

**AGA KHAN IV:** President Vest, members of the Corporation of the Massachusetts Institute of Technology, distinguished members of the faculty, Mayor Reeves, happy graduates, even happier parents, and others gathered here today - I am pleased and honored to be with you this morning. MIT has shown a standard of excellence in education and research that sets a benchmark for universities everywhere. You who've been at the Institute for years may be excused if you take this in stride. But for me, coming here for the first time in several years, the energy of the place is palpable.

Actually, my reaction is somewhat personal. When, as a young man, I began to think about colleges, MIT was my first choice. In the end, I acceded to the advice of my grandfather, who favored Harvard.

[LAUGHTER]

In fact, I didn't even apply anywhere other than MIT. And MIT accepted me on the basis of my grades. They didn't even ask me to take an examination, which is good. Because I could hardly understand written English. When my grandfather told me I shouldn't enroll here, I was devastated. That really put the kibosh on my plans to study science. You see, I learned Harvard English.

[LAUGHTER]

Education has been important to my family for a long time. My forefathers founded Al-Azhar University in Cairo some 1,000 years ago at the time of the Fatimid Caliphate in Egypt. Discovery of knowledge was seen by those founders as an embodiment of religious faith and faith as reinforced by knowledge of workings of the creator's physical world. The form of universities has changed over those 1,000 years. But that reciprocity between faith and knowledge remains a source of strength.

MIT has changed also over its 130 years. This university was initially designed to meet the needs of society in a newly industrialized world. As the world and its needs evolved, so has MIT's curriculum. Steadily, the emphasis on social sciences and humanities has expanded as the Institute has recognized increasingly that the range of technologies that are needed to solve societal problems goes far beyond those of engineering and natural sciences.

The increased richness of education results in an increasingly versatile set of graduates. As I look out over those today who are here, I see that MIT has changed in other ways. The great continents of the world are now represented in your student body and in your faculty. So, too, are the great religions of the world. MIT seems prepared to take advantage of excellence from all quarters, a fact that is sure to reinforce the Institute's future strength.

When I was thinking about the theme that I should choose for this talk, I considered first that commencements are occasions to reflect on general truths-- truths that will retain their validity over the course of your lives and over the wide range of intellectual interests that you graduates embody. But how is that search for generality to be squared with the very particular point in time that today represents? You and I are here, in a real sense, only because 1994 finds MIT and the world at distinctive stages of their evolution. Still, the particular can provide insight into the general. So my comments today will draw on the particular in the hope of saying something of value about the general.

I shall talk today about encounters. Encounters. When two people meet, or two particles, or two cultures, in that crucial moment of interaction, the results of an encounter are determined. In the simplest of encounters-- say, with two billiard balls-- the outcome is a predictable result of position, velocity, and mass.

But the encounters that interest me most are not so simple. In the encounters of people and cultures, much depends on the path that each has taken to that point. These are not stochastic processes. The subjects have histories. The encounter has complexity and rich dimensionality.

The result of an encounter between two people or between two cultures is shaped by the assumptions of each, by their respective goals and, perhaps more directly relevant to a university, by the repertoire of responses that each has learned. Encounters, therefore, have aspects of both the general and the specific.

What makes our current time distinctive are the new combinations of people and cultures that are participating in these encounters. Too, ongoing social and political changes illustrate the reasons for these new combinations. The first is the collapse of communism in the USSR and Eastern Europe.

You graduates may feel that you have been at MIT forever. But it really is remarkable that the overturning of the communist world has occurred since most of you started your studies here. You go out into a world where the rules are different from those it held when you entered.

Colonialism is moribund. No longer is it enough to decide whether one is aligned with communism or capitalism in a bipolar world. Now a full range of complicated choices is opened up to people in the developed and the developing world alike.

A massive break on change has been released. The potential for creative action, creative encounters, is now much enhanced. This change is a work in progress, however. The potential of the moment must be seized, for conditions for change may not always be so propitious. There is the real possibility that the Soviet Union may reconstitute itself if the social upheaval that accompanies political disintegration and economic reform is allowed to become less tolerable than the strictures of a totalitarian state.

While these shocks reverberate from the ex-communist block, profound changes of a very different character are to be found in the Islamic world. Here the changes are in both perception and reality. And both of them are works in progress too.

The Islamic world is remarkably poorly understood by the West, almost terra incognita. Even now, one sees pervasive images in the West. The caricature of Muslim is as either oil sheiks or unruly fundamentalists.

The Islamic world is, in fact, a rich and changing tapestry, which the West would do well to understand. The economic power of the Islamic world is increasing, not so much because of Middle Eastern oil, but because of the rapid growth of newly industrializing countries like Malaysia and Indonesia. Its population is increasing and already represents nearly one quarter of the world's total. It is remarkably diverse-- ethnically, economically, politically-- in its interpretations of its own faith.

The Muslim world can no longer be thought of as a subset of the developing world. Islam is well represented in the United States, Canada, the United Kingdom, and Western Europe. And that presence is growing.

The religious diversity of Islam is important and misunderstood by most non-Muslims. This is not the forum to go into the multiple reasons for this misunderstanding. But for many in the West, the first awareness that there were two major branches of Islam, Shia and Sunni, only came with the Iranian Revolution. That represents a superficiality of understanding that would be as though we Muslims only just learned that there were two branches of Christianity, Protestant and Catholic, and had no understanding of the Reformation, the authority of the church, all the ideas that led to the proliferation of Protestant sects in the 16th and 17th century, or as though we thought that most Americans were Branch Davidians.

In the face of such lack of knowledge about one quarter of the world's population, one may reasonably ask what the role of the university is in setting this straight. It seems clear to me that, at the most basic level, a university is responsible for helping its students to learn not only the simplifying principles that the various learned disciplines have found useful in understanding our world, but also the rich complexity of history, and language, and culture that make real life problems interesting and difficult.

MIT now teaches both of these lessons well and vigorously. But it seems not always to have done so. Indeed, I am told that at the opening of MIT in 1865, one local newspaper reported with a note of triumph that the creation of MIT, quote, "sealed the fate of that system by which our youth waste the best portion of student life in burrowing into the grammars and dictionaries of races less enlightened than their own." Unquote. MIT has clearly come around to thinking that those less enlightened races have something to teach. And that teaching helps the University fulfill its potential.

I would argue, however, that the University's potential is met not just in developing the intelligence of its students, but also in bringing them to understand the importance of engaging themselves in solving the problems of the world. The great political and social changes around us are creating opportunities for service that promise to be deeply rewarding to persons with the engaged intelligence to be successful at important but difficult work.

Let me take one example to illustrate the challenging encounters to which today's graduates might apply their intelligence. Tajikistan is a mountainous country in Central Asia of five million people more than 90% Muslim. As a republic in the former Soviet Union bordering China and Afghanistan, it had a strategic importance that dwarfed its natural resources.

The Soviet Union, therefore, invested heavily in Tajikistan, building roads and power stations, supplementing food supplies and equipment, developing the educational health systems. The result was a highly educated, sophisticated, but largely rural population that managed its affairs well at home by the rules of the game at that time and provided well developed human resources for export to other parts of the Soviet Union.

With the fall of the Soviet Union, things changed for Tajikistan. Subsidies which had provided most of the republic's budget and, for the remoter parts, 80% of the food supply were cut off. The result has been hunger, shortages of fuel and clothing, and deep uncertainty about the future.

Long suppressed ethnic tensions between indigenous Tajiks, neighboring Uzbeks and Kyrgyz, and immigrant Russians, amongst others, became more evident as groups jostled for political and economic control. Religion emerged from private houses, where it had been practiced publicly for 60 years, to become a manifest force.

Tajikistan has become the focus of one of the most interesting encounters of the day. It is here and in other Central Asian republics that the three great cultures encounter each other-- the communist world, the Muslim world, and the Western world. It is here that those three cultures could forge a success that would contrast starkly with the brutal failure in Bosnia.

The result of the encounter in Tajikistan may determine much about the way history unfolds over the coming decades. So it is worth thinking a bit about the stance that each of these cultures might take in preparing for this encounter. That thought might lead one to ask what it would take for this or any encounter to be constructive.

I suggest that there are four prerequisites for success. For each of the cultures, the result should, first, draw on its strengths and, second, be consistent with its goals. Third, the result should be a sustainable improvement in the current situation. And fourth, the transition should be humane.

Each of these three cultures has something to bring to the solution of the problems of Tajikistan. The West has many strengths. But prominent among them are science and democracy, with their public mechanisms for self correction, and also private institutions, liberal economics, and a recognition of fundamental human rights.

The Muslim world offers deep roots in a system of values emphasizing service, charity, a sense of common responsibility, and denying what it sees to be the false dichotomy between religious and secular lives. The ex-communist world, although it failed economically, made important investments in social welfare with particular emphasis on the status of women and was able to achieve in Tajikistan impressive social cohesion.

Just how to combine these competencies to solve Tajikistan's problems is not clear. But if the outcome is to be sustainable, it seems necessary to concentrate resources on the development of private institutions, of accountable public institutions, and of human potential. But how to get from here to there without inflicting cruel damage on the people already buffeted by shortages and change?

Again, the way is not entirely clear. But one should strive to retain the powerful ties of mutual support that, in different ways, bind individuals together in Muslim and communist societies. And one should see that the impressive gains in health and education are not lost in the transition. For it would be unconscionable to allow, for example, the equality of men and women that has been achieved in Tajikistan over the last 60 years to be erased in the transition to a market economy.

These are the prerequisites that I hope the representatives of these three important cultures will keep in mind as they have their encounter over Tajikistan. If the encounter of the Muslim world, the West, and the ex-communist world takes account of the need for each to draw on its own strengths, to be consistent with its goals, to strive for a sustainable, improved outcome, and to ensure a humane transition, then the encounter will have been as successful as it is important. Indeed, the importance of Tajikistan has, if anything, increased in recent years, as events in neighboring countries continue to remind us.

Turning back to today's graduates, I hope that these four prerequisites applied equally to the encounter that you are just completing with MIT. Knowing the quality of faculty and students here, I have no doubt that the encounter between you and the faculty has drawn on your respective strengths. I hope each of you kept consistent with your goals, even as they may have evolved over your time here. The quality and sustainability of the outcome will be determined over the course of your lives. But reading the smiles amongst the graduates, I judge that the transition, your time at MIT, must have been tolerably humane.

In conclusion, I would recall the words of former MIT president James Killian, Jr. Quote, "We need better linkages between science and humanities, with the object of fusing the two into a broad humanism that rests upon both science and the liberal arts and that does not weaken either. We need bifocal vision to thread our way among the problems of modern society." Unquote.

That need to use the power of complimentary academic disciplines remains true today. What is now clear is the need, also, to draw on the wisdom of different cultures in solving those problems. Thank you. And please accept my best wishes for a lifetime of constructive encounters. Thank you.