Rational Choice
Harsanyi and Rawls

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The Decision Matrix

States of Affairs (Ω)

	ω_1	ω_2	$\ldots$	ω_j	$\ldots$	ω_n
a_1	$o_{1,1}$	$o_{1,2}$		$o_{1,j}$		$o_{1,n}$
a_2	$o_{2,1}$	$o_{2,2}$		$o_{2,j}$		$o_{2,n}$
$\ldots$						
a_i	$o_{i,1}$	$o_{i,2}$		$o_{i,j}$		$o_{i,n}$
$\ldots$						
a_m	$o_{m,1}$	$o_{m,2}$		$o_{m,j}$		$o_{m,n}$

Acts (A)

Choice Under Ignorance

In choice under ignorance, the following all hold:

1. There are different outcomes for different states of affairs relevant to the decision,

2. For each combination of action and state of affairs, you *do* know the outcome, and

3. You *do not* know how likely (i.e., how probable) each state of affairs is.

A Matter of Justice

One important issue in political philosophy concerns the principles of justice that ought to govern a society. In *A Theory of Justice* (1971), John Rawls proposes that principles of justice ought to pass a test of fairness: rational, self-interested persons would choose them in a specially defined choice under ignorance.

The Veil of Ignorance

In choosing between principles of justice, the decision maker must place themselves behind a "veil of ignorance". In particular, the decision maker must be ignorant of anything that identifies him or her as an individual person distinguished from other people.

The Veil of Ignorance

Rawls argues that this veil ensures fairness because it will "nullify the effects of specific contingencies which put men at odds and tempt them to exploit social and natural circumstances to their own advantage" (136).

The Veil of Ignorance

The decision maker, while behind the veil, still has any general information that will help him or her make an informed decision. This includes facts about how human societies work, political and economic theory, and laws of human psychology.

A Choice Under Ignorance

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The Individual Persons $(\mathcal{P})$

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Principles of Justice $(\mathcal{J})$	P_1	P_2	$\ldots$	P_j	$\ldots$	P_n
J_1	$o_{1,1}$	$o_{1,2}$		$o_{1,j}$		$o_{1,n}$
J_2	$o_{2,1}$	$o_{2,2}$		$o_{2,j}$		$o_{2,n}$
$\ldots$						
J_i	$o_{i,1}$	$o_{i,2}$		$o_{i,j}$		$o_{i,n}$
$\ldots$						
J_m	$o_{m,1}$	$o_{m,2}$		$o_{m,j}$		$o_{m,n}$

Guiding the Choice

Basic Economic Rationality: The decision maker has a coherent set of judgments concerning the possible outcomes in O (i.e., a preference relation $>$).

Mutual Disinterest: The decision maker is unwilling to sacrifice his or her interests (whatever they may be) to satisfy the interests of another.

Example

	The Individual Persons ($\mathcal{P}$)				
Principles of Justice ($\mathcal{J}$)	P_1	P_2	P_3	P_4	P_5
J_1	1	1	90	90	90
J_2	35	35	35	35	35
J_3	35	35	50	55	55

Harsanyi's Position

According to John Harsanyi, a rational decision maker would use the principle of insufficient reason to make this decision.

The Principle of Insufficient Reason: $J_i > J_j$ if and only if $\text{avg}(J_i) > \text{avg}(J_j)$, where $\text{avg}(J_x) = \sum^{n}_{k=1}\left[\left(1/n\right) \times u(o_{x,k})\right]$.

So we should evaluate principles of justice based on the average utility the group of people receives.

Example

	The Individual Persons ($\mathcal{P}$)				
Principles of Justice ($\mathcal{J}$)	P_1	P_2	P_3	P_4	P_5
J_1	2	3	90	90	90
J_2	35	35	35	35	35
J_3	35	35	50	55	55

Example

The Individual Persons ($\mathcal{P}$)

	P_1	P_2	P_3	P_4	P_5	avg
J_1	2	3	90	90	90	55
J_2	35	35	35	35	35	35.0
J_3	35	35	50	55	55	46

Principles of Justice ($\mathcal{J}$)

In this case: $J_1 > J_3 > J_2$.

Rawls' Position

According to Rawls, however, a rational decision maker would use leximin to make this decision.

> **Leximin:** $J_i > J_j$ if and only if there is some positive integer q such that $q\text{-min}(J_i) > q\text{-min}(J_j)$ and for all positive integers $p < q$, $p\text{-min}(J_i) = p\text{-min}(J_j)$, where $y\text{-min}(J_x)$ is the y^{TH} lowest possible utility value that J_x might return.

So we should evaluate principles of justice based on the utility the worst-off in that group of people.

Example

	The Individual Persons ($\mathcal{P}$)				
Principles of Justice ($\mathcal{J}$)	P_1	P_2	P_3	P_4	P_5
J_1	2	3	90	90	90
J_2	35	35	35	35	35
J_3	35	35	50	55	55

The Individual Persons ($\mathcal{P}$)

	P_1	P_2	P_3	P_4	P_5	leximin
J_1	2	3	90	90	90	3RD
J_2	35	35	35	35	35	2ND
J_3	35	35	50	55	55	1ST

Principles of Justice ($\mathcal{J}$)

In this case: $J_3 > J_2 > J_1$.

Example

The Individual Persons ($\mathcal{P}$)

	P_1	P_2	P_3	P_4	P_5	avg	leximin
J_1	1	1	90	90	90	55	3RD
J_2	35	35	35	35	35	35.0	2ND
J_3	35	35	50	55	55	46	1ST

Principles of Justice ($\mathcal{J}$)

Which is the rational way to select principles of justice?

Harsanyi's Argument

According to Harsanyi, when behind the veil of ignorance, a rational person should infer that she has an equal chance of being *any* given person in society. Therefore, she should treat this choice like a gamble, and so pick the principles of justice that provide the best average (or "expected") utility.

Utilitarianism

Harsanyi's view of political theory is based on what is known as **utilitarianism**, which holds that

1. People are equal insofar as no one person's utility counts for more than another person's, and

2. This equality is respected by summing up each person's utility and averaging it to determine the overall utility of the group.

Rawls' Argument

Rawls argues that a rational person behind the veil would use leximin instead, for three reasons:

1. With an important decision like this, a rational person will be risk adverse,

2. A rational person need not be solely focused on maximizing wealth or power, and

3. Leximin requires a significantly modest informational basis for measuring utility.

Rawls' Argument

In addition, Rawls argues that utilitarian arguments like Harsanyi's do not take seriously the distinction between persons. By summing up each person's utility, one person becomes indistinguishable from another. So utilitarianism embodies the wrong understanding of the equality of persons.

Next Class…

Exam #1 will be held in **lecture hall 2152** and begin promptly at 1:00PM. Show up and be seated by that time.

You are allowed to use one A4-sized page of notes (front and back). You will turn in that page of notes with your exam. Everything else (including cell phone) must put in the aisle or back of the room. Plan accordingly.

I will provide you with two pencils, one pen, a simple calculator, and plenty of scratch paper.