

September 2011

Curriculum Vita

Arunava Sen

Personal Data

Date of Birth, January 3, 1959.

Education

Ph.D (Economics), Princeton University, 1987 (Thesis Advisor: Hugo Sonnenschein).

M.Phil (Economics), Oxford University, 1982 (Inlaks Scholar 1980-82).

M.A (Economics), Delhi School of Economics, University of Delhi (1980).

B.A (Economics), St Stephen's College, University of Delhi (1978).

Positions Held

Professor, Indian Statistical Institute, Delhi Centre, June 1995 - present

Associate Professor, Indian Statistical Institute, Delhi Centre, June 1991 - June 1995

Lecturer, Indian Statistical Institute, Delhi Centre, December 1988 - June 1991

Visiting Scientist, Indian Statistical Institute, Delhi Centre, August 1987 - December 1988

Research Interests

Game Theory, Social Choice Theory, Mechanism Design, Voting and Auctions

Publications

Journal Articles

“Roberts’ Theorem with Neutrality: A Social Welfare Ordering Approach”, (with Debasis Mishra), forthcoming in *Games and Economic Behavior*.

“Nash Implementation with Partially Honest Individuals”, (with Bhaskar Dutta), forthcoming in *Games and Economic Behavior*.

“The Gibbard Random Dictatorship Theorem: A Generalization and a New Proof” forthcoming in *The Journal of the Spanish Economic Association SERIEs*, Special Issue in Honor of Salvador Barberà, (Matthew Jackson and Hugo Sonnenschein (eds)).

“Tops-Only Domains” (with Shurojit Chatterji), *Economic Theory*, Vol 46, 2011, 255-282.

“Efficient Allocation of Heterogeneous Commodities with Balanced Transfers” (with Manipushpak Mitra), *Social Choice and Welfare*, Vol 35, 2010, 29-48.

“Strategy-Proof Cardinal Schemes” (with Bhaskar Dutta and Hans Peters), *Social Choice and Welfare*, Vol 28 (1), January 2007, 163-179.

“Weak Monotonicity Characterizes Deterministic Dominant Strategy Implementation”, (with Sushil Bikhchandani, Shurojit Chatterji, Ron Lavi, Ahuva Mu’alem and Noam Nisan), *Econometrica*, Vol 74(4), July 2006, pp 1109-1133.

“Top Pair and Top Triple Monotonicity”, (with Dipjyoti Majumdar), *Social Choice and Welfare*, Vol 27(1), August 2006, pp 175-189.

“Ordinally Bayesian Incentive-Compatible Voting Rules”, (with Dipjyoti Majumdar), *Econometrica*, Vol 72(2), March 2004, pp 523-540.

“Dictatorial Domains”, (with Navin Aswal and Shurojit Chatterji), *Economic Theory*, Volume 22(1), 2003, pp 45-62.

“Strategy-proof Probabilistic Mechanisms in Economies with Pure Public Goods”, (with Bhaskar Dutta and Hans Peters), *Journal of Economic Theory*, Vol 106, October 2002, 392-416.

- “Strategy-proof Set Valued Social Choice Functions”, (with Salvador Barbera and Bhaskar Dutta), *Journal of Economic Theory*, Vol 101(2), December 2001, 374-394.
- “Another Direct Proof of the Gibbard-Satterthwaite Theorem”, *Economics Letters*, Vol 70, 2001, 381-385.
- “Separable Preferences, Strategyproofness and Decomposability”, (with Michel LeBreton, *Econometrica*, Vol 67, 1999, 605-628.
- “Extensive Form Implementation in Incomplete Information Environments”, (with James Bergin), *Journal of Economic Theory*, Vol 80, 1998, 222-256.
- “Implementation in Generic Environments” (with James Bergin), *Social Choice and Welfare*, Vol 13, 1996, 467-478.
- “Ranking Opportunity Sets and Arrow Impossibility Theorems: Correspondence Results”, (with Bhaskar Dutta), *Journal of Economic Theory*, Vol 71, 1996, 90-101.
- “The Implementation of Social Choice Functions via Social Choice Correspondences: A General Formulation and a Limit Result”, *Social Choice and Welfare*, Vol 12, 1995, 277-292.
- “Nash Implementation through Elementary Mechanisms in Economic Environments” (with Bhaskar Dutta and Rajiv Vohra), *Economic Design* (now called *Review of Economic Design*), Vol 1, 1995, 173-204.
- “Understanding whether agents are Fairmen or Gamesmen”, (with M. Spiegel, J. Currie and H. Sonnenschein), *Games and Economic Behavior*, Vol 7, 1994, 104-115.
- “Two-Person Bayesian Implementation”, (with Bhaskar Dutta), *Economic Design* (now called *Review of Economic Design*), Vol 1, 1994, 41-54.
- “Bayesian Implementation: The Necessity of Infinite Mechanisms”, (with Bhaskar Dutta), *Journal of Economic Theory*, Vol 64, 1994, 130-141.
- “Implementing Generalised Condorcet Social Choice Functions via Backward Induction”, (with Bhaskar Dutta), *Social Choice and Welfare*, Vol 10, 1993, 149-160.

“Virtual Implementation in Nash Equilibrium”, (with Dilip Abreu), *Econometrica*, Vol 59, No 4, 1991, 997-1021.

“A Necessary and Sufficient Condition for Two-Person Nash Implementation”, (with Bhaskar Dutta), *Review of Economic Studies*, Vol 58, 1991, 121-128.

“Implementation under Strong Equilibrium: A Complete Characterisation”, (with Bhaskar Dutta), *Journal of Mathematical Economics*, Vol 20, 1991, 49-67.

“Implementation in Subgame Perfect Equilibrium: A Necessary and Almost Sufficient Condition”, (with Dilip Abreu), *Journal of Economic Theory*, Vol 50, 1990, 285-299.

Articles in Books

“Fair and Lovely: Some Theoretical Considerations in the Equitable Allocation of Resources”, in Ashok S. Guha (ed.) *Markets and Morals: Ethical Issues in Economics*, Volume XIV Part 3 in *History of Science, Philosophy and Culture in Indian Civilization* (General Editor: D.P. Chattopadhyay), Centre for Studies in Civilizations, 2011, pp 91-121.

“Comparing Societies with Different Numbers of Individuals: A characterization of the Average Utilitarian Criterion” (with Nicolas Gravel and Thierry Marchand) in M. Fleurbaey, M. Salles and J. A. Weymark (eds), *Social Ethics and Normative Economics: Essays in honour of Serge-Christophe Kolm*, Springer Verlag, 2011.

“The Economic Theory of Quantity Controls”, (with Debraj Ray), in K. Basu and P. Nayak (eds.), *Development Economics and Policy*, Oxford University Press, 1991.

“Implementation with Perfect Information: A Survey”, (with Bhaskar Dutta), in B. Dutta et al (eds.), *Theoretical Issues in Development Economics*, Oxford University Press 1992.

“Price and Quantity Controls: A Survey of Major Issues”, (with Debraj Ray) in B. Dutta (ed.), *Welfare Economics*, Oxford University Press, 1993.

Articles under Review

“Strategy-proofness and Equal Cost Sharing for a Binary Excludable Public Good with Fixed Cost”, (with Jordi Massó and Antonio Nicolò).

“The Structure of Strategy-Proof Random Social Choice Functions over Product Domains and Separable Preferences: The Case of Two Voters”, (with Shurojit Chatterji and Souvik Roy).

“On Domains that Admit Well-Behaved Strategy-Proof Social Choice Functions”, (with Shurojit Chatterji and Remzi Sanver).

“Ranking Completely Uncertain Decisions by the Uniform Expected Utility Criterion”, (with Thierry Marchand and Nicolas Gravel).

“Incentive-Compatible Voting Rules with Positively Correlated Beliefs” (with Mohit Bhargava and Dipjyoti Majumdar).

“The Shapley Value as the Maximizer of Expected Nash Welfare”, (with Anirban Kar).

Recent Teaching

Game Theory (for MSQE and MStat students).

Advanced Game Theory.

Social Choice and Political Economy.

Microeconomics II.

Workshop on Economic Theory for Ph.d Students (run jointly with Debasis Mishra).

Ph.d Students (Degree Awarded)

Manipushpak Mitra, Indian Statistical Institute 2000. Currently, Associate Professor, Economic Research Unit, Indian Statistical Institute, Kolkata.

Dipjyoti Majumdar, Indian Statistical Institute 2003. Currently, Associate Professor, Concordia University, Canada.

Saptarshi Mukherjee, Indian Statistical Institute 2011. Currently, Post-Doctoral Fellow, Department of Economics, Universidad Autónoma de Barcelona, Barcelona, Spain.

Ph.d Students (Current)

Mridu Prabal Goswami (Expected Completion Date: September 2011).

Soumendu Sarkar (Expected Completion Date: March 2012).

Amit Goyal (Expected Completion Date: March 2012).

Mihir Bhattacharya.

Anup Pramanik.

Sonal Yadav.

Madhav Raghavan.

Supervision of Master's Theses and Projects

Rohit Patel, M.Stat, Indian Statistical Institute, Delhi Centre, 2010.

Godbole Prasad Vaman, M.Stat, Indian Statistical Institute, Delhi Centre, 2010.

Mujtaba Hasan, Mathematics and Computer Applications, Indian Institute of Technology, Delhi, 2010.

Nupur Mangla, Mathematics and Computer Applications, Indian Institute of Technology, Delhi, 2008.

Aneesh Gupta, Mathematics and Computer Applications, Indian Institute of Technology, Delhi, 2008.

Deepna Murgai, Mathematics and Computer Applications, Indian Institute of Technology, Delhi, 2007.

Mallesh Pai, Computer Science, Indian Institute of Technology, Delhi, 2004.

Rahul Deb, Computer Science, Indian Institute of Technology, Delhi, 2004.

Academic Administration

Head, Planning Unit 1999-2003; 2010-2011.

Member Ph.d, D.Sc Committee, 1999-2003.

Chairman Library Committee, Delhi Centre 2007-.

Member of various Departmental and Institute committees.

Professional Editorial Activities

Associate Editor, *Social Choice and Welfare*.

Associate Editor, *Review of Economic Design*.

Associate Editor, *Mathematical Social Sciences*.

Professional Activities

Member of the Program Committee of various major international conferences such as the World Congress of the Game Theory Society, Chicago 2008, South Asian Meeting of the Econometric Society, Chennai 2006, Far Eastern Meeting of the Econometric Society Singapore, 2008, Asian Meeting of the Econometric Society, Seoul 2011.

Member, Council of the Econometric Society, 2006-.

Chair, South and South-East Asia, Regional Standing Committee of the Econometric Society, 2004-.

Member of the Board of the Social Choice and Welfare Society.

Awards, Honours and Special Lectures

Fellow of the Econometric Society, 2003.

Mahalanobis Memorial Medal of the Indian Econometric Society, 2000.

Annual Koc University Prize 1995 for the best paper in *Economic Design* (now called *Review of Economic Design*). Title of the paper “Nash Implementation through Elementary Mechanisms in Economic Environments” written jointly with Bhaskar Dutta and Rajiv Vohra.

Murat Sertel Lecture, SED Conference on Economic Design, Maastricht, June 2009.