

***The time is out of joint. Oh, cursed spite
That ever I was born to put it right!***

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REMEMBER . . .

“Scenarios have to be plausible,
but reality is under no such
constraints.”

– William Gibson

Good Question

- Discussing Cambridge Analytica and Russian subversion of US election in class, and one student asked: “Why didn’t Obama or Hillary do something given the magnitude of the challenge?”
- Answer: they had no idea what was coming at them. And if they did, they would not have known how to intervene.

Trendline Scan

- The Enlightenment values that have underpinned the American experiment for 200 years are failing (cf. French President Macron in his speech to Congress April 25, 2018).
- Most existing U.S. institutions are fragile, vulnerable, or broken – including in particular both political parties.
- A major contributor to this condition is long-term and irreversible: the increasing volume, variety, and velocity of information, and concomitant developments in ICT technology systems such as social media, and sciences such as behavioral economics.

Trendline Scan

- Two levels of challenge:
 - Immediate: foreseeable offensive and defensive considerations around rapidly evolving political, technological, and adversarial relationships, both internal and external. The American cultural/institutional immune system is at least aware of the challenges at this level, although no effective responses yet.
 - Second level is far more complex, long term, and not yet recognized: Given that most existing foundational American institutions are broken, what institutions need to be constructed, and how, to function ethically, responsibly, rationally, and successfully in the new century?

SECOND LEVEL: A SCENARIO

- Expand the matrix into an n-dimensional hypervolume with each dimension – e.g. curiosity, neuroticism, and tolerance for uncertainty - being an individual psychology/cognition trait (generally bell shaped distribution throughout population)
- Include the internalization of social, cultural, institutional, religious, and other narratives and tendencies.
- Data at individual level from scraping the web – same as CA, except at state level with state resources.

SECOND LEVEL: A SCENARIO

- Result: a unique hypervolume for each individual.
- Use AI to identify the shapes (or subshapes – “n-x derived subvolumes”) that lend themselves to exploitation by internal and external adversaries.

SECOND LEVEL: A SCENARIO

- Integrated state/firm AI/big data/analytics capability, and rapidly growing data base on hundreds of millions of people, make such a project possible. The end state of social credit systems isn't, as Americans with their inevitable individualistic focus fear, just a social credit system. It's an AI with your n-dimensional personality hypervolume that knows, based on vast data hordes, exactly which buttons to push to manage your behavior, without you knowing that it has done so.

SECOND LEVEL: A SCENARIO

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- So building and understanding the n-dimensional hypervolume is step one. Step two is populating it with population-level data, and training AIs on those data. And step 3 is applying behavioral economics, psychology, and big data/analytics to learn how to actively shape those hypervolumes. You wanna bet China hasn't realized this already?

Trendline Scan

- Failure of Enlightenment institutions, values, and norms is of particular concern to the U.S.
 - Unlike most other powerful states, the American experiment does not have deep historical roots in either geography or tribe.
 - Rather, the United States was created explicitly at a particular place and time out of Enlightenment ideals, as expressed in the Declaration of Independence and the Constitution.
- The U.S. is the quintessential Enlightenment power, and to the extent the Enlightenment segues into something new in the 21st century, so must the United States.

Specific Challenges to US Institutions

- The Constitutional split between the military and civilian spheres has in domestic U.S. politics created resilience against military adventurism. Now, however, significant disadvantage as integrated threats and adversary doctrines require “whole of society” responses.
- The relatively clear division between the public and the private sectors has been a powerful source of American innovation and economic growth. Now impedes “whole of society” responses, especially as “American” firms become truly multinational with no particular cultural loyalty to the U.S.

Specific Challenges to US Institutions

- The American emphasis on the individual as the functional unit of society, and the citizen as the core of governance, is obsolete.
 - Behavioral economics, neuroscience, evolutionary psychology, and marketing and political operations such as Cambridge Analytica make personal identity and political behavior a design- and battle-space to be manipulated by internal and external entities alike.
- Checks and balances built into the American system have provided political stability, but now ensure that the cycle time of institutional controls (e.g., government bureaucracies and the American legal system) fall further and further behind evolving technology and concomitant social practices.

Specific Challenges to US Institutions

- Freedom of speech – a core American principle – has been weaponized against American society and the American political system.
 - Designed for a period when communication was relatively slow and information relatively sparse, it is obsolete in today's information and communication environment.
 - Without admitting it, important aspects of control of political speech are being outsourced to private firms (e.g., Facebook, Google).

Specific Challenges to US Institutions

- The increasing weakness of the Westphalian state-based international system – of which the U.S. is the current champion – threatens to fundamentally change regional and global power relationships.
- American “Western universalism,” and many of its associated values, norms, and institutions of world governance, as captured in, e.g., U.N. Charter of Human Rights, increasingly rejected – Russia, China, many elements of Islam, etc.

Specific Challenges to US Institutions

- Science and observation – the grounding of Enlightenment achievements and of broadly acceptable social truth – are failing in an environment of dramatically increasing complexity.
 - Increasing numbers of individuals and communities turn to tribal narrative (“Does it agree with what I and those like me believe?”).
 - End result: contingent truths that are often partial, arbitrary, and limited in scope, and incapable of supporting society-wide agreement.

Specific Challenges to US Institutions

- Trend towards tribal narrative as source of truth will accelerate in a year or two with deployment of CGI and voice imitation technology that will enable creation of convincing video and audio products purporting to be by real people and of real events that are, however, entirely fabricated.
- In near future, most people will be unable to judge what constitutes reality beyond their immediate environment.

CONCLUSIONS

- First Enlightenment has succeeded spectacularly, and rendered itself obsolete. Among leading powers, the US is the most affected, with virtually all of its institutions, norms, and governance structures becoming obsolete.
- The trends underlying this obsolescence are powerful, long-term, and not reversible (e.g., continuing takeoff of ICT and AI/big data/analytics).
- Unless US can reinvent itself and its institutions, long term decline is highly probable.