

## The Research Program

The determinants of repression are important and understudied. These papers join novel theoretical accounts of the incentives facing leaders and challengers with appropriate models for rigorous empirical analysis of the determinants of human rights abuses. We differentiate the effects of repression on contenders for power and ordinary citizens to argue that the widely accepted belief that democracy decreases human rights only holds for relatively low levels of abuse. Expanding on this result, we explore the dynamic determinants of abuse to underscore the distinctiveness of repressing mass publics. We show that existing models explain more of the less important variation, that is, variation among the lowest categories of abuse; our models fare poorly in explaining the most egregious of human rights abuses.

## Research Questions

1. Does the relationship between democracy inhibit human rights abuses?
2. How do human rights evolve through time?
3. Does the relationship between democracy and human rights depend on levels of development?
4. How should human rights abuses be measured? Modeled? Bayesian measurement theory for reconciling events and standards-based measures.

## Answers: Theory

1. The effect of democracy on human rights depends on whose rights are abused. Contestants for office are less responsive than are mass publics to the application of repression.
2. Evolution of ordered processes should return a probabilistic map over the  $y$  space. The quantity of interest is of dimension  $j$  – the number of ordered categories – not a scalar, because the expected value of  $y$  must be in the domain of  $y$ . The temporal evolution must also account for transition probabilities.
3. We don't understand Lipset's correlation between democracy and development. Is it a relevant concern for the determinants of human rights abuses?
4. Bayesian measurement theory for reconciling events and standards-based measures.

## Answers: Models

1. Ordered regression models relaxing parallel regressions.
2. Markovian models of ordinal transition probabilities (parallel regressions).
3. Human rights, development, and democracy using (3D) thin-plate and tensor product splines.
4. Bayesian measurement theory for reconciling events and standards-based measures.

## The explained: Political Terror Scales

• **Level 1:** "Countries ... under a secure rule of law, people are not imprisoned for their views, and torture is rare or exceptional ... political murders are rare."

• **Level 2:** "There is a limited amount of imprisonment for nonviolent political activity. However, few persons are affected, torture and beating are exceptional ... political murder is rare."

• **Level 3:** "There is extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without trial, for political views is accepted ..."

• **Level 4:** "The practices of **Level 3** are expanded to larger numbers. Murders, disappearance are a common part of life... In spite of its generality, on this level terror affects primarily those who interest themselves in politics or ideas."

• **Level 5:** "The terrors of **Level 4** have been expanded to the whole population... The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals ..."

## The explainers

Democracy    Development  
Military govts. Leftist govts.  
Lagged  $y$     British colonies  
Population    Chg. in Population  
GDP            Chg. in GDP

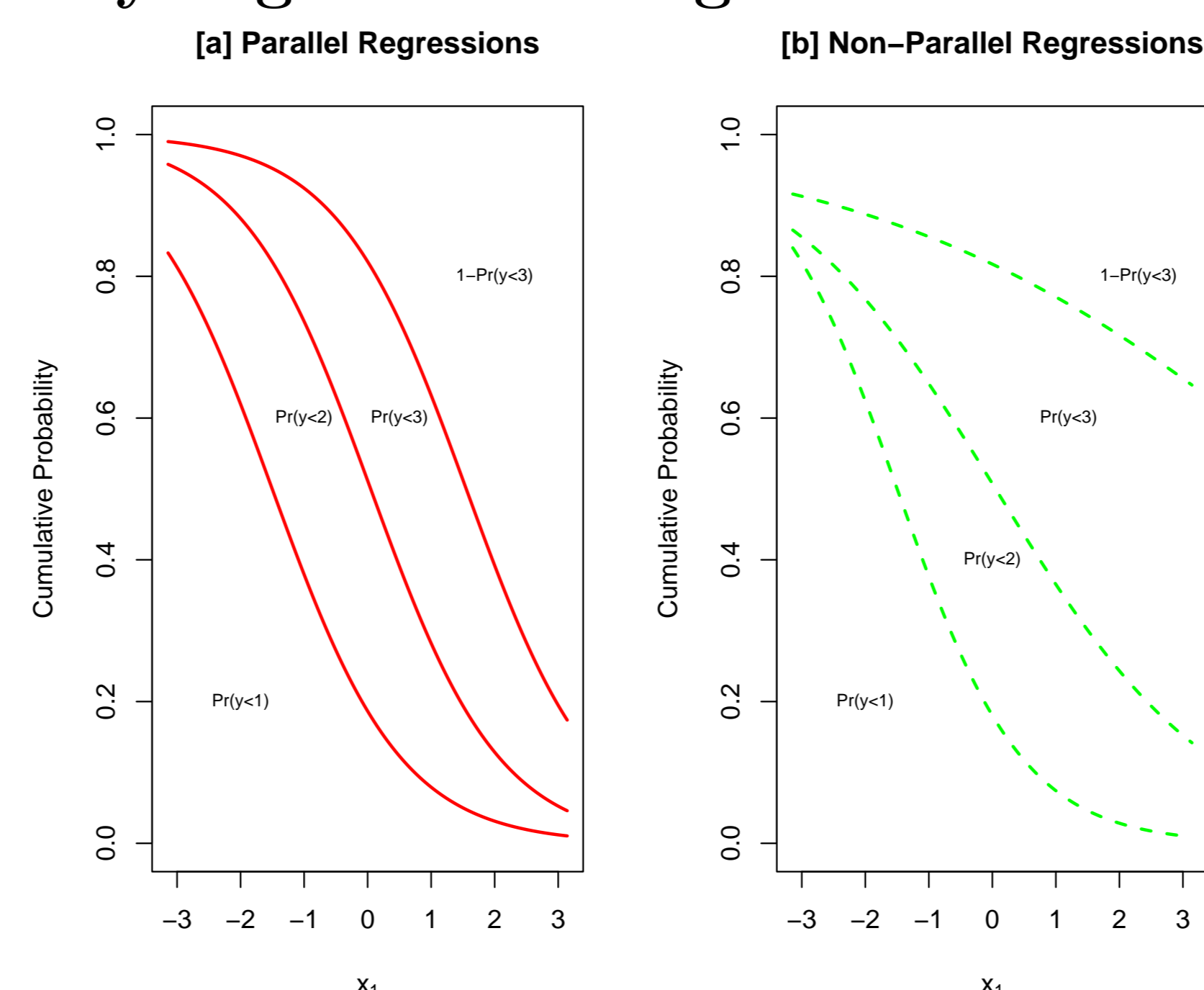
## The Ordered Regression Model

$$y^* = \vec{x}\beta + \epsilon \quad (1)$$

$$P(y = j | \vec{x}, \beta, \tau) = F(\tau_j - \vec{x}\beta) - F(\tau_{j-1} - \vec{x}\beta). \quad (2)$$

Take a derivative with respect to  $x$  and  $\beta$  must be scalar valued. **Implication:  $\beta$  is an unobserved constant.**

## Analyzing Parallel Regressions



## The Meaning of Order

According to Amemiya (1985): a model is unordered if it is not ordered. Compact, convex, mutually exclusive partition of  $\mathbf{R}$ . Alternatives: nonsuccessive partitions or higher order space. So how do we know whether we have a nominal or ordered problem? Amemiya argues that econometrics doesn't use the model because of multidimensionality.

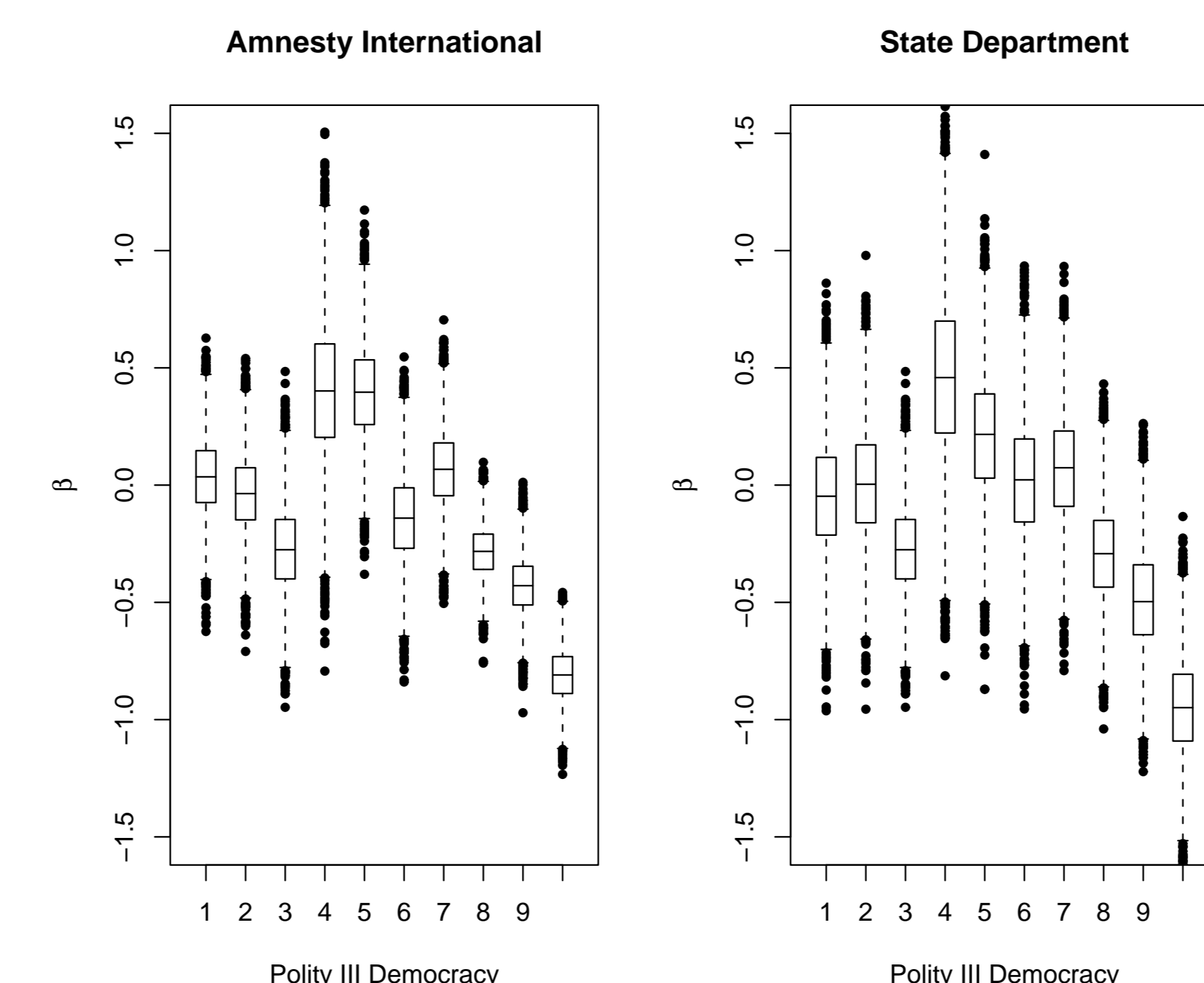
Any decent text on applied categorical analysis gives tests, but they should be weighed carefully. Numerous omnibus tests exist for parallel regressions and violations. However, an omnibus test does not ensure that the probability model remains a probability model, e.g. negative outcome probabilities. This led Amemiya (1985) to argue that economists don't use it because of complex functional latent spaces.

## Monte Carlo Analysis: Example

	Truth	Parallel Regressions	Non-Parallel Regressions		
	$\hat{\beta}$	$\sqrt{I(\hat{\beta})}$	$\hat{\beta}$	$\sqrt{I(\hat{\beta})}$	
$x_{1:0,1}$	.7	0.33 [0.23, 0.43]	0.70 [0.58, 0.85]	0.07 [0.06, 0.08]	
$x_{1:1,2}$	0	0.048 [0.045, 0.052]	0.00 [-0.12, 0.12]	0.06 [0.056, 0.065]	
$x_2$	2	1.89 [1.72, 2.05]	0.09 [0.08, 0.10]	2.01 [1.82, 2.20]	0.10 [0.09, 0.11]
$\hat{\tau}_1$	-2	1.88 [1.65, 2.15]	0.13 [0.12, 0.14]	2.01 [1.77, 2.29]	0.141 [0.129, 0.155]
$\hat{\tau}_2$	1	-0.94 [-1.16, -0.73]	0.11 [0.106, 0.12]	-1.00 [-1.23, -0.78]	0.118 [0.11, 0.127]

## Davenport and Armstrong (2004, AJPS)

Davenport and Armstrong advance a theory relating democracy and respect for human rights by virtue of thresholds. This leads them to expect that democracy inhibits the abuse of human rights once a state has become sufficiently democratic. The basic idea is that  $\frac{\partial \text{Human Rights}}{\partial \text{Democracy}}$  is not scalar-valued. The result is replicated in Figure 2.



## Results from Non-proportional Models

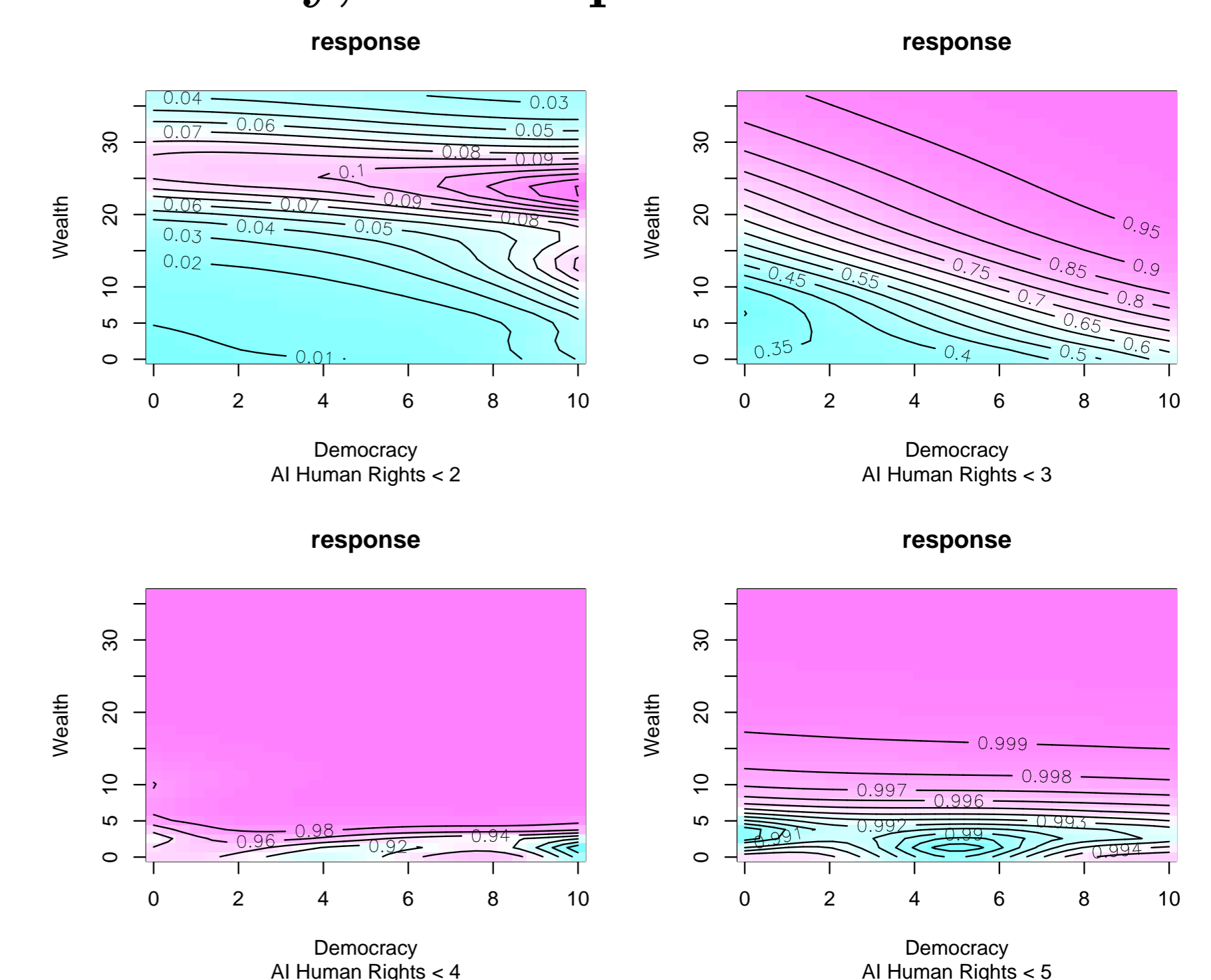
	Polity III		W	
	$\hat{\beta}$	Std. Err.	$\hat{\beta}$	Std. Err.
Democracy:1	-0.18	0.024	-2.22	0.284
Democracy:2	-0.108	0.021	-1.093	0.255
Democracy:3	0.02	0.025	-0.256	0.313
Democracy:4	-0.012	0.037	-0.603	0.445
Military govts.	0.191	0.114	0.274	0.116
British Colonies	-0.379	0.106	-0.327	0.097
Leftist govts.	-0.461	0.144	-0.19	0.122
Log(Population)	0.218	0.035	0.246	0.028
Chg. In Population	6.123	4.184	-0.022	0.01
Civil Wars	1.416	0.176	1.382	0.168
International Wars	0.519	0.162	0.417	0.155
Lagged Abuse	2.173	0.073	2.252	0.069
Wealth	-0.07	0.012	-0.068	0.01
(Intercept):1	-4.752	0.592	-4.819	0.435
(Intercept):2	-8.528	0.596	-8.877	0.462
(Intercept):3	-12.062	0.632	-12.566	0.505
(Intercept):4	-14.778	0.664	-15.189	0.548

## Findings

- The effect of democracy on human rights differs by ordered comparison. Consistent with the theory, at low levels of abuse, democracy decreases human rights violations. Democracy inhibits abuse where such abuses are least egregious.
- Holds for  $W$  and the residual of (Polity III) democracy from  $W$ .

**The punchline: Democracy may inhibit human rights abuses, but the effects are not constant.**

## Democracy, Development and HR



**Punchline: Development does more than democracy and it always matters**

## Where the project stands ...

Responding to measurement controversies, we are developing hybrid item-response models to combine a broad variety of disparate indicators for comparison. In the first paper, we combine standards-based (ordered categorical variables of heterogeneous metrics) and events-based data to assess previously irreconcilable approaches in a common analytical framework. The final installment brings the concerns together in a dynamic simultaneous latent-variables problem. With a measure of repression in hand, we measure threat to the leader and to reexamine the repression-dissent nexus.

## The Future

Numerous nonproportional models exist that are not covered here (indeed, this is but the cumulative family). Stopping/continuation ratio models, adjacent category models, and many others are nonparallel by design. In subsequent work, I plan to explore these models in greater detail. Other papers in the project show that debates over "democracies win wars" depend critically on both the measurement and the treatment of wars that do not result in clear winners or losers.

## Acknowledgements

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