An Empirical Test of Rawls's Theory of Justice: A Second Approach, in Korea and the United States

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The authors conduct an experimental test of Rawls's theory of justice with subjects from Korea and the United States. The subjects begin from Rawls's "original position." Then, from behind this study's experimental "veil of ignorance," they simulate Rawls's "derivation" of principles of distributive justice, both individually and collectively. The authors explore and attempt to explain the cross-cultural differences. The design of this study borrows from earlier (1987) tests conducted by Frohlich, Oppenheimer, and Eavey who found no support for Rawls. But significant differences in this study's approach make this an independent test. The authors find partial empirical support for Rawls's difference principle among the Korean subjects only and suggest that his assumptions and reasoning need to be refined to better account for concerns and considerations beyond levels of income and the balancing of individual monetary interests.

KEYWORDS: cross-cultural; distributive justice; Korea; original position; Rawls; simulation; veil of ignorance

John Rawls's (1971) theory of justice has received enormous attention from scholars in a wide range of disciplines. It also has provoked unprecedented interest from the popular media. The response, both academic and popular, has included criticism. But generally this has been constructive in nature. Indeed, even Rawls's harshest critics acknowledge that a "thorough

AUTHORS' NOTE: The authors are indebted to Professors Norm Frohlich and Joe Oppenheimer for generously sharing materials and ideas from their experiments. Thanks also are due to the editor and several anonymous reviewers who provided constructive suggestions on earlier versions.

SIMULATION & GAMING, Vol. 22 No. 4, December 1991 443-462

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critique [is] not only justifiable but essential” (Schaefer 1979, p. 6). Thus the
task of reading, examining and understanding Rawls has mushroomed into
a broad, spirited debate.¹

One of the central issues in this ongoing debate concerns the relationship
between political philosophy and the social sciences. In particular, the
substantive (liberal) assumptions guiding Rawls’s approach have been ques-
tioned. These assumptions constrain the formulation of Rawls’s “original
position” and, in turn, his derivation of social principles. In reference to
different, but no less plausible, assumptions, Fisk suggests that “the existence
of the associated alternative conceptions of human nature undercuts the title
to neutrality of the liberal conception. It appears that Rawls’s working
conception of human nature does not supply the principles of justice he
derives from the original position with moral weight outside the context of
liberal democracy” (Fisk 1975, p. 57).

One such context is found in the tradition of hierarchical stratification and
communal values that permeates Korean society.² It was this context that
stimulated our inquiry into Rawls’s claims that the assumptions underlying
his “original position” are “widely accepted, weak, innocuous and trivial”
(1971, p. 18). For example, it seemed to us that many Koreans could not easily
conceive of themselves as being “mutually disinterested” (1971, p. 13).
Interpersonal relations in Korea coalesce around small group communities
such as clans, families, schools, and regional-based collectivities. And al-
though this interconnected complex of communities does not comprise a
single national hierarchy, Korean society remains communal and hierarchical
in both structure and dynamics.

Thus two fundamentally different conceptions of human nature are evi-
dent: one embodied in (Rawls’s) liberal democracy and the other rooted in
the traditional Korean hierarchical society³ based on communal (as opposed
to individualistic) values.⁴ We examine the extent to which these alternative
conceptions have an influence on the derivation of principles of distributive
justice in a laboratory setting.

Our Approach

We suspect that Rawls’s conditions and presumptions are not all “natural
and plausible” in the Korean context. But Rawls’s judgments about human
nature are not absolute. Indeed, he describes the process of derivation as
working from both ends to arrive at a “reflective equilibrium” (1971, p. 20).
One way to refine the equilibrium is to have subjects with different back-
grounds, but operating from Rawls’s original position behind an experimental veil of ignorance, choose or derive principles of justice. If these principles diverge from Rawls’s, a modification or refinement of Rawls’s conditions and/or principles would be suggested. On the other hand, empirical support for his assumptions and/or principles would be evident if confirmed by both Koreans and Westerners from behind a veil of ignorance.

Frohlich, Oppenheimer, and Eavey (1987a, 1987b) have conducted a series of laboratory tests to empirically evaluate one aspect of Rawls’s theory, the choice of a principle of income distribution. Their subjects were from the United States and Canada. More recently, Lissowski, Tyszka, and Okrasa (1988) have replicated the experiments with Polish students. These earlier experiments yielded almost no support for Rawls’s difference principle in favor of a mixed principle that takes into account not only the position of the worst-off individual but also the potential expected gain for the rest of society.

We too establish experimentally an “original position” and a “veil of ignorance” to derive principles of distributive justice. Our subjects are drawn from different (Korean and Western) contexts. We compare their preferred principles with Rawls’s “derivations” in an attempt to test this central variable in Rawls’s theory.

The present design, however, is sufficiently different from the earlier experiments to be characterized as an independent test. The basic departure is twofold: We standardize means in the illustrative examples and we present the examples on a continuum. We modified the design in an effort to facilitate comparison of the resultant structures of the various income redistribution principles. These structures of economic relations represent overall or basic patterns of income distribution rather than absolute levels or amounts of income.

Our modification in experimental design yields a static test of Rawls where the overall size of the “pie” to be divided is held constant. It is important to note that this design has a conservative bias with respect to Rawls’s derivation. In a situation where one’s future placement in a society is unknown, a fixed mean design favors principles that impose caps on high incomes (unlike Rawls) because such measures necessarily benefit those with incomes below the mean. In particular, a fixed mean design allows one to minimize worse case risk by choosing to cap high incomes.

Our approach is empirical/experimental. We borrow from (but, again, do not replicate) the previous laboratory experiments developed by Frohlich et al. for, as they have argued, Rawls’s principles “would only be compelling, as an ethical argument, if — as the ideal were approximated empirically — the
behavior of individuals came to approximate that predicted in the ideal” (1987a, p. 7).

To be sure, the present test of Rawls’s hypothetical derivation of principles of distributive justice is imperfect and incomplete. But our focus on basic structures and, especially, our conservative bias push our approximation toward, rather than away from, the ideal. Our design takes on importance because it shows the boundary conditions for the earlier experiments. And as even more rigorous tests are developed and replicated, we should be able to further specify the conditions under which Rawls’s derivations might be supported.

**Rawls’s Theory of Distributive Justice**

Rawls suggests certain patterns of distribution are more just than others. He develops an “expository device” to identify the conditions, constraints, and principles of the fairest distribution of income. Rawls begins with an original position: “the appropriate initial status quo which assures that the fundamental agreements reached in it are fair.” (1971, p. 17). Rawls argues for his “most favored” interpretation by working from “widely accepted but weak premises to more specific conclusions,” and specifies four conditions (Rawls, 1971, pp. 18-19):

1. no one should be advantaged or disadvantaged by natural fortune or social circumstances in the choice of principles;
2. it should be impossible to tailor principles to the circumstances of one’s own case;
3. particular inclinations and aspirations, and persons’ conceptions of their good do not affect the principles adopted;
4. the parties in the original position . . . all have the same rights in the procedure for choosing principles; each can make proposals, submit reasons for their acceptance, and so on.

He also describes a “veil of ignorance” to be used together with these conditions to “nullify the effects of specific contingencies which put men at odds and tempt them to exploit social and natural circumstances.” Most simply, this veil is a set of assumptions guiding his subsequent derivation of principles. The assumptions include that “no one knows his place in society, his class position or social status; nor does he know his fortune in the distribution of natural assets and abilities, his intelligence, strength, and the like” (1971, pp. 136-137).
Finally, Rawls derives the following two principles of justice from the original position (Rawls, 1971, p. 60):

First: each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others.
Second: Social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage, and (b) attached to positions and offices open to all.

Our Test of Rawls's Theory

Our laboratory test of Rawls's expository device focuses on patterns of distribution (what Rawls calls the basic structures of society) which support the range of alternative principles of distributive justice. Departing from the earlier experiments, we array these alternative patterns or structures on a continuum of redistribution systems from no redistribution (i.e., no taxation) to "absolute" redistribution (equalizing all incomes). Each of the patterns is associated with a principle of distributive justice.

Our subjects, working in groups of four to six people, chose collectively a preferred principle of distributive justice (i.e., a pattern of income distribution). The subjects also chose individually their personal preferences (by ranking) at four different times throughout the experiment.

Both the individual and collective choices were made in an experimental original position. At the time of their choice, the subjects did not know the economic class into which they were to be randomly assigned. They also did not know the extent of their ability to perform three tasks. The tasks involved answering 10 to 15 true-false and fill-in type questions. The tasks were designed to create a wide range of scores that were subsequently used to calculate payoffs. Most questions required a general knowledge (e.g., name the author of 1984), some were almost trivial in nature (e.g., identify the 48th state of the United States), and still others were more technical (e.g., what is the chemical formula for benzene?).

Thus, three variables—choice, luck, and skill—operated jointly, much as they do in Rawls's expository device, to approximate a veil of ignorance.

The subjects were paid for their participation in the experiment. Total remuneration ranged from a low of some $10 to a high of some $50 per subject. The high variance in payoffs provoked much discussion, and clearly impressed our subjects (as related by the subjects during the postexperiment
debriefing) with the magnitude of the hypothetical, “real life” implications of the experiment.

Research Questions

Our initial thoughts on the likely outcome of experimental derivations of principles in Korea and the United States were somewhat ambivalent concerning possible cross-cultural differences. We thought the strong communal bonds in Korean society might sway preferences toward structures of redistribution that tie high and low earners in (hierarchical) intricate patterns of obligation and privilege. Rawls’s difference principle, in which the least advantaged receive the greatest benefit, consistent with promoting benefits to the society as a whole, seemed to us to be compatible with this line of argument, although out of context with Rawls’s original formulation. Likewise, we thought that individuals in the West, operating behind an effective “veil of ignorance,” also might choose Rawls’s principle. But here we surmised their rationale would be based more on the maximization of (unknowable) individual interests that were coincident with benefits to the society at large. Our primary interest, therefore, was on exploring and explaining any differences between cultures and in light of Rawls’s derivation. Toward this end we articulated several questions.

1. About the group preferences (decisions):
   What is the nature of the group decisions, that is, are they agreed by consensus, (paired) majority vote, or are the groups unable to reach a collective decision?
   What are the preferred principles of justice? What differences, if any, are evident between Korean and Western group preferences?

2. About the individual preferences (rankings):
   What are the preferred principles of justice? What differences, if any, are evident between Korean and Western individual preferences? What experimental effects might account for the preferences? What other (social-psychological) factors may have affected these preferences?

3. About the stated and/or apparent rationale for the preferences:
   What concerns were expressed during the group discussions? What comments were expressed by individual subjects?

Subjects

Five of the 26 Korean subjects were graduate students and 21 were undergraduate students. They ranged in age from 19 to 30; the mean age was
just over 22 years. Ten of the Korean subjects were female, 16 were male. Both parents of all Korean subjects were born in Korea, as were the subjects themselves.

Fifteen of the 24 non-Korean subjects were graduate students, 4 were undergraduate students and 10 were not enrolled in a degree program, but worked in research/clerical capacities on campus. They ranged in age from 21 to 29, averaging just over 24 years-old. Six of these subjects were female, 18 were male. The heritage of these non-Korean subjects was diverse: their parents' birthplaces included Australia, France, Iran, The Netherlands, Norway, the Soviet Union, Syria, the United Kingdom, and the United States. The subjects' birthplaces were similarly heterogeneous. But none had lived anywhere in East Asia prior to their current sojourn. The commonality among these non-Koreans was their North American-Western European upbringing. All were raised and associated themselves with Western—as opposed to Eastern—values. Thus we refer to them as the "Western" subjects.

Experimental Procedures

We ran the experiment five times in September and October, 1988 at five large universities in Korea. Three of the universities are located in Seoul, one in Inchon, and one in Kangwon Province. Each group was composed of 5 (Korean) students. All of these sessions were conducted entirely in Korean. In addition, we ran the experiment once in Seoul in August (in English) with another group of students, one of whom was Korean. The lone Korean in this mixed group was a resident assistant who lived with the Westerners in an international dormitory. He was fluent in English, comfortable with the "Western" group, and was clearly atypical in his exposure to Western culture. The total number of Korean subjects was 26. The other Korean subjects were recruited with announcements made in regular (Korean) political science classes.

We ran the experiment four times in the United States (in English) from November, 1988 to January, 1989. One of these groups had 4 subjects, one had 6, and the other two had 5 each. The total number of non-Korean subjects was 24 (this includes the four from the mixed group run in Seoul). The non-Korean subjects were recruited from among foreign students at an international school in Seoul (for the one mixed group), and with announcements posted at Harvard University.

The experiment was conducted in four parts and lasted about 2.5 hours. The purpose of Part 1 was to develop a common understanding among the subjects of the terminology, purpose and procedures. In Part 2 we sought to
impress on the individual subjects the elements of luck, skill, and their choice of a principle as they effected their remuneration for the experiment, thereby simulating the veil of ignorance. The group discussion and choice of a principle were conducted during Part 3. Here each subject’s remuneration depended in part on the group (as opposed to individual) choice of a principle. Part 4 served as a “debriefing” period in which the subjects discussed their experience and completed a short attitude and background information questionnaire.

The specific activities included the following:

**Part 1**: introduction to the principles; *initial ranking* of principles; discussion of the principles; comprehension tests; correction and calculation of payoffs; review of principles and procedures; and *base ranking* of the principles. For the comprehension tests, the payoff was $0.50 for each correct answer on the first try. The maximum (possible and actual) payoff was $7.50; the minimum actual payoff on the first try was $5.00. For those few who had to take the test again (only the incorrect test items), $0.25 was paid for each correct answer.

**Part 2**: Task 1 (choice of principle, completion of task, and drawing of income class); correction and calculation of payoffs; Task 2 (another choice of principle, completion of task, and drawing of income class); correction and calculation of payoffs; review of principles and procedures; and *pretest ranking*. For Tasks 1 and 2 the payoff was determined by first locating the column (see Table 1) of the individually chosen principle, then the row of the randomly drawn income class, and multiplying this figure by the task skill score as expressed in a percentage (the range was 0% to 100% for Task 1 and 0% to 120% for Task 2). Note the experimental “interclass mobility” offered by the skill score range extending above 100%. The actual skill score range was 20% to 100% on Task 1 and 0% to 100% on Task 2.

**Part 3**: group discussion; closure of discussion — by consensus; group decision first by consensus, or if none, then by paired majority vote, or if none, imposed (at random); Task 3 (completion of task and drawing of income class); correction and calculation of payoffs; and *posttest ranking*. For Task 3, the payoff was determined as above except the group rather than individual choice was used to locate the column, and the random drawing was modified so that each group member would draw a different income class; the payoffs for the group-defined principles were calculated separately with values between columns 4 and 5. The actual range of skill scores on Task 3 was 0% to 120%, out of a possible 150%.

**Part 4**: completion of background questionnaire; debriefing; calculation of total remuneration; and payments.

Table 1 details the U.S. dollar payoffs for the Western subjects. The Korean subjects’ payoffs were in Korean won and ranged from about 3 to 30 thousand won.
TABLE 1: Payoff Calculations (in U.S. Dollars)

<table>
<thead>
<tr>
<th>Income Class</th>
<th>MAXAVE</th>
<th>FLRSUP</th>
<th>MAXFLR</th>
<th>RNGCST</th>
<th>EQLINC</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>22.79</td>
<td>22.26</td>
<td>20.65</td>
<td>19.22</td>
<td>11.33</td>
</tr>
<tr>
<td>Middle high</td>
<td>15.27</td>
<td>14.92</td>
<td>13.83</td>
<td>13.68</td>
<td>11.33</td>
</tr>
<tr>
<td>Middle</td>
<td>10.40</td>
<td>10.16</td>
<td>9.43</td>
<td>9.88</td>
<td>11.33</td>
</tr>
<tr>
<td>Middle low</td>
<td>7.08</td>
<td>6.86</td>
<td>9.07</td>
<td>9.07</td>
<td>11.33</td>
</tr>
<tr>
<td>Low</td>
<td>4.20</td>
<td>6.86</td>
<td>9.07</td>
<td>9.07</td>
<td>11.33</td>
</tr>
</tbody>
</table>

Principles of Distributive Justice

Our MAXAVE (maximize average) principle represents the preredistribution, actual income pattern of urban Korea in 1986. The FLRSUP (floor support) principle subsidizes low income earners to a level of 60% of the average income. The HGHFLR (high floor) principle represents Rawls's "derived" difference principle, and has a subsidy level of 80%. Both the FLRSUP and HGHFLR principles are funded with a flat tax in our illustrative examples, the former at 2.3% and the latter at 9.4%. As we move along the continuum toward more equal patterns of income distribution, a progressive tax is needed to compress the income pattern. Our RNGCST (range constraint) principle uses a progressive tax of 16% on the high earners (the top 10 percentile group) and subsidizes low earners to 80% of the average income. Those in the 30th to 70th percentile groups (the middle class) are taxed at 5% under the range constraint principle, and those between the 70th and 90th (the middle high class), at 10%. Finally, our EQLINC (equal incomes) principle completes the range of alternatives with an equal income distribution.

GRPALT6 and GRPALT7 (group alternatives 6 and 7) are group-defined principles. Both are variants of the range constraint principle: GRPALT6 has a progressive tax of 25%, 12%, and 4% for high, middle-high, and middle classes respectively; GRPALT7 has rates of 25%, 5%, and 1% for the same classes. The main difference between them lies in the floor; GRPALT6 subsidizes all incomes up to 80% of the group average; GRPALT7 stipulates subsidies up to only 70% of the average.
TABLE 2: Group Choices of Principles of Justice

<table>
<thead>
<tr>
<th>Number</th>
<th>MAXAVE</th>
<th>FLRSUP</th>
<th>HGHLF IR</th>
<th>RNGCST</th>
<th>EQLINC</th>
<th>GRPALT6</th>
<th>GRPALT7</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>4 (6)</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>10</td>
</tr>
<tr>
<td>Korean</td>
<td>0</td>
<td>1m</td>
<td>1m</td>
<td>3c</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>5</td>
</tr>
<tr>
<td>Western</td>
<td>0</td>
<td>1m</td>
<td>0</td>
<td>1m (3)</td>
<td>1c</td>
<td>2m</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

NOTE: “m” identifies a paired majority vote, “c” a consensus decision; numbers in parentheses indicate frequencies when the group defined alternatives (6 and 7) are included in the count for the range constraint principle, of which they are variants; the General Association CMH statistic (1.806, df = 3, p > 0.61) reveals no significant difference between the Korean and Western groups in their choices of preferred principles.

Group Preference (Decisions)

Table 2 presents the group decisions in aggregate and by culture (Korean or Western), along with a notation on the nature of the decision.

We find no significant differences between our Korean and Western subjects in their group choices of principles of justice. When we consider the group-defined alternatives as variants of our range constraint illustration, both Korean and Western groups converge on the range constraint principle. But a cross-cultural difference is evident in the way in which the group choices were made. All of the Korean groups that chose the range constraint principle were unanimous in their decisions. But all of the Western groups that chose the range constraint principle (or a variant) required a (paired majority) vote to break the resistance to capping high incomes.

Individual Preferences (Rankings)

Table 3 presents the posttest mean rankings for all subjects combined and for the separate cultures. Note these rankings were done after the group decision. If the individual subjects disagreed with the group decision, they were told to base their rankings on their own feelings rather than on the group decision.

Because our principles already are arrayed on a continuum, we assign numerical values to indicate choices along this continuum: MAXAVE = 1, FLRSUP = 2, HGHLFIR = 3, RNGCST = 4, EQLINC = 5. Values approaching 1.0 indicate less taxation or redistribution of income. Values approaching 5.0
### TABLE 3: Posttest Individual Mean Rankings

<table>
<thead>
<tr>
<th>Ranking of Mean Value</th>
<th>Korean</th>
<th>Combined</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>RNGCST</td>
<td>1.73</td>
<td>RNGCST</td>
</tr>
<tr>
<td>Second</td>
<td>HGHFLR</td>
<td>1.92</td>
<td>HGHFLR</td>
</tr>
<tr>
<td>Third</td>
<td>FLRSUP</td>
<td>2.50</td>
<td>FLRSUP</td>
</tr>
<tr>
<td>Fourth</td>
<td>MAXAVE</td>
<td>4.35</td>
<td>EQLINC</td>
</tr>
<tr>
<td>Fifth</td>
<td>EQLINC</td>
<td>4.46</td>
<td>MAXAVE</td>
</tr>
</tbody>
</table>

NOTE: Superscripts a, b, and c indicate significant differences between Korean and Western subjects as follows:
- a. \( t = -4.55, p < .01 \);
- b. \( t = 2.32, p < .05 \); and
- c. \( t = 2.59, p < .05 \). For the 10 Western subjects who had ranked 6 or 7 principles instead of 5, rankings less than 5th place on all principles except the range constraint were assigned a value of 5; and for these same 10 subjects, their highest (toward 1st place) ranking among the three range constraint variants (RNGCST, GRPALT6, and GRPALT7) was used to facilitate comparison between the Korean and other Western subjects who ranked only the 5 principles.

indicate more redistribution of income by taxing higher incomes to provide more for those with lower incomes.

For example, at one extreme, a value of 1.0 represents no redistribution of income. All keep what they earn. No subsidies are mandated for low earners. Values between 1.0 and 2.0 represent provision only for a “safety net” or minimum income to be guaranteed by the chosen principle of distributive justice. But values around 4.0 and above represent principles of redistribution that tend to equalize all incomes as the value increases. And at the other extreme, a value of 5.0 indicates a “complete” redistribution of income to render all incomes equal.

We find agreement between Western and Korean individual subjects on the preference for the RNGCST principle (or one of its variants) and on the rejection of the MAXAVE principle. But marked differences are evident as well. Note especially the break between the first and second mean rankings for the Western subjects, but between the second and third for the Koreans; similarly, the Western mean rankings reveal a break between the fourth and fifth places, whereas a break occurs between the third and fourth places for the Koreans.

#### Experimental Effects

To determine the extent to which our experimental process might have influenced the choice of principles prior to the group discussion, we exam-
ined the differences between the subjects' initial- and base-test rankings. Recall the base ranking was done after the comprehension tests but before the skill exercises (Tasks 1 and 2) designed to impress on the subjects the monetary implications of their choices, and before the group discussion and final task (3). No significant differences were found between the initial- and base-test rankings of the principles for either the Korean or Western subjects. We also looked for changes in ranking that appeared after the base ranking but before the group discussion, that is, during the skill exercises. Again, no significant differences were found between the base- and pretest for either the Korean or Western subjects.

Social-Psychological Factors Affecting Preferences

Rawls argues that worst-case risk aversion is an important ground for the selection of his two principles (1971, pp. 176-177). We followed Frohlich et al. in asking the subjects how much they would pay for and sell a lottery ticket to tap into the notion of risk aversion. We created two variables from the data: RISK and PROFIT. RISK is computed by dividing the amount a subject was willing to pay for a ticket by its probable or mathematically expected return. PROFIT is computed by dividing the amount for which a subject was willing to sell his/her ticket (less its cost) by the probable return. Values above one suggest a willingness/desire to take more risks/profit. Values below one suggest the opposite.

We asked also about the subjects' degree of financial independence as indicated by the source of funds for their college education. This variable, SELFSUP, is expressed as a percentage, and includes individual savings, personal loans, and earned scholarships.

AGE was another variable. It should be self explanatory. SCHLYEAR represents the subjects' year in school from 1 (freshman) to 4 (senior) for undergraduates, 6 for MA students and 8 for students enrolled in a Ph.D. program.

Finally, the subjects were asked to agree or disagree with a series of statements about relevant issues. The scale was 1 (strongly disagree) to 5 (strongly agree). The statements are listed below along with their variable names:

EQUALITY: Relative equality of wealth is a good thing.
GVNTGUAR: Governments should ensure that all people have a relatively decent level of living.
GVNTSUP: Governments ought to support people who are disadvantaged by unavoidable natural events.

INDEFORT: The greatest accomplishments in history were individual effort.

INFERIOR: In every country there are groups of people who are naturally inferior.

SURVIVAL: For some people to succeed, others must fail.

Table 4 presents the significant bivariate correlations between preferences for each of the five principles and the social-psychological variables listed above.

The universal rejection of MAXAVE and preference for RNCGST are apparent in that no significant bivariate correlations were evident on the MAXAVE and RNCGST principles at the aggregate level of analysis. This held true also for separate analyses by culture, by gender, and by culture and gender, with one exception. Also a uniformity in the Korean preferences is evidenced by the lack of (within-culture) significant correlations except for the interesting negative correlation between GVNTGUAR and a preference for the EQLINC principle. It seems that the Korean subjects who want the government to guarantee a decent level of living, do not want a high floor that would tend to equalize incomes.

With respect to the FLRSUP principle, the Korean subjects held fast to a hierarchical view of society, considering some people to be naturally inferior significantly more than the Western subjects (means = 3.35 and 2.33, respectively). The Koreans also were more willing to take economic risks (means = 0.86 and 0.39, respectively). Multiple (stepwise) regression analyses revealed GVNTSUP and INFERIOR to be significant predictors of a preference for the FLRSUP principle.

Both SCHLYEAR and AGE were negatively correlated with the choice of the HGHFLR (Rawls's) principle. The older the subject and the more advanced in education, the less he or she chose this principle. But when analyzed separately by culture, the Koreans had no significant correlations and the Westerners had only one—on the SELFSUP variable. Those Westerners who made it on their own resented the high guaranteed minimum income, but this sentiment was not shared by the Koreans. SELFSUP and SCHLYEAR were predictors of a preference for the HGHFLR principle in the multiple regression.

As expected, the variable EQUALITY was positively correlated with the principle of equal incomes at the aggregate level of analysis. But separate analyses reveal two additional variables, GVNTGUAR and SCHLYEAR, to be correlated as well. GVNTGUAR is significant with both Korean and Western subjects but, as noted above, in opposite directions. Finally, the
TABLE 4: Significant (Bivariate) Correlations Between Individual Preferences and Selected Variables

<table>
<thead>
<tr>
<th>Preferred Principle</th>
<th>Korean</th>
<th>( r^2 )</th>
<th>p</th>
<th>Combined</th>
<th>( r^2 )</th>
<th>p</th>
<th>Western</th>
<th>( r^2 )</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXAVE</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLRSUP</td>
<td>none significant</td>
<td>-0.46</td>
<td>.01</td>
<td>none significant</td>
<td>-0.51</td>
<td>.01</td>
<td>none significant</td>
<td>0.57</td>
<td>.01</td>
</tr>
<tr>
<td>GVNTSUP</td>
<td>-0.37</td>
<td>.01</td>
<td>none significant</td>
<td>-0.51</td>
<td>.05</td>
<td>none significant</td>
<td>0.51</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>RISK(^c)</td>
<td>0.30</td>
<td>.05</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>-0.53</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>HGHFLR</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
</tr>
<tr>
<td>SCHLYEAR(^d)</td>
<td>-0.49</td>
<td>.01</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
</tr>
<tr>
<td>SELFSUP(^e)</td>
<td>-0.49</td>
<td>.01</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
</tr>
<tr>
<td>AGE(^f)</td>
<td>-0.31</td>
<td>.05</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
</tr>
<tr>
<td>SURVIVAL</td>
<td>0.31</td>
<td>.05</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
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<td></td>
</tr>
<tr>
<td>RNGCST(^b)</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
</tr>
<tr>
<td>EQLINC</td>
<td>GVNTGUAR</td>
<td>-0.54</td>
<td>.01</td>
<td>EQUALITY</td>
<td>0.29</td>
<td>.05</td>
<td>GVNTGUAR</td>
<td>0.61</td>
<td>.01</td>
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<tr>
<td></td>
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<td>none significant</td>
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<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td>none significant</td>
<td></td>
</tr>
</tbody>
</table>

a. These are Pearson product-moment correlations. The sign has been reversed so that high (toward 1st place) rankings are associated with high (agreement) scores on the variables.

b. The transformation procedure described in the note to Table 3 was employed here.

Superscripts c, d, e, f, and g indicate significant differences between Korean and Western subjects as follows:

c. \( t = 2.25, p < .05 \); d. \( t = 2.69, p < .05 \); e. \( t = -5.34, p < .01 \); f. \( t = -2.60, p < .05 \); and g. \( t = -2.88, p < .01 \).

Western subjects' SCHLYEAR was negatively correlated with a preference for the EQLINC principle.

Subjects' Rationale

During the group and postexperiment discussions the Korean subjects expressed a concern more with preventing abuse at high levels than with eliminating those high levels. The Korean subjects' rejection of MAXAVE is consistent with this concern. They also expressed a concern for a high guaranteed minimum income, as revealed in their second place ranking of
the HGHFLR principle. Indeed, the mean rank for this principle (1.92) was very close to their first place ranking of the RNGCST principle (1.73), and far above the third place mean of 2.50. We interpret this to be a dual preference for a high floor (Rawls’s principle) and a constraint on the range.

The major arguments advanced during the group discussions by the Korean subjects centered around whether the advantaged should be limited in their individual pursuits, thus the split preference between the flat tax (HGHFLR) and progressive tax (RNGCST) principles. There seemed to be more agreement around the idea that the disadvantaged should receive a relatively high, dignified (as opposed to a subsistence or minimum) level of support, reflecting the hierarchically organized community’s responsibility to its lowest members. Both the HGHFLR and RNGCST principles offer a higher level of support than the FLRSUP principle. But for some, the unchecked (flat tax) high incomes of the floor support and high floor principles was argued to be leaving the door open to abuses by those at the top. Many of the contemporary abuses were cited during the group discussions. Indeed a consensus was reached on the range constraint principle in three of the Korean groups. Even the individual rankings, done privately, were influenced by this public fervor. Hierarchical social structures do undermine social integrity when the community trust is broken with overt corruption.

Interestingly, little concern was expressed for a higher floor because of its income-equalizing effect. In fact the equal-income principle was universally rejected by the Korean subjects. In contrast, the group and postexperiment discussions with Western subjects seemed to focus on the balance between the individual and social equality. A cap on high incomes was desired insofar as it could be applied fairly, realistically, reasonably, and toward the goal of social equality. Our RNGCST illustration, with a maximum tax rate of 16% seem to be well within the bounds of reason. Indeed, two of the groups raised this rate to 25% (GRPALT6). But one of the (Western) groups, comprised of four unrelated members of a single household, chose to affirm equality over individual interests in their (unanimous) group decision. They articulated an “imperative to transform society.”

The opposing goal of free-market individualism (tempered with a social “safety net”) seemed to be equally compelling as a goal to most Western subjects. Invariably, the range constraint and its variants were presented as a reasonable, albeit reluctant compromise. No consensus was achieved by the Western groups that chose a range constraint principle.
Conclusions

Recall our hypotheses concerning Rawls’s derivation of a most favored principle of distributive justice. We suspected that even modern Korean society would manifest traditional influences that tended to accept hierarchically organized social structures in which individualistic attitudes were discouraged in favor of “proper” relationships within and among a complex of small-group communities. We surmised that the sense of unity within these communities generally overrides most economic differences.

Methodologically, the absence of significant differences in group choices between our Korean and Western subjects is notable. This convergence suggests that the group choices are not a function of group background or culture, and hence the present empirical/experimental approach to testing for justice is implementable. Rawls's theoretical idea of an “original position” from which principles of justice may be derived is supported as well.

But our empirical results diverge from earlier experiments. Much of this difference is attributable to the significant difference in design (noted above) between this and earlier studies. Both the present static and the previous dynamic comparisons approximate very imperfectly the theoretical conditions and assumptions stipulated in Rawls’s theory. But to the extent the complementary laboratory settings approximate theoretical parameters, we expect to see some convergence of theory and data.

Indeed our Korean subjects’ dual preference shows some convergence with Rawls’s theory, and this finding lends support to this theoretical derivation. But, we suggest, the explanation is not to be found in Rawls’s assumptions and rationale.

The goal of social equality seems to be elusive in Korean culture, the recent populism notwithstanding. The strong sense of community, bound with intricate roles and obligations, serves as a substitute. This legacy of Korea’s traditional values is still influential as evidenced by our Korean subjects’ universal concern for a high minimum income (provided by both HGHFLR and RNCST) even as they lacked consensus on the need for a cap or compression of the range of incomes (provided only by RNCST).

In contrast, the concerns voiced by our Western subjects are more congruent with Rawls's theoretical development. Most cite equality as a key issue, even if only as a goal or ideal. But without exception a reluctance was
expressed (during the postexperiment debriefings) about having to choose between individual and collective interests. This reluctance was underscored by the high degree of tension evident during the individual and highly variable payoffs at the end of the experiment, especially among those in the group that chose the equal income principle.

The tension for our Korean subjects seemed to lie in an inconsistency between public (i.e., group decisions) and private (i.e., individual rankings) sentiments. This suggests other considerations were deemed important, particularly those concerning small-group alliances. Within these alliances, the rules of hierarchical deference and protocol were strictly followed during the public (group) discussions. But their private (individual) rankings revealed a complex range of concerns anchored by the desire for a high floor minimum income as opposed to an equal income approach to dealing with the poor.

In this respect, our Korean subjects focused less on relative income levels among individuals and the balancing of individual versus group monetary interests than on their respective groups. At least in traditional Korean culture, individuals are separate entities with their own interests only within the context of their roles in particular identity or reference groups. These interdependent groups taken together comprise the larger community. The roles carry with them a host of complex obligations to other individuals, groups, and to the community as a whole. When these obligations are not fulfilled, the individual's primary identity groups are weakened. This in turn undermines the power and influence of these groups within the larger community. Thus the sense of distributive justice for our Korean subjects is bound to the integrity of the collectivities in which their identities are expressed.

We offer these cross-cultural results and interpretation as an independent empirical/experimental appraisal of Rawls's theory of distributive justice. We suggest the primacy of the individual in his assumptions needs to be reconsidered and refined. And we encourage further use of this empirical/experimental approach as a way to inform normative theory.
Appendix: Illustration of Principles

Each of the columns in the illustration below represents one principle of distributive justice with its associated pattern of distribution. Each pattern has five different levels of income. The first column represents an actual pretax or preredistribution pattern where the ratio of the floor to the average income is about 40% (6,307/16,996). We chose the 60% (10,290/16,996) and 80% (13,610/16,996) figures for the FLRSUP and the HGHFLR principles because these figures lie at equal intervals between the relatively unequal (actual) distribution and an equal distribution. But remember, the absolute income and tax levels are not as important as the relative levels within each principle that constitute its pattern of distribution.

### Principles Reflecting Five Patterns of Distribution

<table>
<thead>
<tr>
<th>Income Class</th>
<th>MAXAVE</th>
<th>FLRSUP</th>
<th>HGHFLR</th>
<th>RNGCST</th>
<th>EQIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (top 10%)</td>
<td>34,191</td>
<td>33,394</td>
<td>30,971</td>
<td>28,830</td>
<td>16,996</td>
</tr>
<tr>
<td>Middle high (next 20%)</td>
<td>22,905</td>
<td>22,373</td>
<td>20,747</td>
<td>20,515</td>
<td>16,996</td>
</tr>
<tr>
<td>Middle (middle 40%)</td>
<td>15,602</td>
<td>15,237</td>
<td>14,141</td>
<td>14,825</td>
<td>16,996</td>
</tr>
<tr>
<td>Middle low (next 20%)</td>
<td>10,622</td>
<td>10,290</td>
<td>13,610</td>
<td>13,610</td>
<td>16,996</td>
</tr>
<tr>
<td>Low (bottom 10%)</td>
<td>6,307</td>
<td>10,290</td>
<td>13,610</td>
<td>13,610</td>
<td>16,996</td>
</tr>
<tr>
<td>Average (x)</td>
<td>16,996</td>
<td>16,996</td>
<td>16,996</td>
<td>16,996</td>
<td>16,996</td>
</tr>
<tr>
<td>Top (high)</td>
<td>34,191</td>
<td>33,394</td>
<td>30,971</td>
<td>29,046</td>
<td>16,996</td>
</tr>
<tr>
<td>Floor (low)</td>
<td>6,307</td>
<td>10,290</td>
<td>13,610</td>
<td>13,610</td>
<td>16,996</td>
</tr>
<tr>
<td>(40% of x)</td>
<td>27,884</td>
<td>23,104</td>
<td>17,361</td>
<td>15,220</td>
<td>0</td>
</tr>
<tr>
<td>(60% of x)</td>
<td>(80% of x)</td>
<td>9,4%</td>
<td>0%</td>
<td>0% to 16%</td>
<td>0% to 50%</td>
</tr>
<tr>
<td>Range</td>
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<td>flat</td>
<td>flat</td>
<td>progressive</td>
<td>progressive</td>
</tr>
<tr>
<td>Tax type</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax rate</td>
<td>0%</td>
<td>2.3%</td>
<td>9.4%</td>
<td>0% to 16%</td>
<td>0% to 50%</td>
</tr>
</tbody>
</table>

### Notes

1. A selected bibliography of works on Rawls appearing through the mid-1980s is included in Martin (1985); important, early, book-length studies include Barry (1973), Nozick (1974), Daniels (1975), Wolf (1977), and Blocker and Smith (1980).

2. Of course there are many other contexts as well. And although the traditional Korean context does not happen to be the particular conception discussed by Fisk, traditional values will continue to influence modern Korean society for generations to come. See Mitchell (1986, pp. 15-33) for a discussion of the dynamics of this process.

3. Pyong-Choon Hahn notes, “Koreans in the past have been more impressed by differences among men than by their sameness. . . . They thought therefore that the subordination of inferior men to superior men was unavoidable” (1967, p. 35).
4. Gregory Henderson suggests a "major determinant of the Korean cultural persona" is the public impingement on individual and personal behavior and thought: "What one has for central power is far from love, it is not even respect, nor is it by any means always fear nor even apprehension. It is a kind of chronic consciousness often heightening to a preoccupation with a force with which one has almost constantly to cope" (1987, p. 3). See Henderson (1968) for a more complete discussion of the phenomenon.

5. Both this suggestion and its obverse assume that our experimental conditions fairly approximate Rawls's hypothetical conditions. In any case, our position here represents less an advocacy for or against Rawls's principles than a contribution to the experimental/empirical approach to the study of justice as discussed by Soltan (1982) and Frohlich and Oppenheimer (1989).

6. These questions are all from the English test. Appropriate "equivalents" were used for the Korean version.

7. But some private dissent against the group decisions was evident: six subjects (of 15 in the three Korean groups that chose the range constraint principle) did not rank it first in the posttest.

8. We also ran multiple (stepwise) regression analyses, regressing each of the five principles onto all of the social-psychological variables, which revealed nonsignificant results for both MAXAVE and RNGCST.

9. The exception was for self-supporting Korean males who preferred \( r = 0.60, p < .05 \) the MAXAVE principle.

10. Although the Korean and Western males reveal no significant difference on this variable, the Western females have no variance on their strong disagreement (mean = 1.0) with the notion of inferior people, whereas Korean females had a mean of 3.2, above the midpoint on the scale (\( t = 4.49, p < .01 \)).

11. The significant \( (p < .01) \) regression equation is

\[
FLRSUP = -0.25 - 0.72 \text{GVNTSUP} + 0.28 \text{INFERIOR} + \text{error}
\]

(\( R \) square = 0.27). The signs have been reversed as described in note a to Table 4.

12. The significant \( (p < .01) \) regression equation is

\[
HGHFLR = -1.32 - 0.01 \text{SELSUP} - 0.17 \text{SCHLYEAR} + \text{error}
\]

(\( R \) square = 0.34). Again, the signs have been reversed.

References


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