

Lecture 1 - Introduction and the Recent Past

James Rising

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The world is changing at an unprecedented pace. At MIT, we have the potential to hugely affect it. Having a clear vision of the future is the most important tool for choosing change.

The future, like the present, is a delicately overdetermined fractal system. In parts:

- It's a system— that is a complex of inter-related elements. System dynamics can be used to model systems.
- It's fractal, with complexity at all levels. Also, it follows power laws.
- It's overdetermined, every factor cybernetically supporting every other. Change one, and all will be affected. Most often, try to change one, and its original state will be reinforced and the change nullified by all of the others.
- It's delicate, always pushing itself to the brink of catastrophe. Small changes can have large effects.

Is it possible to predict the future?

Voltaire : The present is pregnant with the future.

Gates : 640k ought to be enough for anybody.

Anonymous : There are two types of forecasts: luck and wrong!

It's impossible to predict the future, per se. The future is too delicate and complex and huge, and our hope and fears (that is, our predictions) themselves play a role in shaping it. This class is more about developing the liberal artistry of predicting the future, not the science of it. We will be wrong, but let's construct a vision to be wrong about!

If I asked you to describe the present, how you would approach the question, as something other than a laundry list?

One reached-for goal in the study history to describe "what it was like". Similarly so it should be with futurology. As humans, our experience is hugely shaped by language.

What are the nouns, verbs, and adjectives of the future. The nouns would be the science and technology. The verbs would come from how people work and play. The adjectives come from paradigms and world views.

One goal of this class is to create a new language of the future.

We're going to look at the big paradigms, how they expand and mature.

How does one go about predicting the future?

- Big trends (extrapolation)
- Influence of new technology (creation)
- Battle of dominant paradigms (conflict)
- System dynamics
- Theories of history
- An organic combination of all of these

The semester will be divided into four sections.

Techniques : System dynamics, historiographical theories, anthropology, catastrophe theory, and others.

Extreme Scenarios : The great concerning results of humankind's hubris: nuclear war, global warming, peak oil, bioterrorism, etc. We will discuss these, as well as extremely Utopian views, in part to set them aside and deal with the harsh realities of difficult predictions.

A Look at the Future : We will focus 20 years out and consider politics and society, science and technology, economics and demographics, culture and subculture.

Final Projects : At the end of the course, each student will present on some topic in futurology.

Additional Discussion: What has happened in the past five years? What can we predict for the next five? Look at the covers of magazines and music albums, college admission changes, technology, movies, and video games.

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