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February 2011

Discussion Paper

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Experiment on the Demand for Encompassment

by Daniel Klein, Xiaofei (Sophia) Pan, Daniel Houser, and Gonzalo Schwarz¹

Draft: 23 March 2011

Abstract: The idea of political community is appealing on a gut-level. Hayek suggested that certain genes and instincts still dispose us toward the ethos and mentality of the hunter-gatherer band, and that modern forms of political collectivism have, in part, been atavistic reassertions of such tendencies. Picking up on Hayek, Klein (2005) has suggested a combination of yearnings: 1) a yearning for coordinated sentiment (like Smithian sympathy); and 2) a yearning that the sentiment *encompass the whole group*. This paper reports on an experiment designed to explore the demand for encompassment by having subjects sing together. In each trial, one person in the room was designated not to sing *unless every one of the others in the room had made a payment sufficient so as to have that person sing*. Subjects chose to sacrifice money to achieve encompassment 47.4 percent of the time, with 59.6 percent of the subjects doing so in at least one trial. An exit questionnaire showed that subjects' chief reason for making such a sacrifice was a belief that the singing would be more enjoyable if it encompassed the whole group, and reported enjoyment is significantly higher with encompassment. We discuss the experiment as a parable for a penchant toward political collectivism.

Keywords: Encompassment, political psychology, Hayek, the people's romance

JEL codes: A13, H89, Z1

Excel file containing the data:

http://econfaculty.gmu.edu/klein/Assets/Encompassment_Exp_Data.xlsx

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I. Introduction

We conducted an experiment to test whether people are willing to sacrifice money to make a shared experience and sentiment *encompass* the whole group. The context involved singing together. In each trial, one person in the room was designated not to sing *unless every one of the others in the room had made a payment sufficient so as to have that person sing*. Whether the possible-non-singer sang depended on the sacrifices that the others made to see to it that he or she sang as well, i.e. their willingness to pay to make the experience encompassing.

Subjects chose to sacrifice money to achieve encompassment 47.4 percent of the time, with 59.6 percent of subjects doing so in at least one trial. An exit questionnaire showed that subjects' chief reason for making such a sacrifice was a belief that the singing would be more enjoyable if it encompassed the whole group, and reported enjoyment is significantly higher with encompassment.

Another experimental study involving singing and other synchronous behavior was reported by Wiltermuth and Heath (2009), who found that players in public-goods games cooperate more when put to singing, marching, or coordinated movement. While this finding relates to ours, in that it shows a connection between shared experience and sympathy, it does not address the demand for an experience or sentiment to encompass the whole group.

The motivation for our study springs from speculations about political psychology based on Hayek's emphasis on human instincts evolved from the simple setting of the small band. In particular, we are motivated by Hayek's conjecture that such instincts help us understand modern impulses toward political collectivism. In the sections that follow, we explain this motivation in further detail, set forth our experiment and results, and conclude by discussing whether they might serve as a sort of parable for Hayek's speculations about political psychology.

II. Hayek's Atavism Theory of Collectivist Political Psychology

In "The Atavism of Social Justice," Hayek starts with the hunter-gatherer band:

[B]efore the last 10,000 years, ... man ... existed for at least a hundred times as long in small food-sharing hunting bands of 50 or so, with a strict order of dominance within the defended common territory of the band. ... It was a grouping in which, at least for all males, the common pursuit of a perceived physical common object under the direction of the alpha male was as much a condition of its continued existence as the assignment of different shares in the prey to the different members according to their importance for the survival of the band. (Hayek 1978, 59)

The small band was characterized by universal face-to-face familiarity, little privacy, and a definite sense of *the* group. It was much like a team or organization, in that most major actions were collective. Likewise, sentiments and major experiences were shared – "we" are always together (or continually coming together).

Paul Rubin (2002, 2003) emphasized the zero-sum mentality arising from a situation of very little trade, innovation, or economic growth. Other literature deals more with sentiments, norms, and epistemics; our reading of the science, our interpretation of Hayek is generally along the group-selection lines of such works as Hodgson 1991, Sober and Wilson 1998, Boehm 1999, Zywicki 2000, Tullberg 2003, Field 2004, Whitman 2004, and Rubin and Gick 2005.

In the paleolithic band, the coordination of sentiment would have *encompassed all of those of any moral standing*. Evolution may have selected not only for the yearning for sympathy and coordinated sentiment, but also for the yearning for the sentiment to encompass all of "the people." Mathematically, a set of 50 people contains an extraordinarily large number of possible partitions. But there is one partition that is exceptionally focal: the universal set of 50

people. In the band, the universal set was far more focal and decisive than anything we know today. Thus, the sense of “we” was simple and unambiguous.

People still carry a vestigial penchant for *encompassment*. It is pervasive in the narrative arts, where encompassment may be read into a story’s resolution (e.g., when people live happily ever after). We suggest that encompassment also plays an important role in political psychology. For example, consider the following expressions from the history of American political culture: *united, unity, for all, We the people, universal suffrage, common schools, e pluribus unum, one nation*.

Hayek touches on the epistemic and sentimental aspects of the primeval band:

The events to which the group could adapt itself, and the opportunities it could take advantage of, were only those of which its members were directly aware. Even worse the individual could do little of which others did not approve. (1978, 59)

Hayek adds in *The Fatal Conceit*:

[M]an’s instincts ... were adapted to life in the small roving bands or troops in which the human race and its immediate ancestors evolved during the few million years while the biological constitution of *homo sapiens* was being formed. These genetically inherited instincts served to steer the cooperation of the members of the troop, a cooperation that was, necessarily, a narrowly circumscribed interaction of fellows known to and trusted by one another. ... These modes of coordination depended decisively on instincts of solidarity and altruism—instincts applying to members of one’s own group but not to others. (1988, 11-12)

Just as Adam Smith treated sympathy as instinctual and fundamental, Hayek saw evolution as selecting for instincts of cooperation and solidarity. When free-riders and cheaters gain at the expense of fellow band members, the band suffers from their actions. The band’s “culture,” if it can be called that, plays a crucial role. Hayek says that “cultural evolution

operates largely through group selection” (1988, 25). Evolution selects not only for inclinations to cooperate, but for inclinations to punish, kill, and expel non-cooperators. Those wanting in sympathy and solidarity were probably last to eat, last to multiply, and first to die. “The members of these small groups could thus exist only as such: an isolated man would soon have been a dead man” (1988, 11-12).

Smith wrote that “nothing pleases us more than to observe in other men a fellow-feeling with all the emotions of our own breast; nor are we ever so much shocked as by the appearance of the contrary” (Smith 1790, 13). Hayek highlights as innate “the fear of the frown and other signs of disapproval of our fellows” (1979, 167). Likewise, he writes: “Cooperation, like solidarity, presupposes a large measure of agreement on ends as well as on methods employed in their pursuit” (1988, 19). While Hayek never zeroes in on the notion of *encompassment*, the notion fits his thinking about the environment of evolution adaptation.

Hayek writes of man’s “little changing foundation of genetically inherited, ‘instinctive’ drives which are determined by his physiological structure” (1979, 159). “The needs of this ancient primitive kind of society determined much of the moral feelings which still govern us, and which we approve in others” (Hayek 1978, 59). A growing body of research indicates that there has been much more genetic development in the past 10,000 years than previously thought (for an overview, see Cochran and Harpending 2009). Still, it seems safe to presume that today the genetic make-up of the entire family of humankind remains basically like that of humans in the Upper Paleolithic ending about 10,000 years ago.

Hayek diagnosed the modern ethos and mentality of state collectivism, particularly in the ideologies of fascism, communism, socialism, and social democracy. While he pointed other

barbs at conservatism, (see the epilogue of Hayek 1960), the atavism theory was pointed primarily at the left, whose collectivism he saw as a reassertion of the primordial instincts:

What in fact leads to the condemnation as anti-social of that pursuit of individual interests which contributes to the general interest, and to the commendation as 'social' of the subservience to those sectional interests which destroy the overall order, are sentiments which we have inherited from earlier forms of society. (1976, 138-39)

[T]he whole of socialism is a result of that revival of primordial instincts. (1979, 169)

Their demand for a just distribution in which organized power is to be used to allocate to each what he deserves, is thus strictly an *atavism*, based on primordial emotions. (1979, 165)

[T]he demand to restrict one's action to the deliberate pursuit of known and observable beneficial ends ... is in part a remnant of the instinctual, and cautious, micro-ethic of the small band, wherein jointly perceived purposes were directed to the visible needs of personally known comrades (i.e., solidarity and altruism). (Hayek 1988, 80)

Tocqueville described how the civic religion of democracy invites citizens to think of themselves as a part of government, and even above, rather than subordinate to, the rulers (Tocqueville 1969, 690-695). The historical developments that engendered the political assertion of the band instincts were the crystallization of the nation and the spread of democracy. Universal suffrage involved a mythos of encompassing political participation and political equality. "It was the Rousseauesque idea of democracy," writes Hayek, "his still thoroughly rationalist conceptions of the social contract and of popular sovereignty, which were to submerge the ideals of liberty under the law and government limited by law. It was Rousseau and not Hume who fired the enthusiasm of the successive revolutions which created modern government

on the Continent and guided the decline of the ideals of the older liberalism and the approach to totalitarian democracy in the whole world” (1967[1963], 120). By 1900, collectivist ideologies were rampant among the younger generations of intellectuals, and by 1940 they had greatly subverted the semantics and wisdom of liberal culture.

Recent words from President Barack Obama nicely illustrate the modern mythos:

When our government is spoken of as some menacing, threatening foreign entity, it ignores the fact that in our democracy, government is us. We, the people -- (applause.) We, the people, hold in our hands the power to choose our leaders and change our laws, and shape our own destiny. (Obama 2010)

Klein (2005) has offered the term “the people’s romance” for the idea of a focal and official set of individuals as “the people.” This idea is defined by the polity, particularly the nation, and the yearning for *encompassing* sentiment, such as when we take pride in our “power to choose our leaders and change our laws, and shape our own destiny.” Our experiment, which we report below, illustrates the demand for encompassment.

III. The Experiment

“Thank you for participating in today’s experiment. Everyone was told in advance that today’s experiment would involve singing.”

The experiment explored whether people were willing to pay to help ensure that *everyone* would join together in singing. To minimize confusion, we communicated this purpose to the subjects in very plain terms. We detected little confusion or uncertainty among subjects during the experiment.

We wrote instructions and examples on the whiteboard in the lab’s reception room. When the subjects arrived, one person explained the experiment. Here, we explain the

experiment in the context of nine subjects broken out into subgroups of three; however, we also conducted sessions with 16 subjects forming subgroups of four.²

In explaining the experiment to the subjects, we worked from a prewritten script, which we quote below.

“You have earned a \$5 show-up bonus for participating. Now we give you \$6 for this round of activity. Then there will be another \$6 for another round, and then another \$6 for the third and final round. If you do not spend any money during the experiment you will leave with \$23.”

“In a moment you and two other subjects will be relocated to another room, forming a group of three.”

After speaking these words, the speaker pointed to a blackboard diagram. In one box of the diagram were nine darkened circles representing the nine subjects. Circles further grouped the nine subjects into subsets of three. An arrow indicated that the subgroups would move to a separate room, in which the diagram depicted three small circles, two with DS inside, one with PNS inside. DS stood for *definite-singer*. PNS stood for *possible-non-singer*.

“The three of you will sit down together, and in the room will be a computer/CD player that will play a simple and familiar tune. The words to the song will be printed out on a piece of paper, with enough copies for everyone.”

“There are two types of roles for the participants. When you get to the room, your attendant will let you know which role you have. One role is called *definite-singer*. The other role is *possible-non-singer*.”

The speaker pointed to the cell with two DS and one PNS.

“Two will be definite-singers, who definitely sing along when the tune is played. The third person will be the possible-non-singer. That person will sing along too *only if* the other two have offered to pay enough money to have that person included in the singing.”

“You won’t know which role you have until you get to the room.”

² In one case intended for nine subjects, only six turned up, so we ran that session with just two subgroups of three.

“Now we want to ask you a question that assumes that you will be one of the definite-singers. The question is: *How much you are willing to pay to have the possible-non-singer join in the singing?*”

“So imagine that you will be one of the definite-singers. After we have finished the instructions you will check off an amount of money on the Willingness to Pay slip before you. It could be zero, 20 cents, 40 cents, 60 cents, 80 cents or one dollar. This number is called your *willingness-to-pay*.”

“The way it works is that at the room the attendant, first, will tell you who the definite-singers are and who the possible-non-singer is. Then he/she will see whether the willingness-to-pay written down by each definite-singer is equal or greater than the price of including the other person. Let’s call the price X. We don’t tell you how much X is, except that it is greater than zero. If both willingnesses-to-pay are greater than X, then everyone sings.”

The speaker pointed to a whiteboard illustration with a vertical axis marked with zero and X. He indicated with his hand that if both willingnesses were above or equal to X, then everyone would sing, but if one or both were below X, then only two people sing.

Unbeknownst to the subjects, X was set at 20 cents in every trial. We chose not to disclose the value of X in order to elicit subjects’ maximal willingnesses to pay.

“If you are a definite-singer and both willingnesses are greater than X, so everyone sings, you will be charged X. Again, the amount you will be charged is not the amount you write down now but rather the amount X, which, in that case must be less than what you wrote down.”

“The price X is a payment to get everyone to sing; it will be deducted from the \$6 you otherwise would get for this round. It does not go to the possible-non-singer.”

“If it turns out that you are the possible-non-singer, what you write now will not affect your earnings. You will earn the same amount this round as the other two people in your group.”

“Here are two examples:

- Jim checks 20 cents, Sam checks 80 cents, Phil checks zero.
- X is 20 cents.
 - Example 1:
Jim and Sam are the definite-singers.
Phil is the possible-non-singer:

Then:
All three guys sing together.
Each comes away with \$5.80 in this round.

- Example 2:
Jim and Phil are the definite-singers.
Sam is the possible-non-singer:
Then:
Jim and Phil sing together, *but not Sam*.
Each comes away with \$6.00 in this round.

“Now let’s do a quiz together with the following examples:

- Jim checks 20 cents, Sam checks 40 cents, Phil checks 60 cents.
- X is 40 cents.
 - Example 1:
Jim and Sam are the definite-singers.
Phil is the possible-non-singer:
Then:
Does Phil get to sing? [Answer: no]
How much does each get for this round? [Answer: \$6.00]
 - Example 2:
Sam and Phil are the definite-singers.
Jim is the possible-non-singer:
Then:
Does Jim get to sing? [Answer: yes]
How much does each get for this round? [Answer: \$5.60]”

“Does everyone get it?”

“After the singing you will be asked to fill out a brief questionnaire. Then all nine of you will come back here and we will do another round, and after that we will do a third and final round. You will be grouped with two other **different** participants in each round.”

“Any questions?”

“Now please check off the amount of money you are willing to pay to ensure that everyone sings.”

In explaining how the experiment worked, we were careful not to lead the subjects (e.g., we did nothing to suggest they should sacrifice cash to help achieve encompassment). Likewise, we made it quite clear that there was no strategic aspect, and that there was nothing to “figure

out.” *Mark zero if all you care about is maximizing your cash payoff. Mark something other than zero if you are willing to pay to make it that everyone in the room will join together in the singing.*

From the beginning, almost all subjects seemed to understand that they would be sacrificing some undisclosed amount X if the operative willingness-to-pay amounts exceeded X , and that the way to maximize cash payoff was to mark zero. In the unlikely event that any subjects had residual doubts as to how the experiment worked, these were resolved by the end of the first round.

Each sub-group of subjects was given the lyrics and sang along to a recording of a familiar Christmas carol (either “Jingle Bells,” “Let It Snow,” or “Deck the Halls” – one song per round). The possible-non-singer could sing only if the two definite-singers marked willingnesses above or equal to X (which was always 20 cents). If this did not occur, only the two definite-singers sang. While the possible-non-singer remained seated with the others in the small circle of the subjects, he/she did not get to share in the singing experience. Thus, the experience did not encompass the whole group.

After each round, each subject filled out a questionnaire. There were four versions of the questionnaire, tailored to whether the subject had been a definite-singer or the possible-non-singer and whether encompassment had been achieved.

A. Demand for Encompassment or “The More the Merrier”?

Given that there was only one possible-non-singer, the experiment did not operationally disentangle the demand for encompassment from the demand for simply “more,” i.e., “the more the merrier.” One way to accomplish this would be to have two possible-non-singers. In one variant of the experiment, subjects would pay for one of the non-singers to be able to sing

(gratifying “more the merrier,” but *not* encompassment), while in another variant they would pay for both of the non-singers to sing (gratifying both factors). Here, however, we proceed with a focus on encompassment. The reason is that we believe that “the more the merrier,” as distinct from encompassment, was likely not a large factor in the experience. Nevertheless, it would be interesting to pursue future experiments to disentangle the two.

IV. Results

A. Demonstrated willingness to pay for encompassment

When we asked the subject to mark her willingness-to-pay (WTP), she was to suppose that she would be a definite-singer; otherwise, her mark would have no bearing on the outcome. By eliciting the WTP prior to disclosing the subject’s role for that round, we collected WTP data from all subjects in every round, even those to be assigned the role of possible-non-singer.

The number of sessions, trials, and WTPs consisted of:

- Five 9-subject sessions each consisting of three rounds of three 3-person trials, yielding a total of 135 WTPs.
- One 6-subject session consisting of two rounds of two 3-person trials, yielding a total of 12 WTPs. (This session was intended to have 9 subjects, but the turnout was not sufficient.)
- Three 16-subject sessions consisting of three rounds of four 4-person trials, yielding a total of 144 WTPs.

Thus we collected 291 WTPs. The results are shown in Table 1.

Table 1: Cash sacrifices made in the 291 decisions

WTP	0	20 ¢	40 ¢	60 ¢	80 ¢	\$1.00	Total
Freq.	153	70	32	16	9	11	291
138 instances of WTP > 0 Or 47.4 % of the time.							

		Mean of these = 39.6 ¢	
		Mean of all 291 WTPs = 18.8 ¢	

In 47.4 percent of the decisions, the individual sacrificed to achieve encompassment. Of those sacrifices, the mean sacrifice was 39.6 cents, and there were even quite a few sacrifices in the upper ranges of viable sacrifice, up to \$1.00. Even including the 52.6 percent of WTPs = zero, the mean sacrifice still equals 18.8 cents per decision.³ Moreover, of the 99 subjects who participated in the experiment, 59 of them (or 59.6 percent) sacrificed cash at least once to achieve encompassment. Thus, a majority of subjects evinced some demand for encompassment.

B. “more fun if everyone sang”

The decision to sacrifice cash might be interpreted in a number of ways. After each round, we administered a questionnaire that asked the subject whether she had marked a WTP > 0, and if so, why? The results are shown in Table 2.

Table 2: Reasons given for sacrificing cash.

<i>Why did you decide to offer something to include the other person in singing?</i>	Weight received	% of total weight
<i>(a) Because I thought it would be more fun if everyone sang.</i>	86.0	71.9%
<i>(b) Because I would be less self-conscious if everyone sang.</i>	9.7	8.1%
<i>(c) Because I'd feel bad for the person left out.</i>	18.0	15.0%
<i>(d) Other [please specify:]</i>	6.0	5.0%
Total	119.7	100%

³ The mean WTP by round was fairly stable: 16.2 cents in the first round, 21.2 cents in the second round, and 18.9 cents in the third round. A breakdown by gender is provided on one of the worksheets of the Excel file.

We summed up the responses of those who had sacrificed cash as follows: Response (a) received a weight of 1 when it was the only one checked; responses (a) and (b) each received a weight of 0.5 when a subject checked only those two responses; etc.

The questionnaire strongly supports interpreting the cash sacrifices as a demand for encompassment. The response “*it would be more fun if everyone sang*” received 71.9 percent of the weight. The response “*I’d feel bad for the person left out*” may have also had an element of encompassment motivation. After all, the non-singer had no choice in whether he/she would sing, and it is plausible that others would sympathize with the non-singer’s inability to participate in the shared experience. Thus, the demand for encompassment of experience/sentiment is especially captured by response (a), but also to some extent by (c), and arguably even (b) (“*I would be less self-conscious if everyone sang*”).

There were 85 trial-groups (49 with three persons, 36 with four persons). For the group to achieve encompassment, every definite-singer had to have marked at least 20 cents. This happened in 12 of the 85 trials. In the other 73 trials, encompassment was not achieved, i.e., the possible-non-singer did not sing.

C. Subjects Report Higher Enjoyment with Encompassment

Other information also supports the hypothesis that people value encompassment. In the experiment, it is the singers whose experience and sentiment is a matter of encompassment or not. That is, we are not concerned here with the enjoyment of the person left out of the experience, but with those who have the experience.

After each round, we asked subjects “*How did you enjoy the experience?*” In Table 3 we report the response of Definite Singers.⁴ We see that the encompassment experiences were more

⁴ As noted, it would be inappropriate to include in the analysis possible-non-singers who were in fact not included in the singing, since they did not have the singing experience at all. We pondered whether to include in the present

often rated as “Very much enjoyed” than the non-encompassment experiences. Using a zero-centered scale for the five possible responses (Not at all enjoyed, Not enjoyed, Neutral, Enjoyed, Very much enjoyed), we see that the encompassment experiences had a mean enjoyment score of 1.03 whereas the non-encompassment experiences had a mean score of 0.70.

Table 3: Higher Enjoyment in Encompassment: All Definite-Singer Experiences

		How did you enjoy the experience?					
Definite Singers	scored as:	Not at all (-2)	Not enjoyed (-1)	Neutral (0)	Enjoyed (1)	Very much (2)	Total
The whole was not encompassed	N: 5 %: 2.9% points: -10	5 2.9% -10	5 2.9% -5	48 27.4% 0	97 55.4% +97	20 11.4% +40	175 100% Mean score = 0.70
The whole was encompassed	N: 0 %: 0.0% points: 0	0 0.0% 0	1 3.3% -1	6 20.0% 0	14 46.7% +14	9 30.0% +18	30 100% Mean score = 1.03
Total		5	6	54	111	29	205

Next, in Table 4, we consider the 30 experiences of only those 15 subjects who, as a definite singer, *had both encompassment experiences and non-encompassment experiences*. Although enjoyment can take only integer values, some subjects experienced encompassment or non-encompassment twice (out of three total experiences). For such subjects we recorded their enjoyment as the average of the enjoyment they reported during those two experiences. Thus, Table 4 contains a column for an enjoyment value of 0.5 and 1.5.

For the 15 subjects in Table 4, the difference between mean scores is stark, with a mean enjoyment score of 1.10 for encompassment and 0.50 for non-encompassment, a difference that

analysis PNSs who *were* included in the singing, but opted not to, firstly, just to keep things simpler, but also, secondly, because their experience was a bit different in that when the subgroups (of either 3 or 4) met to sing, the PNS was told that she was the PNS, and that might psychologically alter the experience (that is, she might think of herself as one who got included, rather than one who experienced encompassment).

is statistically significant despite the small number of observations (n=15, P=0.09, two-sided t-test). It is perhaps not surprising that this group would report more enjoyment with encompassment, since all of them were willing to pay a positive amount in at least one round to obtain encompassment, but this comparison nevertheless at least shows that a difference in enjoyment shows up clearly across the two sets of experiences *for the same set of people*. This result militates against the idea that the results from Table 3 arise because zero-WTP subjects simply tend to rate experiences, regardless of encompassment, lower than do positive-WTP subjects.

Table 4: Higher Enjoyment in Encompassment: All Experiences of the 15 Individuals Who, as a Definite Singer, Experienced Both Encompassment and Non-encompassment

Definite Singers	scored as:	How did you enjoy the experience?							Total
		Not at all (-2)	Not enjoyed (-1)	Neutral (0)	(0.5)	Enjoyed (1)	(1.5)	Very much (2)	
The whole was not encompassed	N: 2 %: 13.3% points: -4	2 13.3% -4	0 0.00% 0	3 20.0% 0	0 0.0% 0	8 53.3% +8	1 6.7% +1.5	1 6.7% +2	15 100% Mean score = 0.5
The whole was encompassed	N: 0 %: 0.0% points: 0	0 0.0% 0	0 0.0% 0	2 13.3% 0	1 6.7% +0.5	8 53.3% +8	0 0.0% 0	4 26.7% +8	15 100% Mean score = 1.1
Total		2	0	5	1	16	1	5	30

Note that subjects who achieved encompassment had cash deducted from their earnings, while other subjects did not. The fact that they rated the experience more highly despite having money deducted only bolsters the idea that people value encompassment.

We also asked definite-singers who had achieved encompassment: *Do you think the experience would have been less enjoyable if the possible-non-singer had not been able to join in the singing?* There were 26 such decisions from subjects, and 20 of them selected “Yes, I am glad that everyone joined in the singing,” five selected “neutral,” and, oddly, one selected “No, I would have enjoyed it better if possible-non-singer had not gotten to sing.” We also asked definite-singers who had not achieved encompassment: *Do you think the experience would have been more enjoyable if the possible-non-singer had been able to join in the singing?* Only 6.9 percent responded “no,” while 48.3 percent revealed a clear preference for encompassment.

Thus, we have three kinds of evidence for a demand for encompassment: (1) Actual willingness to pay, (2) explanation of that willing to pay, and (3) responses from two separate enjoyment questions in the post-round questionnaire. All the data support the conclusion that encompassment is enjoyed and demanded, a demand that is quite widespread, if not preponderant.

D. Gender and Group-size Effects

Figure 1 presents subjects’ average willingness to pay for encompassment, by gender (male or female) and by group-size (3-person or 4-person). As it happens, a large portion of the female subjects were in 4-person groups. The figure helps one see each effect in isolation. The number of observations per category are indicated in parentheses (e.g., 28 males participated in 3-person groups).

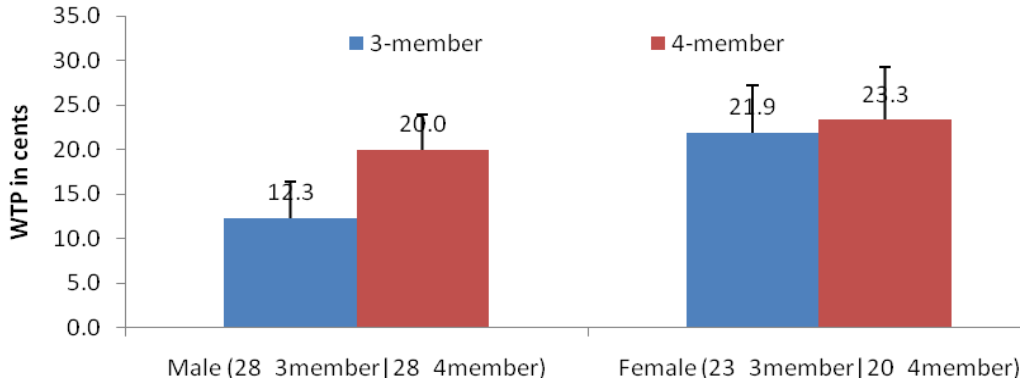


Figure 1: Willingness to pay for encompassment by gender and group-size.

Gender by group-size: We believe the demand for encompassment provides a basis for the political penchant toward collectivism. It is well established that women, relative to men, are more supportive of the “left” within their political context. For example, women in the United States are more supportive of the Democrat Party and collectivistic policies than men (see, e.g., Pratto et al., 1997; Pew Research Center 2009). Therefore, it is interesting that women display a higher average willingness to pay (mean=22.6, n=43) for encompassment than men (mean=16.13, n=56, $P=0.090$, T-test, one-tailed). In 3-person groups, the willingness to pay is much higher among women (n=23) than among men (n=28, $P=0.070$, $Z=1.815$, Mann-Whitney U-test, two-tailed). In 4-person groups, the willingness to pay for the women (n=20) is no different from that of men (n=28, $P=0.749$, $Z=-0.320$). Also, women more *often* sacrificed cash for encompassment.⁵

⁵ Simple gender comparisons not controlling for group-size are shown in the following table:

Gender	WTP N	% of WTP > 0	Mean WTP
Male	164	41.5%	16.0¢
Female	127	55.1%	22.4¢
All	291	47.42%	18.8 ¢

Group-size by gender: For men, their WTPs are statistically significantly higher in 4-person groups (n=28) than 3-person groups (n=28, P=0.037, Z=-1.881, Mann-Whitney U-test, two-tailed). For women, the WTP increases from the 3-person treatments (n=23) to the 4-person treatments (n=20), but the increase is not statistically significant. It seems males are more sensitive to the change in group size.

While the sizes of the sub-samples do not deliver statistical significance for all of the preceding relationships, the results suggest that women's demand for encompassment is stronger than men's, and that men's demand is much higher in 4-person groups.

Why is willingness to pay higher in the 4-person groups? One possible explanation is that a group of just three individuals (two definite-singers and one possible-non-singer) is still quite simple, e.g., "I sang, Sue sang, and Bill did not sing." Perhaps the experiences are still few enough to remain individual and disaggregated. As a result, the instinct of "the group" and the impulse for encompassment may not kick in as much. A group of three people has five possible partitions: {ABC, A-BC, AB-C, AC-B, and A-B-C}. A group of four, however, has 15 partitions. In the 4-person setting, three subjects definitely sing, and the fourth subject possibly sings as well. The addition of another person may make the group seem more like a single aggregated entity, a band or troop, and this setting might lend itself more naturally to aggregation, with focus on the undivided partition ABCD or simply "*everyone*." Did the whole group share the experience and sentiment, or not? Such management becomes more focal because it would be significantly more difficult to treat the activity in an individuated way. Whereas a set of three people remains three people, four people make a gang. The impulse for encompassing sentiment among the group is stronger. It is also possible that group instincts are

more important in larger groups to prevent group dissension and disintegration, e.g., the possibility that a group of four would subdivide into two factional couplings.

V. Support for “The People’s Romance” Thesis

The results of the experiment suggest that many people have an interest in a sense of encompassment – they are even ready to forgo cash for it. That interest will affect their choices in life, and quite plausibly their choices in what to believe. Belief systems that better accommodate an aesthetic of encompassment – even an encompassment only notional or imaginary – will hold some attraction on that account.

In politics, group boundaries are drawn by the polity, particularly by citizenship in the nation. In discourse about national issues, it is the nation that defines the group. In modern societies, citizens are invited, even compelled, to identify with the nation and to partake of “national experiences.” Particularly relevant are experiences initiated and managed by government. Public policy is often represented as a collective effort – sometimes even as a “war” – to fight drug use, crime, illiteracy, or poverty, to advance healthcare, to protect the environment, etc. The welfare state is *us taking care of us* – just as in the Paleolithic band.

In the experiment, 59.6 percent of the subjects sacrificed cash for encompassment at least once, and cash was sacrificed in 47.4 percent of all the decisions. The experiment was just one setting. Many of the subjects were, no doubt, “professional subjects,” who came to the experiment with a mindset of individual cash maximization. But, when it comes to citizenship, no culture has ever morally authorized individual cash maximization. We suggest that in the moral and aesthetic dimensions of life the instinct for encompassment of group experience and sentiment is quite universal.

In actual politics, the mythology of national experience does not depend exclusively on voluntary sacrifice – far from it. Government forces “participation.” Aside from exiting the polity, we cannot help but “help” take care of “us,” since taxation is not voluntary. Likewise, obedience to the commands of “the people’s endeavors,” from recycling to “consumer protection” to “the war on drugs,” is not voluntary. And the government uses the power of coercion and the power that comes from its being an incomparably big player to indoctrinate and propagandize for support of such mythologies. The warm fuzzy feeling of encompassing experience and sentiment might be crucial to inducing public acquiescence to such activities. Opaque governmental proposals with consequences fantastically complex, abstract, and unknowable are packaged with a feel-good gloss of collective action, good intentions, and encompassing effects, led by officers of our own choosing.

The experiment provides evidence of but one possible factor in the bent toward political collectivism: demand for encompassment. Such a demand fits Hayek’s atavism theory and speaks to questions about why the governmentalization of society vastly exceeds the bounds counseled by the Scottish enlightenment, classical liberalism, and the American Founding.

We do not mean to suggest that “the people’s romance” is a definitive explanation for the undue appeal of political collectivism. Indeed, we see many interrelated forces in play. James Buchanan (2005, 23) highlights “the attitudes of persons who seek *to have values imposed upon them* by other persons, by the state or by transcendental forces.” Bryan Caplan (2007) formulates “antimarket bias,” “antiforeign bias,” “make-work bias,” and “pessimistic bias.” Jeffrey Friedman (2007, 213-33) offers the “intentions heuristic.” Our emphasis on encompassment and “the people’s romance” may be placed alongside all such speculations. We would suggest, however, that there is potential to weave many such speculations into a more integrated

interpretation, an interpretation with strong moorings to Hayek's idea that our make-up is principally still Upper Paleolithic and that the ethos and mentality of modern statism are in a significant way the atavistic reassertion of those of the small band.

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