a whole is alive. Each individual soul is a spark of the world soul, in which all souls were once imbedded.[[7]](#footnote-7) This represents a view of the self that that contrasts sharply with Lysias’s uncannily “modern” view of the self-enclosed agent that decides and determines its life on the basis of what it thinks and understands (the information at its disposal). Against this focus on the isolated individual (the one who ends up looking at the world through the glass screen of a hand-held device), Socrates describes life in terms of an always ongoing struggle to remember the mythical time when we were all joined together. The deep premise of our capacity to love one another is that we were all born out of the same deep night.

Before we dismiss all of this as representing “only a myth” we should give some consideration to what motivates Socrates to tell the story. Lysias had advised Phaedrus to live life systematically as if he alone were really real (relegating everyone else to something like a Facebook entry to be managed on one’s own terms). Socrates was appalled by what a distressingly lonely place the young man might find himself in. He tells his story as a way of reaching out to him. While he knows that the desire for personal pleasure brings people together, he also knows that it cannot keep them together. The myth is a myth. We have no access to a pre-birth union in eternity. On the other hand, we all know the urgency with which we try to protect ourselves from the horrific pain of treachery by swearing an allegiance that will transcend the vagaries of time. What, after all, is a wedding ceremony if not the public promise that what chemistry has united will now *stay* united. Until now we have stood together because we have been so inclined – whereas, from this day forward, we will stand together on the basis of a promise that has been sealed in eternity. Socrates says that this promise is a sacred promise and can be broken only at the cost of a deep and ever-nagging guilt.[[8]](#footnote-8) The trust it provides is able to subdue even the most violent jealous rage. Whereas those bound together by desire fall victim to rage once they sense that desire has waned in their partner, those bound together in love withstand such storms. It is thus love that discloses the “bedrock of eternity.” The myth, it turns out, is a myth in service of a very real truth.

Even in the age of the machine, the age in which good science proceeds on the assumption that the world itself is a machine, we have all the evidence we need to understand that this is a narrow and limited way of understanding reality. People do, after all, promise themselves to one another, “for better or for worse, in sickness or in health.” The promise, moreover, is a promise that very many people uphold. There is no naturalistic explanation (one based on “impulse”) for why one person would spend years of his or her life taking care of another person in the grips of something like Alzheimer’s – and yet it happens all the time. People sacrifice their own self-interest all the time. The idea that this is impossible, because we are all interest-bound machines, is itself a myth. What Socrates tries to enable Phaedrus to see is that, precisely because even reason is not self-grounding and all deliberation therefore necessarily unfolds within a mythical horizon, it is up to us to frame our lives within an horizon that will make us as good as we can possibly be.

Socrates, the father of rational thinking, concedes that there is madness in all of this, but adds something surprising: “Madness,” he says, “can be divine.”[[9]](#footnote-9) Whereas there is an earthly madness that presumably has its roots in chemistry, there is another madness that is a “gift from heaven.” Technology, I shall argue, is such a gift – but it only shows itself as such when it is understood in its deepest essence. To disclose this essence, we shall have to peer into that which gave rise to technology. An accomplishment of human freedom and creativity, human ingenuity and intelligence, technology, together with the whole of art and culture, testifies to the strength and the depth of the human soul. That our accomplishments in this sphere goes beyond what seems humanly possible (whether we are talking about a work of Beethoven or the collective achievement that gave us the Internet) is what justifies Socrates reference to the “divine.” Precisely our greatest human achievements force us to think about what is more than human. The best things human beings have achieved have been the gifts of love. To understand how love is possible, Socrates says, one has to know the nature of the soul. What it is, he argues, is freedom, the source of movement as such. To make that argument convincingly he must develop it in as free and spontaneous a fashion as possible.

There is far more to the story he tells than I can tell here. He describes, for instance, in the pre-birth epoch of the soul, an array of gods driving chariots on the outer rim of the cosmos. As they do so they gaze upward into the heaven beyond the heavens, the realm of pure forms, riding the celestial sphere as it makes its majestic 24-hour turn around the earth that we inhabit. He describes whole legions of souls following in the wake of those gods, some seeing more, some seeing less of the pure forms, themselves the source of intelligibility, the explanation for how we humans can gain our command of language. And he describes, of course, those souls that fall and get entangled in bodies. They fall when (perhaps with an I-Phone in hand) they become *distracted*. Fallen as we are, in moments of love we can recognize in others who we once were in the life before life when we cavorted with gods. Joining hands with our friends, we unite with them and begin a lifetime of conversation devoted to the task of recovering ideas that in the mythical long ago we had seen with such clarity.

To this one will reply of course that there was no pre-life journey. After Copernicus, we know that the stars are not bound to a sphere hovering a few thousand miles above the earth – and that therefore the very idea of a divine procession is nonsense. On the other side of the stars is not the Spirit-World of pure Platonic forms. On the other side of the stars there are just more stars. Matter: always, as far as we can see, just matter. And before this universe exploded with such force out of its Black Hole, another universe had fallen into it. No beginning or end to it all, neither to space nor to time. Having broken through to an understanding of the infinite universe, we have no more need to think about an infinite God. So much, it would seem, for Plato.

Except, of course, that Plato is not so easily dismissed. I have two reasons for saying this. The *second* reason I will withhold for the time being, but I can assure you now that when I deliver it, it will get your full attention.

As for the reason closer at hand, however, what it boils down to is this: Plato cannot be disparaged for portraying what is just a myth when he himself called is the one who called it a myth. His real concern lay not with the supernatural beyond, but with what we all know and experience, what it is that makes us *speak* of the supernatural beyond. Just as I speak to the beauty of youth when I teach my classes, Socrates speaks to the beautiful young man in front of him, the one who had come so dangerously close to swallowing Lysias’s rhetorical invitation to let “hooking up” substitute for love. “He can do better than that,” Socrates is clearly thinking. “He is not simply a machine governed by raging hormones. His soul extends into eternity. It must be so, for I recognize something in his face, in its very youth and vitality, that speaks not of atoms cohering with other atoms, but of freedom and spontaneity. I need to awaken him, by challenging him to decide what kind of person he wants to be.”

It is the face-to-face that is crucial. If there is no supernatural beyond, there may still be a supernatural *within*. To disclose it as a reality we need simply to open our mouths and *speak*. Lovers prove as much when they make their mutual pledge of abiding love, a pledge they need to honor only to the degree that they know that is has been freely delivered.

Because there is still afternoon sun in the sky, Socrates and Phaedrus do not stop talking after the completion of their ode to love and freedom. Just as you will have noticed that a lecture of one hour, as long as it was composed in leisure, is capable of so slowing time that there is room for any number of words (and any number of playful asides), the characters in a Platonic dialogue always find time to discuss everything that requires discussion. If time-saving devices leave us with less time than ever, the time-consuming device of a classical text gives us more time than we ever knew we had.

It is in this spirit that Socrates and Phaedrus now turn their attention to a discussion of the new technology of their own age: the technology of writing.

Up until this juncture in the dialogue, we have encountered three speeches: the written one Lysias had composed, Socrates’ attempt to show that he could argue the same case more persuasively, and, thirdly, his attempt to show that to speak truly well one must be inspired by a vision of something both true and important. What now transpires is a reflection on these three speeches, with the goal of clarifying the conditions for good speech. What Socrates is bent on criticizing is the notion that such conditions can take the form of a set of rules that would make possible a kind of technology of good speech. What particularly annoys him is the idea that following a set of rules might enable one to make a persuasive case for any view whatsoever. In Socrates’ mind lawyers and advertisers might well enough have their way with fools, but not with anyone who is thoughtful.

For our purpose, what he has to say can be compressed into two observations. First of all, to find the right words in speaking, one must begin with knowledge of the truth – not with the art of rhetoric (the Greek word for art, by the way, is *techne*). To say that truth, not *techne*, is the origin of good speech, is not to say to speak well is to be in possession of a true belief. Instead, one has to find oneself in a situation that sheds light on a compelling way of viewing the world. Socrates gives an example of such a “situation” by emphasizing that, although the speech came flooding out of his own mouth, it was not he, but young Phaedrus, who was its true author.[[10]](#footnote-10)

Good speech commands the attention of listeners to the degree that their readiness to listen is what makes one want to speak well. It is love, in other words, that underlies good speech. If we cared not a fig for other people, we could very well simply let things unfold as they happen to be unfolding. We could simply let the advertising machine continue to operate as it does, for instance, without registering the protest that it is wrong to lie and, above all, wrong to artificially manufacture desire. We could continue to allow money to speak louder than people are able to speak. We could let the smooth and seamless sheen of virtual reality substitute for the grittiness and nastiness of the world we actually live in. If we cared not a fig for other people, we could suspend all concern for "unforeseen consequences” and simply acquiesce to the fiction that the newest technology is guaranteed to l make for a better world. If we cared not a fig for other people, we could ignore the fact that the interest Apple and Google have in making money might be greater than their concern for fostering education. I recognize, of course, that they will continue to make money only if their contributions are deemed valuable. But what if the context that constitutes value is a context that they themselves are actively shaping? What, in other words, if educational technology served the goal of re-educating humanity to live in a technological world. Is this really any different from the social-engineering projects that were central to the old Soviet Union?

The reason I am making such observations is to call attention to the situation in which you and I now find ourselves. You are the ones who have been hired to install technology in liberal arts colleges. I am asking that you do your job well by serving those colleges – and not the companies who make the machinery you put into place. What I hope to show you is that, when it comes to technology, less can be more. While appreciative of the electronic amplification of my voice, it is clear to me that that is quite enough. To add Power Point – or even a written text – would only serve as a distraction. I can engage you most effectively if I engage you directly.

What most moves me to deliver this talk, of course, is the memory of the young people I have been hired to teach. It is in their name that I suggest we slow down the technology bandwagon. Delivering a quality education is more important than anyone’s business model, especially under the conditions that prevail today, when business is first and foremost about marketing, convincing people that they need things they don’t need and even want things they don’t want. Once we saw that word processing gave us a collective obsession with the virtue of good formatting, we should have drawn back in horror. For we have long known that virtue in appearance is anything but virtue in truth. We owe young people more than the semblance of a good life. We owe them a good life.

Instead of taking our young researchers to the library to show them how, with the help of their computer, they can “manage” bibliographies that contain seemingly endless numbers of articles and books that have been written on whatever might happen to “interest” them, we should be struggling to convince them that some things are more worthy of interest than other things. We should be honest enough to explain to them that the Internet contains more misinformation than true information, and that, even with regard to peer-reviewed publications, whatever has been published under the threat of “publish or perish” can be set aside. The only thing worth reading is what has been written out of the spirit of love. This is the Platonic view – and I hold by it.

Socrates own view, as Plato depicts it, is even more rigorous. For whereas Plato wrote the Dialogues, Socrates himself wrote nothing at all. To explain why he rejected writing, he tells the story of Theuth, the mythical Egyptian inventor of writing. Excited by his invention, Theuth presented it to the king with the assurance “I have discovered a formula for memory and wisdom.” What Pharaoh said in reply is worth hearing: “The discoverer of an art is not the best judge of the good or harm which will accrue to those who practice it. So it is in this case; you, who are the father of writing, have out of fondness for your offspring attributed to it quite the opposite of its real function. Those who acquire it will cease to exercise their memory and become forgetful; they will rely on writing to bring things to their remembrance by external signs instead of on their own internal resources … And, as for wisdom, your pupils will gain the reputation for it without the reality; they will receive a large quantity of information but without proper instruction. In consequence be thought very knowledgeable when they are for the most part ignorant. And, because they will be filled with the conceit of wisdom, instead of real wisdom, they will be a burden to society.”

With that warning in mind, let me now speak directly to the question of technology, particularly with regard to its proper relationship to the liberal arts.

1. **Technology and the Liberal Arts**

Now is the time for me to state my second reason for asserting that it would be foolish simply to dismiss Plato. Put succinctly, no Plato – no technology. What I obviously do not mean by this statement is that Plato is the father of the spear and the plow. What I do mean, however, is that he is the father of the atom bomb and the computer. What both of these things have in common (and what separates them in an absolute way from the spear and the plow) is that they represent the products of specifically *modern* science, a science that has done a Herculean job of observing empirical data, to be sure, but always with the goal of reconciling that data with purely mathematical models. Knowledge, Plato always insisted, is recollection – thus his strategy in the Phaedrus of telling the fanciful story of a pre-birth vision of pure form. That notion of a pre-birth vision of pure form lives today in the architectonic of the natural sciences. Mathematics before Physics. Physics before Chemistry. Chemistry before Biology. And in each, always one abiding rule: there is as much serious science in a science as there is mathematics. For only in mathematics is there certainty.

The background for this was already given in the quadrivium of the Medieval and Renaissance university which, together with the trivium, made up the seven arts of the liberal arts. The quadrivium was arithmetic, geometry, music, and astronomy. Its first known depiction can be found in Plato’s *Republic*. Thus the inscription over Plato’s academy: “Let none but Geometers enter here.” By insisting on the principle of full and complete certainty, René Descartes put an end to medieval science, which was purely empirical, and opened the door to modern science, which operates always on a mathematical basis. If the Phaedrus’s depiction of a sky that circles around the earth was a naïve one, the idea that the whole is held in place by a realm of pure form still lives in the modern understanding of space and time as separable from the things that happen to be in it, so that the form of physical reality can be understood as a three-dimensional coordinate system extended into a fourth dimension that in turn reflects the structure of differential calculus: thus the compulsion to measure, the compulsion to calculate.

With regard specifically to the computer, what proved decisive is a thought that we can even find in a dialogue as literary as the *Phaedrus*. What really irked Socrates about Lysias’s speech, it lacked logical coherence. “Why the guy just said whatever happened to occur to him at the moment,” Socrates exclaimed, “and then polished his sentences afterwards.” What was lacking was the principle and method that Socrates calls dialectic. One begins with an actual insight, out of which one forges a clear definition, which one then develops in a coherent and logical fashion. In the *Republic*, Socrates even hazards the suggestion that dialectic can reproduce the way the whole world was made.[[11]](#footnote-11) The idea of a computational universe is by no means the invention of contemporary cyberneticists. One can find a clear enough presentation of it in any number of Plato’s dialogues.

But, as I have already suggested, the real segue to the computer came with Leibniz, the 17th-century Platonist who not only tried to build calculating machines, but did so on the basis of a theological conception of a God who created the world *by calculating it*. It was appropriate then that Norbert Wiener, so important to the development of the modern computer, called Leibniz the “patron saint of cybernetics.”[[12]](#footnote-12) Anyone who has read any of the more philosophically inclined computer scientists, people like Jürgen Schmidhuber in Switzerland and Seth Lloyd at MIT, will appreciate how much Leibniz lies at the bottom of what one might call the computational theory of reality. Not only was he the father of symbolic and algorithmic logic, but he developed a system of binary numbers and, parallel to Newton, the principles of calculus. Unlike Newton, he conceived reality not as a set of particles bouncing around infinite space, but instead as a network of relationships which are what first define and determine space – as they define and determine time. Because the different relational fields are coordinated and work in tandem, Leibniz assumes that God, acting as a kind of ultimate Programmer, programmed the world in a unified fashion. But because his programming occurs in accord to the Principle of Sufficient Reason, one must eliminate any notion of this God as a maker of arbitrary decisions – or, as Newton liked to put it, as a winder of watches. For Leibniz the universe was a computational network, not a gigantic watch that comes unwound as it ticks away. As for God, Leibniz could very well have dispensed with the notion entirely and instead simply spoken of Reason. Reason is at heart relationality, something that today is discussed primarily in terms of the flow of information, whereby sender and receiver are engaged in some form of communication, even in a slumbering universe where minds are very much the exception rather than the rule.

But what, really, does it mean to communicate? Is communication possible in a purely computational universe? The point I am going for here can be illustrated with the help of a brief summary of 20th-century logic and mathematics that starts with Russell and Whitehead’s Principia Mathematica, published in 1910, which boldly set out to unify the two fields by reducing mathematics to a limited set of axioms – and by rendering those axioms in a purely symbolic language that strips away all meaning, all anything, in other words, that a person might have to actually *think* about. Once mathematics has been fully axiomatized, its operations can be turned over to a machine. Voilá! Mission accomplished. Except, of course, that the mission was not accomplished at all, for as Gödel demonstrated twenty years later, mathematics always contains more truth than its axioms can yield. Even within mathematics, it turns out, meaning and intuition matters. The great mathematical project of building a machine that would put mathematicians forever out of business turned out, luckily for professional mathematicians, to be a failure. In the language of Jean Paul Sartre, it turns out that mathematicians, like it or not, are condemned to be free. While machines can clearly aid their work, machines cannot *do* mathematics. In other words, mathematics remains a creative enterprise. No one learns mathematics simply by learning how to use a calculator.

What is true of mathematics is true of the entire edifice of the natural and social sciences that has been erected on a mathematical foundation – and it is, if you will, even more emphatically true for the humanities, those disciplines that do not rest upon a mathematical foundation. What “rests” on a foundation is cumulative and progressive (the newest is the best) and in theory shared by everyone who is committed to the foundation, who has agreed to build upon it without placing it into question. From the perspective of the humanities, however, the foundation cannot but be regarded as itself the free accomplishment of the creative spirit: something that human beings have *made*. As a result, it stands in competition with other foundational assumptions. It is, in other words, questionable. Here everything hovers, as if in mid-air. In this realm, thinking always has to begin anew. We are robbed of any assurance that the newest is the best. Instead, we find ourselves sifting through history in search of alternative ways of understanding reality. The more we acknowledge the variety of creative expressions, the more we understand that the spirit is free. Technology itself looms forth not as the always fated revelation of the one-and-only order of being, but as one accomplishment among other accomplishments, one art among other arts. Far from offering proof that man too must be a machine, it offers proof of the opposite: human beings are capable of creating more than isolated works; they are capable of creating frameworks that determine what it is, within all that they encounter, that they can count as real. To stand within one framework is to see that it is preposterous to assert the existence of God; to stand within another framework is to see that it preposterous to deny it. What is difficult is to enter into the space where these competing frameworks can be seen as creative responses to the extravagant excess of the unknowable that asserts itself finally in the rule of death, the dissolution of whatever framework one might want to propose. In this region the serious conversation begins that is celebrated in the humanities. It is a conversation that is rich in possibility and understands the provisional nature of anything like an answer.

This much freedom and this much capacity is, of course, a terrifying thing. Little wonder that we so often use our freedom to try to shut the door on it, using our knowledge as a device for securing all aspects of our life. The real gets defined as a calculable process, a marketable commodity, an object of knowledge – all the way to the empire of reason. But behind the real, thus understood, there lurks always the power of the really real, the fearsome god of death, which, by undoing even our greatest achievements, guarantees that the conversation will always go on. Technology is not the fate of humanity. It is an important episode in the history of humanity. When science and technology are understood as historical creations of the human spirit, that is, in their provisional and contingent nature, they can be regarded as belonging to the humanities.

The liberal arts college is the place where the spoken word, exuberant in its own temporality, prevails over the written word, where scholarship is pursued only in the service of good teaching, and where science is revealed as one art among others. As such, it is an oasis of freedom. In an age of technology, it must fight to keep itself unplugged from technology, not because it fears it, but because only from a distance is it possible to discern in technology the signature of freedom. In an age when supercomputers gather digital data and process it by algorithm, there remains one way to preserve one’s privacy and dignity: to stay, as much as possible, offline. The same thing holds for the liberal arts college.

In terms of the practical consequences of my talk, let me conclude with a short list. 1) college professors need to cultivate the power of direct speech – or risk being replaced by televised videos of those who master the art; 2) every college needs to establish and maintain technology-free zones; 3) Computer Science Departments should be expanded so that they can incorporate within their curriculum more of the history and philosophy of technology; and 4) colleges should add courses on the philosophy of the liberal arts and, in particular, the philosophy of the humanities. Only by reflecting more clearly on their mission, which is to establish oases of reflection, will liberal arts colleges be able to survive and flourish in the age of technology. In all of this, IT departments can help by doing what every department needs to do: instead, of seeking simply to expand their own turf within the college, they need to understand what a college is – and what makes it different from a university or a professional school.

But now, having written far more than I will ever be able to say in a short lecture, let me end where I began, by citing one more time the text of Plato’s *Phaedrus*:

When he is in earnest he will not take a pen and write in water or sow his seed in the black fluid called ink, to produce discourses which cannot defend themselves viva voce … No, indeed. It will simply be by way of pastime that he will use the medium of writing to sow what may be styled gardens of literature, laying up for himself and his friends aids to recollection against the time when the forgetfulness of old age may overtake him …

Plato, *Phaedrus*, 276c-d

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1. [↑](#footnote-ref-1)
2. I owe this insight to my sister Inez Crepps. She is currently in the process of closing the Sylvan Learning Center that she has managed for years in Elizabethtown, Kentucky. Her decision is a response to the decision of Corporate Headquarters that selling I-Pads for Apple was more important than giving educationally challenged children the undivided attention of educated and caring adults. [↑](#footnote-ref-2)
3. [↑](#footnote-ref-3)
4. [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. [↑](#footnote-ref-6)
7. [↑](#footnote-ref-7)
8. [↑](#footnote-ref-8)
9. [↑](#footnote-ref-9)
10. [↑](#footnote-ref-10)
11. [↑](#footnote-ref-11)
12. [↑](#footnote-ref-12)