

President Marx, Dean Call, Honored Guests, members of the Faculty, and members of the Class of 2011:

I am doubly pleased to be standing in front of you today — pleased of course to have a chance to share some thoughts with you, but also pleased that you have seemingly escaped the trap laid for you by the presence of two Professors D. Hall on campus. Many times I have been invited to exclusive College events, involving perhaps the staff of the Student Newspaper at the President’s House, or an ‘E’ graduation dinner; and only when I show up do we all realize that the invitation was actually intended for Professor Hall. Of course everyone is too polite to admit to the error, and as a physicist I have learned how to limp through more than a few “weather sure does keep you guessing” conversations in my time.

This year Professor Hall and I even managed to fool the Registrar’s ~~Office~~. (True story.) Several months ago I learned from the heretofore unimpeachable ACDATA system that I had been scheduled to teach both Physics 116, Introductory Physics I, and English 221, Writing Poetry I. Unable to resist acting on this opportunity, I immediately started making plans. My theme for the course became “Poetry for Physicists”; we would read and emulate famous crossover Nobel/poet Laureates, such as the renowned Rhymin’ Feynman; ~~and write in the meter of Louis de Broglie, known for his famous conjecture on the subject of iamb/trochee [/~~trō’ kē/~~] duality~~. I was ready to go. Then I made a mistake: I mentioned my plans for the class to the chairman of the CEP. Being far more responsible than I, he insisted that I abandon my poetic aspirations and notify the Registrar — and it is in the order of events here that we disagreed — *prior to* the first day of online preregistration. This brought to premature conclusion what would surely have been a highly entertaining experimental romp through the liberal arts.

This is a long-winded way of saying thank you for inviting me, and not Professor Hall, to address you today.

It could not escape my attention that on this day twenty years ago I was sitting where you, the Class of 2011, are today: in the central pews of this Chapel. Ten years ago I was

also here, but sitting amongst you, the Faculty, desperately clinging to a window in hopes of a breath of fresh air. Today I am up on the dais. I am not entirely sure where I can go from here that does not take me somewhere that I have already been. But I note happily, class of 2011, that your own prospects are presently expanding, not closing in on themselves. There is a Serious Question here: Where will *you* be — ten, twenty, thirty years hence?

We physicists cannot predict the future, unless you are a pendulum, or a ball rolling down an inclined plane, ~~or, possibly, a vortex-antivortex pair in a superfluid gas of atoms~~; and even in these cases, as some of you know quite well, it can be a tricky business. So I suggest that we set aside this Serious Question in favor of some comments on a different topic that we can all plausibly claim to have some interest in. What I have in mind is the ongoing project at the very heart of the institution, namely, the close academic relationship between teacher and student. In the end, this is why we are here.

To summarize: you chose this place, pursued an academic program for four years, majored in a discipline, received passing grades in at least 31 courses, passed at least one comprehensive examination, and possibly wrote at least one thesis. These aggregations don't quite get at what it has meant for you to experience, as individuals, these four years in close contact with your teachers; and I doubt that I could make many useful generalizations. But perhaps some of what follows will resonate with you in some small way.

I originally chose a small college more than I chose Amherst, largely because a quarter-century ago I was not sophisticated enough to think beyond the categories of “small” and “large”; and I thought, with the helpful assistance of my parents, a small college would be more to my taste, as it had been for my mother (Smith, class of 1966) and my father, class of 1964 — Williams. As the application season rolled around, it became increasingly clear that Smith was never going to accept me, and that Williams was going to accept me no matter what kind of clod I was, or would later become. And anyway, I had no desire to live an unprincipled life of dissipation. I applied instead to the small college that I thought would be both the hardest to get into and piss off my father the most, and that just happened to

be this one.

Our Dean of Admission and Financial Aid assures me that such a strategy would most likely not succeed today.

Just for fun, let's step back in time. What was Amherst like in 1987? Reagan was President; and Peter Pouncey was President. There were fewer portraits of past Presidents in this room. The Campus Center had balls — big aluminum ones — on its roof, and one could buy beer in the snack bar on the *third* floor. Webster was the biology building, Appleton psychology, Williston philosophy, and Charles Pratt geology. James and Stearns were proto-James and proto-Stearns. There were three recently-built dormitories: A, B, (Taplin, Jenkins, or vice versa) and the eponymous New Dorm (Cohan). North was North, South was South; but, in Valentine, East was West. You could smoke tobacco pretty much everywhere. Many bathrooms were coed, especially in the freshman dormitories. Groundbreaking on a new science center was rumored to be just five years away. (I made that last one up.)

The social scene of twenty years ago would feel both familiar and strange, as if you had entered some mirror world from an episode of *Star Trek*. The banning of fraternities only three years earlier, in 1984, had left a legacy of beautiful houses and social chaos. The void was filled by Demes, a well-intentioned but ultimately ill-fated piece of social engineering. Each Deme consisted of a random assortment of geographically disconnected dormitories and houses that were somehow supposed to reinvigorate campus life by hosting a variety of wholesome all-campus events. They were hard to take too seriously; even their names were clownish: Notre Deme, Gunga Deme, Yabba Dabba Deme, and Carpe Deme. We were missing only “Deme-ented” and “Buddy can you spare a Deme.” The only thing that Demes were good at — as far as I could tell — was to launder student activities money in order to buy alcohol. In this unintended and appalling respect the Demes were a smashing success.

There were of course all these laws and rules about alcohol but, twenty-odd years ago, the only two that seemed to occur to anyone, including the police, were (1) the need for an ID to purchase alcohol, and (2) the open container law that one typically violated while crossing

Main Street on the way to the Hill — basically, right where they built that really nice police station in 1990. If you didn't want to travel you could let the party come to you, even if you lived in a freshman dormitory. The first party I ever went to was in my own dormitory, Valentine. In the center of the little rooftop area was a wading pool filled with vodka; you only had to reach down and fill your cup. TAP had not yet become an acronym for The Amherst Party, but was either the thing you used to get beer out of a keg, or the name of a weekly party held, often as not, every Wednesday through Friday night. This would be followed Saturday night by a Deme party in the basement of one of the houses.

If there are any parents or administrators in the room, let me stress that all of this is ancient history, and I bring it up not to excuse or condone it but to illustrate some real differences between then and now. I am assured by my current students that alcohol no longer plays any significant role in the social life at Amherst.

The Amherst of 1987 was, in the words of one of my classmates, one of the “whitest places” he had ever seen. Such a claim would be difficult to make today. The diversification of the institution that has taken place in the last twenty years, the growth in the number of international students, and the enhanced efforts to attract students from a variety of economic circumstances, are among the most important ways that Amherst has changed for the better. I commend our departing President for making the diversification of Amherst one of his central priorities.

In one important dimension institutional change has been remarkably gradual; and I speak now of the Faculty. Many of my teachers have been yours as well. I'll go ahead and embarrass those of mine now, what the heck: Babb Call Courtright Couvares Hunter Jagannathan Peterson Rabinowitz Redding Sarat Sofield Velleman Woglom Zajonc. Just a handful have retired in the last decade: Beals Gordon Hilborn Romer Townsend. A few are no longer with us: Greene Kennick Towne. The Faculty embodies, preserves, and transmits the academic traditions of the College. But twenty years of relatively gradual change are coming to a close, and at this moment the Faculty is on the cusp of dramatic change through

retirements and replacements. When you return as alumni five, ten, or twenty years from now, the Faculty will look significantly different. My hope is that our values will be preserved through the relatively tumultuous period that lies ahead, and that the College will feel only subtly different to you.

I've been an alumnus and Faculty member long enough now that most of my specific memories of the student-teacher relationship, from the student perspective, have dimmed. So, when I was invited to give this talk a few months ago I assigned myself some homework in order to recapture my dim student mindset. My assignment was to reread all of my graded College papers and the myriad, meticulous comments in the margins. Sounds manageable on the surface. Then I had to give and grade a midterm and two papers, so I kinda wasn't able to finish the reading, and I had to ask myself for an extension. Success! But I did manage to re-examine my first semester, which was a lot easier this time through because I knew in advance that I would survive it.

A simple red oval is drawn around the first word in an ILS paper on Jonathan Schell's The Fate of the Earth. I managed to spell Jonathan R-O-B-E-R-T, achieving thereby the dubious distinction of getting the very first word wrong in my first College paper.

English 11, comment on a paper on Sherwood Anderson:

You display a nice sense of the moment for a time, but for the sake of your own reading let me suggest that you focus more. You'll do it more justice. The insights here get dissipated.

All evidence to the contrary, I spent a lot of time contemplating this comment as I was composing this speech.

Philosophy 17. I did not understand at first that the Professor expected everyone to rewrite every paper in order to raise its grade from the dead. I received a B+/B on my first two papers and did not rewrite them, rationalizing this decision as a principled rejection of "grade-grubbing." My moral compass spun 180 degrees after the C/C+ grade-grubbing I

received on the third paper, and I have been a fan of rewriting papers ever since.

And it was about this time in my first semester I remember telling a prospective student that I didn't think people got A's at Amherst, based upon a comprehensive empirical study of my own grades.

English 11, paper on Proust:

What you seem to do is lump everyone together in order to draw a moral. The vision's moral here, but is it so uniform, so grim? B

The buoyancy of grade inflation ultimately floats all boats. This from a final paper:

You've continued to progress. A-

In exploring my little archive I experience again the pride in a point made and well received; the chagrin at having a bad argument cut to shreds; and, of course, the anxiety associated with turning that last page to read the final comments and grade. It is remarkable how the marginal notes have not lost their power over me after all of these years. And it is striking how much energy and effort were expended to achieve this fleeting moment in which teacher and pupil meet on the page. It is regarded so briefly, and is so soon forgotten.

When I went to graduate school I was astonished at what little contact the undergraduates had with their Faculty, especially in terms of writing to one another; and this was at an institution well-known for the quality of its undergraduate education. We have been fortunate indeed.

This thought brings me now to the traditional matter of finding some piece of advice or wisdom with which to send you on your way. I am a bit hesitant to do so, since those who believe that they have wisdom to impart are often fools: "neither a borrower nor a lender be"; "don't accept wooden nickels"; "plastics." I will therefore duck this responsibility and lead with someone else's advice. The individual in question is no fool: he is an esteemed graduate of Amherst College, and 59 years ago he was sitting where you, the class of 2011, are sitting today. He sat with the Faculty for forty-six of the following years. And he's one

of the main reasons I'm here at Amherst today.

His advice went something like this:

I went to graduate school and was surrounded by all kinds of hot-shots who knew everything about physics. After a year or two all the hot-shots were gone.

He gave this advice to a group of us twenty years ago, and I remember thinking: This is advice? In fact, one could read the story any number of different, largely unflattering ways. Did the hotshots graduate early? Where did they all go? Was my Professor actually more of a hot-shot than they were, and was this his way of letting us know? What was he talking about?

This started to make more sense to me a year later. Here is a prolix [/prō'-liks/] rendering of my own experience:

I went to graduate school and my cohort consisted entirely of individuals who were smarter than I, who had a university education that had delved more deeply into physics than I could even imagine, and who apparently knew everything about physics. After one and a half semesters I decided to take a terminal Master's degree and do something else.

I was then a teaching fellow for one of the Very Senior Faculty, and over lunch at the Faculty Club he asked me why I seemed a little down. I told him that I had realized that I was ill-prepared for the challenges of graduate school, that I was the dumbest one in my class, and that I was planning to quit. He absorbed all of this, and then he asked me where I had gone to College. In the context of the Faculty Club this question occupies the same conversational role as does talking about the weather, so at first I took his question as a desire to change the subject. But I pressed on.

“Amherst College.”

He chuckled. “Mr. Hall, you sound like everyone else who comes here from places

like Amherst. You start out unprepared and unready, full of self-doubt, but by the end you'll find yourself doing just fine. You'll see."

Most of the hot-shots were soon gone.

As students, we used to say that the value of an Amherst education is that you learn how to teach yourself stuff. Most institutions will teach you basic facts, equations, numbers, histories. Fewer institutions will succeed well at teaching the higher analytic and synthetic functions, the critical reasoning that stitches together these facts to provide, *inter alia*, a greater appreciation for others and our own place in the world. Most of the members of my graduate cohort were educated in the liberal arts at one of the Big Ivies, and were richly endowed with both types of educational experience. Amherst is, or was, decidedly more thorough with respect to the latter than the former.

The difference, as far as I can tell, is that Amherst offers an environment that privileges the academic relationship between teacher and student. This manifests itself on the page, in the lectures, in the research, in the discussions, in the studios, in the laboratories, in the theatre, in the concert hall. What you take away, what you are taking away, is something personal and individual for having had some expert guidance in each of these venues.

What I took with me from my time as a student was a vision that one could play with ideas as one was mastering them; I observed this playfulness all the time in the Faculty, from their choices of assigned paper topics to their creative and playful approaches to research problems. I was fortunate to have, with their guidance, a few of my own research experiences, which taught me that playing with ideas was something I could and did want to do. And I had support, both explicit and implicit, for the idea that the world — my world — was rich with possibilities.

As a Faculty member I have experienced this relationship differently. We Faculty receive semiannual infusions of newness, additional chances to share our corners of the academic world with people who know little about it but who are often brimming with fresh perspectives and insights. In my own teaching and research I especially enjoy the formulation of

simple questions that lead me to think about a research topic, an equation, or an interpretation of a result in a new way. In research, especially, questions that arise out of simply not knowing what has been done, or can be done, often provoke the most thought and excitement. How wonderful it is to have a student ask a question and to subsequently realize that the answer is “Nobody knows for sure.” The response can only be “Let’s see what *we* can say.”

We started out by avoiding a Serious Question about the future, to which the answer is indeed “Nobody knows for sure.” We must wait. But let’s see what we can say. Class of 2011, I ask that you create something before you graduate that will remind you of what you have found of meaning in your relationships with your teachers here. Expand it as necessary and appropriate to include the other institutional and personal relationships that have been important to you. Limit yourself to nine pages, or its equivalent. Let this Assignment be one that — or, perhaps, *in which* — you can grade yourself in twenty years’ time.

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David S. Hall 06 May 2011