

The Politics of Mate Choice

John R. Alford Rice University

Peter K. Hatemi University of Sydney

John R. Hibbing University of Nebraska-Lincoln

Nicholas G. Martin Queensland Institute of Medical Research

Lindon J. Eaves Virginia Commonwealth University

Recent research has found a surprising degree of homogeneity in the personal political communication network of individuals but this work has focused largely on the tendency to sort into likeminded social, workplace, and residential political contexts. We extend this line of research into one of the most fundamental and consequential of political interactions—that between sexual mates. Using data on thousands of spouse pairs in the United States, we investigate the degree of concordance among mates on a variety of traits. Our findings show that physical and personality traits display only weakly positive and frequently insignificant correlations across spouses. Conversely, political attitudes display interspousal correlations that are among the strongest of all social and biometric traits. Further, it appears the political similarity of spouses derives in part from initial mate choice rather than persuasion and accommodation over the life of the relationship.

After languishing for a time in the face of predominately individualistic approaches to politics, the study of context is making a strong comeback. For example, lively debates have sprung up regarding the extent to which political concordance/diversity is present in typical encounters at the workplace, shopping mall, and family reunion (Huckfeldt and Sprague 1995; Huckfeldt, Johnson, and Sprague 2004; Huckfeldt, Mendez, and Osborn 2004; Mutz 2006; Mutz and Mondak 1997) and over the ability of “virtual” political contexts such as that obtained on television or online to serve as adequate replacements for traditional, face-to-face contexts (Mutz 1998; Putnam 2000).

This renewed attention to context is beneficial, as it is inarguable that humans are much influenced by others. Though substantial attention has been given to the role of social factors in shaping political attitudes, the potential effects of spouses and mate selection have been largely ignored. Recognizing that not everyone has a mate and that even among those who do, coworkers, congregants, and others remain quite influential, it remains the case that mates are often in a position to play a leading role in many political environments. Mates frequently spend considerable time in each other’s company, discussing all manner of topics, including politics. Furthermore, in

addition to any social effect that one spouse may have upon the attitudes of another, the implications of mate selection for the intergenerational transmission of attitudes and for the maintenance of diversity in the next generation have not been appreciated fully within the social sciences. This intergenerational influence of mate pairs on offspring can come in many ways, though two factors are most often noted: the first is active or passive postnatal socialization (Campbell et al. 1960; Jennings and Niemi 1968, 1991; Tedin 1974), and the second is intergenerational reallocation of genetic and environmental influences on political behavior between families (Alford, Funk, and Hibbing 2005; Bouchard et al. 1999; Bouchard and McGue 2003; Fowler, Baker, and Dawes 2008; Fowler and Dawes 2008; Hatemi et al. 2007; Martin et al. 1986; Olson et al. 2001; Scarr and Weinberg 1981). It is widely agreed that regardless of whether parent-offspring transmission is social or genetic or both, mate pairs that are politically similar will produce a much different next generation than mate pairs that are politically dissimilar (Jennings and Niemi 1968). If only genes matter or if only parental socialization matters in shaping the political attitudes of offspring, the degree of political congruence within the mate pair is an important topic. However, if both socialization and genes matter, as

seems likely, the political concordance of mates becomes even more consequential.

Thus, our goal here is to analyze the politics of mate pairs—to understand whether and why mates agree on political matters and to consider the long-term societal implications of spousal political concordance. This analysis is conducted in four sections. In the first, we document the extent to which mate pairs are concordant on a wide variety of physical and behavioral traits, thereby placing political concordance in broader context. In the second, to better understand the nature of political resemblance between mates, we identify the particular political attitudes and clusters of attitudes with the highest level of spousal concordance. In the third, we begin to establish the main reason for the political concordance of mate pairs by asking whether concordance is the result of homogamy, assimilation, assortation, or some combination thereof. And in the final section, we address the practical and theoretical implications of our findings.

The Concordance of Mates

Questions concerning the extent to which politics is relevant to mate choice can be seen as part of a larger research enterprise concerned with the extent to which spouses are similar to each other on all traits. Folk wisdom is of little help in making a prediction on mate similarity. For every saying implying mate concordance (“birds of a feather flock together”) there is one implying discordance (“opposites attract”). Fortunately, empirical research provides a clear verdict on these conflicting adages: when it comes to mates, birds of a feather apparently do flock together.

Spouses resemble each other on traits ranging from physical characteristics (height, weight, skin color, neck circumference, and ear lobe size) to life situations such as educational attainment, income, age, occupation type, and general socioeconomic status, and to mental and social traits such as personality, intelligence, and attitudes (see Bouchard and McGue 1981; Buss 1984; 1985; Caspi, Herbener, and Ozer 1992; Lykken and Tellegen 1993; Plomin, Defries, and Roberts 1977; Thiessen and Gregg 1980; Vandenberg 1972). For almost all traits measured, the correlation between mates is positive. Though opposites do not attract when it comes to mating, the degree of interspouse similarity varies widely from trait to trait. Focusing on the traits of greatest interest to social scientists, the suggestion in previous research is that mate pairs are characterized more by similarities

in social attitudes than by similarities in personality (Eaves, Eysenck, and Martin 1989, Feng and Baker 1994; Luo and Klohn 2005; Martin et al. 1986; Watson et al. 2004). In fact, of all the traits tested, personality traits show some of the lowest correlations between spouses. A few personality traits, such as openness, have demonstrated slight tendencies toward mate concordance, but the core personality traits, including extraversion and impulsivity, produce inter-spouse correlations of less than .10 (Botwin, Buss, and Shackleford 1997; Eaves, Eysenck, and Martin 1989). Despite the presumed permanence of personality traits and their seeming centrality to mate selection and attraction, extraverts are as likely to form pair-bonds with introverts as with fellow extraverts.

Our Analysis

Here, with the aid of data from the “Virginia 30,000” study of kinships and their relatives (“VA30K”), these initial findings are extended more concordently into the political realm.¹ One of the central motivations for collecting these particular data was the need to analyze the multiple social and genetic factors involved in the transmission of a wide range of physical, clinical, and behavioral traits using an “extended twin kinship” design comprising pairs of twins together with their spouses, parents, siblings, and children (Eaves, Eysenck, and Martin 1989; Heath

¹Individuals included in the original VA30K came from a population registry originated in the late 1970s as a result of collaboration between Virginia Commonwealth University and the Virginia Vital Records Office in which all birth records in Virginia were accessed to identify twins. This Virginia twin sample was supplemented with additional twins drawn from a national mailing to American Association of Retired Persons (AARP) members. First-degree relatives and spouses of the twins in the registry were then surveyed. Response rates for the “Health and Lifestyles” survey utilized here, which was conducted in the mid-1980s, were 70% for the twins and 45% for the first-degree relatives and spouses, far better than the response rate for typical surveys. Obviously, this sample is in no respects intended to be random given that a particular component of the population—twins and their relatives/spouses—was targeted. Nonetheless, core demographics indicate a reasonably typical group: mean age = 49; 36% Republican, 32% Democrat, 32% moderate (or don’t know); 59% female; 32% with college degrees, 25% with some college but not a four-year degree, 29% with only a high-school degree, and 11% not finishing high school. Additional details on the sample are available in Truett et al. (1994, 224–25) and Lake et al. (2000). The original twin data collection was funded in part by NIH grants GM30250 and AG04954, by ADAMHA grants AA06781, AA07728, AA07535, and MH40828, and by a gift from R.J.R. Nabisco. The data set employed here is proprietary and application to use it should be made to Professor Lindon Eaves, Virginia Commonwealth University.

et al. 1985; Lake et al. 2000; Truett et al. 1994). The core of the data derives from survey responses of 2,778 pairs of monozygotic (identical, MZ) twins and 3,266 pairs of dizygotic (fraternal, DZ) twins. Twins and their relatives completed individually a comprehensive 16-page instrument concerning physical and mental health, personality, social attitudes, physical traits, personal habits, life-events, demographics, work-related matters, family structure, and relationships. It is the inclusion of twins' family members that makes this data set so valuable for the study of mate concordance. The ~30,000 respondents included 4,387 spouses of twins, and both parents of 773 twin pairs, yielding a total of 5,160 cases (10,320 individuals) for comparing the views of one spouse to the other.

The use of a population based study built around twins is somewhat unique. However, for the purposes of this study, we know of no reason to think that the match between a twin and that twin's spouse should be any different from the match between a nontwin and that nontwin's spouse, and none of the conclusions we are about to draw changes appreciably when the analysis is confined to the 773 cases in which neither spouse is a twin (see column 3 of Table 1 below). Given the large number of cases, the range of variables included, and the paucity of data sets containing political and other information on both spouses, these data are quite likely among the best currently available. Before focusing specifically on the extent to which political traits are concordant across mates, we provide an overview of the extent to which a wider range of traits are similar from one mate to the other. In Table 1, we report concordance for 16 traits taken from the VA30K data.

Though many of the variables in this table are self-explanatory, others require brief description. Height is measured in inches; weight is in pounds while wearing indoor clothing. "Stunkard silhouette" refers to nine drawings of variably shaped male bodies and nine drawings of variably shaped female bodies. This has become a widely utilized protocol for assessing body type and has been validated against body mass index measurements. Respondents were asked to indicate the silhouette closest to their usual appearance. The "Stunkard silhouette" ideal again uses the same drawings but this time asks respondents to report "which of these figures you would *like* to look like." Sleep length is simply the amount of sleep in minutes respondents "usually get at night." Drinking frequency is measured on a 7-point scale representing how often the respondent had an alcoholic drink in a typical week (during the last

12 months). Options ranged from "more than once a day" through "once or twice a week" to "not at all." Smoking frequency is measured via respondents' self-report of their "cigarette consumption (or equivalent)" per day and answers could range from "more than 40 per day" to "never smoked cigarettes." Education is a 6-point scale ranging from "0–7 years of elementary school" to "4+ years of college." W-P index stands for a 28-item version of the Wilson-Patterson liberalism-conservatism index of social and political attitudes (Wilson and Patterson 1968). Party support is measured by a 5-point scale with one pole being "always support Republicans" and the other being "always support Democrats;" "varies" is in the middle and "usually support Republicans" and "usually support Democrats" fill out the index. Church attendance is a 6-point scale running from "more than once a week" to "never." Finally, the five "EPQ" indices are pulled from a 54-item personality battery. EPQ stands for Eysenck Personality Questionnaire and this fivefold breakdown of personality is often employed in personality studies (for a detailed description, see Eysenck 1967).

The first column of Table 1 is the Pearson's correlation for each of the variables for the full sample of spouse pairs. The first feature of note is that the sign for all variables is positive, casting further doubt, at least when it comes to mate choice, on the notion that opposites attract. Still, there is considerable variation in the size of the correlation coefficients. Many, notably those for some of the main dimensions of personality, are quite weak. Physical measures such as height, weight, and Stunkard silhouette (both actual and desired) are positively correlated across mates, but only mildly, with correlations running from barely 0.1 to a little over 0.2. Correlations in personality traits tend to be similar or even smaller than those for physique. In fact, the only personality index with a correlation over 0.2 is the social desirability ("lie") scale with a correlation of 0.217 (similar results can be found in Eaves, Eysenck, and Martin 1989; Feng and Baker 1994). Neither sleeping nor smoking patterns is strongly correlated between spouses, but correlations for alcohol consumption and church attendance are large (one might speculate about the impact of two very common, if socially divergent, locations in which prospecting for mates often occurs). Generally, the largest correlations are found for those measures that might be expected to have greater social impact, notably church attendance, educational attainment, and political affiliation. Support for one political party or the other is definitely concordant, with a correlation between spouses of nearly 0.6 (see also Stoker and Jennings

TABLE 1 Spousal Concordance on 16 Traits Pearson's r (n)

Trait	All Pairs	Twins and Spouses	Parents of Twins
Church attendance	.714 (4950)	.727 (4250)	.631 (700)
W-P Index (28 items)	.647 (3984)	.658 (3443)	.534 (541)
Drinking frequency	.599 (4984)	.593 (4244)	.625 (740)
Political party support	.596 (4547)	.595 (3924)	.598 (623)
Education	.498 (4957)	.462 (4261)	.583 (696)
Height	.227 (4964)	.239 (4257)	.175 (707)
EPQ lie scale	.217 (4475)	.203 (3847)	.306 (628)
Smoking frequency	.211 (4266)	.203 (3417)	.276 (484)
Weight	.154 (4985)	.154 (4286)	.108 (699)
Sleep length	.127 (5086)	.111 (4360)	.206 (726)
EPQ psychotism	.122 (4545)	.118 (3918)	.142 (627)
Stunkard Silhouette ideal	.121 (4894)	.120 (4068)	.139 (671)
Stunkard Silhouette	.119 (5019)	.121 (4316)	.086 (703)
EPQ neuroticism	.082 (4991)	.074 (4273)	.118 (718)
EPQ extraversion	.005 (4739)	.006 (4059)	-.010 (680)
EPQ impulsivity	.002 (4875)	-.006 (4181)	.044 (694)
Mean correlation	.278	.274	.285

Source: VA30K survey data (as described in text).

Note: The reported correlations are Pearson's r's followed by the number of spouse pairs in parentheses. All of the correlations are statistically significant at the .001 level except for Stunkard silhouette for parents of twins (which reaches the .05 level) and all of those for extraversion and impulsivity (which fail to reach significance at even the .1 level).

2005). The W-P index, which contains numerous political items in addition to items designed to assess other attitude domains is explored more closely below.

The right two columns of Table 1 reproduce the concordance analysis discussed above separately for the twin portion of the sample and the smaller set of spouse pairs that were parents of twins. There is no systematic difference between the two groups and the average correlations are very similar. For example, a concern that twins might be more likely to seek concordant mates as a function of having experienced an unusual level of sibling concordance does not seem to be supported as the mean correlation for the twins and their spouses is if anything slightly lower than the mean concordance for the parent pairs. As a result, for the remainder of the analysis we will rely on the full combined sample.

The Political Concordance of Mates

With these general levels of mate concordance in mind, we proceed to a more detailed analysis of the traits most likely to be of interest to political scientists: political and social attitudes. To emphasize the unique nature of these attitudes, and to provide a more detailed look at the component parts of the broader indices, we report spousal concordance on an item by item basis for both the individual

personality items and the individual political items. The left half of Table 2 contains the interspousal correlations for each of the 28 individual items in the VA30K Wilson-Patterson inventory, and the right half reports interspousal correlations for the 54 items in the EPQ battery. Both sets of items are ranked from highest to lowest in terms of spousal concordance. Because of the limited range of response options on these individual items (three for each of the W-P items and two for each of the EPQ items) polychoric or tetrachoric correlations rather than Pearson correlations are presented. We report significance tests in spite of the fact that their inferential value is limited by the nonrandom nature of the sample. In drawing our conclusions, we rely solely on the size and substantive significance of the reported results; we report levels of statistical significance only to give some sense of the stability of the relationships.

Table 2 makes it clear why in Table 1 the composite W-P inventory produced such a strong overall interspousal correlation while those for the five EPQ indices were much weaker. The two lists barely overlap with only three of the EPQ items showing spousal concordance as high as the lowest W-P item (censorship). In fact, it is revealing that the only two EPQ items with concordance above .3 both have decidedly political aspects. One item asks whether respondents believe "marriage is an old fashioned institution that deserves

TABLE 2 Spousal Concordance on Attitudinal and Personality Items (Descending Order)

Wilson-Patterson Item	Polychoric Correlation	Statistical Significance	Number of Pairs	EPQ Item	Tetrachoric Correlation	Statistical Significance	Number of Pairs
school prayer	.647	.001	5002				
abortion	.631	.001	4968				
gay rights	.581	.001	4953				
living together	.573	.001	4977				
Democrats	.527	.001	4906				
Republicans	.498	.001	4902				
				marriage is old fashioned	.487	.050	4243
X-rated movies	.472	.001	5005				
unions	.462	.001	4953				
liberals	.451	.001	4912				
capitalism	.443	.001	4895				
death penalty	.437	.001	4999				
Moral Majority	.412	.001	4882				
divorce	.410	.001	4955				
women's lib.	.408	.001	4980				
the draft	.400	.001	4938				
nuclear power	.392	.001	4952				
property tax	.381	.001	4923				
busing	.352	.001	4978				
socialism	.348	.001	4888				
foreign aid	.343	.001	4986				
astrology	.336	.001	4889				
				would take dangerous drug	.320	.195	4233
federal housing	.317	.001	4978				
immigration	.316	.001	4961				
pacifism	.304	.001	4809				
segregation	.303	.001	4933				
modern art	.300	.001	4977				
military drill	.281	.001	4897				
				saving/insurance is a waste	.261	.001	4169
censorship	.253	.001	4909				
				cheated at game	.251	.001	4162
				better to follow rules	.250	.001	4063
				good manners important	.250	.001	4209
				spoken ill of another	.239	.001	4142
				taken advantage of someone	.231	.001	4166
				all own habits desirable	.223	.001	4137
				often lonely	.221	.001	4209
				taken another's property	.220	.001	4209
				practice what preaches	.208	.001	4110
				likes to intimidate others	.203	.505	4208
				happy-go-lucky	.183	.001	4126
				fresh to parents as child	.183	.001	4187
				often fed up	.177	.001	4167
				been greedy	.166	.001	4204
				broken other's property	.164	.001	4185
				can get party going	.164	.001	4063
				prefers own way	.163	.001	4178
				likes excitement	.156	.001	4138
				lets self go at party	.155	.001	4154

TABLE 2 (Continued)

Wilson-Patterson Item	Polychoric Correlation	Statistical Significance	Number of Pairs	EPQ Item	Tetrachoric Correlation	Statistical Significance	Number of Pairs
				feels miserable for no reason	.152	.001	4198
				takes on too much	.151	.001	4214
				suffers from nerves	.147	.001	4160
				would worry about debt	.144	.001	4227
				keeps promises	.136	.002	4202
				feelings easily hurt	.120	.001	4170
				enjoys cooperation	.117	.173	4209
				enjoys mixing with people	.112	.001	4127
				blamed another	.105	.001	4167
				a nervous person	.100	.001	4192
				thought of as lively	.099	.001	3998
				enjoys meeting people	.096	.004	4178
				notices what others think	.092	.021	4216
				worries about mistakes	.089	.064	4169
				worries after embarrassment	.087	.001	4194
				can liven up party	.084	.003	4130
				Lively	.074	.026	4178
				thinks before doing	.063	.128	4167
				feelings of guilt	.059	.174	4168
				mood up and down	.057	.043	4214
				decides on spur of moment	.056	.012	4197
				Procrastinates	.054	.238	4186
				keeps in social background	.052	.079	4161
				mostly quiet	.028	.387	4123
				tense/highstrung	.019	.831	4074
				likes to act quickly	.019	.189	4138
				sometimes act too rashly	.004	.855	4176
				Irritable	-.014	.375	4141
				tries not to be rude	-.035	.804	4215
				takes initiative with people	-.056	.028	4160
				Worrier	-.059	.081	4140
				Talkative	-.099	.001	4189
28 item mean	.413			54 item mean	.128		

Source: VA30K survey data.

to be done away with." This item has both political and religious implications and is the only EPQ item dealing with attitudes toward a specific social institution. The other item asks about willingness to take a potentially dangerous drug, a topic that is related to social/antisocial behavior and holds political connotations. All of the other EPQ items are personality based and display weaker spousal concordance than the political items.

Overall, the spousal correlations for the W-P items are positive and large. The correlations for the EPQ personality items, on the other hand, are much smaller with many hovering around 0.0 and some even registering as slightly negative. With regard to a few isolated personality items, such as being talkative, opposites may attract—though the size of the correla-

tion coefficients indicates that this pattern is hardly a strong one. The slightly different item formats and distributions discourage precise comparisons, but it is clear that in terms of spousal concordance, social and political attitudes function differently from personality traits.

Having established that mates are more similar in social and political attitudes than for personality, the question becomes which social and political attitudes are the most likely to be shared. Since the Wilson-Patterson items in Table 2 are ordered from highest to lowest, this matter is easy to resolve. As may have been expected, spouses are most likely to share views on hot-button social issues involving reproduction, religion, and sexual preference. Attitudes on school prayer, abortion, gay rights, and living together are

those most likely to display similarity from one spouse to the other. In fact, the strength of these correlations suggests it is rare for spouses to have diametrically opposed attitudes on these matters. Attitudes on other political issues such as property taxes, foreign aid, immigration, federal housing, and censorship are much less concordant, displaying spousal correlations that are still positive but somewhat weaker.

The 28 items included in the version of the Wilson-Patterson Inventory available to us constitute an eclectic combination and neither treating them *seriatim* as we do in Table 2 nor as a simple additive index as we do in Table 1 is necessarily satisfactory. Using linear structural models, it is possible to specify whether concordance has its basis in specific items, in underlying common factors, or in both. Though a single common conservatism factor is unlikely to provide a complete description of the structure of attitudes, it provides a convenient starting point for describing the pattern of interitem correlations in the sample. Using M-Plus, a single factor was extracted from the matrices of polychoric correlations between the items. The loadings of the 28 items on the first factor are summarized in Figure 1. The liberal pole is defined most markedly by permissive attitudes to sex and reproduction (abortion, gay rights, living together, and women's liberation) and, not surprisingly, approval of "liberals." The conservative pole is reflected in high positive loadings on attitudes to the "Moral Majority" (remember the survey was conducted in the 1980s), school prayer, and "Republicans." By graphically displaying the factor scores for both males and females Figure 1 also allows us to visually confirm the considerable comparability of item loadings across gender.

One additional aspect of the political concordance of mate pairs deserves attention now. Typical measures of correlation, such as the Pearson's *r* and others employed here, tap relative concordance as opposed to absolute concordance, thereby leaving open the possibility that husbands and wives are not politically similar in an absolute sense. To this point we have demonstrated that the most liberal [conservative] wives have the most liberal [conservative] husbands, but if significant differences exist in the mean attitudes of males and females, husbands and wives could nonetheless be quite different politically. If for example males are on average substantially more conservative than females, then we could have high relative concordance while still, for example, having the majority of pairs made up of a conservative husband and a liberal wife.

The first question is whether there is in fact a large male/female mean difference in ideology. With

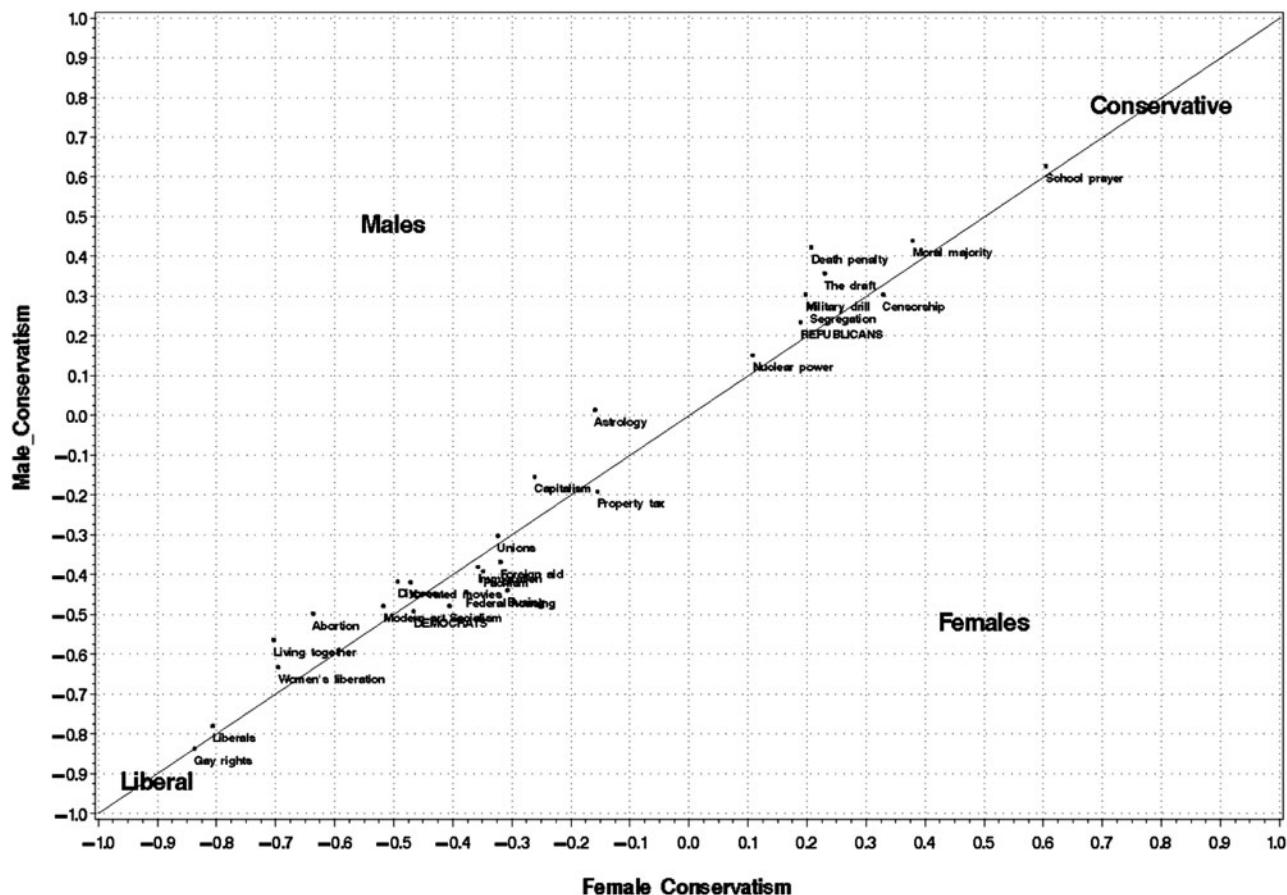
its 28 items each coded +1 for a "conservative" attitude, -1 for a "liberal" attitude and 0 for uncertain, the W-P Inventory has a theoretical range of 56 (-28 to +28). The actual range in the sample is -25 to +26 for males and -24 to +25 for females. Males in the sample, as might be expected, are more conservative than females, but the difference is modest. The mean WP index value for males is 4.3 and the mean for females is 2.8, a difference of only 1.5 ($p < .001$) on a range of approximately 50. Thus, while this difference is real, it is relatively small.

The second question addresses the extent to which these modest male/female differences translate into absolute differences within spouse pairs. If we assume random mating for these 3,984 males and 3,984 females, we would expect a mean absolute difference of 9.0 on the WP index and a median absolute difference of 8.0. The actual absolute difference for a spousal pair is much less than this, with a mean absolute difference for couples of 5.4 and a median absolute difference of only 4.0.

A more direct look at absolute concordance is possible by collapsing the WP index into a seven-point scale and displaying the absolute concordance as a cross-tabulation of female and male values for the couples. As can be seen in Table 3, the cases clearly cluster on the main diagonal, especially as we move out to the left or right toward less moderate positions. In contrast, the same areas of the off-diagonal (where we would expect an equal number of cases under random mating, or a larger cluster of cases if "opposites attract") show very few cases. For example, there are 317 couples (compared to an expected number of only 87) matched in the top left cell (1 with 1, or most liberal with most liberal) and 257 couples (compared to an expected number of only 90) matched in the bottom right cell (7 with 7, or most conservative with most conservative), for a total of 574 couples (compared to an expected number of only 176). Contrast this with the two most ideological off-diagonal categories. Here we find only 14 couples (compared to an expected number of 125) matched in the bottom left cell (1 with 7, or most liberal wives with most conservative husbands) and only three couples (compared to an expected number of 63) matched in the top right cell (7 with 1, or most conservative wives with most liberal husbands), for a total of only 17 couples (compared to an expected number of 188).

Table 3 can also directly answer the question of whether the high relative concordance we have found here exists despite the fact that most couples actually have opposite ideologies. If we exclude the couples in

FIGURE 1 Loadings of Attitude Items on the “Conservatism” Factor in Males and Females from the Virginia 30,000.



which one or both spouses fall in the neutral category we are left with 2,927 couples in which both spouses tilt conservative or liberal. Of these couples only 667 (23%) are composed of opposite ideology pairs, while 2,260 (77%) are same ideology pairs. This indication of strong absolute concordance can also be seen in the summary measures for Table 3. Overall, the absolute match is a clear one, with a tau-b of .465 (significance level .001), and a similarly strong intra-class correlation coefficient of .565 (significance level .001). Interestingly, this is remarkably similar to the strong absolute concordance between parent and child's party identification presented in the classic Jennings and Niemi article (1968). Their 7-point cross-tabulation shows much the same internal pattern and produces a nearly identical tau-b of .47.

The Sources of Mate Concordance

Having established many of the details regarding the nature of mate concordance on political issues, it is

time to turn to the reasons for this concordance. Three possible explanations for spousal political concordance have been proffered (Heath et al. 1985). The first is phenotypic assortative mating, where mates are selected because of the degree of similarity of a trait they hold to a corresponding trait of their prospective mate. Social homogamy, on the other hand, produces spousal concordance not because of direct selection on the basis of a given trait such as height, weight, or political views but rather because mates tend to come from similar social and geographic backgrounds. If these backgrounds are connected to the trait of interest, say political views, spousal concordance may actually be due to the pool of likely mate possibilities and not to direct selection on the trait in question. Finally, the assimilation hypothesis holds that to the extent spouses are concordant, the primary reason is the influence that one spouse exerts on the other. This exposure could either be due to overt attempts at persuasion and conversion or indirectly due to the fact that spouses tend to share many of the same experiences and over

TABLE 3 Crosstab of 7-Point Wilson Patterson Index

			7-point Wilson Patterson Collapsed Index for Female Spouse							
			1	2	3	4	5	6	7	Total
7-Point Wilson Patterson Collapsed Index for Male Spouse	1	Count	317	99	49	27	20	7	3	522
		Expected Count	86.6	75.5	72.8	77.2	84.4	63.0	62.5	522.0
	2	Count	120	113	96	54	40	21	14	458
		Expected Count	76.0	66.2	63.9	67.7	74.0	55.3	54.8	458.0
	3	Count	94	105	104	81	69	39	17	509
		Expected Count	84.5	73.6	71.0	75.3	82.3	61.5	60.9	509.0
	4	Count	59	99	101	111	105	74	30	579
		Expected Count	96.1	83.7	80.8	85.6	93.6	69.9	69.3	579.0
	5	Count	40	81	103	146	145	91	61	667
		Expected Count	110.7	96.4	93.1	98.6	107.8	80.5	79.9	667.0
	6	Count	17	41	53	80	104	103	95	493
		Expected Count	81.8	71.3	68.8	72.9	79.7	59.5	59.0	493.0
	7	Count	14	38	50	90	161	146	257	756
		Expected Count	125.4	109.3	105.5	111.8	122.2	91.3	90.5	756.0
Total Count			661	576	556	589	644	481	477	3984
			661.0	576.0	556.0	589.0	644.0	481.0	477.0	3984.0

the years these mutual experiences are likely to mute any initial discordance that may have existed. Thus, a key feature of the assimilation explanation is the expectation that similarity will increase with length of marriage. In sum, mate concordance on ideology could be due to *selection* (the initial choice of a mate based on ideology), *social homogamy* (the fact that social background skews the ideology of the potential mate pool in which individuals exist), *assimilation* (the convergence in attitudes caused by the shared environment and mutual political influence of mate pairs on each other *after* mate choice has already taken place), or some combination thereof.

Stoker and Jennings observe that while political scientists have focused on the influence of primary groups on political beliefs, attention to adult family members as primary political groups has been “curiously absent” (2005). There has some recent work by Hayes and Bean in Australia (1992 and 1994) and work in the United States by Jennings and associates (see especially, Niemi, Hedges, and Jennings 1977; Stoker and Jennings 2005; in addition, Zuckerman, Dasovic, and Fitzgerald 2007 touch on spousal concordance even as they focus on parent-child similarity). Though the authors of these studies assess whether spouses share political views, their primary interest is the extent to which the political views of a given spouse are influenced by the other spouse (with secondary interests in the conditions under which interspousal influence is heightened or diminished). They seek to determine, for example, whether the

political views of husbands influence wives more than the views of wives influence husbands. Our data allow us to provide empirical tests of the extent to which assimilation and social homogamy are evident in the data. If similarity between the spouses does not increase as the length of time they have spent together increases, serious questions are raised concerning the mutual influence and shared experience explanation. Similarly, if controls for such factors as social class, familial background, and related variables fail to eliminate spousal concordance on political views, this would be powerful evidence against the social homogamy explanation (see also Heath et al. 1985). We begin with assimilation.

The Effects of Assimilation on Spousal Political Concordance

The ideal research design would include a longitudinal sample of spouses before they met; however, this would require the ability to foresee the future, or to obtain a large enough sample that by chance a large number of persons would eventually meet and mate. Such a test is not likely possible. Though we do not have both spouses before they meet, we do have two data sets that speak to the role of assimilation, with the primary data deriving, again, from the VA30K.

A simple test for whether or not concordance on political and social attitudes increases over the life of a relationship is possible by first breaking couples

into seven categories—those who have been married less than or equal to one year; those married 2–5 years or less; those married 6–15 years; those married 16–25 years; those married 26–35 years; those married 36–45 years; and those married at least 46 years (the longest marriage in the data was 67 years)—and then computing the correlation of the W-P index between spouses for couples in each of these categories. Remember from Table 1 that the W-P inter-spousal correlation for the entire sample is .647. When split according to years of marriage, the correlations are as reported in Table 4.

Couples in all seven categories display an impressively high concordance of political and social beliefs. There does appear to be some modest upward trend as length of the relationship increases after the initial year, but this increase is not statistically significant. When we compute the absolute value of the difference between the additive W-P score for the two spouses and correlate this difference with years of marriage, the coefficient is indeed negative, indicating that the gap between spouses does tend to diminish, but is substantively minuscule (and statistically insignificant). As described earlier, the W-P index has a possible range of 56 points and according to our analysis it would take 48 years of marriage to decrease the gap by only one point ($48 \times .021$). Even the minimally lower correlation for those married less than five years seems to be due to the fact that many of these individuals are young. Political views are often not fully formed in these early years, and it appears that the influence of genes on political and social attitudes does not begin to manifest itself until approximately age 20 (see Bouchard and McGue 2003; Hatemi et al. 2009). When all marriages prior to age 30 are excluded from the analysis, the slightly reduced correlation of those married less than five years vanishes.

In Figure 1, we reported the results of a simple single-factor extraction for the 28-item W-P index. Further exploratory analysis of the interitem correlations suggested that a model with five oblique primary factors was superior to a model that assumed a single common “conservatism” factor. In this five-factor solution, items were clustered around attitudes to sex, economic issues, militarism and punishment, religious conservatism, and political preference. For each of the factors we used weighted least squares regression to predict the observed correlation between mates as a function of marital duration. We proceeded step-wise, testing first whether the correlations were really homogeneous and, if not, adding linear and quadratic terms in a stepwise fashion to determine whether any heterogeneity can be explained, at least in part, by systematic increases or decreases in correlation with age. The analysis is summarized in Table 5.

Since duration of 0–4 years is coded as 0 in the regression analysis (5–9 = 1, etc.), the intercept represents the average correlation between mates during the first four years of marriage. These are uniformly large, implying that most of the resemblance between mates is established before marriage or very soon thereafter, consistent with the high correlation of .588 for those married a year or less. Though it is possible that the resemblance results from very rapid convergence early in the marriage, the results are also consistent with the possibility that the correlation between mates results primarily from the tendency of like to marry like (i.e., from assortative mating more than spousal interaction).

Turning to the estimated slopes, similarity for overall liberalism-conservatism increases modestly with length of marriage, but this trend originates in just two of the five underlying factors, reflecting statistically significant increases over time in spousal

TABLE 4 Spousal Correlations on the Wilson-Patterson Index by Length of Marriage

Length of Marriage	Pearson's Correlation	Statistical significance	Interclass Correlation	Statistical significance	Number of Pairs
≤ 1 year	.588	.001	.559	.001	97
2-5 years	.595	.001	.577	.001	312
6-15 years	.629	.001	.621	.001	591
16-25 years	.585	.001	.571	.001	427
26-35 years	.661	.001	.647	.001	851
36-45 years	.668	.001	.655	.001	1276
>46 years	.665	.001	.663	.001	390
all couples	.647	.001	.636	.001	3984

Source: VA30K survey data.

TABLE 5 Spousal Correlation and Duration of Marriage (Five-Year Cohorts) for Overall Ideology and Five Primary Factors

Variable	Parameter			Statistic		
	Intercept	Linear	Quadratic	Fit (χ^2)	d.f.	P % (Fit)
Conservatism	0.572	0.010	—	11.07	9	>5
Sex and reproduction	0.602	—	—	14.91	10	>5
Economy and taxation	0.388	—	—	16.90	10	< 1
Militarism and punishment	0.349	0.015	—	10.58	9	>5
Political preference	0.478	-0.004	0.0037	26.71	8	< 1
Religious conservatism	0.453	—	—	11.96	10	>5

Notes: Goodness of fit is assessed for the simplest adequate model. The probability, P(Model) is the significance of the joint linear+quadratic regression using a variance ratio test, $F_{(2,9)}$ using the weighted residual sum of squares as error.

correlations on the “militarism and punishment” factor and the “political preference” factor. Substitution in the equations for predicted spousal correlations shows an expected increase in the correlation for overall conservatism from 0.57 in marriages that have lasted 0–4 years ($0.572 + (0 \times 0.010)$) to 0.67 ($0.572 + (10 \times 0.010)$) in marriages that have lasted 50 years or more. Put another way, adding five years to the length of a marriage boosts the ideological similarity of spouses by only .01, a very modest increase in the correlation particularly in light of the large intercept of .57. Over the same period, the average correlation for the “militarism and punishment” factor is expected to increase from 0.35 to 0.50 and for the “political preference” factor from 0.49 to 0.81.² Correlations in the other three factors show no meaningful trends. The increases in similarity over time in the two factors that show a trend might be due to phenotypic convergence between spouses who live together, but might also be explained by a secular trend toward less intense assortative mating such that the correlation between mates is higher in couples who selected one another a relatively long time ago.

The general finding that political attitudes of spouses are about as similar when they are first married as when they have been married decades

will be surprising to some readers as it clearly contradicts the conclusion reached by Stoker and Jennings (2005) in the only other recent U.S. research on this issue. Stoker and Jennings, for example, flatly dismiss selection as an explanation for mate concordance asserting that “Americans seldom use politics as a criterion for mate selection.” They conclude instead that political concordance of mates is the result of both social homogamy and assimilation through the “volume of shared experiences and interactions with each other” (2005, 53). In their analysis, Stoker and Jennings take advantage of an extremely valuable long-term panel study to estimate spousal correlations at three widely separated stages of a marriage. Though the usual attrition of panel studies plus the mortality of individuals and relationships conspire to reduce their N, it is still amazing that they have data on the political views of 150 couples early in their marriage and then again 24 years later. As will be discussed later, the empirical findings on the stability of attitudinal concordance regardless of the stage of the marriage are remarkably similar whether the data are cross-sectional (ours) or longitudinal (Stoker and Jennings).

As mentioned, in order to determine the source of spousal similarity in political attitudes, the ideal data would include self-reports of spouses before they met, and then again after. While no such data exist, in addition to the VA30K data on spousal concordance of U.S. couples over decades of marriage, we also have access to a highly informative Australian data set containing the political attitudes of 5,877 individuals

²This fairly robust increase on this dimension (mostly a response to the party labels of “Democrat” and “Republican”) is similar to a finding in Stoker and Jennings (2005) for party identification.

as expressed in 1980 and then again in 1990.³ In the 10 years in between measurements, many of the individuals entered into marriage or long-term mating partnerships and in 1990 the attitudes of their spouses were assessed as well. Attitudes were measured by 30 W-P items included in both the 1980 and 1990 surveys. As such, the measures available provide three of the four possible points of information for spousal assortment, with the only point missing being assessment of the spouse's attitudes prior to marriage.

Table 6 provides the correlations of individual attitude position in 1980 with individual attitude positions in 1990 for (1) all individuals assessed, (2) those individuals who were single in 1980 but married by 1990, (3) those individuals who were single in 1980 and still single in 1990, and (4) those individuals who were married in 1980 and still married in 1990. For comparison purposes, the last line of the table presents the 1990 interspousal correlations. The analyses, though simple in nature, provide a remarkable picture. The correlations between repeated measures for all individuals, for just those remaining single, and for those remaining married, were nearly the same (.744, .765, and .796). The only group with a smaller correlation was composed of those individuals who were single in 1980 but married by 1990. However, the difference in correlations is only about 0.1, suggesting that, though marriage is correlated with an alteration in political attitudes, this alteration is surprisingly small. Further assessment is possible by focusing only on the 1,308 subjects who were single in 1980 and then regressing a dummy variable for married in 1990 (and a control for age) on the absolute value of the change in individual attitude position over the 10-year period. The resulting estimation shows an average change (intercept) of .178 over the 10-year period and a small

³These data were collected in the course of mailed surveys of adult Australian twins born 1893–1972. An initial survey (1980–82) included measures on attitudes, health, and personality, among other traits of interest to clinicians and epidemiologists. The sample consisted of 3,808 twin pairs aged 18–88 years. A follow-up survey of twins enrolled in the Australian Twin Registry was conducted from 1988 to 1990 with a more extended Health and Lifestyle Questionnaire containing items on voting preference, social attitudes, and a variety of sociodemographic and clinical variables. After mail and telephone follow-ups, questionnaires were returned by 6,327 individuals (83.1%) including 2,995 complete pairs (78.7%). Comparisons with the Australian Bureau of Statistics provide evidence that these groups are reasonably representative of the population in general with regard to education, socioeconomic status, and social behaviors. Further details can be found in the numerous published works employing these data (Baker et al. 1996; Eaves, Eysenck, and Martin 1989; Jardine and Martin 1984; Kendler et al. 1995; Truett et al. 1992; Whitfield et al. 2005).

but statistically significant -.001 slope for age as attitudes firm up later in life ($p < .001$). The important result, however, is that the slope for marital status is both substantively small ($b = .007$) and statistically insignificant ($p = .203$). If assimilation is the major causal element for spousal concordance, the impact of marriage on attitude change should be much more substantial than is indicated by this regression coefficient.

It is apparent that the similarity in spouses' social and political attitudes is substantial and that most of this similarity is present from the beginning. One implication of this high level of initial similarity is that no matter how strong the pressure on spouses to move toward less conflicting attitudinal stance, the high level of initial assortation does not leave much room for assimilation to take place. At the same time, these relatively low levels of initial attitude differences diminish assimilation pressures compared to those present if the initial attitude clash between spouses were more pronounced. In short, assortation, even if only because it occurs first, reduces the role of assimilation.

It may seem as though these results are inconsistent with Stoker and Jennings' (2005) emphasis on the importance of assimilation rather than assortation but a closer look indicates their findings and ours show quite similar levels of assimilation. Table 7 juxtaposes results reported by Stoker and Jennings (S&J) and results from our analysis in a format that is as parallel as possible given the inherent differences in the studies. To match length of marriage we compare pairs from our data who reported being married from two to six years to S&J 1973 data, where their couples had been married for an average of four years. Similarly, we compare pairs from our data who reported being married from 26 to 30 years to S&J 1997 data, where their couples had been married for an average of 28 years. Stoker and Jennings report an increase in spousal agreement on party identification from .34 to .54 and a similar pattern for self-identification with an ideological group. We have no measure of either party or ideological self identification and have no reason to dispute the evidence that spousal pairs' similarity in attachment to social groups grows with the passage of the years (in fact, such a finding concerning group attachment makes perfect sense). But on actual issue attitudes—the only area where comparisons are possible—the empirical results presented by Stoker and Jennings are quite consistent with ours.

More specifically, two points from Table 7 seem most salient. First, there remarkable similarity exists in the pattern of findings between our data and that

TABLE 6 Correlation of Individual Political Attitudes Indices in 1980 and 1990, Australian Sample

Index of 30 Political Items	Pearson's Correlation	Number of Observations	Statistical Significance
All individuals 1980-1990	0.765	5877	.001
Single 1980-Married 1990	0.639	1273	.001
Single 1980-Single 1990	0.744	1035	.001
Married 1980-Married 1990	0.796	3252	.001
Spousal concordance 1990	0.661	2362	.001

Source: Australian data set (as described in note 3)

of Stoker and Jennings, particularly given that the studies are from different populations at different times. Second, once we move beyond self-identification

to actual voting or specific attitudes the Stoker and Jennings data provide clear evidence of strong initial assortation followed by only modest assimilation. The correlation in vote choice in the S&J data starts at .59 and grows only slightly to .69 after 24 years. The same pattern is evident in our data with the correlation for the reported typical vote direction starting at .44 and rising modestly to .54. Religiosity, measured as behavior and belief, not as self-identification, starts at an even higher initial correlation and actually declines over time in both data sets. Turning to specific issue attitudes, we were able to find fairly close matches in our data for five of the six issues that S&J report for both 1973 and 1997. The patterns vary considerably over the individual items, but in the aggregate they demonstrate that most spousal concordance is present early and increases only modestly over time. The mean correlation for the five specific issue positions reported by S&J starts at .25 and rises to .30 after 24 years. If legalization of marijuana is included, the six-issue mean starts at .29 and ends at a nearly identical .31

TABLE 7 Comparison of Stoker and Jennings (S&J) Correlations to Other Results

	~ 4 years	~ 28 years	Difference
S&J Ideology (7-point self identification)	0.22	0.41	0.19
Our Party Identification (5-point)	0.34	0.54	0.20
S&J Reported Vote (previous two Presidential elections)	0.59	0.69	0.10
Our Reported Vote (party usually supported)	0.44	0.54	0.11
S&J Religiosity (Bible beliefs + church attendance)	0.72	0.53	-0.19
Our Religiosity (church attendance)	0.70	0.68	-0.02
S&J Race policy (school integration + aid to blacks)	0.22	0.38	0.16
Our WP item - Segregation	0.18	0.26	0.08
S&J Gender equality (women's role + women's influence)	0.15	0.14	-0.01
Our WP item - Women's liberation	0.19	0.35	0.16
S&J Business vs. labor (labor union + big business influence)	0.33	0.31	-0.02
Our WP item - Unions	0.25	0.41	0.17
S&J Government job assistance	0.11	0.21	0.10
Our WP item - Federal Housing	0.16	0.19	0.04
S&J School Prayer	0.44	0.47	0.03
Our WP item - School prayer	0.42	0.49	0.07
S&J mean of five issues	0.25	0.30	0.05
Our mean of five issues	0.24	0.34	0.10
Schooley 1936	1-4 yrs	5-20 yrs	
Political values	0.17	0.22	0.05
Attitude toward communism	0.64	0.61	-0.02
Attitude toward birth control	0.52	0.67	0.14
Newcomb & Svehla 1937	Couples	Parents	
Attitude toward church	0.67	0.76	0.09
Attitude toward war	0.53	0.43	-0.09
Attitude toward communism	0.71	0.58	-0.13
Caspi et al. 1992 (Kelly 1935-55 longitudinal data)	Engaged	Married 20 yrs	
Political values	0.34	0.38	0.04

after 24 years. Attitudes on abortion, the one issue S&J have in only 1982 and 1997, start at a correlation of .51 and 15 years later are unchanged at .50. In other words, taken together the seven issues reported by S&J show essentially no change over the substantial period of their study. So while interpretations differ, our findings (as reported in Tables 5, 6, and 7) are entirely compatible with the S&J data for issue attitudes.

Also note that at the bottom of Table 7 we report data collected in the 1930s from three large groups of spouses. These data included some political content. Schooley (1936) and Newcomb and Svehla (1937) both conclude, and their results clearly show, that spousal concordance is almost entirely the result of initial assortation. A similar pattern is exhibited in the 20-year longitudinal study (1935 to 1955) of engaged couples carried out by E. L. Kelly and reported in Caspi, Herbener, and Ozer (1992). These are the only studies we can locate with political data on spousal pairs at various lengths of marriage, and they all point to the same conclusion.

The Effects of Social Homogamy on Spousal Political Concordance

Social homogamy is an alternative explanation for spousal concordance because if individuals are simply choosing mates from within their own religious, social, economic, and educational milieu, then this alone could result in substantial, if spurious, ideological concordance. This possible explanation is relatively easy to test. If spousal concordance is due to social homogamy, spousal correlations within demographic categories should drop to near zero; if on the other hand the correlation is not a by-product of the pool of likely mates but is instead the result of active selection, spousal correlations should remain significantly greater than zero even when spouses come from the same groups. The social background variables available in the VA30K data are somewhat limited but still allow testing for the central traits of religion, education, income, and party affiliation. In Table 8 we report the extent of spousal similarity on political and social attitudes in the United States when these background characteristics are controlled by restricting the correlation to the set of couples in which both spouses share that characteristic. Ideological similarity could very well arise simply from Catholics marrying Catholics and Jews marrying Jews, or regular church attendees being much more likely to meet and to marry other regular church attendees. If this is the case, then couples in which

TABLE 8 Spousal Concordance Controlling for Socioeconomic and Other Traits

	Pearson's Correlation	Statistical Significance	Number of Pairs
Male/Female Wilson-Patterson index correlation for:			
All couples	.647	.001	3984
Within Categories of:			
Religion			
Roman Catholic	.431	.001	397
Protestant	.627	.001	2435
Jewish	.487	.001	149
Other	.660	.001	146
None	.779	.001	30
Less than High School	.444	.001	122
High School Graduate	.628	.001	297
Some College	.643	.001	557
College Graduate	.741	.001	744
Church Attendance			
More than once a week	.686	.001	379
Once a week	.594	.001	767
Once or twice a month	.607	.001	172
A few times a year	.638	.001	269
Rarely	.612	.001	361
Never	.640	.001	93
Political Party Support			
Always support Republicans	.533	.001	173
Usually support Republicans	.492	.001	525
Varies	.599	.001	672
Usually support Democrats	.732	.001	332
Always support Democrats	.742	.001	63

Source: VA30K survey data.

both spouses are Catholics, or Jews, or regular church attendees, should display no ideological correlation.

The findings offer little support for the hypothesis that social homogamy accounts for spousal concordance. Within every single category, spousal concordance is substantial, never falling as low as .4 let alone .0. Jewish couples assort attitudinally and so do Catholic couples. Spousal concordance does seem to move up marginally with education but this is likely because of the well-known connection between education and attitude firmness rather than a reduction in assortation. Even among less-educated couples, the tendency to assort on political and social attitudes is notable. A striking defeat for social homogamy is the stable pattern of spousal correlations within categories of church attendance. As discussed above, the political attitudes with the strongest assortativeness have clear connections to

religious and moral concerns, and an obvious path for homogamy to account for these spousal correlations would be through church attendance, as regular church attenders would be more likely to meet their future spouse at church and this alone could yield substantial attitudinal similarity on political issues. But instead, the levels of sorting by political ideology are virtually unchanged across the range of church attendance.

Perhaps even more remarkable, however, are the results within categories of party affiliation. The relevant item in the survey asked if respondents "always supported Democrats," "mostly supported Democrats," "varies," "mostly supported Republicans," or "always supported Republicans." Since mate concordance for party affiliation is so high (see Table 1), this presents a strong test of social homogamy, yet even here the concordance of political attitudes within categories of party identification remains surprisingly high—never falling below .48. All in all, it seems clear that substantial spousal concordance exists for political attitudes even among spouses homogeneous with regard to socioeconomic status, religion, and party affiliation.

Further evidence that social homogamy is not the only source of the strong spousal concordance evident in our results can be shown by regressing out the influences of important parental and social background measures thought to influence the choice of spouse. Table 9 provides the spousal correlations of the residuals of each of the political attitude factors as well as party identification once each spouse's mother's and father's education level, religion, and political affiliation are taken into account. We also regressed out influences of each spouse' own education and religion. As a result of these procedures, spousal correlation for the W-P liberalism-conservatism index decreased only slightly, from .647 to .628. The subfactors do show somewhat larger declines in strength of correlation, though much less than would

be expected if social homogamy were the primary source of spousal concordance on political views. Like assimilation, social homogamy alone seems incapable of driving the large spousal correlations we report.

Implications

Mates tend to be positively but only weakly concordant on most personality and physical traits, but, James Carville and Mary Matalin aside, spousal concordance in the realm of social and political attitudes is extremely high. Moreover, political concordance appears to arise in substantial part from assortative mating rather than from spousal assimilation or social homogamy. The evidence here of very substantial positive assortment on political attitudes confirms similar findings in favor of initial assortment in other fields. Recent studies in family science and gerontology (Hamon and Ingoldsby 2003), clinical psychology (Feng and Baker 1994; Furnham 2009), behavior genetics (Heath and Eaves 1985), and social psychology, (Luo and Klohnen 2005) all present clear evidence of a prominent role for positive assortment on attitudes before marriage.

The final issues we address in this paper have to do with the consequences of this major role for assortative mating. A long literature has attempted to integrate assortative mating with evolutionary theory. At first blush, Darwinian logic would seem to suggest individuals should be attempting to maximize the genetic quality of their mates (and therefore offspring) instead of trying to locate a mate with similar traits to theirs, so numerous hypotheses have been put forward in an effort to identify the biological logic behind assortative mating (see, for example, Buss and Barnes 1986; Eckland 1968; Kondashov and Shpak 1998) but often these

TABLE 9 Correlation of Political Attitude Indices after Controlling for Social Background

Political Attitude Measure	Pearson's Correlation	Statistical significance	Spouse Pairs
Liberalism-Conservatism Factor	.628	.001	1296
Sex and reproduction Attitude Factor	.495	.001	1465
Party Identification	.457	.001	1550
Political preference Attitude Factor	.452	.001	1489
Militarism and punishment Attitude Factor	.439	.001	1466
Religious conservatism Attitude Factor	.303	.001	1477
Economy and taxation Attitude Factor	.282	.001	1473

Notes. Correlations are between the residuals on each item once the effects of Education, Religion, mother's Education, Fathers Education, Mothers Religion, Fathers, Religion, Mothers Party Identification, and Fathers Party Identification were regressed out.

explanations are trait neutral and fail to take into consideration the widely disparate degrees of assortative mating depending upon the characteristic of interest (see Table 1). The growing evidence that social and political variables have the highest levels of assortative mating is potentially quite revealing. It would appear humans place more importance on finding a mate who is a kindred spirit with regard to politics, religion, and social activity than they do on locating similar mates in terms of physique or personality—thus suggesting a centrality for socio-political attitudes that should be heartening to political scientists.

But why does assortative mating occur at all? It is certainly possible to posit biological reasons for assortative mating,⁴ but it is also possible that mate selection in the modern era is at least in part a specialized case of friend selection. Thanks to substantial mental capabilities and extended periods of time during which survival and reproduction are not at issue, much of what humans do and think (though not nearly as much as humans imagine) is orthogonal to canonical conceptions of biological selection. Survival and reproduction aside, people appear to prefer to be around those who share their socio-political orientation but not necessarily those who share their personality. This is true of selection of friends and selection of mates and, as such, may indicate the need for new thinking regarding the workings of evolution as it applies to traits remote from reproductive fitness.

However, a more immediate issue is likely to be the implications of substantial levels of assortative mating for the contours of disputes in the arena of practical politics. Scholarly interest in assortation has been growing rapidly but this interest is typically at the residential level. Neighborhoods that are ever

⁴Concordance of the mate pair on genetically relevant traits will by definition increase the genetic relatedness of parents to their offspring, and may even increase the level of altruism in the family (see Rushton, Littlefield, and Lumsden 1986; Rushton, Russell, and Wells 1985). Theoretically, similar mates may also form stronger bonds thereby increasing the chances of producing a large number of offspring or at least successfully rearing those offspring that are produced, though earlier work finds no evidence that marriages between attitudinal soul mates are more successful (Luo and Klohnen 2005) and our own preliminary empirical investigation yields no indication that politically congruent pair-bonds have more children (results available from the authors). Without denying the potential biological advantages of assortative mating, if biology were the entire story, assortation should be in evidence for personality traits since spousal similarity on these traits improves marital success (Luo and Klohnen 2005) and since the demonstrably heritable nature of personality traits means assortation on them would increase parent-offspring genetic similarity.

more politically homogeneous with regard to political views have the potential to affect everything from congressional elections (see Oppenheimer 2005) to more general political interactions (Bishop 2008; Mutz 2006). In 1976, 26.8% of Americans lived in counties in which the presidential vote margin was at least 20%; by 2000, that number had increased to 48.3%—and the reason for the increase is certainly not that 2000 was a more lopsided race since it was one of the closest presidential elections ever recorded. As Americans have fled rural areas and become more mobile in the past half century, the effect may have been less to create a more liberal or a more conservative populace overall and more to create one in which people are increasingly able to self-select into like-thinking areas. For example, on average those choosing to remain in rural areas are likely to be different in a variety of ways from those eager to move to the cities. The potential of this increasing residential segregation to affect the polity, particularly through its role in dramatically narrowing the range of diversity in political discussion, has been ably described by the observers cited above.

Our intent here has been to show that assortation does not stop with the selection of neighborhoods but rather is also apparent in the selection of spouses. We do not claim that assortation is the only reason for spousal political concordance. Social homogamy and persuasion over the years clearly occur (Stoker and Jennings 2005), though their influence on attitudes (but not party identification) appears more modest than is often averred. Rather, the evidence we present indicates that spousal concordance is due in part—perhaps in large part—to assortation. The process may or may not be overt (just as is the case for residential assortation). It is not necessary for individuals to give their potential mates a political quiz since general orientations toward the organization and conduct of group life can permeate daily events without political content being blatant.

The remaining issue is whether this documented tendency of modern Americans to engage in assortative mating with regard to political and social beliefs has long-term implications for the nature of politics. As noted above, research on the impact of homogeneity in political discussion networks has demonstrated that issue divergence is facilitated by relative isolation from opposing viewpoints. This impact is clearly compounded if the tendency to select into homogeneous political environments extends beyond the neighborhood and workplace and into the bedroom. But in mate choice the broader political implications do not stop at the impact on the

individual's own political orientation. Mates also produce and socialize offspring. The likelihood of intergenerational political variation is inversely related to the degree of parental political homogeneity, regardless of whether the transmission of ideology is through socialization (à la Jennings and Niemi), through genetics (à la Alford, Funk, and Hibbing), or through the likely combination of both these influences. If parents transmit political traits to their offspring, the practice of liberals marrying liberals and conservatives marrying conservatives seems likely to increase political heterogeneity both within their own generation and into the next generation as well.

Our data show that spousal concordance is high and that assortative mating is a major contributor to that concordance, though we cannot draw any ultimate conclusions regarding real longitudinal patterns. However, we do know that political divergence did not begin with the "red state—blue state" divide, but rather is at least as old as Athens versus Sparta. And we can say that the existence of high levels of political concordance across spouses and the importance of assortation in generating that concordance offer a novel contributing explanation for the enduring tendency toward ideological division in political life—an explanation suggesting that the timeless character of political divisiveness may emanate not just from the machinations of elites but also from the nuances of courtship.

References

- Alford, John R., Carolyn L. Funk, and John R. Hibbing. 2005. "Are Political Orientations Genetically Transmitted?" *American Political Science Review* 99 (2): 153–68.
- Alford, John R., Carolyn L. Funk, and John R. Hibbing. 2008. "From Liberals and Conservatives to Political Genotypes and Phenotypes." *Perspectives on Politics* 6 (2): 321–28.
- Baker, L. A., S. A. Trelaor, C. A. Reynolds, A. C. Heath, and Nicholas G. Martin. 1996. "Genetics of Educational Attainment in Australian Twins: Sex Differences and Secular Changes." *Behavior Genetics* 26 (2): 89–102.
- Bishop, Bill. 2008. *The Big Sort: Why the Clustering of Like-Minded Americans is Tearing Us Apart*. New York: Houghton Mifflin.
- Botwin, M. D., D. M. Buss, and T. K. Shackelford. 1997. "Personality and Mate Preferences: Five Factors in Mate Selection and Marital Satisfaction." *Journal of Personality* 65 (1): 107–36.
- Bouchard Jr., T. J., and M. McGue. 1981. "Familial Studies of Intelligence: A Review." *Science* 212 (4498): 1055–59.
- Bouchard Jr., T. J., and M. McGue. 2003. "Genetic and Environmental Influences on Human Psychological Differences." *Journal of Neurobiology* 54 (1): 4–45.
- Bouchard Jr., T. M., M. McGue, D. T. Lykken, and A. Tellegen. 1999. "Intrinsic and Extrinsic Religiousness." *Twin Research* 2 (June): 88–98.
- Buss, D. M. 1984. "Marital Assortment for Personality Dispositions: Assessment with Three Different Data Sources." *Behavior Genetics* 14 (2): 111–23.
- Buss, D. M. 1985. "Human Mate Selection." *American Scientist* 73 (1): 47–51.
- Buss, D. M., and Michael Barnes. 1986. "Preferences in Human Mate Selection." *Journal of Personality and Social Psychology* 50 (3): 559–70.
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley.
- Caspi, A., E. S. Herbener, and D. J. Ozer. 1992. "Shared Experiences and the Similarity of Personalities: A Longitudinal Study of Married Couples." *Journal of Personality and Social Psychology* 7 (2): 351–61.
- Eaves Lindon, J., H. J. Eysenck, and Nicholas G. Martin. 1989. *Genes, Culture and Personality: An Empirical Approach*. London: Academic Press.
- Eckland, B. K. 1968. "Theories of Mate Selection" *Eugenics Quarterly* 15 (1): 71–84.
- Eysenck, H. J. 1967. *The Biological Basis of Personality*. Springfield, IL: Charles C. Thomas.
- Feng, D., and L. Baker. 1994. "Spouse Similarity in Attitudes, Personality, and Psychological Well-being." *Behavior Genetics* 24 (July): 357–64.
- Fowler, James H., Laura Baker, and Christopher T. Dawes. 2008. "The Genetic Basis of Political Cooperation." *American Political Science Review* 102 (May): 233–48.
- Fowler, James H., and Christopher T. Dawes. 2008. "Two Genes Predict Voter Turnout." *Journal of Politics* 70 (July): 579–94.
- Furnham, Adrian. 2009. "Sex Differences in Mate Selection Preferences." *Personality and Individual Differences* 47 (4): 262–67.
- Hamon, R. R., and B. B. Ingoldsby. 2003. *Mate Selection across Cultures*. Thousand Oaks, CA: Sage Publications.
- Hatemi, Peter K., Carolyn L. Funk, Sarah E. Medland, Hermine M. Maes, Judy L. Silberg, Nicholas G. Martin, and Lindon J. Eaves. 2009. "Genetic and Environmental Transmission of Political Attitudes over a Life Time." *Journal of Politics* 71 (3): 1141–56.
- Hatemi, Peter K., Sarah E. Medland, Katherine I. Morley, Andrew C. Heath, and Nicholas G. Martin. 2007. "The Genetics of Voting: An Australian Twin Study." *Behavior Genetics* 37 (May): 435–48.
- Hayes, Bernadette D., and Clive S. Bean. 1992. "The Impact of Spousal Characteristics on Political Attitudes in Australia." *Public Opinion Quarterly* 56 (4): 524–29.
- Hayes, Bernadette D., and Clive S. Bean. 1994. "Political Attitudes and Partisanship among Australian Couples: Do Wives Matter?" *Women and Politics* 14 (1): 53–80.
- Heath, A. C., and Lindon J. Eaves. 1985. "Resolving the Effects of Phenotype and Social Background on Mate Selection." *Behavior Genetics* 15 (1): 15–30.
- Heath, A. C., K. S. Kendler, L. J. Eaves, and D. Markell. 1985. "The Resolution of Cultural and Biological Inheritance: Informativeness of Different Relationships." *Behavior Genetics* 15 (5): 439–65.
- Huckfeldt, Robert, Paul Johnson, and John Sprague. 2004. *Political Disagreement: The Survival of Diverse Opinions within Communication Networks*. Cambridge: Cambridge University Press.
- Huckfeldt, Robert, Jeanette Morehouse Mendez, and Tracy Osborn. 2004. "Disagreement, Ambivalence, and Engagement: The Political Consequences of Heterogeneous Networks." *Political Psychology* 26 (1): 65–96.

- Huckfeldt, Robert, and John Sprague. 1995. *Citizens, Politics, and Social Communication*. Cambridge: Cambridge University Press.
- Jardine, R., and Nicholas G. Martin. 1984. "No Evidence for Sex-linked or Sex Limited Gene Expression Influencing Spatial Orientation." *Behavior Genetics* 14 (4): 345–54.
- Jennings, M. Kent, and Richard G. Niemi. 1968. "The Transmission of Political Values from Parent to Child." *American Political Science Review* 62(March): 169–83.
- Jennings, M. Kent, and Richard G. Niemi. 1991. "Issues and Inheritance in the Formation of Party Identification." *American Political Science Review* 85 (4): 970–88.
- Kendler, K. S., E. E. Walters, K. R. Truett, A. C. Heath, M. C. Neale, N. G. Martin, and L. J. Eaves. 1995. "A Twin-Family Study of Self-report Symptoms of Panic Phobia and Somatization." *Behavior Genetics* 25 (6): 499–515.
- Kondrashov, A. S., and M. Shpak. 1998. "On the Origin of Species by Means of Assortative Mating." *Proceedings of the Royal Society of London (Biological Sciences)* 265 (1412): 2273–78.
- Lake, R. I. E.; L. J. Eaves, H. H. M. Maes, A. C. Heath, and N. G. Martin. 2000. "Further Evidence against the Environmental Transmission of Individual Differences in Neuroticism from a Collaborative Study of 45,850 Twins and Relatives on Two Continents." *Behavior Genetics* 30(May): 223–33.
- Luo, ShanHong, and Eva C. Klohnen. 2005. "Assortative Mating and Marital Quality in Newlyweds: A Couple-Centered Approach." *Journal of Personality and Social Psychology* 88 (2): 304–26.
- Lykken, D. T., and Auke Tellegen. 1993. "Is Human Mating Adventitious or the Result of Lawful Choice? A Twin Study of Mate Selection." *Journal of Personality and Social Psychology* 65 (1): 56–68.
- Martin, N. G., L. J. Eaves, A. C. Heath, R. Jardine, L. M. Feingold, and H. J. Eysenck. 1986. "Transmission of Social Attitudes." *Proceedings of the National Academy of Sciences* 83 (June): 4364–68.
- Mutz, Diana C. 1998. *Impersonal Influence*. Cambridge: Cambridge University Press.
- Mutz, Diana C. 2006. *Hearing the Other Side*. Cambridge: Cambridge University Press.
- Mutz, Diana C., and Jeffrey J. Mondak. 1997. "What's So Great about League Bowling?" Paper presented at the annual meeting of the Midwest Political Science Association.
- Newcomb, Theodore, and George Svehla. 1937. "Intra-Family Relationships in Attitude." *Sociometry* 1 (1/2): 180–205.
- Niemi, Richard G., Roman Hedges, and M. Kent Jennings. 1977. "The Similarity of Husbands' and Wives' Political Views." *American Politics Quarterly* 5 (2): 133–48.
- Olson, James M., Philip A. Vernon, Julie Aitken Harrix, and Kerry L. Jang. 2001. "The Heritability of Attitudes: A Study of Twins." *Journal of Personality and Social Psychology* 80 (6): 845–60.
- Oppenheimer, Bruce I. 2005. "Deep Red and Blue Congressional Districts." In *Congress Reconsidered*, 8th ed., eds. Lawrence C. Dodd and Bruce I. Oppenheimer. Washington, DC: Congressional Quarterly Press, 135–57.
- Plomin, R., J. C. DeFries, and M. K. Roberts. 1977. "Assortative Mating by Unwed Biological Parents of Adopted Children." *Science* 196 (4288): 449–50.
- Putnam, Robert D. 2000. *Bowling Alone*. New York: Simon and Schuster.
- Rushton, J. P., C. H. Littlefield, and C. J. Lumsden. 1986. "Gene-Culture Coevolution of Complex Social Behavior: Human Altruism and Mate Choice." *Proceedings of the National Academy of Sciences* 83(October): 7340–43.
- Rushton, J. P., R. J. H. Russell, and P. A. Wells. 1985. "Personality and Genetic Similarity Theory." *Journal of Social Biological Structures* 8 (1): 63–86.
- Scarr, S., and R. Weinberg. 1981. "The Transmission of Authoritarianism in Families: Genetic Resemblance in Social-Political Attitudes." In *Race, Social Class, and Individual Differences*, ed. S. Scarr. Hillsdale, NJ: Erlbaum, 399–429.
- Schooley, Mary. 1936. "Personality Resemblances among Married Couples." *The Journal of Abnormal and Social Psychology* 31(October): 340–47.
- Stoker, Laura, and M. Kent Jennings. 2005. "Political Similarity and Influence between Husbands and Wives." In *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior*, ed. Alan S. Zuckerman. Philadelphia: Temple University Press, 51–74.
- Tedin, Kent L. 1974. "The Influence of Parents on the Political Attitudes of Adolescents." *American Political Science Review* 68(November): 1579–92.
- Theissen, D., and B. Gregg. 1980. "Human Assortative Mating and Genetic Equilibrium: An Evolutionary Perspective." *Ethology and Sociobiology* 1 (2): 111–40.
- Truett, K. R., L. J. Eaves, J. M. Meyer, A. C. Heath, and N. G. Martin. 1992. "Religion and Education as Mediators of Attitudes: A Multivariate Analysis." *Behavior Genetics* 22 (1): 43–62.
- Vandenberg, S. G. 1972. "Assortative Mating, or Who Marries Whom?" *Behavior Genetics* 2(June): 127–57.
- Watson, D., E. C. Klohnen, A. Casillas, E. Nus Simms, J. Haig, and D. S. Berry. 2004. "Match Makers and Deal Breakers: Analyses of Assortative Mating in Newlywed Couples." *Journal of Personality* 72 (5): 1029–68.
- Whitfield, J. B., G. Zhu, A. C. Heath, and N. G. Martin. 2005. "Choice of Residential Location: Chance, Family Influence, or Genes? *Twin Research and Human Genetics* 8 (1): 22–26.
- Wilson, Glen D., and John R. Patterson. 1968. "A New Measure of Conservatism." *British Journal of Social and Clinical Psychology* 7 (2): 264–69.
- Zuckerman, Alan S., Josip Dasovic, and Jennifer Fitzgerald. 2007. *Partisan Families: The Social Logic of Bounded Partisanship in Germany and Britain*. New York: Cambridge University Press.

John R. Alford is Associate Professor of Political Science at Rice University, Houston, Texas 77251.

Lindon J. Eaves is the Distinguished Professor of Human Genetics and Psychiatry, Virginia Institute for Psychiatric and Behavioral Genetics, Richmond, Virginia 23219.

Peter K. Hatemi is a Research Fellow at the United States Studies Centre, University of Sydney.

John R. Hibbing is the Foundation Regents Professor of Political Science and Psychology at the University of Nebraska-Lincoln, Lincoln, Nebraska 68588.

Nicholas G. Martin is the Senior Principal Research Fellow at the Queensland Institute of Medical Research, Brisbane, Australia.