

Jeff's view

My secret university

I have been a university professor for most of my adult life and never thought that I might be an endangered species. Nobody is hunting me, and my genome seems to be more or less OK, thank you very much. But my habitat is shrinking. If universities continue to disappear at the current rate, my future colleagues will have no place to go.

There is no shortage of institutions that have the shingle 'University' over their door, but many of them seem to have a funny notion of this term, or do not give a lukewarm cheese about Truth in Advertising.

The western university was born in the eleventh century, mainly in northern Italy and England, because there were people who wanted to teach and acquire knowledge without ecclesiastic or royal control. Their concept was hugely successful and the universities founded a little later at Paris, Prague, Uppsala, Vienna and elsewhere have decisively forged the cultural and political face of Europe. When Wilhelm von Humboldt, early in the nineteenth century, championed the unity of teaching and research, he put a finishing touch on one of the proudest achievements of our civilization.

Those in power have always looked at universities with a wary eye and tried to control them as best as they could. As long as the pressure came from the outside, most universities defended themselves well. But when their unity was challenged from the inside, matters went wrong. Early in the nineteenth century, the 'humanities' started to move away from the 'natural sciences', precipitating an intellectual calamity of far-reaching consequences. Suddenly there were 'two cultures'. To make things worse, our society excommunicated one of them. It gave the humanities the exclusive patent right to *Culture*® and branded the natural sciences as stepping stones to mindless technology and commercial exploitation. Today, many of our universities are a collection of professional training schools that interact little, if at all, with one another. For example, the average curriculum in the natural sciences usually focuses on professional excellence and leaves little time for opening the students' eyes to the limits, the philosophical consequences, or the ethical implications of scientific inquiry. Matters are even worse in the humanities. These have generally fragmented into many highly specialized fiefdoms that are often unfit to give their students a broad vista of the intellectual world. We seem to have forgotten that, for a university, lack of diversity is not simply an adversity, but a per-versity.

The gulf between the humanities and the natural sciences has weakened both. The humanities are now marginalized, on the defensive, and under-funded; and the natural sciences have been debased as mere engines for technological progress. They are supposed to 'valorize knowledge'.

But universities were not designed to valorize knowledge and are not very good at it. On this count, small start-up companies run rings around them. And when it comes to genomic screens for new drug targets or to ruinously expensive clinical trials, universities cannot hold a candle to the big pharmaceutical companies. Today, the general public expects universities to train professionals for the market place - peri-

od. Some politicians try to use them as instruments of social change, or to keep unemployment down. And some city council members love them as a source of revenue. We no longer have a vision of what a university should be.

Neither do the universities themselves. They should be restless breeding grounds for new ideas, yet have become one of the most conservative of institutions. They should strive to attract and foster young scholars, because these often have the best ideas. Yet few private enterprises treat their young staff as miserably as our universities do. And self-administration has become an inverted world in which professors do the administration, and administrators decide policy. Universities should be places of science, but only very few of their staff do science, or care about it. The Rector of a European university once warned me in a stern letter that scientists should not meddle in university politics. A real gem, that letter! If you are looking for a concise summary of what is wrong with our universities, this letter will do nicely.

Yet I am not pessimistic, because I have had the good fortune to work at some great universities and have seen what such places can do to you. And I know at least one university that is just about perfect. When despair is closing in on me, I go there to get back my courage. I bet the place will do the same for you, so let's visit it together.

It is smack in the midst of a big city, yet you see right away that it is a world by itself. The buildings are plastered with posters on every imaginable subject, and the people milling about will impress you more with their liveliness and smart talk than with their sartorial splendor. A big mural in the entrance hall of the Main Administration building tells you what this university tries to do: to give people the knowledge and the courage to think by themselves and to solve problems rationally and with an open mind. The goal is *autonomous* human beings. That's all. Not a word about 'Science' or 'Profession'. I guess they want to imply that science is just a method, and professional training a welcome side-product. How could you possibly learn to solve problems without doing scientific research? Von Humboldt again. It makes a lot of sense to me.

It is hard to become a professor there, and even harder to get accepted as a student. Professors have three official duties: research, teaching, and interaction with the general public. Few professors are good at all three, but they all try. This can be quite a challenge, since more than half of them speak with a foreign accent. Students are only admitted after careful screening and intensive personal interviews. The interviewers are particularly interested in applicants that do not fit the common mold, and scoff at age limits, quotas and other arbitrary nonsense. They want their university to be a place for unusual people, and know that one can only spot these by talking to them. It is a hard process, but those that get in are proud of it and do their best to succeed.

If you really want to feel the pulse of the place, look at the big displays that cover the other two walls of the entrance hall. One display shows how the present and former students

rank each professor's teaching. Everyone loves that display, because it is a sports column, an academic *Michelin* guide, and a society page rolled into one. The university president, too, pays a lot of attention to this display, and makes sure that the professors know it. The other display shows how the professors scored the latest exams of their students. Quid pro quo. It is tough, but fair and keeps up standards.

You may have trouble telling the students apart from the faculty, because the two of them do similar things. Both do research, organize public discussions, and try to learn from each other. Here, too, it is quid pro quo. For example, the biochemistry students show their professors how to run computer programs, the latest gizmos for sequencing DNA, or other new tricks. Students and professors work side-by-side in running the annual "University Day" for the townspeople, and the "Open Door" day of their department. The professors teach what professors around the world are supposed to teach, but also spend a lot of time encouraging their students to do long-term basic research, to go after problems that might be important for technological innovation only several decades down the road. They keep harking back to the same three points: that universities should be places where people still think about what may happen 50 or 100 years from now; that the short-term mentality of today's society has made such places precious; and that if universities were to capitulate to short-term thinking, one might as well close them down.

The professors have time for all these things because they never go to faculty meetings. In fact, there are no faculties. There are big departments, and various ad hoc structures through which different departments work together in order to give their students a broad training. But most of the strategic and organizational decisions are left to a few powerful deans and the university president. If these people misbehave or turn out to be incompetent, the professors have ways to get them fired. But this does not happen very often, and the professors are glad to let competent academic colleagues run the place. That gives them time to do the things they became professors for. They know that those who cannot wait for the next faculty meeting are rarely the cream of the crop.

The university president is a renowned scholar with a knack for leadership. When they interviewed her and asked about her administrative experience, her answer was a classic: "*None whatsoever. My strongest point*". She got the job and is good at it. Her persuasive powers are legendary. And when they fail

and irate professors or unruly students try to go ballistic on her, she simply stares them down. She also has a good nose for selecting able administrators. May she live forever.

The student reps do not think much of endless debates on changing the world. They prefer to evaluate their professors and go after those that do a bad job at it. They also appear in local talk shows that deal with science issues. Some of them even run for municipal office. They have also persuaded a private foundation to help them operate their own radio station. This station is quite popular because it is irreverently 'green', yet pro-science.

Students must decide for themselves what their training should be and are required to compose their own curriculum. The curriculum needs to be approved by a professor and should give the necessary training for the chosen goal. But it must also include courses – and exams – in areas outside the chosen discipline. For example, a biology student could pick archeology, seventeenth century Serb poetry, or geology – whatever. Playing in the university orchestra or singing in the university choir also count, but sports do not. They have to draw the line somewhere.

Friends often want to know whether this university is big or small, and whether it is public or private. I have never bothered to look into these questions, because I do not consider them important.

By now you might have surmised that this university is only in my head. If that is not real enough for you, you are dead wrong. It is real enough to help me find my bearings when advising our government. It is my professional North Star. It is not a precise blueprint, but a dream, yet without dreams there are no blueprints. My Secret University belongs to the world where I meet my parents, both long dead, enchanted moments of my childhood, and teachers that shaped my life. This world grows on me with each passing year, because it holds an ever larger part of me. Without this inner world, I could not deal with the outside one.

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