

# A Human Rights Network Influences Countries' Torture Policies

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## Motivation

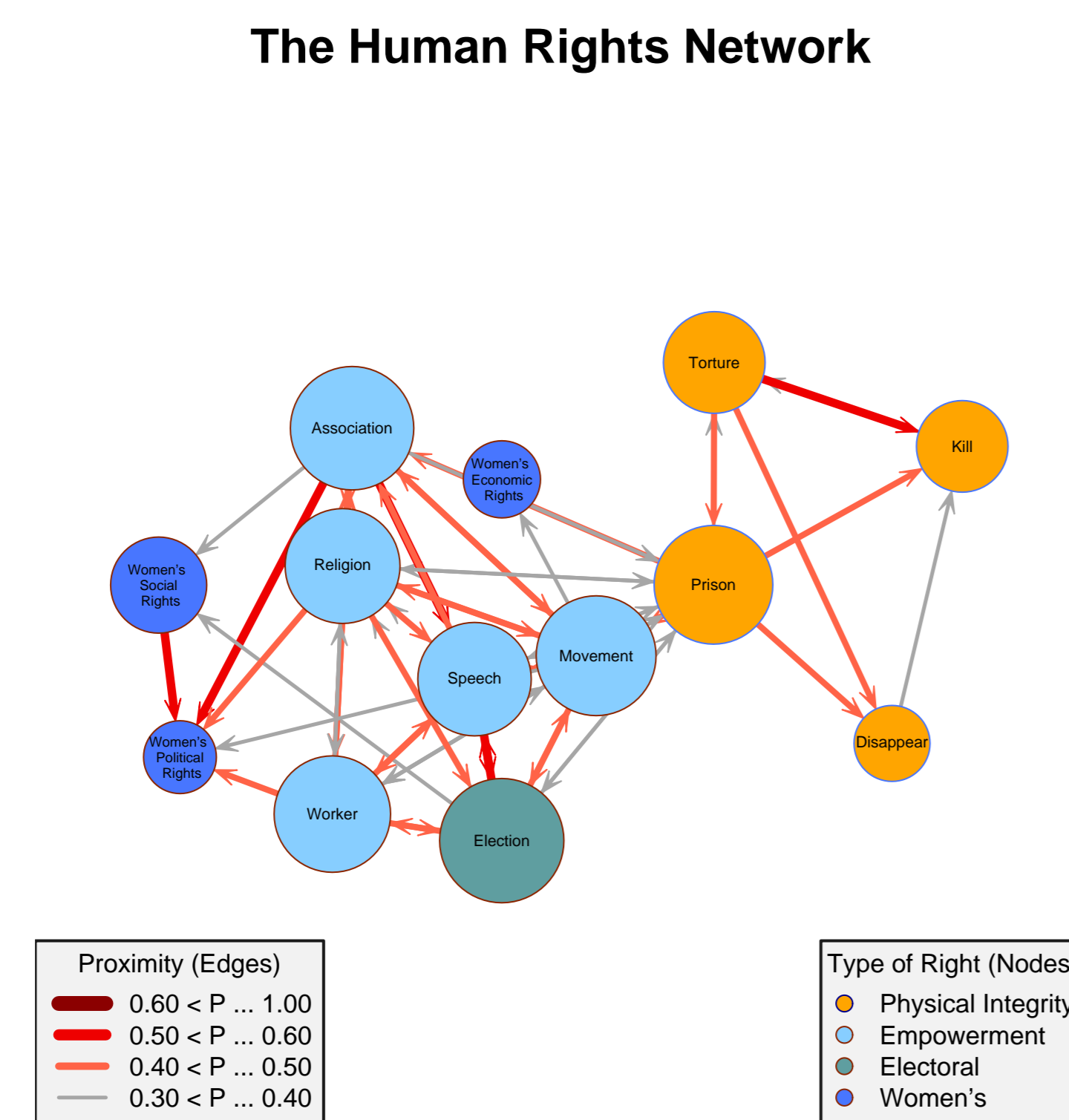
- Countries repress their citizens despite widespread acceptance of the Universal Declaration of Human Rights and the other international human rights treaties; yet, research does not directly assess the complex interdependent relationships among the rights that these treaties contain.
- This study utilizes a novel network analytic method (Hidalgo et al., 2007) to analyze how the complex relationships between rights violations develop as states encroach on the liberties of individuals.
- The human rights network links 13 human rights variables (Cingranelli and Richards, 1999) to reveal the most likely path to torture.

## Network Concepts

- **Proximity** between human rights:
  - Measures how close one right is to another in the human rights network
  - Conceptualized as

$$\phi_{ij} = P(i = 1 | j = 1) - P(i = 1 | j = 0) \quad (1)$$

- The human rights network is a system-wide characteristic, therefore proximity values vary across years but not across countries in a given year.



**Figure 1:** The human rights network, with human rights as nodes and proximity values ( $\phi_{ij}$ ) as edges. The plot is generated for all  $\phi_{ij} > 0.3$  between extreme violations in the average year.

- **Connectedness** of a country-year to a particular right:
  - Measures the total network influence on each right within the network
  - The connectedness around right  $i$  for for a given country year is conceptualized as

$$\omega_i = \frac{\sum_j x_j \phi_{ij}}{\sum_j \phi_{ij}} \quad (2)$$

- Since the connectedness variable positions a country in the human rights network, values for  $\omega_i$  are unique for each country in each year.

## Statistical Model

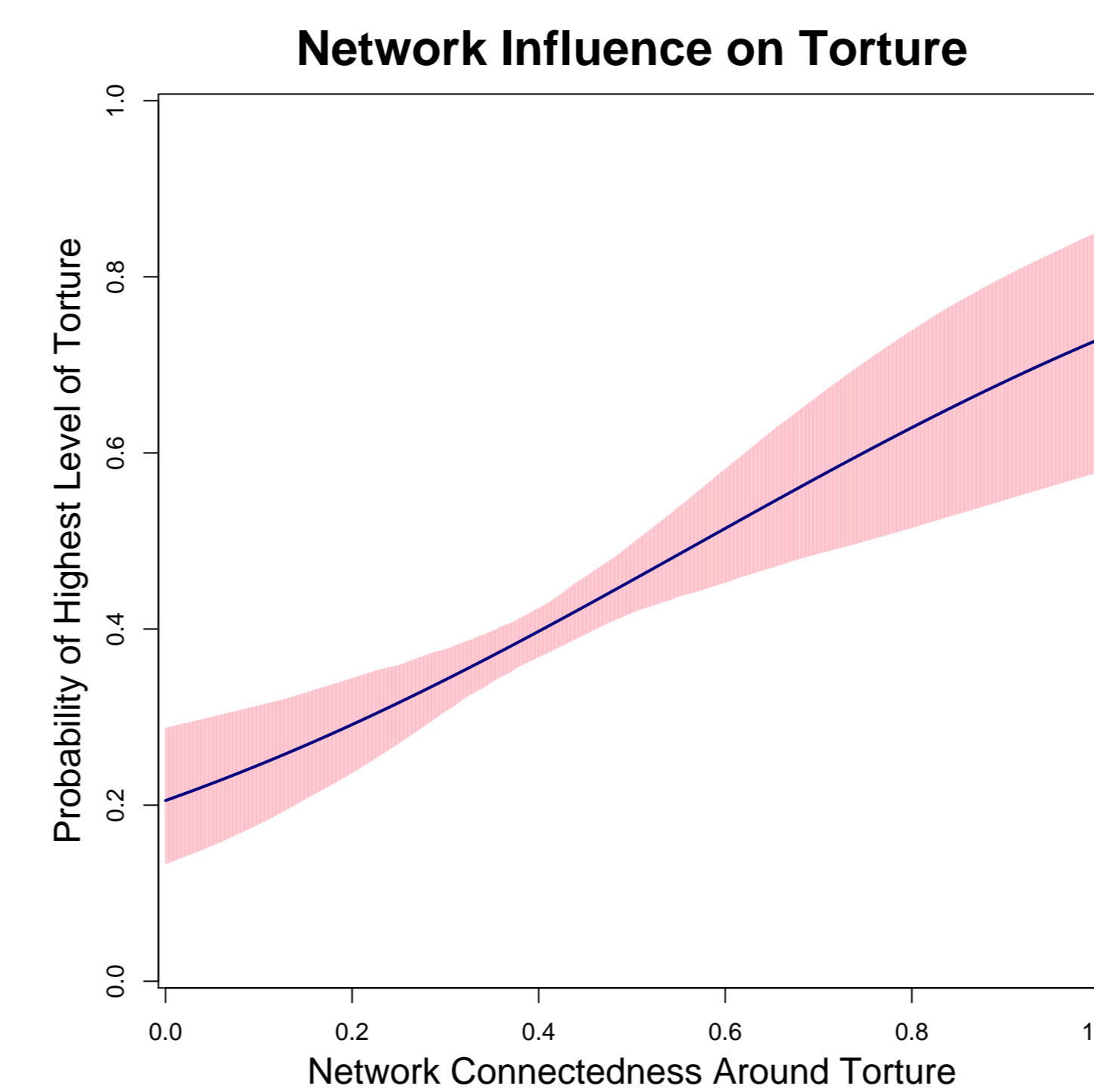
The logistic regression model for the probability of observing a violation of torture by country  $k$  in time  $t$ .

$$P(y_{k,t} = 1 | \theta) = \frac{1}{1 + e^{-\theta}}, \quad (3)$$

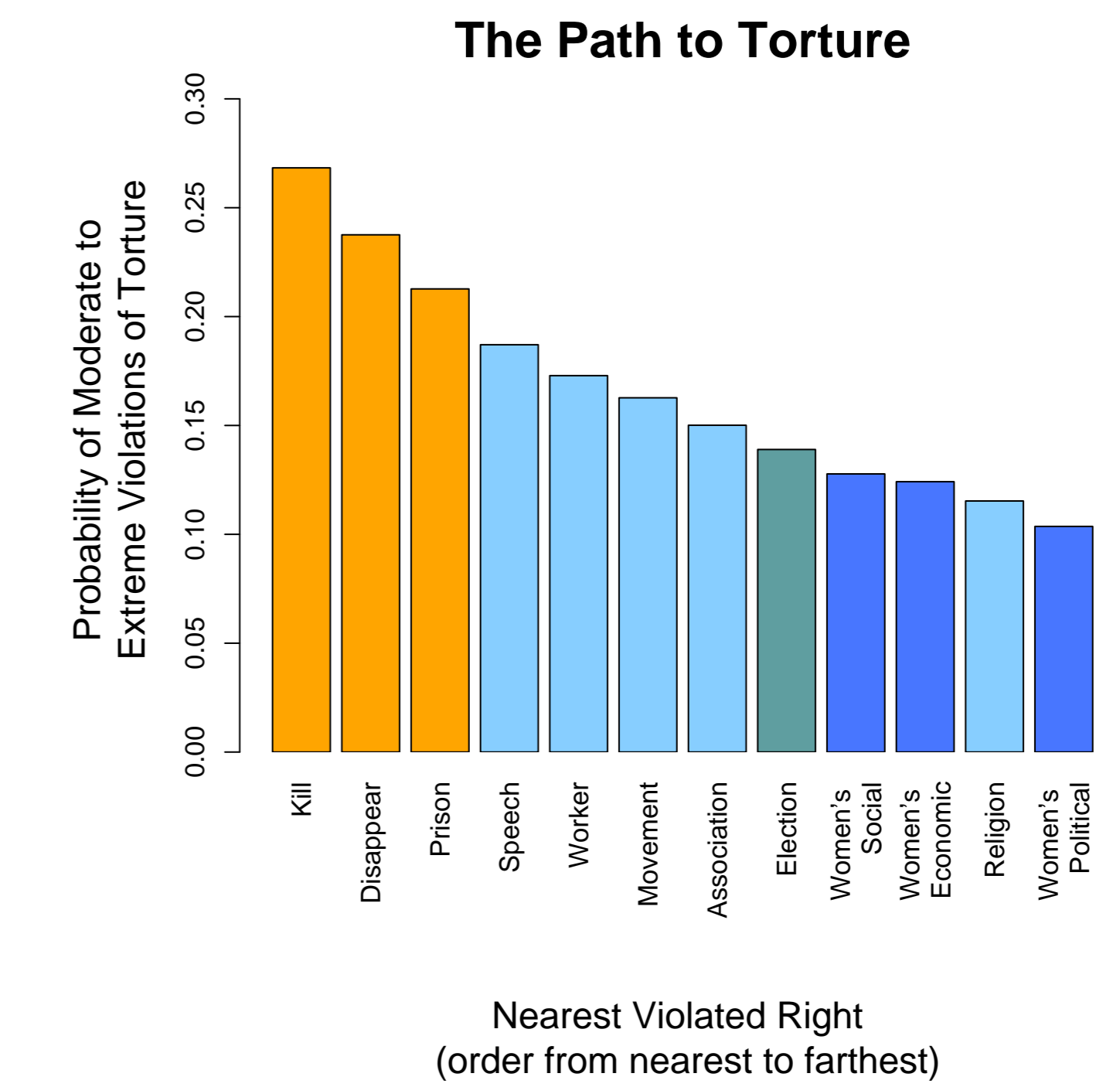
$$\theta = \alpha + \beta_1 \omega_{k,t-1} + \beta_2 y_{k,t-1} + \beta_3 \omega_{k,t-2} + \beta_4 y_{k,t-2} + \gamma M_{k,t-1} + \epsilon_{k,t}$$

Where  $M$  is a set of control variables, taken from a standard human rights model (Poe, Rost and Carey, 2006) and  $\omega$  is the connectedness variable around torture.

## Results



**Figure 2:** The expected value and 99% confidence intervals for the probability of extreme violations of torture at each level of connectedness. Moving from one standard deviation less than the mean connectedness score to one standard deviation greater than the mean results in a 93% increase in the probability of extreme violations of torture, suggesting that torture violations are strongly influenced by the human rights network.



**Figure 3:** The probability of extreme violations of torture given the “nearest” violated right in the previous year, with the x-axis ordered by the proximity of each right to torture. Probabilities estimated from simulations on a counterfactual dataset where non-human-rights variables were held constant at their means and human rights variables were randomly sampled from the set of all permutations of human rights scores. Nations were substantially more likely to engage in torture if they have recently violated a “nearby” right.

## Implications

- States that broadly violate other human rights are more likely to start torturing and less likely to quit.
- The network model of rights violations shows that previously-ignored, complex interdependencies can help us to predict which states are most likely to start torturing their citizens.
- Future research should therefore examine network influences on other human rights practices.

## References

- Cingranelli, David L. and David L. Richards. 1999. “Measuring the Level, Pattern, and Sequence of Government Respect for Physical Integrity Rights.” *International Studies Quarterly* 43(2):407–417.
- Hidalgo, C. A., B. Klinger, A. L. Barabási and R. Hausmann. 2007. “The Product Space Conditions the Development of Nations.” *Science* 317:482–487.
- Poe, Steven C., Nicolas Rost and Sabine C. Carey. 2006. “Assessing Risk and Opportunity in Conflict Studies: A Human Rights Analysis.” *Journal of Conflict Resolution* 50(4):484–507.