

Uzi Segal  
**Warwick Business School**

Summer School on  
Medical and Ethical Decision Making  
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## **Lecture 1: Randomization and Fairness: Axioms and Objections**

When in doubt which of two or more individuals should get a certain treat (or suffer a loss) of an indivisible good, flipping a coin seems to be the most natural mechanism to use. In this lecture we will discuss two possible axiomatizations of this idea, and will see why the whole idea of randomization may lead to dynamic inconsistency.

## **Lecture 2: How to Randomize: Biased Lotteries and Fairness**

In this lecture we'll see conditions under which society may wish to randomize between several options even though one of them is better than all others. We'll discuss a simple rule that determines the probability of each individual to be picked.

## **Some Suggested Readings**

### **Randomization and Fairness**

1. Harsanyi J.C., 1955. "Cardinal welfare, individualistic ethics, and interpersonal comparisons of utility," *Journal of Political Economy* 63:309–321.
2. Diamond P.A., 1967. "Cardinal welfare, individualistic ethics, and interpersonal comparison of utility," *Journal of Political Economy*, 75:765–766.
3. Epstein L.G. and U. Segal, 1992. "Quadratic social welfare functions," *Journal of Political Economy* 100:691–712.

4. Karni E. and Z. Safra, 2002. "Individual sense of justice: A utility representation," *Econometrica*, 70:263–284.

### **Dynamic Consistency**

1. Machina M.J., 1989. "Dynamic consistency and non-expected utility models of choice under uncertainty," *J. Econ. Literature*, 27:1622–1668.
2. Myerson R., 1981. "Utilitarianism, Egalitarianism and the Timing Effect in Social Choice Problems," *Econometrica*, 49:883–897.
3. Ben-Porath E., I. Gilboa, and D. Schmeidler, 1997. "On the measurement of inequality under uncertainty," *Journal of Economic Theory*, 75:194–204.
4. Harel A., Z. Safra, and U. Segal, 2005. "Ex-post egalitarianism and legal justice," *Journal of Law, Economics, and Organization*, 21:57–75.

### **Biased Selection**

1. Broome J., 1984. "Selecting people randomly," *Ethics*, 95:38–55.
2. Broome J., 1984. "Uncertainty and Fairness," *The Economic Journal* 94:624–632.
3. Segal U., 2006. "Fair bias," *Economics and Philosophy*, 22:213–229.

### **Philosophical Approach**

1. Taurek J.M., 1977. "Should the numbers count?" *Philosophy and Public Affairs* 6:293–316.
2. Parfit D., 1978. "Innumerate ethics," *Philosophy and Public Affairs*, 7:285–301.
3. Montmarquet J.A., 1982. "On doing good: The right and the wrong way," *The Journal of Philosophy*, 79:439–455.