The History of the Near Future
What history tells us about our Age of Discord

Forecast: growing political instability to the 2020s

Our decadal research predictions ('2020 visions' Nature 463, 26-32; 2010) provoked ideas — and ire.

Political instability may be a contributor in the coming decade

The next decade is likely to be a period of growing instability in the United States and western Europe, which could undermine the sort of scientific progress you describe in the Opinion collection of '2020 visions'. Quantitative historical analyses reveal that complex human societies are affected by recurrent — and predictable — waves of political instability. (P. Turchin)

Therefore, support development of as many technologies as possible. Diversity among thought leaders is there. If you look for it. You no longer have to look far among academics. Today, for example, women of vision are heads of the Massachusetts Institute of Technology, Harvard, Princeton and Brown universities; and the universities of Michigan, Pennsylvania and Cambridge. Consider the Nobel prize. In 2009, it was awarded to five women (three of them scientists) and eight men, the narrowest gender gap since its inception.

The scientific community in
Three major themes

• What are the deep structural forces that drive social instability and political violence?
  – United States from the 1970s to the present
• All complex human societies experience periodic waves of political instability
  – a historical database of past societies falling into crisis – and emerging from it
• Work in progress and future research
  – massively expanding the historical database of crises/recovery
  – building country-specific models connecting macro-to micro-dynamics
Structural Forces Driving Social Instability and Political Violence

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Brief explanation</th>
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<tbody>
<tr>
<td>Mass mobilization</td>
<td>When the supply of labor exceeds its demand, the price of labor decreases, depressing the living standards for the majority of population, thus leading to popular immiseration and growing <strong>mass-mobilization potential</strong>, but creating favorable economic conditions for the elites.</td>
</tr>
<tr>
<td>Intraelite competition</td>
<td>Favorable economic conjuncture for the elites results in increasing numbers of elites and elite aspirants, as well as runaway growth of elite consumption levels. Elite overproduction results when elite numbers and appetites exceed the ability of the society to sustain them, leading to spiraling <strong>intraelite competition</strong> and conflict.</td>
</tr>
<tr>
<td>State fragility</td>
<td><strong>A fiscal crisis</strong> reduces the state’s control of the coercive apparatus (police and army). The state’s <strong>legitimacy crisis</strong> undermines the willingness of the elites and the population to defend state institutions against the assault by radical groups.</td>
</tr>
<tr>
<td>International environment</td>
<td>Whereas the first three mechanisms are internal, societal stability is also affected by external factors: <strong>geopolitical</strong> (e.g., foreign support for the opposition), <strong>geo-economic</strong> (shifting prices of international commodities), and <strong>geo-cultural</strong> (a successful revolution in a culturally similar country).</td>
</tr>
</tbody>
</table>

Well-being/Immiseration I: Why did real wages stop growing?

Real wage, \( W_{r,t} \), as a function of:

- GDP per capita
- Labor demand/supply ratio
- Extra-economic factors: norms and institutions

Regression model:

\[
\log W_{r,t} = A + \alpha \log \left( \frac{G_t}{N_t} \right) + \beta \log \left( \frac{D_t}{S_t} \right) + \gamma \log C_t + \epsilon_t
\]
\[
\log W_{t,r} = A + \alpha \log \left( \frac{G_t}{N_t} \right) + \beta \log \left( \frac{D_t}{S_t} \right) + \varepsilon_t
\]

Full model: GDP, Labor Supply/Demand, Social Norms*

*proxied by real minimum wage

\[
\log W_{t,r} = A + \alpha \log \left( \frac{G_t}{N_t} \right) + \beta \log \left( \frac{D_t}{S_t} \right) + \gamma \log C_t + \varepsilon_t
\]
Well-Being II: Additional Proxies

- Biological well-being
  - average expectation of life
  - population stature (average heights)
- (for other proxies see *Ages of Discord*)


Well-Being: life expectancy

The Effect on the Elites

- Elites: small percent of the population who concentrate social power in their hands
- Declining relative wages means not only immiseration of large segments of population, but also enrichment of those who consume labor – the elites and elite aspirants
  - elite numbers (and appetites) grow
  - high rate of upward social mobility

Proportion of multimillionaires in relation to the total population, 1983–2007

(Wolff 2010: Table 3) in constant 1995 dollars.

<table>
<thead>
<tr>
<th>year</th>
<th>Percent of households with net worth exceeding:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mln</td>
</tr>
<tr>
<td>1983</td>
<td>2.9</td>
</tr>
<tr>
<td>1986</td>
<td>3.3</td>
</tr>
<tr>
<td>1992</td>
<td>3.3</td>
</tr>
<tr>
<td>1995</td>
<td>3.0</td>
</tr>
<tr>
<td>1998</td>
<td>4.7</td>
</tr>
<tr>
<td>2001</td>
<td>5.5</td>
</tr>
<tr>
<td>2004</td>
<td>5.8</td>
</tr>
<tr>
<td>2007</td>
<td>6.3</td>
</tr>
</tbody>
</table>
“Elite Overproduction”

- Growing elite numbers and consumption levels eventually overshoot the productive base
  - large segments of the elites find themselves lacking resources to maintain status
- Since the number of power positions is limited, segments of elites/elite aspirants must be denied access to them
- Rise of the counter-elites: “surplus” elites who challenge the established elites, even by violent means
- As a result, elite overproduction drives up intra-elite competition and sociopolitical instability

<table>
<thead>
<tr>
<th>Year</th>
<th>House</th>
<th>Senate</th>
<th>Both chambers</th>
<th>Millionaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1233</td>
<td>191</td>
<td>1424</td>
<td>no data</td>
</tr>
<tr>
<td>2002</td>
<td>1299</td>
<td>146</td>
<td>1445</td>
<td>32</td>
</tr>
<tr>
<td>2004</td>
<td>1212</td>
<td>189</td>
<td>1401</td>
<td>30</td>
</tr>
<tr>
<td>2006</td>
<td>1317</td>
<td>166</td>
<td>1483</td>
<td>42</td>
</tr>
<tr>
<td>2008</td>
<td>1377</td>
<td>168</td>
<td>1545</td>
<td>51</td>
</tr>
<tr>
<td>2010</td>
<td>1897</td>
<td>308</td>
<td>2205</td>
<td>58</td>
</tr>
<tr>
<td>2012</td>
<td>1711</td>
<td>251</td>
<td>1962</td>
<td>48</td>
</tr>
</tbody>
</table>

Numbers of candidates (including the primaries) that ran for House and Senate seats: 2000–2012.
(Source: Center for Responsive Politics, OpenSecrets.org)

The average cost of winning an election to the House, 1986–2012 (in thousands of inflation-adjusted 2012 dollars) and the total amount (in millions of 2012 dollars) spent by major party candidates.
Data source: The Campaign Finance Institute
Part I: conclusions

- Two major structural trends are undermining social and political stability of the US
- Declining well-being of large segments of the American population drives mass-mobilization potential
- Elite overproduction drives intra-elite competition and conflict

Three major themes

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Where do waves come from?

Real wages
(source: MeasuringWorth)

GDP per capita
(source: MeasuringWorth)

Relative Wage: Scaling Wage by GDPpc

Relative Wage
(source: MeasuringWorth)
Economic inequality as a “proxy” (indirect indicator) of structural pressures for instability

Summary of well-being indicators
Elite overproduction/competition indicators

The “double spiral” of well-being and elite overproduction
Social and political instability in the US

Instability Waves in France (Sorokin's Index)

Instability Waves in Rome

Delving deeper into the past
The pessimistic view:
“Death is the Great Leveler”

Inequality can decrease only by major, violent shocks:
• Mass-mobilization warfare
• Transformative revolution
• State failure/collapse
• Lethal pandemic

Note: I see inequality as a “proxy” (indicator) of social pressures undermining stability, rather than a direct cause of it

My take: a bit more optimistic

• Entry into crisis (“revolutionary situation”) is relatively stereotypical
  – mass-mobilization, intra-elite conflict, state fragility
• The exit from the crisis is hugely contingent
  – a “fan” of possible outcomes: from relatively mild to catastrophic
Sample:
30 societies experiencing revolutionary situations (Europe, Russia, Middle East, India, China, US)

Severity components of the outcome:
- Population decline
- Population decline > 50%
- Lethal epidemic
- Elite: massive downward mobility
- Elite: dispossession or extermination
- Ruler executed or assassinated
- Transformative revolution
- Civil war
- Prolonged civil wars (>100 years)
- Territorial fragmentation
- External conquest
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Predicting social unrest/political violence is difficult

“The Soviet Union would not break apart because Soviet generals would never permit the dissolution of the state they were sworn to defend”

– Jerry Hough, a prominent Soviet expert; October 1991

<table>
<thead>
<tr>
<th></th>
<th>Tunisia</th>
<th>Egypt</th>
<th>Libya</th>
<th>Syria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failed States Index</td>
<td>122, 122, 131</td>
<td>36, 40, 43, 49</td>
<td>115, 111, 112, 111</td>
<td>40, 35, 39, 48</td>
</tr>
<tr>
<td>State Fragility Index</td>
<td>97, 89, 100</td>
<td>53, 50, 48, –</td>
<td>82, 75, 100, –</td>
<td>72, 75, 75, –</td>
</tr>
<tr>
<td>Economist Intelligence Unit</td>
<td>67, –, 134, –</td>
<td>75, –, 106, –</td>
<td>133, –, 137, –</td>
<td>65, –, 94, –</td>
</tr>
<tr>
<td>Index of State Weakness</td>
<td>–, 112, –, –</td>
<td>–, 78, –, –</td>
<td>–, 86, –, –</td>
<td>–, 59, –, –</td>
</tr>
</tbody>
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*Rankings listed by year: 2007, 2008, 2009, 2010, respectively. Each ranking number indicates that there were n countries at greater risk of instability or failure than the listed country that year.

Erroneous Instability Ranking of “Arab Spring” Countries, 2007-2010.
Multipath Forecasting (MPF) Engine

- Empirically grounded in historical analysis of a massive database of past crises/recoveries
- Integrating qualitative ("Thick Data") and quantitative ("Big Data") approaches
- Translating between macro processes (structural pressures) and micro-dynamics
  - contending rival elite groups, state and non-state organizations (including radical ones), and individuals
<table>
<thead>
<tr>
<th>General Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Structural causes of Ages of Discord:</td>
</tr>
<tr>
<td>• declining population well-being and growing popular discontent</td>
</tr>
<tr>
<td>• elite overproduction, intra-elite competition and conflict</td>
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<tr>
<td>• In past societies these structural conditions usually end with major outbreaks of political violence—revolutions and civil wars</td>
</tr>
<tr>
<td>• We are on track for the predicted instability peak in the 2020s</td>
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<tr>
<td>• the underlying structural pressures are still building</td>
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