

Evolution and Trends of Climate / Conflict Research

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What do we want to know?

- Will climate change generate **greater levels of conflict**?
 - When?
 - Where?
 - How much?
 - What types?
- What **aspects of climate change** will elevate risks the most?
 - Extreme events
 - Shifting climate regimes
 - Ecological shifts
- What shapes **political sensitivity to climate stress**? What factors shape the dose-response relationship concerning climate stress and conflict?
- Can we **use this knowledge practically**?
 - Early warning
 - Targeted interventions
 - Development priorities

(1) Will Climate Change Generate more Conflict?

Almost
definitely

Clarification 2

This statement makes no claims about causal efficiency; it does not privilege climate stress relative to other conflict risk factors; **it is not an exercise in climate determinism.**

Clarification 1

Number or magnitude of conflicts not predictable with current methods

This statement means “**risk of conflict will go up** relative to hypothetical world of no climate change, in the absence of effective adaptation”

How do we know this?

Climate stress

Drought
Flood
Temperature anomalies

Direct biophysical

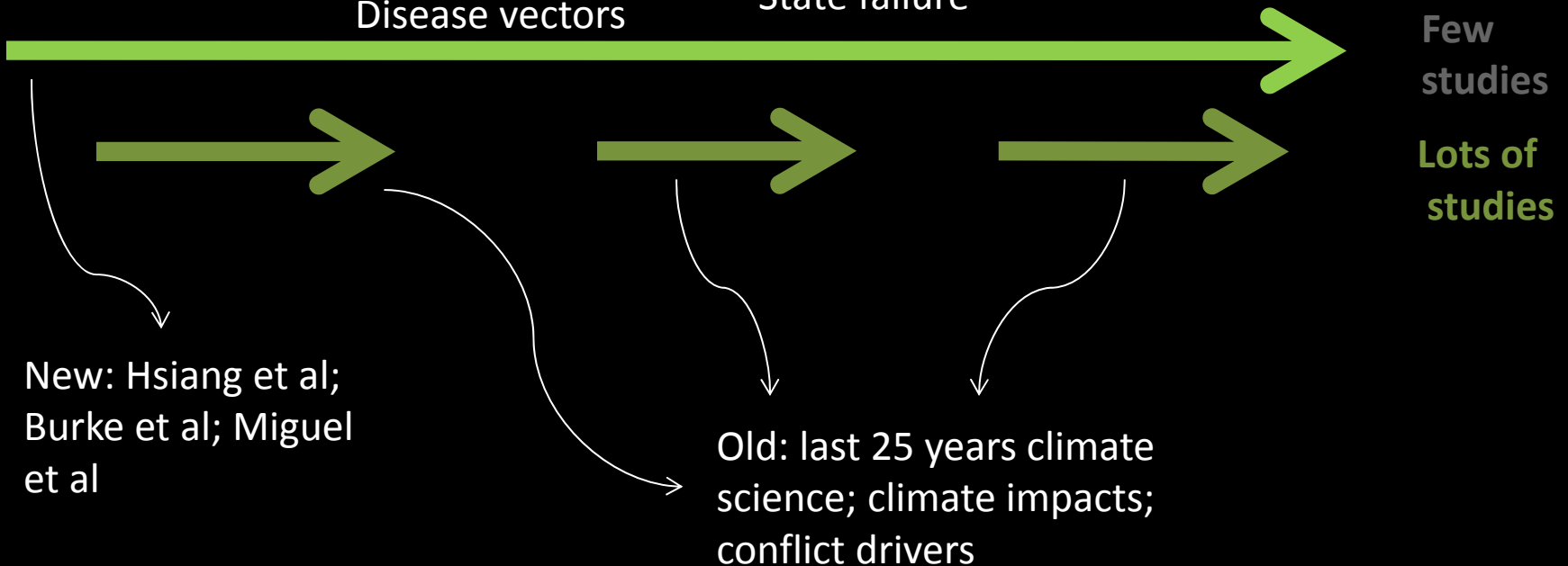
Water stress
Agricultural stress
Livestock stress
Ecosystem stress
Disease vectors

Indirect human security

Pressure to migrate
Poverty
Health crises
Social unrest
State failure

Conflict

Civil War
[International war]
Communal violence



Firm knowledge across the whole chain is very limited

- Almost all the evidence comes from statistical relationship between past **variability** and **internal war**.
 - Low rain /high temperature / ENSO effect → Elevated internal war risk
- Data drives big-picture quantitative research in this direction. What's left out:
 - Other stress (floods, climate shift)
 - Other outcomes (international war, communal war)

A Plea

- Let's agree on basis for model intercomparison
 - Conflict data sets
 - Climate data sets
 - Benchmark model specifications
 - Be sensitive to evaluation criteria in multiple relevant disciplines

Security Dilemmas?

- Core social science finding: many security problems stem from downward spiral of action/reaction
 - One actor seeks to improve security; other actor perceives that effort as diminishing own security; seeks to correct;
- Hard to research, especially for novel threats
- Optimism about international conflict is grounded in part on ignorance

Example of climate responses that may trigger security dilemmas

- Complications from disappearance of small island states
- Difficulty managing newly navigable Arctic ocean
- International tensions regarding shared water resources
- Spiraling political crises stemming from geoengineering or other policy dynamics
- Livelihood impacts from climate policy responses (land grabs, biofuels, REDD, ...)

(2) What aspects of climate change will elevate risks the most?

We do not have good answers

Statistical evidence of historic data artificially limited by data constraints

We know what variations that tend to repeat every 5 years or so do; we don't know what 50- or 100-year events do.

We know about annual shocks. We don't know shocks that persist over several years.

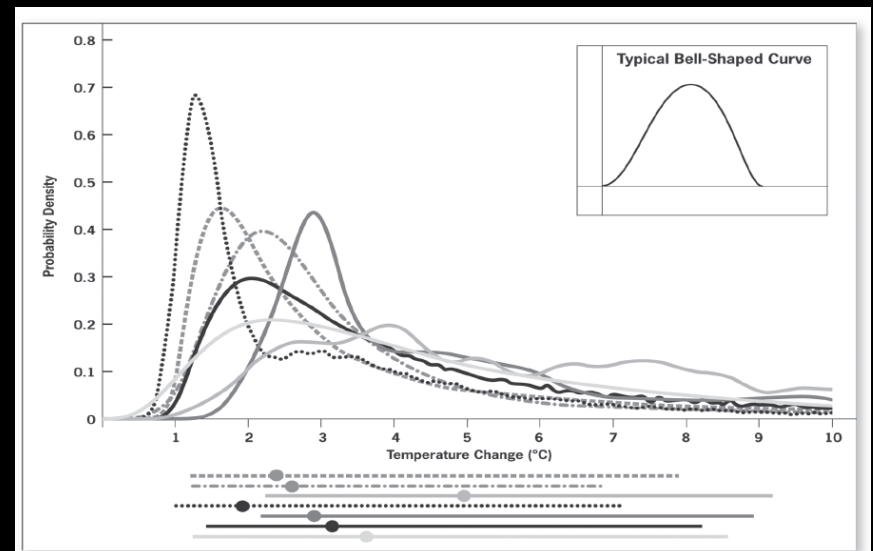
We know what variation around a mean does; we don't know what shift in the mean does

Implications:

Resist temptation to leap from knowledge about past *variability* to inferences about future *change*.

Start investing in modeling techniques that permit qualified inferences about the future

Pay more attention to “fat tails” and fundamental discontinuities



(3) What shapes political sensitivity to climate stress?

This question has not been asked in depth

Conflict literature is fragmented on general risk factors: this creates challenges

Breakthroughs in statistical studies push this question further into background (these are nuisances to be controlled for – methods succeed when these effects become invisible)

How to respond? Consider focus on dangerous transitions

- Autocracy to Democracy
- Ambiguous property rights to clear property rights
- High mortality/fertility to low mortality/fertility
- Communal property rights to private property rights
- Plundered resource rents to invested resource rents
- Squandered ecosystem services to managed ecosystem services

(4) Can we use this knowledge practically?

Stuck with platitudes and heuristics

Monitor key elements in causal chains

Desperate need for policy experiments and targeted research on effectiveness

What works / doesn't work in high conflict-risk countries?

What custom approaches are worth trying in high-risk countries?

Structural handicap: Climate change community organized around century time scale. Conflict community organized around 0.5 – 2 year time scale.

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Summary

- Climate change will increase conflict risk
 - let's move on and take the implications seriously
- Start turning analytical lens toward the future, not just the past
 - Crash effort to understand decadal time frame
- Bring politics back in
 - Combine best of qualitative case work with refined statistical models
- Act as if this all really matters
 - focus on policy implications explicitly