**On Economics and Morality**

**Moral Valuations, and Irrational Exuberance in the face of Economic Contrast**

India is riddled with poverty, and it is not exactly hard to miss . The sprawling gap between the rich and the poor is particularly visible in urban areas like Delhi and Mumbai, where a customary stroll down the road would pitch you between the homeless on one side, and luxury cars on the other. Traffic junctions are riddled with beggars, slum areas flourish just outside high end malls, the deluxe right next to the decrepit. This pressing contrast in economic well-being lends a moral dimension to our everyday economic transactions, one which comes to the fore when we ask ourselves questions like "How much would this be worth to someone who doesn't have it?". But traditional economics would regard such considerations as 'irrational'. This essay is an attempt to reconcile with this burden of economic morality.

## Part 1 : Placing Altruism within Economic Thought

### Background

*If being rational means being self interested, then is altruism irrational? If economic models assume men to be self-interested agents, then how are acts of altruism accounted for?*

### Adam Smith

The following passage from *The Wealth of Nations* is often quoted out of context in Economic textbooks:

*"Every individual endeavors to employ his capital so that its product may be of greatest value. He generally neither intends to promote the public interest, nor knows how much he is promoting it. He intends only his own security, only his own gain. And he is in this led (as if) by an **invisible hand** to promote an end which was not part of his intention. By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote."* [1]

Adam Smith, thus, is represented as promoting the view of man as a selfish agent, his economic acts being directed only towards his own good. But it is important to note that Smith had, in other instances, recognised that man's instinct for self-love is not alone in governing his action.
In the opening lines of his first book, *The Theory of Moral Sentiments,* he says:

*"How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others and render their happiness necessary to him, though*

[1] Smith, *Wealth of Nations*, Bk. IV, Ch. 2, Para. 9.

*he derives nothing from it except the pleasure of seeing it."* [2]

And later:

*"It is not the soft power of humanity, it is not that feeble spark of benevolence which Nature has lighted up in the human heart, that is thus capable of counteracting the strongest impulses of self-love. It is a stronger power, a more forcible motive, which exerts itself upon such occasions. It is reason, principle, conscience, the inhabitant of the breast, the man within, the great judge and arbiter of our conduct. It is he who, whenever we are about to act so as to affect the happiness of others, calls to us, with a voice capable of astonishing the most presumptuous of our passions, that we are but one of the multitude, in no respect better than any other in it; and that when we prefer ourselves so shamefully and so blindly to others, we become the proper objects of resentment, abhorrence, and execration. It is from him only that we learn the real littleness of ourselves, and of whatever relates to ourselves, and the natural misrepresentations of self-love can be corrected only by the eye of this impartial spectator. It is he who shows us the propriety of generosity and the deformity of injustice; the propriety of resigning the greatest interests of our own, for the yet greater interests of others, and the deformity of doing the smallest injury to another, in order to obtain the greatest benefit to ourselves. It is not the love of our neighbor, it is not the love of mankind, which upon many occasions prompts us to the practice of those divine virtues. It is a stronger love, a more powerful affection, which generally takes place upon such occasions; the love of what is honorable and noble, of the grandeur, and dignity, and superiority of our own characters"* [3]

Thus**,** Adam Smith's conception of human nature explicitly mentions his altruistic instincts.

**Homo Economicus**

John Stuart Mill, in *On the Definition of Political Economy (1836)* , proposed '**an arbitrary definition of man, as a being who inevitably does that by which he may obtain the greatest amount of necessaries, conveniences, and luxuries, with the smallest quantity of labor and physical self-denial with which they can be obtained'.** [4]

It is surprising that Mill's notion of economic rationality had little room for altruism, since his principles (of economic behavior) were supposed to be the result of a long and accurate observation, an empirical generalization established by the experimental Psychology.[5]

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[2] Smith, *The Theory of Moral Sentiments*, Part I, Ch. 1.
[3] Smith, *The Theory of Moral Sentiments*, Part III, Ch. 3.
[4] Mill, "*On the Definition of Political Economy, and on the Method of Investigation Proper to It*," *London and Westminster Review*, October 1836; republished in his *Essays on Some Unsettled Questions of Political Economy* (2nd ed., London 1874), Paras. 38 and 46
[5] It has been argued that Mill was not proposing that man is narrowly-self interested, motivated solely by greed and personal wealth. He was, instead, defining the limits of the field of political economy. see Lindley and Farmelant, *Looking Back for Insights into a New Paradigm*

Various attempts have been made to reconcile altruism with Mill's notion of an economic man. Pscyhologist Howard Rachlin offers the view that altruism, like self-control, is a valuable, temporally extended pattern of behaviour. He accounts for altruistic acts by seeing them as particular instances of a highly valued habit – the overall value of which overrides the value of non- altruistic acts. He compares them to acts of self control, which might not be valuable in the short term, but can be very valuable over the long term. Thus, he extends Mill's account of self interest to a form of holistic long term self-interestedness.Rebuttals to Rachlin point out that since acts of altruism have immediate emotional payoff (the warm glow feeling), they are not like acts of self controlf, for acts of self control involve costs in return for long term gain. Unlike self-control, an act of altruism is not an unpleasant deed. [6]

**The Rise of the Utilitity Function, and Von Neumann- Morgenstern Rationality**
*Can we attribute a utility to the the Joy of Giving?*

In 1728, swiss mathematician Gabriel Cramer (of Cramer's Rule fame), in a letter to Nicolas Bernoulli, wrote, "the mathematicians estimate money in proportion to its quantity, and men of good sense in proportion to the usage that they may make of it."
10 years later, Daniel Bernoulli (Nichalos's cousin) came up with his breakthrough paper containing the first formalisation of the utility function, which eventually found sweeping applications in all of economics. In his paper, Bernoulli formalised the idea that the same amount of additional money was less useful to an already-wealthy person than it would be to a poor person.

"*The determination of the value of an item must not be based on the price, but rather on the utility it yields…. There is no doubt that a gain of one thousand ducats is more significant to the pauper than to a rich man though both gain the same amount."* [7]

It is worth noting that Bernoulli's idea of utility was only associated with utility of money, and not with other economic transactions.

Fast forward two centuries. In their seminal work Theory of Games and Economic Behavior, Von Neumann and Morgenstern proved that for an agent that follows four modest axioms of rationality (completeness, transitivity, continuity, independence), there exists a utility function such that every preference of the agent is characterized by maximising its expected value.[8]

Von Neumann's and Morgenstern's definition of rational is not about being the narrowly self

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[6] Rachlin, *Altruism and Selfishness,* Behavioral and Brain Sciences (2002) 25, 239–296

[7] D. Bernoulli, *Exposition of a new theory on the measurement of risk*

[8] Neumann, John von and Morgenstern, Oskar *Theory of Games and Economic Behavior*. Princeton, NJ. Princeton University Press. 1944, sec.ed. 1947, th.ed. 1953.

interested, labour averse and cost-benefit optimising. It is, instead, about following four simple, somewhat intuitive axioms[9]. Their utility function merely captures the preferences; it says nothing about the nature of preferences - whether profit, greed and narrow self-interest motivate the preferences or not. Hence, it allows for rational agents to have altruistic preferences., which are factored in the utility function. To say that rational agents act to maximise their expected utility is not to say that they act towards personal profit, but that their preferences follow the four axioms. To say that they serve their self interest is to say that they follow their own preferences - a sort of tautology. Thus, Von Neumann's and Morgenstern's Expected Utility theory should not be read as declaring altruism to be irrational.

Developing a rational choice explanation of individual altruistic behaviour is thus not a problem, as long the act of altruism doesn't come into conflict with the four pillars of VNM rationality.

## Part 2 : Can insights from Behavioral Economics be used into making people more altruistic?

### Rise of Behavioral Economics

A large body of literature, in the form of Behavioral Economics, has sprung up in the last few decades which deals with the departures from the predictions of standard expected utility models. For a quick review, see the summary by Shafir.] [10]
In short, people violate different axioms of VNM-rationality in various contexts. For example, under VNM axioms, people's preferences are supposed to be clear, complete and stable. They should be invariant across equivalent assessment methods (procedure invariance) and logically equivalent ways of describing the options (description invariance). Numerous studies have shown that preferences, though, appear to be formed, not merely revealed, in the elicitation process, and their formation depends on the framing of the problem, the method of elicitation, and the valuations and attitudes that these trigger. [11]

### An Experiment

Consider the following experiment, consisting of three steps:

1. First, survey participants are asked whether they would donate an amount Z (say Rs. 200) to charity, or not.

[9] Completeness (agent has well l defined preferences), Transitivity (agent's preferences is consistent across 3 options), Continuity (for a best outcome X and a worst outcome Z, a person is indifferent between some non-degenerate lottery between X and Z and a middle outcome certain outcome Y ) and Independence (preference relation between two options is independent of any other options).

[10] http://ai.ato.ms/MITECS/Entry/shafir2.html
[11] Kahnemann. *Thinking Fast and Slow*

2. Second, the survey participants are asked to choose between two similar products or services., both of which fulfil a need, but where one is significantly cheaper than the other.

   Template: A product/service for X **(Option a)** vs A similar product or service for Y (<X) **(Option b)**
   *Example 1* : Would you enjoy a meal in a good restaurant for Rs. 500, or would you eat at a roadside eatery for Rs. 100 instead?
   *Example 2* : Would you buy a good branded tshirt for Rs 350, or would you make do with an ordinary one for Rs. 150?
   *Example 3* : Would you prefer a comfortable ride by cab for Rs. 250, or would you make do with an auto ride costing Rs. 50?

3. Third, the participants are asked to choose between the same two options, with the savings in the cheaper option being donated to charity.
   Template: A product/service for X **(Option a)** vs A similar product/service for Y and donating the amount X-Y **(Option b)**
   *Example 1* : Would you enjoy a meal in a good restaurant for Rs. 500, or would you eat at a roadside eatery for Rs. 100, donating the remaining Rs. 400 instead?
   *Example 2* : Would you buy a good branded tshirt for Rs 350, or would you make do with an ordinary one for Rs. 150, donating the remaining Rs. 200 instead?
   *Example 3* : Would you prefer a comfortable ride by cab for Rs. 250, or would you make do with an auto ride costing Rs. 50, donating the remaining Rs. 200 instead?

In a small pre-survey sampling, most of the participants chose to NOT donate in step 1. Within this sample, though, there was a decided shift from **Option a i**n the second step to **Option b** in the third step.

**Violation of Transitivity:**

Step 2 can be read as a choice between:

a. A product/service for X **(Option a)**
b. A similar product or service for Y (<X) and keeping X-Y with yourself **(Option b).**

If someone is prefers **Option a** in step 2 and **Option b** in step 3, it implies that the person prefers donating X-Y than to keep the same amount with himself. The same preference should have reflected in Step 1, otherwise the axiom of transitivity is violated. (If one prefers A to B and B to C, then he should prefer A to C)

**Violation of independence**

Let **a** = Spending on the product/service costing X
**b =** Spending on the product/service costing Y
**c =** Donate X-Y.

We can model the test with two scenarios having the following choice sets.
Scenario one : (a, b)
Scenario two : (a, b, c)
People tend to prefer a > b in the first scenario, which changes to b > a in the second scenario. Thus, they violate the independence axiom; the preference relation between any two options (**a** and **b)** is not independent of other options (**c**).

**Explanations (from Behavioral Economics)[12]**

1. Accessibility effect:

   In Step 1, there is a direct comparison (in our heads) between possible benefits of money retained and possible benefits of donating it. In Step 2, the money saved is implicit, not explicit, and so possible uses of the money saved don't occur to us, and our thus not accessible. Whereas in Step 3, other avenues are explicitly mentioned, the possible benefits (including emotional) of those from donating the money are 'accessible' to our psychological selves, and so we switch.

2. Mental Accounting:

   People don't think of money as a whole, but tend to compartmentalise it into different budget categories, like rent, saving, spending etc. This explains why people are often reluctant to sell stocks that have lost value (in hope of recouping the loss and making the net account positive), and much more willing to sell winning stocks. (Thaler 85)

   Participants in the survey are reluctant to move their money from their savings category to the donation. category, but not so in moving to donation. within the spending category. Thus, once they are in the 'spending mode', they are much more willing to donate, which lies within the spending category. Presenting a small cost on its own is more salient than embedding it within a larger cost.

3. Loss Aversion:

   People are loss-averse, the loss of utility associated with giving up a good is greater than the utility associated with obtaining it. In Step 1, donating Rs. 200 is framed as a 'loss', while in Step 3 it is not, since both the options involve spending the same amount.

[12] Kahnemann, *Thinking, Fast and Slow*

**Summary**

People violate at least two axioms of Von Neumann- Morgenstern rationality in the test, and thus show a departure from the standard model which assumes them being utility maximising beasts. The source of these departures is probably not related to just the altruistic instinct, but also to more generic psychological aspects. (We might observe a similar behaviour if, in the test, we replace donating money with some other productive use of it). Nevertheless, the experiment shows that a consideration of donation or altruism as one of the possible alternatives could result in substantial behavioral changes. If luxury stores start displaying disclaimers saying , "The money you spend on this indulgence can also be donated to someone in need", a large part of the population will start spending sensibly, and indulging in altruistic pleasure instead. More appropriately, if a company starts charging a premium which goes to donation, it might paradoxically attract more consumers!

## Part 3 : Psychological Foundations for Greed

*A Case against Loss Aversion*

**Loss Aversion**

In 1979, Kahnemann and Tversky developed Prospect Theory[13] to explain choice in risky situations. Their idea was that contrary to the utility maximisation assumption, the psychological carriers of value is not final wealth, but gains and losses. Also, people are much more sensitive to losses than to gains (Loss Aversion). For example, people would prefer a sure reward of Rs 100 than a gamble which gives them an expected payoff of 200 (equal chance to win 600 and lose 200). Loss Aversion has managed to explain many real world departures from the predictions of standard expected utility models. (..) It explains the endowment effect, in which people's valuation of an item increases after they get to own it. In endowment effect, there's a gap in people's willingness to pay for an item, and their willingness to accept compensation for the same. (This violates the basic independence assumption; preferences and valuation should be independent of ownership). An individual is reluctant to part with an item he owns, because he regards it as a loss, and people are loss averse.

When I first read about loss aversion, it seemed counter-intuitive. After all, aren't people supposed to be greedy? And greed is all about attaching more value to gains that it actually holds. Items which I don't have seem more valuable to me than the items I do. (Grass is greener on the other side). I always feel like selling items after I've bought them.

**Experiment**

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[13] D Kahneman, A Tversky, *Prospect theory: An analysis of decision under risk*, Econometrica: Journal of the Econometric Society, 1979

In general, the utility people associate with money cannot be measured or observed directly, so we must infer underlying relative utilities from observed choice. This experiment tests whether the utility (associated with the same monetary value) is dependent on whether the money is owned or not.

1. Participants are offered a product that they might want (say a Tshirt or a pen) , and asked how much money are they willing to pay for it. This is done by a bargaining game, until a price is agreed. Let the mean prize be X..
2. Participants are offered to choose between the product and cash prize. The cash prize is slowly increased from 0 till the participants switch. Let the mean price by Y.

Hypothesis : Y< X.

**Some other observations:**

1. My friends would rather have coffee/juice in SDA market for Rs. 50 than walk back to the hostel and have the same coffee for Rs 20 (because of the distance/time cost). But they would readily walk back to the hostel if they received 30 bucks (50- 20) for doing so.
2. They would also prefer a cab for Rs X (say Rs. 100) than a free lift home an hour later. But if they're offered even 50 bucks for waiting, they'd wait.

It would be interesting to test whether the psychological value of money a person has is less than psychological value of an equal amount of money which he doesn't.

**Conclusion**

Cramer might have been right in saying that the mathematicians estimate money in proportion to its quantity, and men of good sense in proportion to the usage that they may make of it. But it seems that both greed and the altruistic instinct seem to be present in the human nature, as Adam Smith, too , had observed. Men of good moral sense, then, would estimate money not only in proportion to their own usage, but also in proportion to the usage someone else might make of it.