UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WASHINGTON

ROGELIO MONTES and MATEO ARTEAGA,	§	
	§	
Plaintiffs,	§	
	§	
vs.	§	**NO: 12-CV-3108-TOR**
	§	
CITY OF YAKIMA, *et al*,	§	
	§	
Defendants	§	

REPORT OF JOHN ALFORD, Ph.D.

I have been retained as an expert by the city of Yakima, Washington. My rate of compensation is $400 per hour. I am a tenured associate professor of political science at Rice University. At Rice, I have taught courses on redistricting, elections, political representation, voting behavior, and statistical methods at both the undergraduate and graduate level. Over the last twenty-five years, I have worked with numerous local governments on districting plans and on Voting Rights Act issues. I have previously provided expert reports and/or testified as an expert witness in voting rights and statistical issues in a variety of court cases, working for the U.S. Attorney in Houston, the Texas Attorney General, members of the U.S. Congress, and various cities and school districts. In the 2001 round of redistricting, I was retained as an expert to provide advice to the Texas Attorney General in his role as Chair of the Legislative Redistricting Board. I subsequently served as the expert for the State of Texas in the state and federal litigation involving the 2001 redistricting for U.S. Congress, the Texas Senate, the Texas House of

Representatives, and the Texas Board of Education, and my testimony was cited by the Court as helpful in their drawing of the US House district map for the 2002 elections. When that court-drawn map was replaced in 2003 with a legislative map (the so called Delay plan), I testified for a group of US House members that were successful in overturning parts of the new map. I am currently an expert for the State of Texas in the consolidated cases challenging the 2011 statewide redistricting. I have worked as an expert in redistricting and voting rights cases in New Mexico, Mississippi, Wisconsin, Florida, and Alabama. The details of my academic background, including all publications in the last ten years and work as an expert, including all cases in which I have testified by deposition or at trial in the last four years, are covered in the attached vita (Appendix B).

I have been retained as an expert to provide an analysis of the *Gingles* test (focusing primarily on prongs two and three) and the totality of circumstances as they apply to elections in the city of Yakima. In preparing this report I have relied on the expert reports and various data files relevant to the preparation of their reports provided in this case by Dr. Richard Engstrom and Mr. William Cooper, data and materials available on the website of the Yakima County Elections Department, and precinct level computations of the proportion of voters with Spanish surnames calculated by Dr. Peter Morrison and by William Cooper.

***Gingles* Two and Three**

Ecological Inference (EI) results for seven elections from 2009 to 2012 are presented in the table included with Professor Engstrom's report. The Ecological

Inference estimates from his report are reprinted here in Table 1 below. In addition, Dr. Engstrom's EI results are supplemented with an independent replication of the same EI estimations using the same data provided by the plaintiffs. Two other techniques commonly used in VRA lawsuits to assess voter cohesion and polarization – homogeneous precinct analysis and ecological regression (ER) – are also provided for comparison.

A. Homogeneous Precinct Analysis

Homogeneous precinct analysis, also referred to as extreme precinct analysis, is the simplest technique used to assess voting patterns. Precincts are selected that all share very high levels of minority voters (typically 90% or above) and the voting results for the minority candidate in the election are compared to precincts selected on the basis of very low minority percentages (typically 10% or less). This allows a comparison the patterns of support for a minority candidate between a set of homogeneously minority voting precincts and a set of homogeneously non-minority voting precincts.

In this case we can use this technique to assess non-Hispanic voting behavior, as in more than half of all the voting precincts less than 10% of the voters casting ballots have Spanish surnames. Unfortunately, we cannot do the same for Hispanic voters. In no precinct in any of the elections covered here do 90% or more of the voters have Spanish surnames. In fact not a single precinct even reaches 50% Spanish surname voters (and only one precinct exceeds 30%). This is unusual and problematic. It is problematic because it reduces our ability to accurately assess the cohesion of Hispanic voters. It is also unusual given that the plaintiffs' claim to be able to draw two districts that will be Hispanic majority districts. In both versions of District 1 in Mr. Cooper's

report precincts 101 and 104 are mostly contained within District 1, and together account for the majority of the geography of the district. In these precincts the percentage of Spanish surname voters in the 2009 Rodriquez general election contest was 20.1% and 15.3% respectively. Similarly, in both versions of District 2 in Mr. Cooper's report precincts 120 and 126 are mostly contained within District 2, and together account for the majority of the geography of district. In these precincts the percentage of Spanish surname voters in the 2009 Rodriquez general election contest was 26.4% and 30.3% respectively.

Mr. Cooper reports that the 2010 Census for Yakima indicates that Hispanics comprise 41.3% of the population of Yakima, and that this Hispanic population is concentrated primarily in eastern Yakima, where Mr. Cooper locates his two demonstration districts. The fact that not a single precinct in Yakima turns out a Hispanic majority of voters in an actual election seems very unlikely, given the numerousness and concentration that the overall population levels and geographic concentration would suggest. The explanation for this disconnect can be found in two sources. The Hispanic population is younger and much less likely to be citizens in comparison to the non-Hispanic population. This alone reduces the Hispanic concentration from over 40 percent of the total population to only 21.6% of the adult citizen population. The Hispanic proportion of registered voters, at 18.5%, is close to what we would expect given the eligible population percent. It is principally the low levels of Hispanic turnout that reduce the share of actual voters to levels typically below 7%.

B. Ecological Regression Analysis

Ecological regression analysis is the other technique commonly used in VRA lawsuits to assess voter cohesion and polarization. In a nutshell, regression is a mathematical technique for estimating the single best fitting straight line that could be drawn to describe the relationship between two variables in a scatter plot. Ecological regression is distinct from simple regression in the fact that it relies on a data set made up of precinct level aggregations of voters and election results, rather than a data set of individual voter characteristics and vote choices.

Applied to voting rights cases, the logic of regression analysis is to determine to what degree, if any, the vote for a candidate increases in a linear fashion as the concentration of voters of a given ethnicity in the precincts increases. The estimated coefficients for the intercept and for the slope form the estimated equation of the actual regression line, with the intercept defining the point at which the line crosses the vertical axis, and the slope indicating rise over run. More intuitively, the intercept tells us the predicted value of the dependent variable when the independent variable is equal to zero, or in this case the predicted share of the vote for the Hispanic candidate when the percent of actual voters that with Spanish surnames in a precinct is zero. Similarly, the slope tells us the predicted change in the dependent variable for a one unit change in the independent variable, or in this case the predicted change in the vote for the Hispanic candidate for a one percentage point change in the percent of the actual voters that have Spanish surnames in the precinct. By using the slope and the intercept we can compute an estimate for the vote for the Hispanic candidate when the percent of the voters in a precinct with Spanish surnames equals 100. This estimate is then an estimate of Hispanic

(or at least Spanish surname) voting cohesion for the candidate. Similar procedures can be used to access non-Spanish surname (our proxy for non-Hispanic) voting cohesion.

In addition to the estimates of Hispanic and non-Hispanic voting generated from the regression estimates for the slope and intercept, there is also a measure of the overall 'goodness of fit' for the regression line called the '$R^{2'}$ that is typically reported. The R^2 ranges from 0 to 1.0, and is generally used as a "goodness-of -fit" measure to describe how tightly the actual data points are clustered around the regression line. The can be interpreted as the proportion of variation in the dependent variable that is explained or accounted for by the independent variable. In this case, the proportion of the variation in the percentage of the votes cast for the Hispanic candidate that can be explained by variation in the percentage of voters in a precinct that have Spanish surnames. For example, an R^2 close to zero would indicate that the ethnicity of voters was not linearly related to variation support for the Hispanic candidate. Similarly, an R^2 closer to 1.0 would indicate that the ethnicity of voters was very closely related (linearly) to variation support for the Hispanic candidate. An R^2 of .50 would indicate that about half of the variation support for the Hispanic candidate could be accounted for by variations in the ethnicity of voters, and the remaining half could be attributed to other factors impacting vote choice.

C. Ecological Inference Analysis

Dr. Engstrom relies on the most recent methodology for the analysis of ecological data - Gary King's Ecological Inference (EI) procedure. This approach utilizes a combination of a method of bounds analysis, combined with a more traditional statistical method, to improve on standard ecological regression. While the details are

mathematically complex, the differences mostly center on utilizing bounds information contained in individual precinct results that would not be exploited in ecological regression, and by not imposing a linear constraint on the pattern across precincts.

D. Election Analysis Results

As is clear from Table 1 below, the results from each of the three analytical methods are substantively very similar. For the seven election contests the average estimate of non-Hispanic support for the Hispanic candidate (or 'yes' vote on Proposition 1 in 2011) is 34.8% based on the homogeneous precinct method, 33.3% based on the EI method (32.9 Engstrom EI), and 32.5% based on the ER method. Turning to Hispanic cohesion we have only the estimates from the EI and ER analysis (due to the lack of homogenously Hispanic precincts). Again, the results from each of these analytical methods are substantively very similar. For the seven election contests the average estimate of Hispanic support for the Hispanic candidate (or 'yes' vote on Proposition 1 in 2011) is 70.9% based on the EI method (73.3 Engstrom EI), and 75.0% based on the ER method.

The fact that the replication of the EI analysis reported here does not exactly match the estimates reported by Dr. Engstrom may seem unusual, but this is actually what we would expect. EI utilizes a repeated series of simulations to converge on a resulting estimate, and as such will produce modestly different results each time it is run, even on exactly the same data set. In this case, running EI repeatedly for the 2009 Rodriguez primary contest, and using a limit of 100 simulations (as does Dr. Engstrom), produced estimates of Hispanic vote for Rodriguez that vary from 49.1 percent to 54.5 percent (these results, along with the EI output that is summarized in Table 1 below, are

included in the attached Appendix A). To reduce this inherent instability of the estimates, the replications reported here for EI are based on 1000 simulations, an increase that should produce an approximate doubling in the stability of the estimates.

In general terms the results in Table 1 suggest a mixed pattern. The range of values for the R^2 indicate that the influence of the ethnicity of voters on their vote choice is both highly variable (ranging from only 4% to 54%) and typically not very strong (the average for the seven elections is 27% and only in the two 2011 primary contests (one in a district that includes only 7 of the 33 precincts in Yakima and the other involving a proposition and not an actual minority candidate) does the R^2 inch above 50%. In the five city wide contests that included a Hispanic candidate the average R^2 is only 16.4%. Substantively, this means only 16.4% of variance in support for the Hispanic candidate across precincts can be accounted for by corresponding variation in the percentage of votes with Spanish surnames in those precincts.

The same mixed pattern is evident for Hispanic cohesion. Two of the Hispanic candidates (Rodrigues and Soria in the 2009 general election) have the cohesive support of Hispanic voters, but in the other contests, including the primary contests for both Rodriguez and Soria in 2009, Hispanic voter cohesion is very weak (a 50%/50% split is the lowest possible value for cohesion in this analysis – indicating that a Spanish surnamed voters is equally likely to support the Hispanic candidate or not). This lack of consistent cohesive political support is also evident in the low levels of turnout among Hispanic registered voters even in contests that feature Hispanic candidates. While Hispanics make up more 41 percent of the population of Yakima, they make up only 22 percent of the adult citizens, a proportion very close to the 18 percent of the registered

votes in Yakima that have Spanish surnames, and yet they are typically less than 7 percent of the actual voters in the elections analyzed here. In an election like the 2009 in which Rodriguez is a candidate for place 5, this low level of Hispanic turnout was critical. Based on the EI estimates of cohesion, Rodriguez would have won the election if Hispanic voters made up 16 percent of the actual voters, a level comparable to their share of the registered voters.

The estimates for non-Hispanic voting behavior are much more consistent across elections. In all five of the citywide elections with Hispanic candidates, non-Hispanic crossover voting for Hispanic candidates is substantial – ranging from the low thirty percent to the low 40 percent range. The average estimated Anglo crossover for these five elections is 38.1 percent based on the homogeneous precinct method and 36.1 percent based on the EI method (35.7 percent Engstrom EI).

Table 1: Estimates for Elections Included in Prof. Engstrom's Report

	Percent Voting for the Hispanic Candidate		R^2
	Spanish Surname Voters	Non-Spanish Surname Voters	
Place 5 2009 Primary (Rodriguez)			
Homogeneous Precinct Analysis	NA	38.1	
EI	52.4	37.7	
Weighted ER	57.0	37.0	.04
Engstrom's EI	52.9	37.3	
Place 5 2009 General (Rodriguez)			
Homogeneous Precinct Analysis	NA	47.3	
EI	86.7	43.4	
Weighted ER	82.0	45.5	.16
Engstrom's EI	92.8	42.6	
Place 7 2009 Primary (Soria)			
Homogeneous Precinct Analysis	NA	31.7	
EI	59.0	31.1	
Weighted ER	64.3	29.7	.20
Engstrom's EI	59.5	31.0	
Place 7 2009 General (Soria)			
Homogeneous Precinct Analysis	NA	34.3	
EI	85.4	31.2	
Weighted ER	84.5	31.6	.37
Engstrom's EI	92.7	30.5	
District 2 2011 Primary (Montes)			
Homogeneous Precinct Analysis	NA	13.6	
EI	52.8	13.5	
Weighted ER	72.1	10.7	.54
Engstrom's EI	53.5	13.4	
Proposition 1 2011 Primary			
Homogeneous Precinct Analysis	NA	39.3	
EI	92.7	39.1	
Weighted ER	100.0	36.2	.53
Engstrom's EI	98.2	38.4	
Sup. Ct. Pos. 8 2012 Primary (Gonzalez)			
Homogeneous Precinct Analysis	NA	39.1	
EI	67.4	37.2	
Weighted ER	65.4	36.9	.05
Engstrom's EI	63.2	36.9	

While the analysis reported above provides useful detail, a similar overall picture can be derived by simply looking at the scatterplots provided below in Figures 1 through 7 for each of the elections. A visual inspection of the scatterplots tells the same story as the statistical analysis reported above in Table 1. The plot for Rodriguez in the 2009 primary (Figure 1), for example, clearly shows that support at the polls for Rodriguez is not simply a function of strongly polarized voting patterns. Instead of clustering tightly around a 45 degree line sloping up from the origin at (0,0) (0% Spanish surname voters, and 0% vote for Rodriguez) to the upper right corner at (100,100) (100% Spanish surname voters, and 100% vote for Rodriguez), which would indicate a strong relationship between the two variables, the actual precinct data points are shifted up (indicating substantial support for Rodriguez in precincts with few Hispanics) and scattered almost randomly (indicating that this level of support is only weakly connected to the percent of Spanish surname voters in the precinct).

The only scatterplot that comes anywhere close to a classic pattern of polarization is Figure 6 for the 2011 District 2 primary. The results are limited, as there are only 7 precincts in the primary, but the points are all closer to a 45 degree line and more tightly clustered than they are for any of the other candidates. This tighter clustering is reflected in the relatively high R^2 of .54, and the position of the points nearer a 45 degree line is reflected in the relatively low 10.7 intercept. These low levels of non-Hispanic voter support for the Hispanic candidate in precincts with few Hispanic voters is hardly typical. In fact, it is not evident in any other contest. Montes gets less than 20 percent of the vote in five of the seven precincts in the 2011 election. In all of the other contests combined

there is only one precinct (with only eleven voters in the 2009 general election) where less than 20 percent of the vote goes to the Hispanic candidate.

Figure 1: 2009 Place 5 - Primary Election

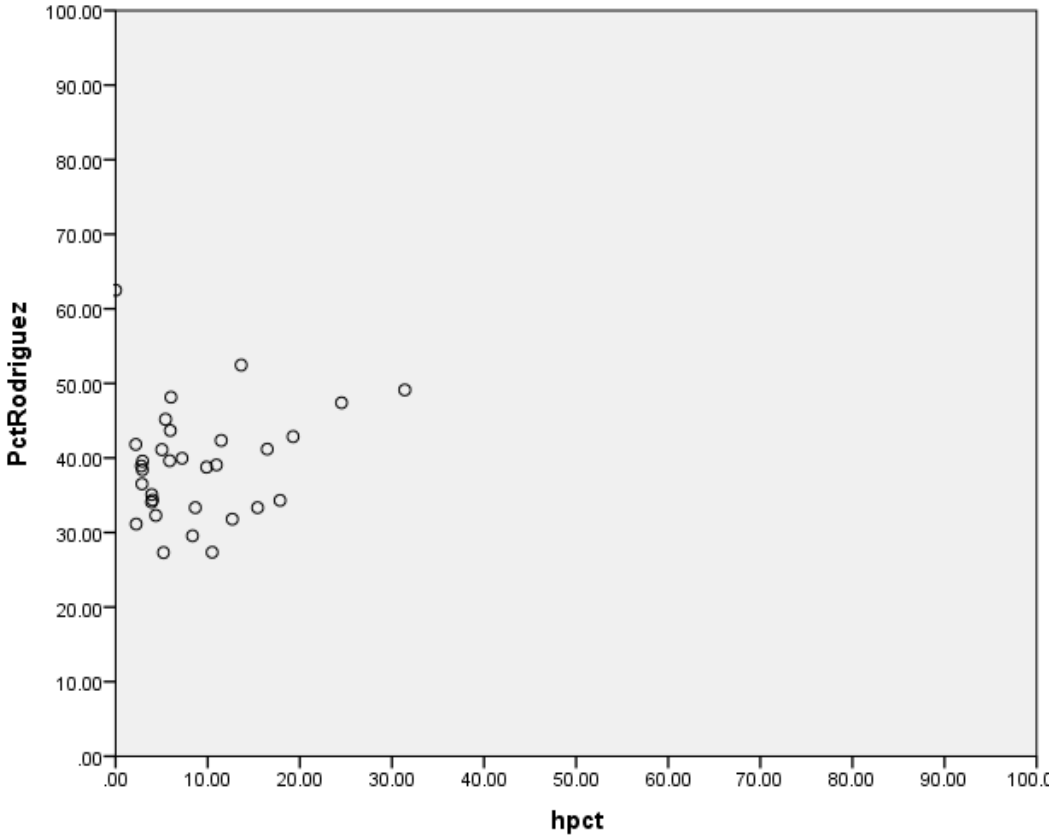


Figure 2: 2009 Place 5 - General Election

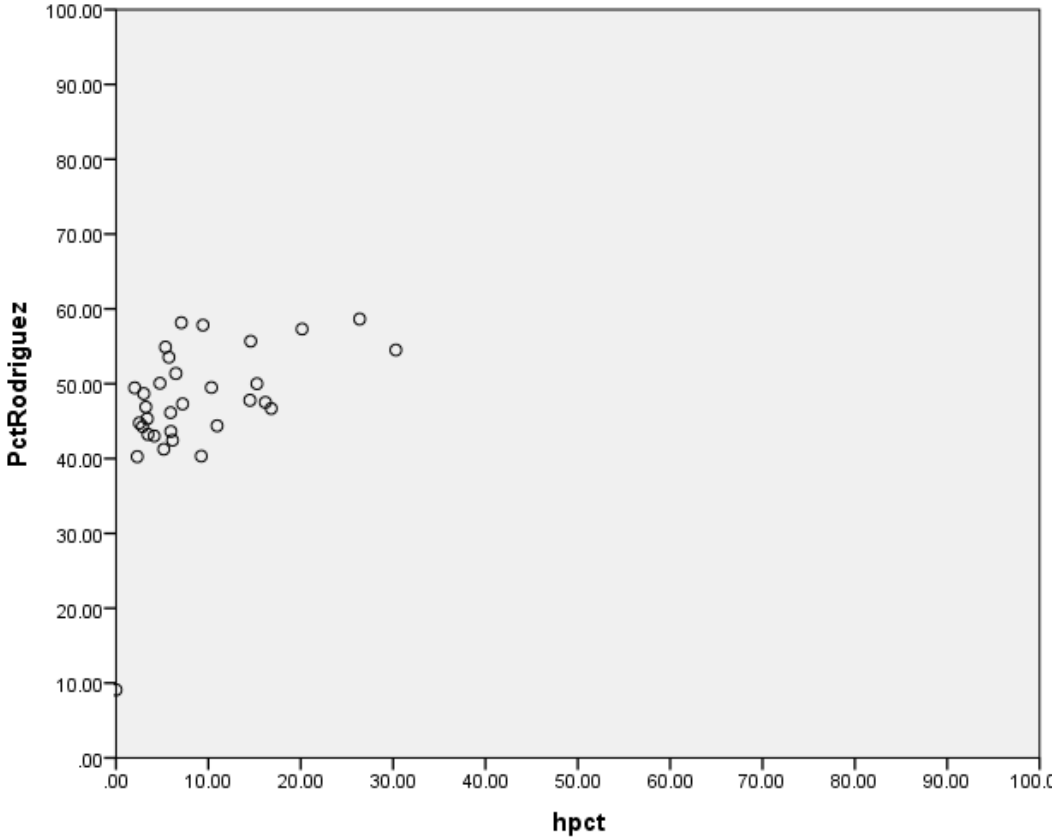


Figure 3: 2009 Place 7 - Primary Election

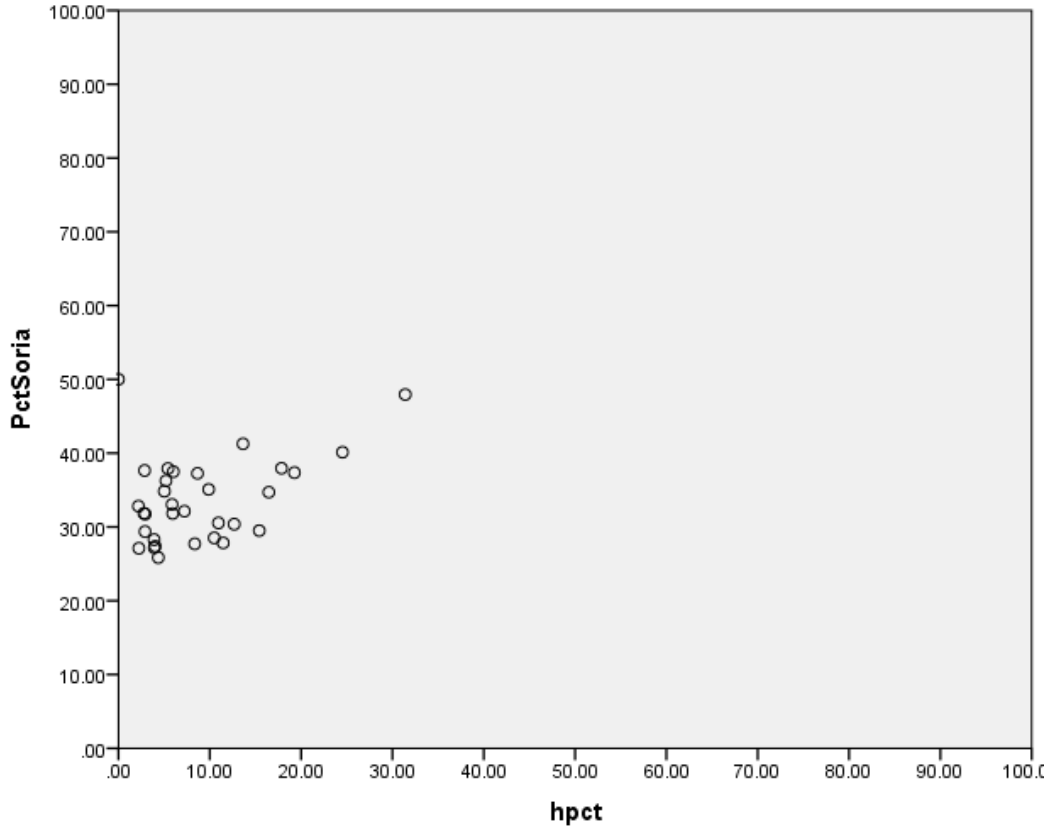


Figure 4: 2009 Place 7 - General Election

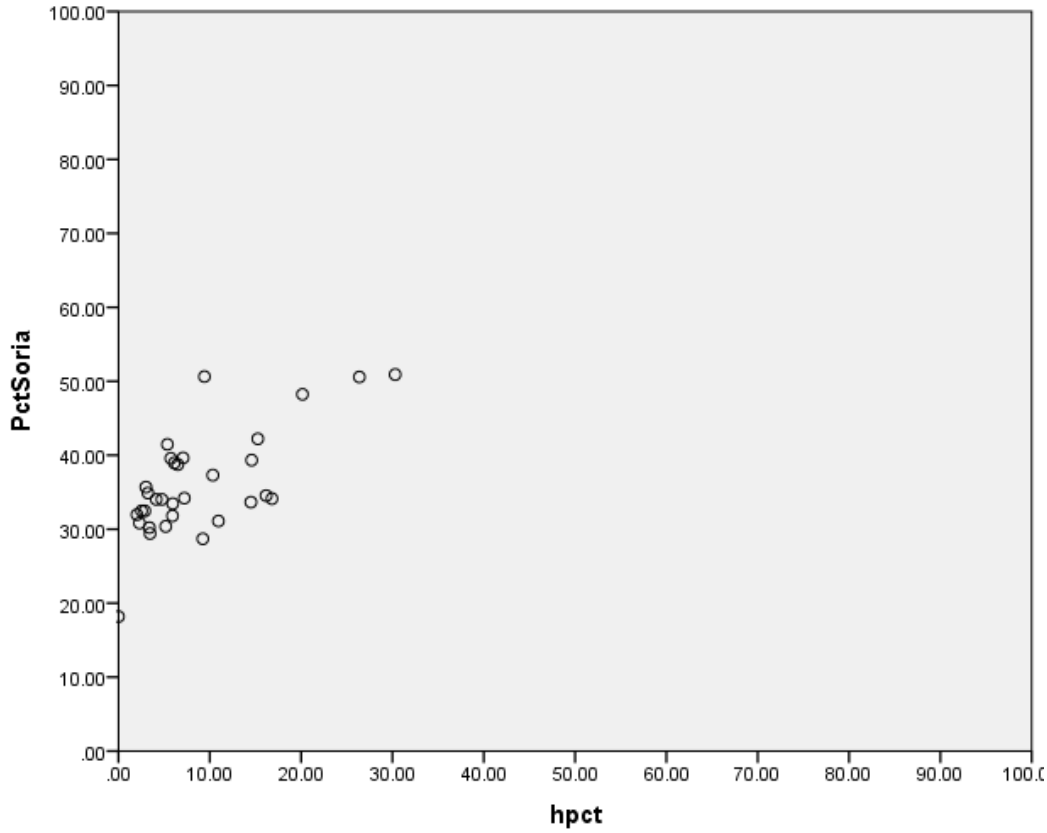


Figure 5: 2011 District 2 - Primary Election

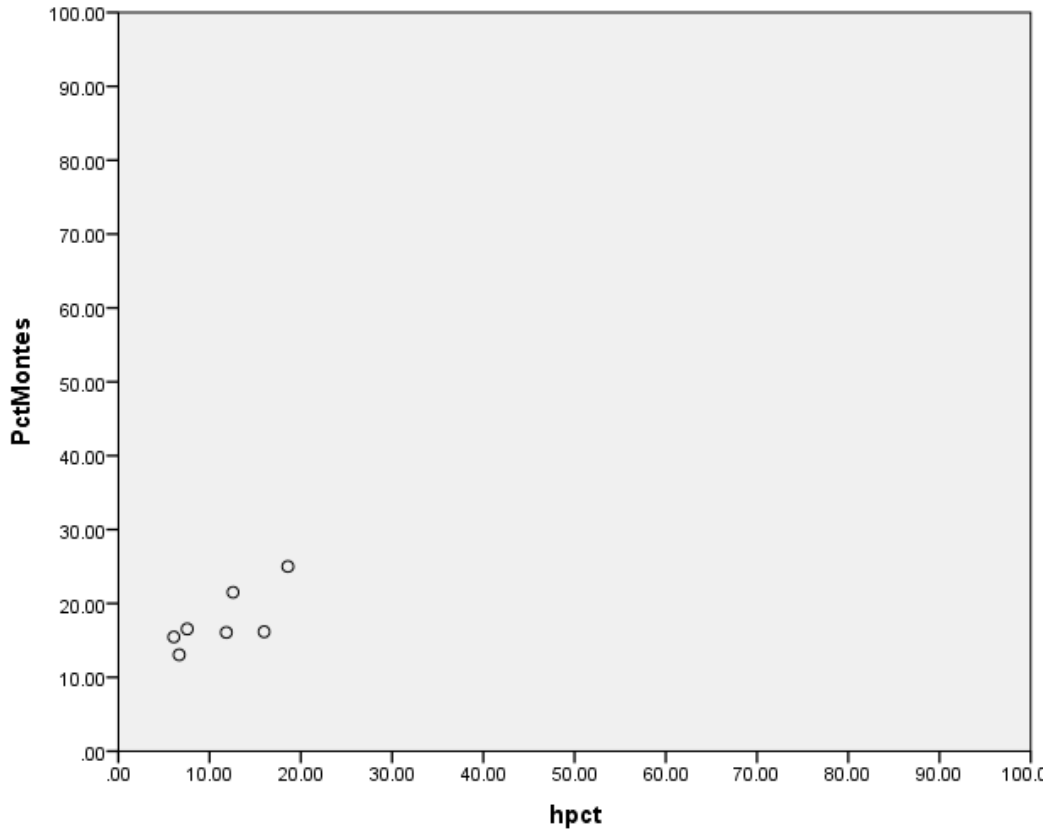


Figure 6: 2011 Proposition 1 - Primary Election

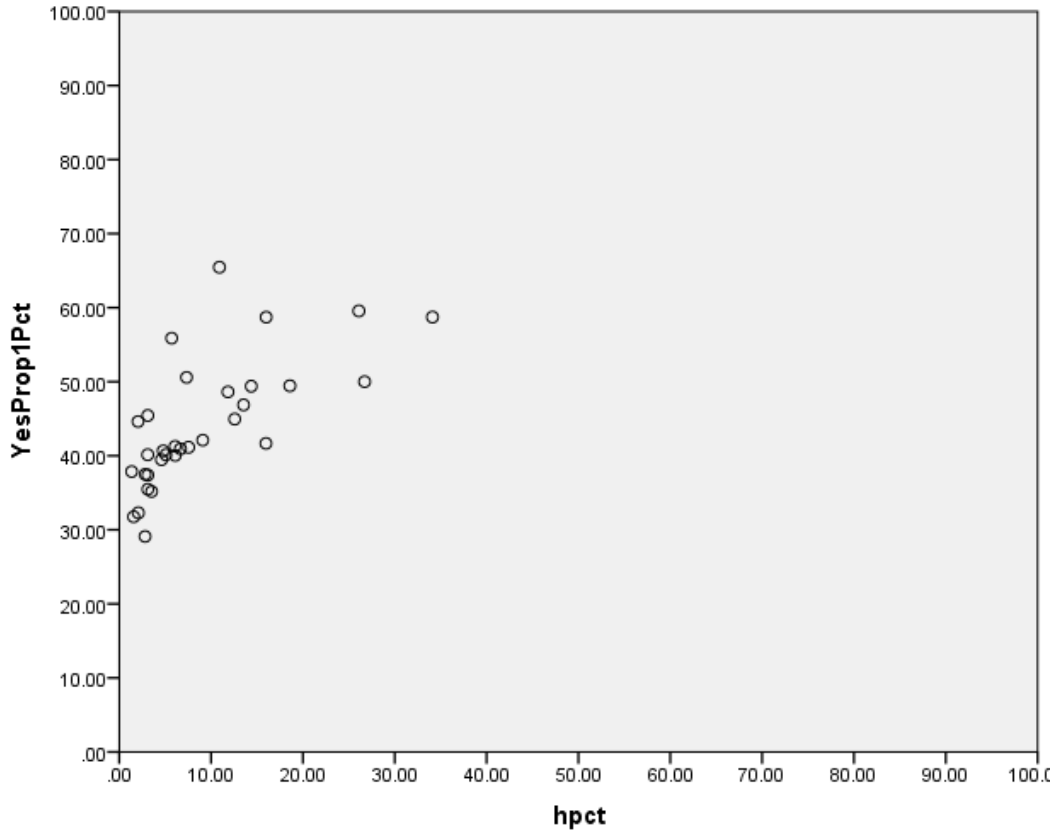
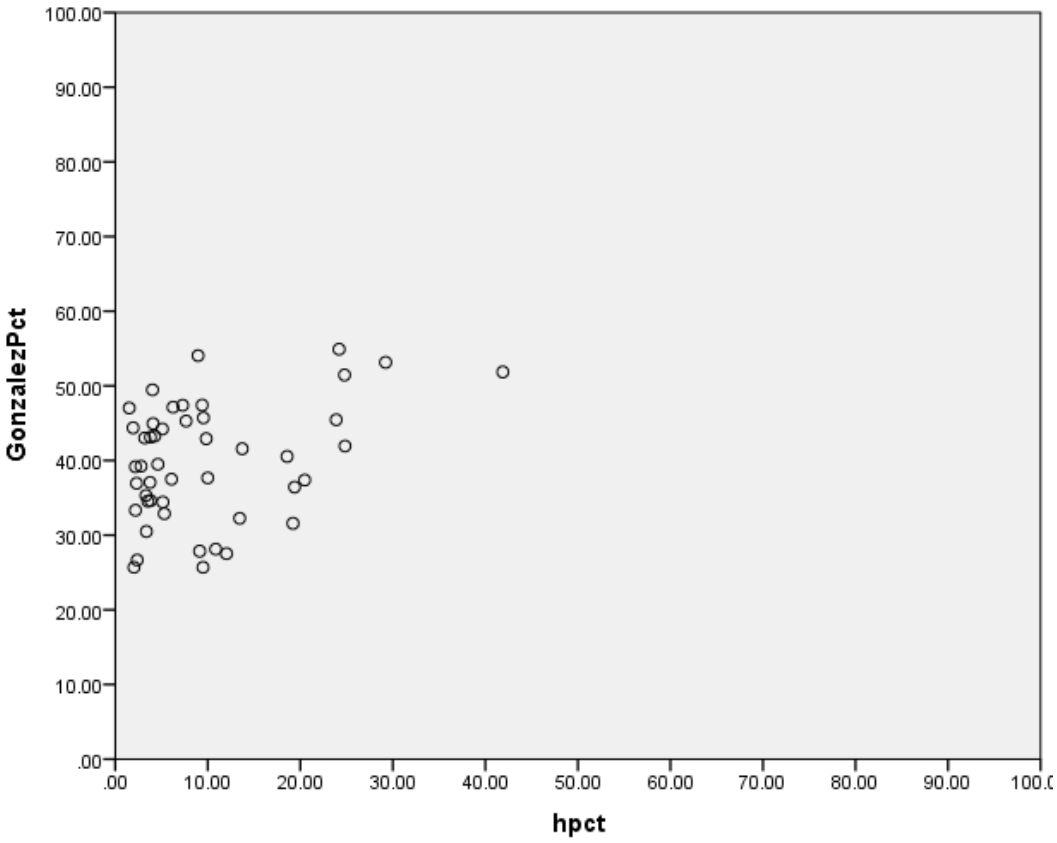
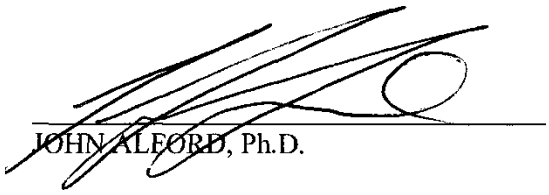


Figure 7: 2012 Supreme Ct. Position 8 - Primary Election



The elections for the Yakima school board are also instructive, as they are also non-partisan elections and cover a very similar geography. During most of the last decade there has been at least one Hispanic board member. Several of these Hispanic board members have run unopposed (a situation that would not be expected if the Anglo electorate was a politically cohesive force working to block Hispanic representation), but there are three contested elections with Hispanic candidates. In one of those contested elections the Hispanic candidate, Ybarra, wins the election. In another the Hispanic candidate, Saenz, loses without much apparent support from either Hispanics or non-Hispanic. In the third contest the results appear to be more similar to the Soria 2009 general election reported above. Like the City Council contests, the school board contests do not demonstrate consistent polarized voting in Yakima.

Taken as a whole, the election analysis does not show evidence of a consistent pattern of polarized voting. Hispanic voters are not consistently cohesive, as evident in both the highly variable levels of cohesion among Hispanics and the low level of participation among registered Hispanic voters (typically less than seven percent of those casting a ballot). Anglo crossover in support of Hispanic candidates, in the low 30 to low 40 percent range, is substantial, much less variable, and is not consistent with polarized Anglo bloc voting.



JOHN ALFORD, Ph.D.

March 22, 2013

APPENDIX A

EI Results

2009 Primary Place 5

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5240036 0.37707919
sd    0.1663248 0.02219829
2.5%  0.1470338 0.33803792
97.5% 0.7805618 0.42565859

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.4759964 0.62292081
sd    0.1663248 0.02219829
2.5%  0.2194382 0.57434141
97.5% 0.8529662 0.66196208
```

2009 General Place 5

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctRodrig_09_gen_place5
            hpct    NOThpct
mean  0.86679195 0.43436120
sd    0.07513016 0.02135715
2.5%  0.69109033 0.39115946
97.5% 0.95896689 0.47289524

  Observation PctNOTRodrig_09_gen_place5
            hpct    NOThpct
mean  0.13320805 0.56563880
sd    0.07513016 0.02135715
2.5%  0.04103311 0.52710476
97.5% 0.30890967 0.60884054
```

2009 Primary Place 7

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctSoria_09_pri_place7
           hpct    NOThpct
mean  0.5902589 0.31116486
sd    0.1406681 0.01827066
2.5%  0.2545193 0.27931310
97.5% 0.7943070 0.34982717

  Observation PctNOTSoria_09_pri_place7
           hpct    NOThpct
mean  0.4097411 0.68883514
sd    0.1406681 0.01827066
2.5%  0.2056930 0.65017283
97.5% 0.7454807 0.72068690
```

2009 General Place 5

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctSoria_09_gen_place7
           hpct    NOThpct
mean  0.8539305 0.31203000
sd    0.0681423 0.01127536
2.5%  0.6538474 0.29052525
97.5% 0.9334410 0.33355244

  Observation PctNOTSoria_09_gen_place7
            hpct    NOThpct
mean  0.14606950 0.68797000
sd    0.06814230 0.01127536
2.5%  0.06655903 0.66644756
97.5% 0.34615259 0.70947475
```

2011 Primary Dist 2

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctMotes_11_pri_dist2
          hpct    NOThpct
mean  0.5278522 0.13495207
sd    0.1098932 0.01332221
2.5%  0.3344753 0.11299975
97.5% 0.7068483 0.16376025

  Observation PctNOTMotes_11_pri_dist2
          hpct    NOThpct
mean  0.4721478 0.86504793
sd    0.1098932 0.01332221
2.5%  0.2931517 0.83623975
97.5% 0.6655247 0.88700025
```

2011 Prop 1

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctYes_11_pri_prop1
           hpct    NOThpct
mean  0.92714479 0.39103728
sd    0.02646523 0.01312309
2.5%  0.85979957 0.36779511
97.5% 0.95835264 0.41797268

  Observation PctNOTYes_11_pri_prop1
           hpct    NOThpct
mean  0.07285521 0.60896272
sd    0.02646523 0.01312309
2.5%  0.04164736 0.58202732
97.5% 0.14020043 0.63220489
```

2012 Supreme Court, Pos 8

```
  Model: ei.RxC
  Number of simulations: 1000

Expected Values: E(Y|X)

  Observation PctGonzales_12_supct
         phsign     posign
mean  0.6737825 0.37176505
sd    0.0945540 0.01501406
2.5%  0.4558982 0.34359729
97.5% 0.8235203 0.40183722

  Observation PctNOTGonzales_12_supct
         phsign     posign
mean  0.3262175 0.62823495
sd    0.0945540 0.01501406
2.5%  0.1764797 0.59816278
97.5% 0.5441018 0.65640271
```

2009 Primary Place 5

Several Runs with only 100 Simulations

```
  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5088137 0.37670573
sd    0.1706963 0.02359066
2.5%  0.1472984 0.33223036
97.5% 0.7797170 0.42332895

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.4911863 0.62329427
sd    0.1706963 0.02359066
2.5%  0.2202830 0.57667105
97.5% 0.8527016 0.66776964


  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
```

```
mean  0.4912955 0.38031222
sd    0.1656753 0.02500265
2.5%  0.1566484 0.33876726
97.5% 0.7690554 0.43334294

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5087045 0.61968778
sd    0.1656753 0.02500265
2.5%  0.2309446 0.56665706
97.5% 0.8433516 0.66123274
```

```
  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct   NOThpct
mean  0.5439055 0.3758689
sd    0.1634286 0.0222147
2.5%  0.1863998 0.3385723
97.5% 0.7916758 0.4149811

  Observation PctNOTRodrig_09_pri_place5
           hpct   NOThpct
mean  0.4560945 0.6241311
sd    0.1634286 0.0222147
2.5%  0.2083242 0.5850189
97.5% 0.8136002 0.6614277
> s.out <- sim(z.out, num = 100)



  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5024080 0.38119015
sd    0.1842371 0.02494356
2.5%  0.1076505 0.33896961
97.5% 0.7904215 0.43379787

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.4975920 0.61880985
sd    0.1842371 0.02494356
2.5%  0.2095785 0.56620213
97.5% 0.8923495 0.66103039
```

```
  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5094792 0.37806379
sd    0.1664341 0.02331578
2.5%  0.1697166 0.33739649
97.5% 0.7633860 0.41624003

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.4905208 0.62193621
sd    0.1664341 0.02331578
2.5%  0.2366140 0.58375997
97.5% 0.8302834 0.66260351
> s.out <- sim(z.out, num = 100)



  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct   NOThpct
mean  0.5151990 0.3765646
sd    0.1775123 0.0233914
2.5%  0.1548885 0.3356893
97.5% 0.7698420 0.4189269

  Observation PctNOTRodrig_09_pri_place5
           hpct   NOThpct
mean  0.4848010 0.6234354
sd    0.1775123 0.0233914
2.5%  0.2301580 0.5810731
97.5% 0.8451115 0.6643107
```

```
  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5454507 0.37413241
sd    0.1822671 0.02534705
2.5%  0.1476312 0.33123929
97.5% 0.8053883 0.43084593

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.4545493 0.62586759
sd    0.1822671 0.02534705
2.5%  0.1946117 0.56915407
97.5% 0.8523688 0.66876071


  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct    NOThpct
mean  0.5204967 0.37919596
sd    0.1695293 0.02088545
2.5%  0.1604392 0.34176427
97.5% 0.7804931 0.42828045

  Observation PctNOTRodrig_09_pri_place5
           hpct    NOThpct
mean  0.4795033 0.62080404
sd    0.1695293 0.02088545
2.5%  0.2195069 0.57171955
97.5% 0.8395608 0.65823573
```

```
  Model: ei.RxC
  Number of simulations: 100

Expected Values: E(Y|X)

  Observation PctRodrig_09_pri_place5
           hpct   NOThpct
mean  0.5205903 0.3765396
sd    0.1684277 0.0237497
2.5%  0.1498936 0.3361919
97.5% 0.7834246 0.4289930

  Observation PctNOTRodrig_09_pri_place5
           hpct   NOThpct
mean  0.4794097 0.6234604
sd    0.1684277 0.0237497
2.5%  0.2165754 0.5710070
97.5% 0.8501064 0.6638081
>
```

APPENDIX B

ALFORD CV

JOHN R. ALFORD

CURRICULUM VITAE

DECEMBER, 2012

DEPT. OF POLITICAL SCIENCE
RICE UNIVERSITY - MS-24
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HOUSTON, TEXAS 77251-1892
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Employment:

ASSOCIATE PROFESSOR, RICE UNIVERSITY, 1985 TO PRESENT.

ASSISTANT PROFESSOR, UNIVERSITY OF GEORGIA, 1981-1985.

INSTRUCTOR, OAKLAND UNIVERSITY, 1980-1981.

TEACHING-RESEARCH FELLOW, UNIVERSITY OF IOWA, 1977-1980.

RESEARCH ASSOCIATE, INSTITUTE FOR URBAN STUDIES, HOUSTON, TEXAS, 1976-1977.

Education:

PH.D., UNIVERSITY OF IOWA, POLITICAL SCIENCE, 1981.

M.A., UNIVERSITY OF IOWA, POLITICAL SCIENCE, 1980.

M.P.A., UNIVERSITY OF HOUSTON, PUBLIC ADMINISTRATION, 1977.

B.S., UNIVERSITY OF HOUSTON, POLITICAL SCIENCE, 1975.

Publications:

"GENETIC AND ENVIRONMENTAL TRANSMISSION OF POLITICAL ORIENTATIONS." WITH CAROLYN L. FUNK, MATTHEW HIBBING, KEVIN B. SMITH, NICHOLAS R. EATON, ROBERT F. KRUEGER, LINDON J. EAVES, JOHN R. HIBBING. **POLITICAL PSYCHOLOGY**. FORTHCOMING.

"BIOLOGY, IDEOLOGY, AND EPISTEMOLOGY: HOW DO WE KNOW POLITICAL ATTITUDES ARE INHERITED AND WHY SHOULD WE CARE?" WITH KEVIN SMITH, PETER K. HATEMI, LINDON J. EAVES, CAROLYN FUNK, AND JOHN R. HIBBING. **AMERICAN JOURNAL OF POLITICAL SCIENCE**. (JANUARY, 2012)

"DISGUST SENSITIVITY AND THE NEUROPHYSIOLOGY OF LEFT-RIGHT POLITICAL ORIENTATIONS" WITH KEVIN SMITH, JOHN HIBBING, DOUGLAS OXLEY, AND MATTHEW HIBBING, **PLOSONE**, (2011), 6(10):E25552. DOI:10.1371/JOURNAL.PONE.0025552.

"THE POLITICS OF MATE CHOICE" WITH PETER HATEMI, JOHN R. HIBBING, NICHOLAS MARTIN AND LINDON EAVES, **JOURNAL OF POLITICS**, (2011) 73, DOI:10.1017/S0022381611000016.

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"THE ULTIMATE SOURCE OF POLITICAL OPINIONS: GENES AND THE ENVIRONMENT" WITH JOHN R. HIBBING IN **UNDERSTANDING PUBLIC OPINION**, 3RD EDITION EDS. BARBARA NORRANDER AND CLYDE WILCOX, WASHINGTON D.C.: CQ PRESS, (2010).

"IS THERE A 'PARTY' IN YOUR GENES" WITH PETER HATEMI, JOHN R. HIBBING, NICHOLAS MARTIN AND LINDON EAVES, **POLITICAL RESEARCH QUARTERLY**, (SEPTEMBER, 2009).

"TWIN STUDIES, MOLECULAR GENETICS, POLITICS, AND TOLERANCE: A RESPONSE TO BECKWITH AND MORRIS" WITH JOHN R. HIBBING AND CARY FUNK, **PERSPECTIVES ON POLITICS**, (DECEMBER, 2008). THIS IS A SOLICITED RESPONSE TO A CRITIQUE OF OUR 2005 APSR ARTICLE "ARE POLITICAL ORIENTATIONS GENETICALLY TRANSMITTED?"

"POLITICAL ATTITUDES VARY WITH PHYSIOLOGICAL TRAITS" WITH DOUGLAS R. OXLEY, KEVIN B. SMITH, MATTHEW V. HIBBING, JENNIFER L. MILLER, MARIO SCALORA, PETER K. HATEMI, AND JOHN R. HIBBING, **SCIENCE**, (SEPTEMBER 19, 2008).

"THE NEW EMPIRICAL BIOPOLITICS" WITH JOHN R. HIBBING, **ANNUAL REVIEW OF POLITICAL SCIENCE**, (JUNE, 2008).

"BEYOND LIBERALS AND CONSERVATIVES TO POLITICAL GENOTYPES AND PHENOTYPES" WITH JOHN R. HIBBING AND CARY FUNK, **PERSPECTIVES ON POLITICS**, (JUNE, 2008). THIS IS A SOLICITED RESPONSE TO A CRITIQUE OF OUR 2005 APSR ARTICLE "ARE POLITICAL ORIENTATIONS GENETICALLY TRANSMITTED?"

"PERSONAL, INTERPERSONAL, AND POLITICAL TEMPERAMENTS" WITH JOHN R. HIBBING, **ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE**, (NOVEMBER, 2007).

"IS POLITICS IN OUR GENES?" WITH JOHN R. HIBBING, **TIDSSKRIFTET POLITIK**, (FEBRUARY, 2007).

"BIOLOGY AND RATIONAL CHOICE" WITH JOHN R. HIBBING, **POLITICAL ECONOMY NEWSLETTER**, (FALL, 2005)

"ARE POLITICAL ORIENTATIONS GENETICALLY TRANSMITTED?" WITH JOHN R. HIBBING AND CAROLYN FUNK, **AMERICAN POLITICAL SCIENCE REVIEW**, (MAY, 2005). (THE MAIN FINDINGS TABLE FROM THIS ARTICLE HAS BEEN REPRINTED IN TWO COLLEGE LEVEL TEXT BOOKS - PSYCHOLOGY, 9TH ED. AND INVITATION TO PSYCHOLOGY 4TH ED. BOTH BY WADE AND TAVRIS, PRENTICE HALL, 2007).

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"ACCEPTING AUTHORITATIVE DECISIONS: HUMANS AS WARY COOPERATORS" WITH JOHN R. HIBBING, **AMERICAN JOURNAL OF POLITICAL SCIENCE**, (JANUARY, 2004).

"ELECTORAL CONVERGENCE OF THE TWO HOUSES OF CONGRESS" WITH JOHN R. HIBBING, IN **THE EXCEPTIONAL SENATE**, ED. BRUCE OPPENHEIMER, COLUMBUS: OHIO STATE UNIVERSITY PRESS, (2002).

"WE'RE ALL IN THIS TOGETHER: THE DECLINE OF TRUST IN GOVERNMENT, 1958-1996." IN **WHAT IS IT ABOUT GOVERNMENT THAT AMERICANS DISLIKE?**, EDS. JOHN HIBBING AND BETH THEISS-MORSE, CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS, (2001).

"THE 2000 CENSUS AND THE NEW REDISTRICTING," **TEXAS STATE BAR ASSOCIATION SCHOOL LAW SECTION NEWSLETTER**, (JULY, 2000).

"OVERDRAFT: THE POLITICAL COST OF CONGRESSIONAL MALFEASANCE" WITH HOLLY TEETERS, DAN WARD, AND RICK WILSON, **JOURNAL OF POLITICS** (AUGUST, 1994).

"PERSONAL AND PARTISAN ADVANTAGE IN U.S. CONGRESSIONAL ELECTIONS, 1846-1990" WITH DAVID W. BRADY, IN **CONGRESS RECONSIDERED** 5TH EDITION, EDS. LARRY DODD AND BRUCE OPPENHEIMER, CQ PRESS, (1993).

"THE 1990 CONGRESSIONAL ELECTION RESULTS AND THE FALLACY THAT THEY EMBODIED AN ANTI-INCUMBENT MOOD" WITH JOHN R. HIBBING, **PS** 25 (JUNE, 1992).

"CONSTITUENCY POPULATION AND REPRESENTATION IN THE UNITED STATES SENATE" WITH JOHN R. HIBBING. **LEGISLATIVE STUDIES QUARTERLY**, (NOVEMBER, 1990).

"EDITORS' INTRODUCTION: ELECTING THE U.S. SENATE" WITH BRUCE I. OPPENHEIMER. **LEGISLATIVE STUDIES QUARTERLY**, (NOVEMBER, 1990).

"PERSONAL AND PARTISAN ADVANTAGE IN U.S. CONGRESSIONAL ELECTIONS, 1846-1990" WITH DAVID W. BRADY, IN **CONGRESS RECONSIDERED** 4TH EDITION, EDS. LARRY DODD AND BRUCE OPPENHEIMER, CQ PRESS, (1988). REPRINTED IN THE CONGRESS OF THE UNITED STATES, 1789-1989, ED. JOEL SILBY, CARLSON PUBLISHING INC., (1991), AND IN THE QUEST FOR OFFICE, EDS. WAYNE AND WILCOX, ST. MARTINS PRESS, (1991).

"CAN GOVERNMENT REGULATE FERTILITY? AN ASSESSMENT OF PRO-NATALIST POLICY IN EASTERN EUROPE" WITH JEROME LEGGE. **THE WESTERN POLITICAL QUARTERLY** (DECEMBER, 1986).

"PARTISANSHIP AND VOTING" WITH JAMES CAMPBELL, MARY MUNRO, AND BRUCE CAMPBELL, IN **RESEARCH IN MICROPOLITICS. VOLUME 1 - VOTING BEHAVIOR**. SAMUEL LONG, ED. JAI PRESS, (1986).

"ECONOMIC CONDITIONS AND INDIVIDUAL VOTE IN THE FEDERAL REPUBLIC OF GERMANY" WITH JEROME S. LEGGE. **JOURNAL OF POLITICS** (NOVEMBER, 1984).

"TELEVISION MARKETS AND CONGRESSIONAL ELECTIONS" WITH JAMES CAMPBELL AND KEITH HENRY. **LEGISLATIVE STUDIES QUARTERLY** (NOVEMBER, 1984).

"ECONOMIC CONDITIONS AND THE FORGOTTEN SIDE OF CONGRESS: A FORAY INTO U.S. SENATE ELECTIONS" WITH JOHN R. HIBBING, **BRITISH JOURNAL OF POLITICAL SCIENCE** (OCTOBER, 1982).

"INCREASED INCUMBENCY ADVANTAGE IN THE HOUSE" WITH JOHN R. HIBBING, **JOURNAL OF POLITICS** (NOVEMBER, 1981). REPRINTED IN THE CONGRESS OF THE UNITED STATES, 1789-1989, CARLSON PUBLISHING INC., (1991).

"THE ELECTORAL IMPACT OF ECONOMIC CONDITIONS: WHO IS HELD RESPONSIBLE?" WITH JOHN R. HIBBING, **AMERICAN JOURNAL OF POLITICAL SCIENCE** (AUGUST, 1981).

"COMMENT ON INCREASED INCUMBENCY ADVANTAGE" WITH JOHN R. HIBBING, REFEREED COMMUNICATION: **AMERICAN POLITICAL SCIENCE REVIEW** (MARCH, 1981).

"CAN GOVERNMENT REGULATE SAFETY? THE COAL MINE EXAMPLE" WITH MICHAEL LEWIS-BECK, **AMERICAN POLITICAL SCIENCE REVIEW** (SEPTEMBER, 1980).

Awards and Honors:

CQ PRESS AWARD - 1988, HONORING THE OUTSTANDING PAPER IN LEGISLATIVE POLITICS PRESENTED AT THE 1987 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION. AWARDED FOR "THE DEMISE OF THE UPPER HOUSE AND THE RISE OF THE SENATE: ELECTORAL RESPONSIVENESS IN THE UNITED STATES SENATE" WITH JOHN HIBBING.

Research Grants:

NATIONAL SCIENCE FOUNDATION, 2009-2011, "IDENTIFYING THE BIOLOGICAL INFLUENCES ON POLITICAL TEMPERAMENTS", WITH JOHN HIBBING, KEVIN SMITH, KIM ESPY, NICOLAS MARTIN AND READ MONTAGUE. THIS IS A COLLABORATIVE PROJECT INVOLVING RICE, UNIVERSITY OF NEBRASKA, BAYLOR COLLEGE OF MEDICINE, AND QUEENSLAND INSTITUTE FOR MEDICAL RESEARCH.

NATIONAL SCIENCE FOUNDATION, 2007-2010, "GENES AND POLITICS: PROVIDING THE NECESSARY DATA", WITH JOHN HIBBING, KEVIN SMITH, AND LINDON EAVES. THIS IS A COLLABORATIVE PROJECT INVOLVING RICE, UNIVERSITY OF NEBRASKA, VIRGINIA COMMONWEALTH UNIVERSITY, AND THE UNIVERSITY OF MINNESOTA.

NATIONAL SCIENCE FOUNDATION, 2007-2010, "INVESTIGATING THE GENETIC BASIS OF ECONOMIC BEHAVIOR", WITH JOHN HIBBING AND KEVIN SMITH. THIS IS A COLLABORATIVE PROJECT INVOLVING RICE, UNIVERSITY OF NEBRASKA, VIRGINIA COMMONWEALTH UNIVERSITY, AND THE QUEENSLAND INSTITUTE OF MEDICAL RESEARCH.

RICE UNIVERSITY FACULTY INITIATIVES FUND, 2007-2009, "THE BIOLOGICAL SUBSTRATES OF POLITICAL BEHAVIOR". THIS IS IN ASSISTANCE OF A COLLABORATIVE PROJECT INVOLVING RICE, BAYLOR COLLEGE OF MEDICINE, QUEENSLAND INSTITUTE OF MEDICAL RESEARCH, UNIVERSITY OF NEBRASKA, VIRGINIA COMMONWEALTH UNIVERSITY, AND THE UNIVERSITY OF MINNESOTA.

NATIONAL SCIENCE FOUNDATION, 2004-2006, "DECISION-MAKING ON BEHALF OF OTHERS", WITH JOHN HIBBING. THIS IS A COLLABORATIVE PROJECT INVOLVING RICE AND THE UNIVERSITY OF NEBRASKA.

NATIONAL SCIENCE FOUNDATION, 2001-2002, DISSERTATION GRANT FOR KEVIN ARCENEAUX, "DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE: VOTING BEHAVIOR IN THE CONTEXT OF U.S. FEDERALISM."

NATIONAL SCIENCE FOUNDATION, 2000-2001, DISSERTATION GRANT FOR STACY ULBIG, "DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE: SUB-NATIONAL CONTEXTUAL INFLUENCES ON POLITICAL TRUST."

NATIONAL SCIENCE FOUNDATION, 1999-2000, DISSERTATION GRANT FOR RICHARD ENGSTROM, "DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE: ELECTORAL DISTRICT STRUCTURE AND POLITICAL BEHAVIOR."

RICE UNIVERSITY RESEARCH GRANT, 1985, RECENT TRENDS IN BRITISH PARLIAMENTARY ELECTIONS.

FACULTY RESEARCH GRANTS PROGRAM, UNIVERSITY OF GEORGIA, SUMMER, 1982. IMPACT OF MEDIA STRUCTURE ON CONGRESSIONAL ELECTIONS, WITH JAMES CAMPBELL.

Papers Presented:

"THE PHYSIOLOGICAL BASIS OF POLITICAL TEMPERAMENTS" 6TH EUROPEAN CONSORTIUM FOR POLITICAL RESEARCH GENERAL CONFERENCE, REYKJAVIK, ICELAND (2011), WITH KEVIN SMITH, AND JOHN HIBBING.

"IDENTIFYING THE BIOLOGICAL INFLUENCES ON POLITICAL TEMPERAMENTS" NATIONAL SCIENCE FOUNDATION ANNUAL HUMAN SOCIAL DYNAMICS MEETING (2010), WITH JOHN HIBBING, KIMBERLY ESPY, NICHOLAS MARTIN, READ MONTAGUE, AND KEVIN B. SMITH.

"POLITICAL ORIENTATIONS MAY BE RELATED TO DETECTION OF THE ODOR OF ANDROSTENONE" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, IL (2010), WITH KEVIN SMITH, AMANDA BALZER, MICHAEL GRUSZCZYNSKI, CARLY M. JACOBS, AND JOHN HIBBING.

"Toward a Modern View of Political Man: Genetic and Environmental Transmission of Political Orientations from Attitude Intensity to Political Participation" Annual meeting of the American Political Science Association, Washington, DC (2010), with Carolyn Funk, Kevin Smith, and John Hibbing.

"Genetic and Environmental Transmission of Political Involvement from Attitude Intensity to Political Participation" Annual meeting of the International Society for Political Psychology, San Francisco, CA (2010), with Carolyn Funk, Kevin Smith, and John Hibbing.

"Are Violations of the EEA Relevant to Political Attitudes and Behaviors?" Annual meeting of the Midwest Political Science Association, Chicago, IL (2010), with Kevin Smith, and John Hibbing.

"The Neural Basis of Representation" Annual meeting of the American Political Science Association, Toronto, Canada (2009), with John Hibbing.

"Genetic and Environmental Transmission of Value Orientations" Annual meeting of the American Political Science Association, Toronto, Canada (2009), with Carolyn Funk, Kevin Smith, Matthew Hibbing, Pete Hatemi, Robert Krueger, Lindon Eaves, and John Hibbing.

"The Genetic Heritability of Political Orientations: A New Twin Study of Political Attitudes" Annual Meeting of the International Society for Political Psychology, Dublin, Ireland (2009), with John Hibbing, Cary Funk, Kevin Smith, and Peter K Hatemi.

"The Heritability of Value Orientations" Annual meeting of the Behavior Genetics Association, Minneapolis, MN (2009), with Kevin Smith, John Hibbing, Carolyn Funk, Robert Krueger, Peter Hatemi, and Lindon Eaves.

"The Ick Factor: Disgust Sensitivity as a Predictor of Political Attitudes" Annual meeting of the Midwest Political Science Association, Chicago, IL (2009), with Kevin Smith, Douglas Oxley Matthew Hibbing, and John Hibbing.

"The Ideological Animal: The Origins and Implications of Ideology" Annual meeting of the American Political Science Association, Boston, MA (2008), with Kevin Smith, Matthew Hibbing, Douglas Oxley, and John Hibbing.

"THE PHYSIOLOGICAL DIFFERENCES OF LIBERALS AND CONSERVATIVES" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, IL (2008), WITH KEVIN SMITH, DOUGLAS OXLEY, AND JOHN HIBBING.

"LOOKING FOR POLITICAL GENES: THE INFLUENCE OF SEROTONIN ON POLITICAL AND SOCIAL VALUES" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, IL (2008), WITH PETER HATEMI, SARAH MEDLAND, JOHN HIBBING, AND NICHOLAS MARTIN.

"NOT BY TWINS ALONE: USING THE EXTENDED TWIN FAMILY DESIGN TO INVESTIGATE THE GENETIC BASIS OF POLITICAL BELIEFS" ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION, CHICAGO, IL (2007), WITH PETER HATEMI, JOHN HIBBING, MATTHEW KELLER, NICHOLAS MARTIN, SARAH MEDLAND, AND LINDON EAVES.

"FACTORIAL ASSOCIATION: A GENERALIZATION OF THE FULKER BETWEEN-WITHIN MODEL TO THE MULTIVARIATE CASE" ANNUAL MEETING OF THE BEHAVIOR GENETICS ASSOCIATION, AMSTERDAM, THE NETHERLANDS (2007), WITH SARAH MEDLAND, PETER HATEMI, JOHN HIBBING, WILLIAM COVENTRY, NICHOLAS MARTIN, AND MICHAEL NEALE.

"NOT BY TWINS ALONE: USING THE EXTENDED TWIN FAMILY DESIGN TO INVESTIGATE THE GENETIC BASIS OF POLITICAL BELIEFS" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, IL (2007), WITH PETER HATEMI, JOHN HIBBING, NICHOLAS MARTIN, AND LINDON EAVES.

"GETTING FROM GENES TO POLITICS: THE CONNECTING ROLE OF EMOTION-READING CAPABILITY" ANNUAL MEETING OF THE INTERNATIONAL SOCIETY FOR POLITICAL PSYCHOLOGY, PORTLAND, OR, (2007.), WITH JOHN HIBBING.

"THE NEUROLOGICAL BASIS OF REPRESENTATIVE DEMOCRACY." HENDRICKS CONFERENCE ON POLITICAL BEHAVIOR, LINCOLN, NE (2006), WITH JOHN HIBBING.

"THE NEURAL BASIS OF REPRESENTATIVE DEMOCRACY" ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION, PHILADELPHIA, PA (2006), WITH JOHN HIBBING.

"HOW ARE POLITICAL ORIENTATIONS GENETICALLY TRANSMITTED? A RESEARCH AGENDA" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO ILLINOIS (2006), WITH JOHN HIBBING.

"THE POLITICS OF MATE CHOICE" ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION, ATLANTA, GA (2006), WITH JOHN HIBBING.

"THE CHALLENGE EVOLUTIONARY BIOLOGY POSES FOR RATIONAL CHOICE" ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION, WASHINGTON, DC (2005), WITH JOHN HIBBING AND KEVIN SMITH.

"DECISION MAKING ON BEHALF OF OTHERS" ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION, WASHINGTON, DC (2005), WITH JOHN HIBBING.

"THE SOURCE OF POLITICAL ATTITUDES AND BEHAVIOR: ASSESSING GENETIC AND ENVIRONMENTAL CONTRIBUTIONS" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO ILLINOIS (2005), WITH JOHN HIBBING AND CAROLYN FUNK.

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"ACCEPTING AUTHORITATIVE DECISIONS: HUMANS AS WARY COOPERATORS" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, ILLINOIS (2002), WITH JOHN HIBBING

"CAN WE TRUST THE NES TRUST MEASURE?" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, ILLINOIS (2001), WITH STACY ULBIG.

"THE IMPACT OF ORGANIZATIONAL STRUCTURE ON THE PRODUCTION OF SOCIAL CAPITAL AMONG GROUP MEMBERS" ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION, ATLANTA, GEORGIA (2000), WITH ALLISON RINDEN.

"ISOLATING THE ORIGINS OF INCUMBENCY ADVANTAGE: AN ANALYSIS OF HOUSE PRIMARIES, 1956-1998" ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION, ATLANTA, GEORGIA (2000), WITH KEVIN ARCENEAUX.

"THE ELECTORALLY INDISTINCT SENATE," NORMAN THOMAS CONFERENCE ON SENATE EXCEPTIONALISM, VANDERBILT UNIVERSITY; NASHVILLE, TENNESSEE; OCTOBER (1999), WITH JOHN R. HIBBING.

"INTEREST GROUP PARTICIPATION AND SOCIAL CAPITAL" ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION, CHICAGO, ILLINOIS (1999), WITH ALLISON RINDEN.

"WE'RE ALL IN THIS TOGETHER: THE DECLINE OF TRUST IN GOVERNMENT, 1958-1996." THE HENDRICKS SYMPOSIUM, UNIVERSITY OF NEBRASKA, LINCOLN. (1998)

"CONSTITUENCY POPULATION AND REPRESENTATION IN THE UNITED STATES SENATE," ELECTING THE SENATE; HOUSTON, TEXAS; DECEMBER (1989), WITH JOHN R. HIBBING.

"THE DISPARATE ELECTORAL SECURITY OF HOUSE AND SENATE INCUMBENTS," AMERICAN POLITICAL SCIENCE ASSOCIATION ANNUAL MEETINGS; ATLANTA, GEORGIA; SEPTEMBER (1989), WITH JOHN R. HIBBING.

"PARTISAN AND INCUMBENT ADVANTAGE IN HOUSE ELECTIONS," ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION (1987), WITH DAVID W. BRADY.

"PERSONAL AND PARTY ADVANTAGE IN U.S. HOUSE ELECTIONS, 1846-1986" WITH DAVID W. BRADY, 1987 SOCIAL SCIENCE HISTORY ASSOCIATION MEETINGS.

"THE DEMISE OF THE UPPER HOUSE AND THE RISE OF THE SENATE: ELECTORAL RESPONSIVENESS IN THE UNITED STATES SENATE" WITH JOHN HIBBING, 1987 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

"A COMPARATIVE ANALYSIS OF ECONOMIC VOTING" WITH JEROME LEGGE, 1985 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

"AN ANALYSIS OF ECONOMIC CONDITIONS AND THE INDIVIDUAL VOTE IN GREAT BRITAIN, 1964-1979" WITH JEROME LEGGE, 1985 ANNUAL MEETING OF THE WESTERN POLITICAL SCIENCE ASSOCIATION.

"CAN GOVERNMENT REGULATE FERTILITY? AN ASSESSMENT OF PRO-NATALIST POLICY IN EASTERN EUROPE" WITH JEROME LEGGE, 1985 ANNUAL MEETING OF THE SOUTHWESTERN SOCIAL SCIENCE ASSOCIATION.

"ECONOMIC CONDITIONS AND THE INDIVIDUAL VOTE IN THE FEDERAL REPUBLIC OF GERMANY" WITH JEROME S. LEGGE, 1984 ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION.

"THE CONDITIONS REQUIRED FOR ECONOMIC ISSUE VOTING" WITH JOHN R. HIBBING, 1984 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION.

"INCUMBENCY ADVANTAGE IN SENATE ELECTIONS," 1983 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION.

"TELEVISION MARKETS AND CONGRESSIONAL ELECTIONS: THE IMPACT OF MARKET/DISTRICT CONGRUENCE" WITH JAMES CAMPBELL AND KEITH HENRY, 1982 ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION.

"ECONOMIC CONDITIONS AND SENATE ELECTIONS" WITH JOHN R. HIBBING, 1982 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION. "POCKETBOOK VOTING: ECONOMIC CONDITIONS AND INDIVIDUAL LEVEL VOTING," 1982 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

"INCREASED INCUMBENCY ADVANTAGE IN THE HOUSE," WITH JOHN R. HIBBING, 1981 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION.

Other Conference Participation:

ROUNDTABLE PARTICIPANT "GENES, BRAINS, AND CORE POLITICAL ORIENTATIONS" 2008 ANNUAL MEETING OF THE SOUTHWESTERN POLITICAL SCIENCE ASSOCIATION, LAS VEGAS.

ROUNDTABLE PARTICIPANT "POLITICS IN THE LABORATORY" 2007 ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION, NEW ORLEANS.

SHORT COURSE LECTURER, "WHAT NEUROSCIENCE HAS TO OFFER POLITICAL SCIENCE" 2006 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

PANEL CHAIR AND DISCUSSANT, "NEURO-SCIENTIFIC ADVANCES IN THE STUDY OF POLITICAL SCIENCE" 2006 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

PRESENTATION, "THE TWIN STUDY APPROACH TO ASSESSING GENETIC INFLUENCES ON POLITICAL BEHAVIOR" RICE CONFERENCE ON NEW METHODS FOR UNDERSTANDING POLITICAL BEHAVIOR, 2005.

PANEL DISCUSSANT, "THE POLITICAL CONSEQUENCES OF REDISTRICTING," 2002 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

PANEL DISCUSSANT, "RACE AND REDISTRICTING," 1999 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION.

INVITED PARTICIPANT, "ROUNDTABLE ON PUBLIC DISSATISFACTION WITH AMERICAN POLITICAL INSTITUTIONS", 1998 ANNUAL MEETING OF THE SOUTHWESTERN SOCIAL SCIENCE ASSOCIATION.

PRESENTATION, "REDISTRICTING IN THE '90S," TEXAS ECONOMIC AND DEMOGRAPHIC ASSOCIATION, 1997.

PANEL CHAIR, "CONGRESSIONAL ELECTIONS," 1992 ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION.

PANEL DISCUSSANT, "INCUMBENCY AND CONGRESSIONAL ELECTIONS," 1992 ANNUAL MEETING OF THE AMERICAN POLITICAL SCIENCE ASSOCIATION.

PANEL CHAIR, "ISSUES IN LEGISLATIVE ELECTIONS," 1991 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION.

PANEL CHAIR, "ECONOMIC ATTITUDES AND PUBLIC POLICY IN EUROPE," 1990 ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION

PANEL DISCUSSANT, "RETROSPECTIVE VOTING IN U.S. ELECTIONS," 1990 ANNUAL MEETING OF THE MIDWEST POLITICAL SCIENCE ASSOCIATION.

CO-CONVENER, WITH BRUCE OPPENHEIMER, OF ELECTING THE SENATE, A NATIONAL CONFERENCE ON THE NES 1988 SENATE ELECTION STUDY. FUNDED BY THE RICE INSTITUTE FOR POLICY ANALYSIS, THE UNIVERSITY OF HOUSTON CENTER FOR PUBLIC POLICY, AND THE NATIONAL SCIENCE FOUNDATION, HOUSTON, TEXAS, DECEMBER, 1989.

INVITED PARTICIPANT, UNDERSTANDING CONGRESS: A BICENTENNIAL RESEARCH CONFERENCE, WASHINGTON, D.C., FEBRUARY, 1989.

INVITED PARTICIPANT--HENDRICKS SYMPOSIUM ON THE UNITED STATES SENATE, UNIVERSITY OF NEBRASKA, LINCOLN, NEBRASKA, OCTOBER, 1988

INVITED PARTICIPANT--CONFERENCE ON THE HISTORY OF CONGRESS, STANFORD UNIVERSITY, STANFORD, CALIFORNIA, JUNE, 1988.

INVITED PARTICIPANT, "ROUNDTABLE ON PARTISAN REALIGNMENT IN THE 1980'S", 1987 ANNUAL MEETING OF THE SOUTHERN POLITICAL SCIENCE ASSOCIATION.

Professional Activities:

Other Universities:

INVITED LECTURER, BIOLOGY AND POLITICS MASTERS SEMINAR (JOHN GEER AND DAVID BADER), DEPARTMENT OF POLITICAL SCIENCE AND BIOLOGY DEPARTMENT, VANDERBILT UNIVERSITY, 2010.

INVITED LECTURER, BIOLOGY AND POLITICS SENIOR SEMINAR (JOHN GEER AND DAVID BADER), DEPARTMENT OF POLITICAL SCIENCE AND BIOLOGY DEPARTMENT, VANDERBILT UNIVERSITY, 2008.

VISITING FELLOW, THE HOOVER INSTITUTION, STANFORD UNIVERSITY, 2007.

INVITED SPEAKER, JOINT POLITICAL PSYCHOLOGY GRADUATE SEMINAR, UNIVERSITY OF MINNESOTA, 2007.

INVITED SPEAKER, DEPARTMENT OF POLITICAL SCIENCE, VANDERBILT UNIVERSITY, 2006.

Member:

EDITORIAL BOARD, JOURNAL OF POLITICS, 2007-2008.

PLANNING COMMITTEE FOR THE NATIONAL ELECTION STUDIES' SENATE ELECTION STUDY, 1990-92.

NOMINATIONS COMMITTEE, SOCIAL SCIENCE HISTORY ASSOCIATION, 1988

Reviewer for:

AMERICAN JOURNAL OF POLITICAL SCIENCE
AMERICAN POLITICAL SCIENCE REVIEW
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AMERICAN PSYCHOLOGIST
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COMPARATIVE POLITICS

ELECTORAL STUDIES

EVOLUTION AND HUMAN BEHAVIOR

INTERNATIONAL STUDIES QUARTERLY

JOURNAL OF POLITICS

LEGISLATIVE STUDIES QUARTERLY

NATIONAL SCIENCE FOUNDATION

POLICY STUDIES REVIEW

POLITICAL BEHAVIOR

POLITICAL PSYCHOLOGY

PUBLIC OPINION QUARTERLY

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University Service:

MEMBER, UNIVERSITY COUNCIL, 2012-2013.

INVITED SPEAKER, RICE ALUMNI ASSOCIATION, ATLANTA, 2011.

LECTURER, ADVANCED TOPICS IN AP PSYCHOLOGY, RICE UNIVERSITY AP SUMMER INSTITUTE, 2009.

SCIENTIA LECTURE SERIES: "POLITICS IN OUR GENES: THE BIOLOGY OF IDEOLOGY" 2008

INVITED SPEAKER, RICE ALUMNI ASSOCIATION, SEATTLE, SAN FRANCISCO AND LOS ANGELES, 2008.

INVITED SPEAKER, RICE ALUMNI ASSOCIATION, AUSTIN, CHICAGO AND WASHINGTON, DC, 2006.

INVITED SPEAKER, RICE ALUMNI ASSOCIATION, DALLAS AND NEW YORK, 2005.

DIRECTOR: RICE UNIVERSITY BEHAVIORAL RESEARCH LAB AND SOCIAL SCIENCE COMPUTING LAB, 2005-2006.

INTERNSHIP DIRECTOR FOR THE DEPARTMENT OF POLITICAL SCIENCE, 2004-2012.

UNIVERSITY OFFICIAL REPRESENTATIVE TO THE INTER-UNIVERSITY CONSORTIUM FOR POLITICAL AND SOCIAL RESEARCH, 1989-2012.

DIRECTOR: RICE UNIVERSITY SOCIAL SCIENCE COMPUTING LAB, 1989-2004.

MEMBER, RICE UNIVERSITY INFORMATION TECHNOLOGY ACCESS AND SECURITY COMMITTEE, 2001-2002

RICE UNIVERSITY COMMITTEE ON COMPUTERS, MEMBER, 1988-1992, 1995-1996; CHAIR, 1996-1998, CO-CHAIR, 1999.

ACTING CHAIRMAN, RICE INSTITUTE FOR POLICY ANALYSIS, 1991-1992.

DIVISIONAL MEMBER OF THE JOHN W. GARDNER DISSERTATION AWARD SELECTION COMMITTEE, 1998

SOCIAL SCIENCE REPRESENTATIVE TO THE EDUCATIONAL SUB-COMMITTEE OF THE COMPUTER PLANNING COMMITTEE, 1989-1990.

DIRECTOR OF GRADUATE ADMISSIONS, DEPARTMENT OF POLITICAL SCIENCE, RICE UNIVERSITY, 1986-1988.

CO-DIRECTOR, MELLON WORKSHOP: SOUTHERN POLITICS, MAY, 1988.

GUEST LECTURER, MELLON WORKSHOP: THE U.S. CONGRESS IN HISTORICAL PERSPECTIVE, MAY, 1987 AND 1988.

FACULTY ASSOCIATE, HANSZEN COLLEGE, RICE UNIVERSITY, 1987-1990.

DIRECTOR, POLITICAL DATA ANALYSIS CENTER, UNIVERSITY OF GEORGIA, 1982-1985.

EXTERNAL SERVICE:

EXPERT WITNESS, GARCIA-SONNIER ET AL V. PASADENA ISD, RACIALLY POLARIZED VOTING ANALYSIS, 2012.

EXPERT WITNESS, MONTES V. CITY OF YAKIMA, CHALLENGE TO YAKIMA, WASHINGTON AT-LARGE CITY COUNCIL ELECTIONS, 2012.

CONSULTANT, LAMAR ISD - DEMOGRAPHIC ANALYSIS AND REDRAWING OF ELECTION DISTRICTS, 2012.

EXPERT WITNESS, RODRIGUEZ, ET. AL. V HARRIS CO., CHALLENGE TO ADOPTED HARRIS COUNTY COMMISSIONERS' COURT PRECINCTS, 2011.

CONSULTANT, CITY OF BAYTOWN - DEMOGRAPHIC ANALYSIS AND REDRAWING OF ELECTION DISTRICTS, 2011.

CONSULTANT, GOOSE CREEK ISD - DEMOGRAPHIC ANALYSIS AND REDRAWING OF ELECTION DISTRICTS, 2011.

CONSULTANT, SAN ANTONIO WATER SYSTEM - ANALYSIS OF PRECLEARANCE ISSUES RELATED TO MERGER WITH BEXARMET WATER AUTHORITY, 2011.

EXPERT WITNESS, TEXAS V US, PRECLEARANCE SUIT FOR TEXAS STATEWIDE DISTRICTS, 2011.*

EXPERT WITNESS, DAVIS V PERRY (AND CONSOLIDATED CASES), CHALLENGE TO ADOPTED TEXAS SENATE DISTRICTS, 2011.

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EXPERT WITNESS, EL PASO APARTMENT OWNERS ASSOC. V CITY OF EL PASO, ANALYSIS OF RACIAL PATTERNS IN HOUSING OCCUPANCY, 2009.

EXPERT WITNESS, BENEVIDES, V IRVING ISD, RACIALLY POLARIZED VOTING ANALYSIS, 2008-2009.

EXPERT WITNESS, BENEVIDES, V CITY OF IRVING, RACIALLY POLARIZED VOTING ANALYSIS, 2008-2009.

EXPERT WITNESS, REYES, ET. AL. V CITY OF FARMERS BRANCH, RACIALLY POLARIZED VOTING ANALYSIS, 2007-2008.