An Economic Approach to Gratitude, with Implications for Political Obligation

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Abstract

Suppose someone does me a favor without any request from me. Am I morally obligated to repay him? Such a social norm is useful, in the sense that the incentives will be correct for doing favors if people are inwardly impelled to reward favors by an amount between the cost of the favor and the benefit to them. This has implications for whether a person has a moral obligation to the state in which he is born, and it is related to the legal problems of quasi-contract.

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Introduction

In a 1995 article Garrett Cullity tells the following story (here rewritten slightly to add clarity):

> *The Fable of the Elves.* On the first day in my newly carpeted house, I leave my old dress shoes outside. In the morning, I am delighted to find they have been extraordinarily well repaired– as good as new! I am less delighted when I see a note on one of them: "Inside you will find the repair bill. Signed, The Elves.
>
> Ought I to pay the bill?

The problem the present article will examine is whether I should be grateful to the elves before I see the bill and after, and what I should do about paying it. I will use the approach of asking what moral sentiment or social norm would be most useful: if we could instill in each person a moral rule for gratitude that he would follow without appeal to formal law, what would that rule be?

After we have answered this question, we will be able to return to the questions of primary interest to Cullity and the literature he is addressing: political obligations. Cullity's article is about the free-riding problem in public goods– the problem that goods such as national defense benefit everyone in the country, whether or not they consented to receive the benefits. The question is whether each person is under an obligation to help pay for the public good. The Fable of the Elves introduces this, by simplifying from the problem of multiple citizens.

Cullity is reacting to John Rawls, whose *Theory of Justice* says is fair to refuse to pay. Rawls's "Principle of Fairness" says:

> "a person is [morally] required to do his part as defined by the rules of an institution when two conditions are met: first, the institution is just (or fair), that is, it satisfies the two principles of justice; and second, one has voluntarily accepted the benefits of the arrangement or taken advantage of the opportunities it offers to further one's interests."[1]

[1] As quoted by Cullity. John Rawls, *A Theory of Justice*. Cambridge, Mass: Harvard

I did not voluntarily accept the shoe repair. And so, Rawls says, I have no obligation to pay.

Robert Nozick would agree. Nozick says that no payment is required even if the work was worth money and the bill is what would be considered a fair amount in a voluntary transaction.[2]

Cullity, Rawls, and Nozick move rapidly to higher-level political topics, Cullity and Rawls suggesting other reasons why citizens should pay taxes and obey laws, Nozick laying out a libertarian framework more consistent with the idea that unasked-for benefits impose no obligation.[3] I think they move too quickly. The position that I cannot be put under a moral obligation without my consent sounds plausible at first hearing. And who would disagree when Rawls and Nozick, so often presented as the two great opposites of modern political philosophy, agree on something?

A little reflection, however, shows that their position is radically opposed to our everyday notion of what is ethical. It denies that gratitude– a word these authors never mention– is a virtue. If it is true, then I owe nothing to my parents or friends, to someone who helps me out with a problem or someone who saves my life at risk to his own. Why, then, do we believe in gratitude?

This issue has been addressed by philosophers from a variety of perspectives.

What I will do in most of this article is to delve deeply into the issues raised by the Fable of the Elves. Having laid a foundation I will, however, show how my framework can address some old puzzles in political obligation.

University Press, 1971, pp 111-112. Rawls' principle is similar to that in Herbert Hart, "Are There Any Natural Rights?"*Philosophical Review*, 1955.

[2]See Robert Nozick, *Anarchy, State and Utopia*, New York: Basic Books, 1974, pp. 93-95. Nozick does not really argue for his position, but he states it clearly. Cullity also refers us to John Simmons, *Moral Principles and Political Obligations*, Princeton: Princeton University Press, 1979, pp. 42-45, 89-90, 138-63, 187-99.

[3]I will not explore these other framework here. Flathman (1972, p. 286) summarizes thus: "Both Hart and Rawls stress that it is not individual receipt of benefits, *simpliciter*, which creates political obligation. It is receiving benefits generated by a cooperative practice which involves rules that restrict individual action." That would not apply to the Fable of the Elves. We will have quite enough to think about in dealing with simple gratitude, however.

The approach I will use is the economic one variously called efficiency, value maximization, wealth maximization, and utilitarianism. In this specific problem, the fine points of the objective will not be crucial, and even non-utilitarians may find the approach useful. Also, the sharpness of the economic approach will help identify crucial features important to whether gratitude is owed which might otherwise not be apparent.

In Section 2, I will explain the approach in detail. In Section 3, I will apply it to the Fable of the Elves. Later, I will discuss whether the Elves should have asked permission, apply the moral rule suggested here to public goods, and show how it applies to political obligation.

2. The Economic Approach

The economic approach to public policy is to ask what system gives people incentives to behave in ways that allocate resources so that in the end no two people would want to trade resources; there is no trade left which would make both traders better off. We call such an outcome "efficient" or "value maximizing". If, for example, Joe has a book worth 20 dollars to him and 30 dollars to Tom, but Joe is not allowed to sell the book to Tom, then the situation is inefficient. Value as defined in economics would increase by 10 dollars if Tom had the book instead of Joe. Efficiency does not require that the trade be voluntary; all that it requires is that Tom end up owning the book. It is a matter of indifference to total value whether Tom buys the book for 20 dollars or for 25 dollars, whether he steals it, or whether the government requires Joe to sell it to him for 15 dollars– in each case, Tom ends up with the book.[4]

Incentives are important to attain efficiency. Stealing and government-forced transfer create bad incentives. They would induce Joe to hide the existence of the book, and he certainly would not seek out Tom to try to make the efficient transfer of the book from himself to Tom, as he would if he received adequate payment. And not only do bad legal rules reduce the

[4]For further discussion of value maximization see Richard Posner (1983) "Utilitarianism, Economics, and Social Theory," pp. 48-87 of *The Economics of Justice.* Cambridge: Harvard University Press, 1983. Richard Epstein (1989) "The Utilitarian Foundations of Natural Law" *Harvard Journal of Law and Public Policy.* Summer 1989. 12: 713-751. Eric Rasmusen "Of Sex and Drugs and Rock'n Roll: Law and Economics and Social Regulation," *Harvard Journal of Law and Public Policy* (Fall 1997) 21: 71-81.

probability that efficient transactions will take place; they also create extra transaction costs. If Joe hides the book, Tom may be able to steal it anyway, but only with extra effort. If the goverment forces the transfer, someone in the government must be paid to oversee it.

Economists, and especially those in the field of law-and-economics, devote much of their energies to figuring out optimal legal rules. Very often, laissez faire is optimal. The government enforces property rights, but does not force transactions to take place. Even this does require government, however, since property rights require police and courts, and contracts require a contract law to be made to specify what happens in cases of disagreement over transactions. And there are many situations in which laissez faire does not lead to value maximization, situations in which the economic approach conflicts with philosophical libertarianism. A merger of the leading firms in an industry to create monopoly power, for example, would lead them to raise prices and therefore reduce the quantity of sales to consumers even if the firm's production cost was low. This would lead to too few transactions, and so value maximization implies such mergers should be banned, even though they are voluntary transactions between the firms.[5]

In looking at gratitude, we will use value maximization differently. We will not try to devise optimal legal rules. Rather, we will try to devise optimal moral rules. A legal rule must be enforced by the state, at considerable cost, and much of the problem in rule design is to find rules that can be implemented when people are tempted to cheat and break them. A moral rule is not enforced by the state. Here, we will take the simple path of imagining that we can instill a moral rule into every person in society so strongly that they will obey the rule without external pressure. In practice, moral rules, like legal rules, are costly to implement. They must be taught to children, or enforced by reciprocal expectations, public shaming, or any of a

[5] Note that value maximization most certainly does not mean maximization of the dollar value of an economy's businesses. If the dollar value of corporations goes up, but the loss to consumers is greater, then value is not maximized. In the case of monopoly, if profits rise by 10 million dollars, consumers would in aggregate have been willing to pay more than 10 million to keep the old prices, and so value is not maximized. (They would pay more than 10 million because they would save exactly that much from lower prices on the post-monopoly quantity, plus they would buy extra quantity and get value from it if the price were low.)

variety of other social means.[6] But we will put aside practical considerations now, and just ask what moral rule would be desirable if we could snap our fingers and have it in everyone.[7] This is essentially the approach of the utilitarian Henry Sidgewick in his *Methods of Ethics.* He asks what moral rules best promote utilitarian ends. He says that

> "Gratitude (if we mean by this a settled disposition to repay the benefit in whatever way one can on a fitting opportunity) is enjoined by Utilitarianism no less than by Common Sense; for experience would lead us to expect that no kind of onerous service will be adequately rendered unless there is a general disposition to requite them." (Book IV, Chapter 3)

Sidgewick does not, however, go on to explain exactly what gratitude enjoins, leaving us without guidance as to how the moral rule would apply in particular situations.

There are other ways to approach the same idea of finding a moral rule that would make everyone better off. Rawls's own "Veil of Ignorance" is one of them. It can be looked at from the point of view of social contracts. Would I agree to follow moral rule X if everyone else would follow it too? In answering such a question, value maximization is the natural approach. I would answer "yes" if my value were increased by the rule, and if the contractors are roughly symmetric, what maximizes value for me will maximize value for the group. Or, it can be looked at from the point of view of aretaic ethics. What kind of disposition towards benefactors should we cultivate? The answer depends on one's ultimate aims, but if one aims to create a world in which useful actions are performed more often, the present approach will be useful.

Both a virtue and a limitation of the value maximization approach is that it does not address the question of why I personally should follow the

[6]See Richard McAdams and Eric Rasmusen "Norms in Law and Economics," forthcoming, *Handbook of Law and Economics*, Elsevier.

[7]Another practical difficulty is what to do if only some of the people in society follow the moral rule. Some rules might be best abandoned entirely if not everyone will follow them ("always drive on the right"); others work surprisingly well even if only a few people follow them ("carry a gun and shoot anyone who tries to rob you" will make robbing any random person risky).

rule. Why I should do what is good requires an extra argument to explain why I should follow a rule I think other people should follow, an argument I will not make here. You might be willing to accept this without argument, in which case the value maximization approach is useful for making personal ethical decisions. Or, even if you are not willing to accept it, and so would not find it persuasive as an argument for your personal behavior, the value maximization rule is useful for discovering what social norms are desirable– what rules you would propose for other people. In this, the approach is similar to that of designing legal rules, which must apply to everyone rather than just the designer.

As we will see, however, designing moral rules is in some respects much easier than designing legal rules. If it is to be enforced, rather than just providing moral guidance, a legal rule must be based only on information the court can discover. It is useless to try to use information known only to the private parties involved; this is why under traditional contract law, what matters is what the contract says, not what one of the people claims he meant to write. A moral rule, however, is self-enforced, so it can rely on what is in a person's heart. This is especially useful in small matters, where legal rules are useless because enforcement cost cannot fall below a minimum size. It is worth employing a policeman and a judge to deal with murder, but not to deal with telling bad jokes or with being ungrateful. A moral rule, however, does not require external agents of punishment or courts to determine what actually happened.

3. Back to the Fable of the Elves

What then, is the gratitude rule that maximizes value? An important use of a moral rule is to tell us what questions to ask when we are wondering about an ethical decision. Here, the questions involve the cost and benefit of the shoe repair. Let us denote the cost, defined as the smallest amount the elves would accept to do the job on a voluntary contract basis, as C. Let us denote the benefit, defined as the largest amount I would accept to have the job done on a contract basis, as B. We will not assume that B is necessarily greater than C.

Value maximization suggests the following moral rule.

> *Repayment Rule I.* If someone confers a benefit on me of B at cost C, then if $C < B$ I am obliged to confer a benefit on them of P, an amount at least C but no more than B; and if $C > B$ I am obliged to confer a benefit of $P = B$. Whether or not I consented is irrelevant.

According to the Repayment Rule I, I am under an obligation to the elves of between B and C dollars. This is independent of the amount named on the bill the elves left.

What are the allocative and incentive effects of this rule? If I follow the Repayment Rule, the elves will choose to fix my shoes if and only if the benefit to me is greater than the cost to themselves. If $C < B$, value is maximized by fixing the shoes, which they will do since they will receive at least C. If $C > B$, value is mazimized by *not* fixing the shoes–it costs the elves more than the benefit to me– and the elves will not fix them, since they would only receive B from me.

If the moral rule instead obliged me to pay something less than C even if $C < B$, then in some cases the elves would choose not to fix my shoes even when the benefit to me exceeded the cost to them, and so value would not be maximized.

If the moral rule instead obliged me to pay something more than B, then in some cases the elves would choose to fix my shoes even when the benefit to me was less than the cost to them, and so value would not be maximized. This would occur if $C > B$ and I pay them more than C. The payment would exceed their costs, giving them incentive to fix the shoes, but the costs would in turn exceed the final benefit to me.

I have focussed on value maximization, but in the Fable of the Elves, the Repayment Rule has an even more attractive property relative to the Principle of Fairness: it satisfies the Pareto Principle.

> *The Pareto Principle.* Act so as to avoid situations where at least one person can be made better off without making anyone else worse off.

Rawls's Principle of Fairness violates the Pareto Principle, because it not only does not maximize the sum of value in a utilitarian way; it results in a situation in which each person involved is worse off.[8] If I follow the Principle of Fairness and do not compensate elves when they repair my shoes, they will not repair my shoes. Suppose instead, in accord with Repayment Rule I, that I pay them some amount P between C and B when $C < B$. Then the shoes will be repaired, generatng will be better off by $\frac{B-C}{2}$, and the elves will be better off by $\frac{B-C}{2}$. Hence, it seems that stubborn adherence to property rights violates the Pareto Principle. My refusal to pay would result in a world in which both I and the elves are worse off.

I have so far not discussed such things as the benefactor's intent, his request for or hope of reward, and my consent or lack of consent. Repayment Rule I induces the elves to make the correct decision regardless of any of these things.

Intent to Help. If the elves did not intend to benefit me– if, perhaps, the fixing of the shoes was an accidental byproduct of some magic spell they were casting for entirely different purposes– then it is unimportant whether I show gratitude. This may be be cast as a situation in which the elves' cost C equals zero. They did not intend to help me, and did not incur any costs to do so. Zero gratitude would therefore be acceptable, although a positive amount of gratitude would not hurt anything, since it would not affect accidental actions anyway.

We might imagine a different situations in which the elves did not intend to fix the shoes, but did so accidentally, at some cost. Perhaps the spell which accidentally fixed the shoes used up some of its power on them, costing the elves amount some positive amount in lost benefit to themselves from the spell's main target. That does not alter the unimportance of gratitude. The cost was accidental, and compensating the elves for it does not alter their incentives.

This policy is subject to one caveat, however. Suppose the elves do not intend to benefit me in particular, but they know that every so often, a spell goes astray and helps some unintended beneficiary. Then in deciding whether to cast a spell, the elves will take into account the possible payment from

[8] Liberalism often faces this conflict. See Amartya Sen, "The Impossibility of a Paretian Liberal," *Journal of Political Economy,* (January-February 1970) 78: 152-57. Louis Kaplow and Steven Shavell (2002) *Fairness versus Welfare* (Cambridge, Mass: Harvard University Press, 2002).

unintended beneficiaries. In such a situation, a norm that beneficiaries pay at least the cost of the part of the spell that helped them would indeed be desirable. In fact, even if there is no extra cost for helping the beneficiary, it will be desirable for beneficiaries to subsidize spells because that will encourage the elves to cast more of them. The situation then becomes very like the public goods I will talk about later: it is not the marginal cost that matters, but the average cost across beneficiaries.

Request for Reward. Nor does the benefactor's request for reward matter. It may be rude to ask for a reward for a favor, but that does not alter the fact that the action conferred a benefit. Perhaps the reason it is repellent to us is that to ask is to imply that the beneficiary is not moral enough or careful enough to pay the reward without prompting; it is an insult. If the request is indeed an insult, imposing cost I on the beneficiary, then in looking at the overall benefit to him from the favor, we must subtract that cost, so the amount owed becomes $B - I$ instead of B, and becomes zero if $C < B - I$. Thus, pique at being asked can be incorporated into this framework, but only if it is genuine pique. If the beneficiary does not mind being asked, being asked should have no effect on gratitude.

Hope of Reward. The benefactor's hope of reward does not matter to the rule being value-maximizing, but it does raise a paradox. The paradox is that while it is important to reward the benefactor if he did the favor out of a desire for reward, it is not important if he did it out of pure altruism. Saints do not need gratitude, precisely because they are unselfish; the more sinful of us do, because we need the incentive. Here, Repayment Rule I and everyday morality diverge. Under Repayment Rule I it does not reduce value to reward the altruist, but it does not increase value either.

Consent. The beneficiary's consent does not matter either. That, of course, is our starting point in the Fable of the Elves, but it is worth noting that Repayment Rule I also has implications for the situation where the beneficiary has consented to be helped, but no price has been set. In such a situation the beneficiary must decide how much to pay. Repayment Rule I says he should pay P between C and B.

But why not require the elves to ask permission before they fix the shoes.

That would indeed be prudent of them— what if they do the repair and discover that my benefit is $B < C$, so the repairs are inefficient? Any such request, however, creates additional costs. I do not know if elves are so shy that talking to humans is costly, but "transaction costs" are part of ordinary economic transactions, and much of the field of law-and-economics is devoted to discovering institutions to minimize transaction costs. We could, in the extreme, require every purchase of bubble-gum to be put into writing and notarized, with the assistance of two lawyers for each side, so that a refund can be properly paid if the gum is bad. We could, in the other extreme, have a rule of "Look around the lot and find a car you like– the keys are in them all. Drive off, and pay us by check whatever you think is fair." The second rule has lower transaction costs, and would be a better one, if human nature allowed.[9]

Here, if the elves, naive in the ways of humans, do the work without a contract, it would be desirable that we humans at least have a moral rule requiring payment. Again, the Pareto Principle favors this. If the elves and myself both know that we both benefit from the shoe repair, why should we put the extra, if small, burden on ourselves of hammering out a deal in advance?

Wasteful Favors. I will make one more observation about Repayment Rule I before we look at some applications. Under the rule, something is owed even if $B < C$, the benefit being less than the cost. An alternative rule would be to say that nothing is owed if $B < C$. This, too, creates efficient incentives, because it is a net loss to society if favors are granted that are not worth their cost. This does, however, create a discontinuity in gratitude. If B is just a little larger than C, the price owed is at least $P = C$; but if B is just a little smaller, absolutely nothing is owed. This makes sense as an incentive, because we want a reward for socially desirable actions and either no reward or punishment for undesirable ones. It also makes calculation easy for the beneficiary; once he has determined that $B < C$, he does not have to determine B precisely in order to decide how much to pay. The rule of "no gratitude for inefficient favors", however, will not work so well in the public good setting we will look at below.

[9] This idea is explored in detail in Lucian Bebchuk (2001) "Ownership and Exchange," Harvard Law School, working paper (February 2001).

Applications

The Repayment Rule has widespread application. Consider the story below, one people often think about when the topic of unasked-for benefits comes up.

> *The Car Window Washer.* You are driving through a bad neighborhood and you stop at a red light. A disheveled street person comes to your car, wipes the windshield, and then asks you for money.
>
> Are you obligated to pay him anything?

Under Repayment Rule I, you are not obligated to pay the window washer anything if you would rather he had not approached your car and wiped the windshield. In our notation, that says the benefit B is negative, and so, if anything, he owes you money. That he may have incurred some positive cost C is irrelevant. If you follow a moral rule under which you pay him $P > C$, you will encourage value-reducing behavior, because each such incident will yield you a negative benefit of $B - P$, it will yield the window washer a positive benefit of $P - C$, and the overall social value will be the negative amount $B - C$.

What the window washer is hoping is to impose on you an inefficiently high burden of gratitude. Or, since most people do not like to feel the disapproval even of strangers, he may hope to make you believe that although you yourself do not think gratitude is owed, he does and he will think badly of you if you fail to pay. (And, of course, this is not far from the threat of simple physical violence if you fail to pay.) This kind of fear of disapproval is plausible enough, but it depends on someone possibly already having a moral rule that imposes an inefficiently high burden of gratitude.

Mental extortion of this kind is common in life. Let us use another real example to further develop our moral rule.

> *The Paralyzed Veterans of America.* I receive a letter from the "Paralyzed Veterans of America". It begins, "Dear Friend, Sometimes it's hard to find the right words to thank someone as generous as you..." and continues, "As a small token of our thanks, I wanted to send you free and without obligation our 'Home for the Holidays', a special tape that I hope brings good cheer to your house this holiday."

> At the end of the letter is a perforation and a form titled "Holiday Gift Reply Form".
>
> Am I obligated to send a donation in return for the tape they sent?

Repayment Rule I says that I am obliged, if I value the tape the Paralyzed Veterans sent me, but only to the extent of that benefit B– perhaps 30 cents. Suppose the cost were 20 cents, so the benefit did exceed the cost by 10 cents. I then do owe at least a 20-cent donation under Repayment Rule I. Since the donation would be less than the cost of mailing the donation, this suggests that the moral rule should be modified for situations where there are costs to showing gratitude.

Let D be the transaction cost of repaying the moral debt– in this case, the postage and time spent mailing off the money.

> *Repayment Rule II.* Suppose someone confers a benefit on me of B at cost C, and repaying them amount P would cost me $P + D$. If $C < B - D$, I am obliged to pay them P, an amount at least C, but in any case no more than $B - D$. If $C > B - D$, I am obliged to pay them $B - D$, if that is greater than zero, and nothing otherwise. Whether or not I consented is irrelevant.

It is important to take amount D into consideration, because it is common– perhaps typical– for it to be awkward to show gratitude. Paying cash is socially inappropriate, and as with the insult of asking for a reward discussed earlier, would cut heavily into the amount of the reward. To reward friend's favor of value \$50 at cost \$30 to himself would require \$90 of my cash if his psychological cost to being so insulted (because I show my doubt of his altruism, perhaps) were \$40. If so, then I do not owe him that debt in cash. If I can repay him with \$50 in net benefit in some other way that is not so costly to me, I am obliged to do so, but if not, I am free under Repayment Rule II to never repay him.

The notation used for Repayment Rule II can also encompass cases where D is negative– that is, where the beneficiary can repay the benefactor amount P at a cost of less than P to himself. If, for example, my neighbor did me a favor, and I repay him later by letting him know that his car lights were left on, $D < P$, because it is easy for me to do him a valuable favor.[10]

The next applications are two hard cases discussed in Fitzgerald (1998).

> *The Dalai Lama.* The Dalai Lama has said, "Even our enemies give us the best training in patience. When we reflect on these holy instructions, in a way we should feel grateful to the Chinese. If we were still living in the same old system, I very much doubt that the Dalai Lama could have become so closely acquainted with worldly reality".[11]
>
> Should the Dalai Lama really be grateful to the Chinese?

> *Feeling Grateful to Someone You Helped.* Susan volunteers at a hospice for the terminally ill. She enjoys this, and is grateful to them for the chance to help. Is she right to feel grateful?

The key to each story is identifying the cost C and the benefit D.

In the case of the Dalai Lama, the cost to the Chinese of driving him from Tibet and acquainting him with worldly reality is negative– the Chinese benefited by doing it. Hence, even if the Chinese anticipated and intended this benefit to him, the amount he owes is anything between that negative cost $C < 0$ and his benefit $B > 0$, which include zero. The Dalai Lama did not, I am sure, mean to say that he was glad that the Chinese conquered Tibet– he no doubt would set larger bads against the good of his becoming wiser. Still, that is a good, and to the extent that it is a good, it is a reason not to discourage invasions as much as we might otherwise.

In the case of Susan at the hospice, she feels that she has received a positive benefit, B, from the terminally ill patients because they allowed

[10] In both cases, veterans and neighbor, I am assuming that the beneficiary has no preexisting duty to help. If my wife ought to donate to the Paralyzed Veterans simply because they are a worthy cause, or I ought to do easy but valuable favors for my neighbor, then the donation and favor do not pay the obligation incurred, which is a moral debt that remains outstanding. A perfectly altruistic society has no place for gratitude, a point continued below. And indeed, gratitude is a concept surprisingly absent from the Bible, with its injunctions to do good regardless of repayment by God or Man.

[11] Fitzgerald, 1998, p. 124, citing The Dalai Lama, *Awakening the Mind. Lightening the Heart:Core Teachings of Tibetan Buddhism,* ed. Donald S. Lopez Jr. (San Francisco, California: Harper Collins, 1995) p. 35.

her to help them. They, however, like the Chinese, have a negative cost of providing her with this benefit. Hence, as with the Dalai Lama, the amount P that Susan owes lies somewhere between that $C < 0$ and her $B > 0$ and includes a payment of zero. Repayment Rules I and II allow her to pay, but do not require it, because payments in that range do not affect whether the patients provide her the favor of allowing her to help them.

Altruism

If we may return to the Fable of the Elves now, suppose the elves are purely altruistic, and would do the favor for free, even knowing that I would not pay them. As discussed earlier, I am not obligated to pay them under Repayment Rules I and II. That seems a hard rule. Is it moral to pay only selfish people, and not unselfish ones?

For value maximization, it is, of course–that is the surprising result. But does this show that value maximization is a bad thing? No– on closer examination, it matches our intuition as well with the unselfish as with the selfish. Suppose the Elves are altruistic, caring more about me than about themselves. They do not leave a bill, but I decide to pay them 20 dollars anyway. I am, of course, 20 dollars worse off as a result of having paid. But note that the elves are worse off too. They care about my wealth more than their own, so a transfer of 20 dollars from me to them makes them worse off. They would prefer to refuse payment.

One part of gratitude remains– that I should feel kindly towards the elves because of the good they did me. Everyday morality expects that. But the operational part of gratitude– taking some action to help the person to whom I feel gratitude– is absent. It is not moral for me to pay them, any more than it is moral for someone who has been freely given a gift to return the gift to the giver.

Despite these arguments, my gut feeling, like that, no doubt of the reader, is that I ought to be grateful to an alruistic benefactor, and try to do good things for him. That, however, may be because my project in this paper is to discuss what moral rule is desirable– here, in the sense of being value-maximizing– rather than to investigate which moral rule we actually have. In practice, much of gratitude is driven by the idea of reciprocity, the idea that I should confer a benefit on someone who has previously conferred a benefit on me. In many situations, reciprocity is not the result of a moral norm, but of mere prudence– you and I help each other because we wish to maintain a mutually profitable future relationship, as in the Folk Theorem of game theory. In other situations, however, it is the result of a social norm according to which I feel I should repay you for benefits received even if the relationship is not going to continue. If this norm interacts with a desire to help people whom we esteem, we have explained our moral intuition that one ought to be grateful to altruistic beneficiaries. But that kind of description is not the project of this paper.

Altruism, however, is not always simple. Consider the following two stories.

> *Foreign Aid.* Andrew gives $20 to a charity which uses the money to buy food for John, who lives in Sudan, telling John that Andrew paid for it. John would only have paid $5 for the food. Should John be grateful to Andrew?
> *The Rich Neighbor.* Frank's neighbor Sam, a rich man, is an old family friend who buy a car for $20,000 and gives it to Frank. Frank would only have paid $15,000 for it. Should Frank be grateful?

Looked at in terms of self-regarding, nonaltruistic homo economicus, both these stories are about waste. Andrew is giving food, and Sam is giving a car, to someone who does not value it as highly, in dollar terms. But gifts are voluntary acts, so something more must be going on– some other-regarding preferences.

The Foreign Aid story is about pure altruism. Andrew wants to aid John, or someone like him, and would do so even without any thanks. The net cost to Andrew of giving the aid is not $20, but rather some negative amount, because Andrew derives value from the gift. Andrew would, in fact, be willing to pay a tax to give the gift. Since Andrew derives at least $20 in value from paying $20 to the charity, and John derives $5 of value, the transaction is value-maximizing. And no gratitude is necessary as an additional incentive.

The story of The Rich Neighbor, however, though also about a gift, is a bit different. Sam would think it silly of Frank to return $15,000 to him, the B in our model above. He is not giving the car to Frank in the hopes of material compensation. But Sam might well be giving the car only because he expects a different form of gratitude– warm feelings that we might call "esteem". Sam wants Frank to esteem him, and so he can know that Frank esteems him, he would like a "Thank you" from Frank, and perhaps other tangible evidence of esteem. In this situation, which I will term "semi-altruistic", we still have potential for enhancing value. Sam derives at least \$20,000 in value from receiving Frank's esteem, and Frank derives \$15,000 in value from the car, loses nothing by giving esteem, and loses little by conveying his esteem via actions such as writing a thank you note.

Thus, in cases of semi-altruistic favors, Repayment Rule I is insufficient. It would call for repayment in material goods, which is not a good enough incentive for value-maximizing favors. Rather, the semi-altruistic donor must be repaid in esteem, in proportion to the cost and value of the favor he has done.

It is perhaps rash for an economist to speculate on the psychology of esteem, but it is worth pointing out some implications of trade in it. Suppose each person has a limited amount of esteem to bestow, which at a first approximation we might assume is the same for each person. Some of this esteem would be given in exchange for favors, as in the story of the Rich Neighbor, and the rest of it would be used in other ways, notably esteem given in admiration of good characteristics without any expectation of return, and the trading of mutual esteem. A person's willingness to return esteem for material favors would depend on two things: (a) the desire he has to use his limited budget of esteem for other purposes, and (b) his benefit from the material favor. The poor person– Frank, in the story of the Rich Neighbor– would place a higher value on material favors relative to other uses of esteem, since he has fewer material goods to begin with. Thus, someone such as Sam who is seeking esteem in exchange for favors, should do his favors for someone who is poor, and would pay a higher esteem price. For value maximization, which can thus be expanded to include esteem as a good, favors done for esteem should therefore tend to be done for the poor rather than the rich. Note that we have reached this conclusion only using the idea of value maximization, not fairness or altruism of any kind. The argument here is that the poor person should receive favors in the favor-esteem market for the same reason that the rich person should receive goods in entirely material markets– because he will pay a higher price in the relevant currency, and the higher price shows his greater value from the trade.

5. Public Goods

Hart, Nozick, Rawls, and Cullity are all most concerned about public goods, not the private goods we have been discussing so far, which is perhaps why they, in our view, trip up on this simpler point. A private good, such as shoe repair, yields its benefits to only one person,the owner of the shoe. A public good yields its benefits to more than one person at minor extra cost. In the extreme, a pure public good yields its benefits to everyone in the world at no more cost than to one person, and there is no way to deny everyone the benefits if they do not pay voluntarily.

Clearly, public goods are at the heart of the connection between ethics and political philosophy. If, for example, it is true that having a welfare state benefits everyone, and that one ought to pay for benefits one receives, it is an easy step to morally justify a welfare state with compulsory taxation on pain of imprisonment.

Our discussion of private goods is a necessary base for thinking about the Principle of Fairness with respect to public goods. The principle of efficiency can be easily extended, but becomes more debatable as a moral principle, since with more than two people involved, cases soon arise in which efficiency requires the happiness of one to be involuntarily sacrificed for the happiness of the two others, an old utilitarian sticking point that did not arise in our earlier discussion. We will not discuss public goods fully, though, and instead content ourselves with pointing out two problems in extending the Principle of Fairness to public goods. To explain them, another story will help.

> *Helen's Flowers.* Helen has planted pretty flowers in her front garden, at the cost of more sweat than is justified by the pure pleasure of being outside. Her immediate neighbor Clarence, and Denise further down the street, both enjoy seeing the flowers. Have they incurred moral obligations to Helen?
>
> Let us add particular values. Clarence gets $100 in benefit, Helen gets $20, Denise gets $10, and the cost to Helen of planting them is $90.

If we try to apply Repayment Rule I and require Clarence to pay some amount between Helen's cost C and Clarence's benefit B, we run into an immediate problem: what is the cost C?

One definition of cost is the "total cost" of Helen's effort— 90 dollars. A second definition is the "average cost"— 30 dollars, averaged over the three beneficiaries. A third is the "marginal cost"— the extra cost created by Clarence's enjoying the flowers, once all the costs necessary for the other people to enjoy them have been incurred. Here, the marginal cost is zero.

Thus, "cost" is an ambiguous term. Which definition should be used for the term C in Repayment Rule I? Recall that our principle is to find a rule that if followed by everyone will maximize value. This implies that we should look for a definition of cost that if followed by everyone will not be inconsistent. If each of the three people uses total cost, each would pay \$90, a total of \$270 and clear overcounting. If each of the three people uses marginal cost, each would pay \$0, because only the first person to enjoy the flowers requires a cost, and each would be putting himself in the position of the marginal enjoyer. Average cost is the only concept that makes sense when the three people apply it simultaneously.

Even using average cost as C, however, Repayment Rule I will fail here. Clarence would pay between $C = 30$ and $B = 100$, but Denise would only pay her benefit of $B = 10$, since that is less than C. If Clarence's repayment is less than $P = 60$ (=90-20-10), Helen will have insufficient incentive to plant the flowers.

This suggests that we need to refine Repayment Rule I, to reduce the range of possible repayments.

> *Repayment Rule III.* If someone confers a benefit on N people (including himself) of B_i for person i at total cost C, then person i should pay the benefactor
> $$B_i - \frac{Sum_{i=1}^{N} B_i - C}{N}.$$
> Whether or not people consented is irrelevant.

Repayment Rule III is equivalent to each person paying his value, B_i, into a pot, and then receiving back an equal share of the pot. Applied to

Helen's Flowers, Clarence would pay 100- (100+20+10-90)/3 = 100- 40/3 = 86 2/3, Helen would pay 20- (100+20+10-90)/3 = 20- 40/3 = 6 2/3, and Denise would pay 10- (100+20+10-90)/3 = 10- 40/3 = -3 1/3, a negative amount. This is to be interpreted as Clarence paying Helen 86 2/3 and Helen paying Denise 3 1/3, so that Helen ends up, after getting 86 2/3 from Clarence, paying 90 for the flowers, and paying 3 1/3 to Denise, with a net payout of 6 2/3 (= 86 2/3 - 90 - 3 1/3).

It is, of course, odd that Denise ends up being paid. That, I think, is unnecessary to achieving value maximization, since Denise does not create the flowers and thus does not need any incentive. To the extent that Helen is paid extra because Denise is not paid, Helen may be given too great an incentive to plant the flowers, but that is a minor problem.

This is a simplified example of what economists call a "mechanism"– a procedure for combining information to make a decision (whether to do the favor) and allocate its costs and benefits. Ordinarily, the problem in mechanism design is to set up rules that cleverly induce everyone to tell the truth (see Chapter 10 of Rasmusen (2001)). Here, since the motivation is internal, we do not face that problem.

Many other mechanisms could also result in efficient decisions. Repayment Rule IV is a particularly simple one:

> *Repayment Rule IV.* If someone confers a benefit on N people (including himself) of B_i for person i at total cost C, then person i should pay the benefactor B_i. Whether or not people consented is irrelevant.

Repayment Rule IV is counterintuitive, because if the beneficiary follows it, he gets no net benefit from the favor– the repayment has used up every bit of the value he gets from it. Because the rule is so extreme, it has two problems that offset its simplicity.

First, if someone can predict that I will overestimate my benefit B_i, he can take advantage of me. There will thus be a tendency for favors to be done when errors in overestimating them are most likely, which will include inefficient favors for which the true B is less than C.

Second, it will lead to excessive competition for the production of public goods. In Helen's Flowers, the result of Repayment Rule I would be that Helen would receive payments of 100+10 =110, which is more than the 90-20=70 she needs as an incentive to plant the flowers. With such a high return– which would grow rapidly as we increased N by adding more neighbors to the example– Helen would have an excessive incentive to plant flowers. Other activities would be foregone in return for creating public goods.

Let us return to the Fable of the Elves briefly. Notice what happens if we set $N = 2$ in Repayment Rule III, with $B_1 = 0$, the benefit to the elves, and $B_2 = B$, the benefit to me. I would pay the elves this amount:

$$B - \frac{0 + B - C}{2} = \frac{B + C}{2},$$

which would split the created value equally– the payment is halfway between C and B. Thus, solving the public good problem has given us a way to refine Repayment Rule I.

It is interesting that Repayment Rule III supports the idea that the rich should pay a greater share of the cost of public goods. Here, that does not arise from any idea that paying more costs the rich less utility, as in a utilitarian framework, or that it tends to level out consumption, as in an egalitarian framework. Rather, the rich tend to have greater benefits. Since they have more money, they are willing to part with more of it to obtain the public good, so their values of B are greater. Since their values of B are greater, they should feel obliged to pay more.

This is a reversal of what is commonly seen as the skewing of the value maximization criterion towards the rich.

The typical application of value maximization is to allocate goods to the rich because they have greater willingness to pay. Thus, if a Mercedes is to be allocated to either a poor man or a rich man, the value maximization criterion and Pareto optimality, like the market, allocates it to the rich man because he would be willing to pay \$40,000 and the poor man would only be willing to allocate \$5,000. The idea is that if the car were allocated to the poor man first, both rich man and poor man could be made better off if the car were transferred to the rich man and the rich man transferred \$18,000 to the poor man, so that initial allocation would not be value-maximizing. If the car were initially allocated to the rich man, on the other hand, no such reallocation of car and money can be found that would make both people better off. Advocates of wealth maximization would say that if the social planner does not like the result that the rich man gets the car, their objection is not really to the allocation of the car, but to the initial distribution of wealth, and social policy should be directed at that (using, say, progressive taxation) rather than at the allocation of goods once wealth is settled. Thus, if we begin by accepting wealth differences, we should accept that the wealthy should end up consuming more and better goods. This is, of course, not an unmixed blessing for the rich, because in the market system the way they get the goods is to exchange their wealth for them: there is a price to be paid.

In the context of public goods, too, there is a price to be paid for the goods. If it rises with benefit, then we have the result that value maximization implies that the rich, valuing the benefit more in terms of dollars, should pay more.

A progressive tax system, of course, does not depend entirely on moral sentiments– non-payers have violated a legal rule too. But there do exist many situations in which people pay more voluntarily because the monetary value of the benefit is greater to them. Consider scholarly associations. At least three of them, the American Economic Association, the American Sociological Association, and the American Political Science Association, have higher dues for members with higher incomes. The dues are based on self-reported income, so if a high-income member so desires, he can lie and pay lower dues. Laband and Beil surveyed members about their incomes and then compared the income distribution to what members reported when paying their dues. They found considerable though not universal compliance: in the high-temptation category of incomes above $50,000, for example, 26$

Another comment on the role of transaction costs may be appropriate. If sending a bill, writing a check, returning a bill, and cashing the check are too costly, efficiency does not support payment for benefits. This is the same principle by which it is inefficient for a Scot to send his shoes to be repaired in China, even though labor costs are lower there. In social interactions, many obligations are incurred, but few bills are paid in cash. This is presumably because of the transaction costs, which are especially redundant when people are constantly imposing counter-obligations which cancel out the first obligations. We keep running social tabs, instead. Thus, in the story of Helen's Flowers, if Clarence and Denise have incurred moral obligations, they will likely pay them by loan of a snow shovel or by planting flowers themselves rather than by checks for two dollars apiece.

7. The Cullity Proposal and others

This is a different set of arguments, and a more general principle than Cullity uses. On page 18 of his article he proposes an "Extended Principle of Fairness":

> If a person receives benefits from a scheme that satisfies the following conditions, it is unfair for her not to meet the requirements it makes of her in respect of her enjoyment of those benefits.
>
> (i) The practice of participation in the scheme represents a net benefit for her.
>
> (ii) It is not the case that practically everyone would be made worse off by the practice of participation in the recognition as obligatory of those further requirements that must in fairness be regarded as obligatory if the requiremnents in question are regarded as obligatory.
>
> (iii) She is not raising a legitimate moral objection to the scheme.

We must, of course, strip off condition (iii) immediately, since it begs the question; fairness surely does not require one to do something to which there are legitimate moral objections, just as legality does not require us to do things that are unlawful.[12]

Simmons (p. 178) says that the following five conditions are necessary– but perhaps not sufficient– for a debt of gratitude to be owed:

"1. The benefit must be granted by means of some special effort or sacrifice.

[12]xxx Cullity is aware of this problem it seems in footnote 32, and maybe there are terms of art being used here.

2. The benefit must not be granted unintentionally, involuntarily, or for disqualifying reasons.

3. The benefit must not be forced (unjustifiably) on the beneficiary against his will.

4. The beneficiary must want the benefit (or would want the benefit if certain impairing conditions were corrected).

5. The beneficiary must not want the benefit not to be provided by the benefactor (or would not want the benefit not to be provided by the benefactor if certain impairing conditions were corrected)."

What comes out of these conditions is, since it was designed to grasp the everyday idea of gratitude, similar to the rule of this paper, and different from Rawls. The elves deserve their payment under them, at least if we treat them as sufficient conditions. We must assume that I did not hate the idea of having my shoes fixed without consent so much that the benefit was negative, to meet condition (3), but that is not hard, and Simmons supplies us with the wiggle-word "unjustifiably" in any case.

Simmons, however, complicated the picture too much. Though presented as five short conditions, the wording requires much elaboration before they become meaningful– we must learn what "special" effort is, what reasons are "disqualifying", what force is "unjustifable", and what is the mearning of "impairing conditions". It is simpler to go to just the costs and benefits of the action performed.

9. Political Obligation

Political obligation is the glamor issue in the obligation literature. We can use the economic framework to help, though I will not attempt a comprehensive analysis in the present article. To illustrate how it can help, though, consider what Flathman calls ""the Nazi problem."

> *The Nazi Problem.* You are a citizen of Nazi Germany in 1943. The government provides you with police and fire protection without asking whether you want it. At the same time, the government does evil things such as rounding up Jews, who then disappear to a no doubt

wretched fate. The government asks you to do X. Are you obliged to do it?

The economic approach says that you must ask yourself whether the value of police and fire protection to you, B, is worth the cost $C(X)$ to you of doing X. This will of course depend on what X is. Let us examine four cases:

Case 1. X is paying your city taxes, which are used almost entirely for police and fire protection, but a small part of which pays for police who round up Jews.

Case 2. X is revealing the location of hidden Jews, and you strongly believe that the Nazi policy towards the Jews is unjust.

Case 3. X is serving in the army, and you are someone who is neutral as to whether World War II is a just war or not.

Case 4. X is serving in the army, and you strongly believe that Germany's position in World War II is that of an unjust aggressor.

In Case 1, the Repayment Rules oblige you to do do X. You must pay the cost of the benefits you receive, which are substantial. You are perhaps free to withhold a tiny percentage of your tax bill, as paying for police round-ups which do not benefit you, but even this is unclear. Your benefits, after all, exceed your tax bill, and the only problem is that you are paying more than your share of the cost.

A simpler case, perhaps, is if city workers trim your tree at no charge. You are then under an obligation to the city, an obligation which might be discharged by picking up trash you come across in other neighborhoods. This obligation is unaffected by the evildoing of the city in other spheres.

It may be helpful to return to the Fable of the Elves. Suppose the elves are evil creatures, who will use any profit I pay them to steal babies. The question comes down the same one as whether I should pay my legal, pre-agreed-upon debts to such creatures. If I order new shoes and then stiff them on the bill, their capacity for harm is reduced. But they would then never have paid me in the first place.

It could be, however, that this raises the cost D to me of paying by too much. Suppose that ordinarily my benefit B is 50 dollars and the cost is 10 dollars, so I would pay. If, however, I know that the elves will use the 10 dollars for mischief, then the cost to me of that 10 dollars is actually much higher than 10 dollars. It might be that I would pay 500 dollars to someone else to avoid paying 10 dollars to the evil elves, in which case $C = 500$ rather than $C = 10$. In that case, I should not incur debts by consent in the first place, and I have no obligation for benefits incurred without consent.

Case 2 is similarly easy. My benefit B from city services is less than the cost D to me of repaying those services by revealing the hiding places of Jews. Thus, there is no obligation under Repayment Rule II. Though simple, this takes care of many hard cases. An evil regime asks too much of its moral citizens, and if they were offered a choice between performing evil deeds on the one hand and not receiving government services on the other, they would choose not to receive government services.

Cases 3 and 4 involve closer calculations. Both involve a typical government activity, an unjust war. Though wrong, such an activity is typical of governments, which do many wrong things, and in the case of even pre-Nazi Germany the possibility of an unjust war was entirely foreseeable.

In Case 3, however, the citizen does not care about the justness of the war. All he cares about is the danger and inconvenience of serving in the army. During the war, this cost D may well exceed the value to him of police and fire protection. It certainly will if he is sent to fight in the front lines and places no value on glory. That, however, is not the only relevant calculation. Wars are occasional events, whose costs should be amortized over peacetime as well. If that is done, the cost falls drastically, as a German citizen accepts a probability of having to join the army as part of the repayment for police and fire protection.

Case 4 is similar, but here the citizen believes the war is unjust, so the cost D to him is much higher. The question then in the empirical one of whether that cost, amortized over peacetime years as well, really exceeds the benefit to him of government services. For some people it does; for others opposed to the war it does not.

10. Does the Proposed Moral Rule Match Popular Morality?

Does the Repayment Rule match popular morality? In everyday life we do not, of course, ordinarily express gratitude through cash payments. Indeed, people would be shocked by the thought. If my neighbor is nice enough to shovel the snow from my sidewalk when I am away on a business trip, it would not be appropriate for me to give him 20 dollars when I returned. This does not mean that the Repayment Rule is not being used, however. It just shows that social life has other complexities besides simple gratitude. Monetary transactions, for example, are seen in our society as being different in kind than nonmonetary transactions. Thus, gratitude expresses itself with different means of payment.

Most people would say I am under an obligation to my neighbor if he shovels my walk. They would also say that the size of the obligation is proportional to the effort expended. If my neighbor had to shovel nine inches of snow from fifty yards of sidewalk, my obligation is greater than if he used his snowblower to clear three inches of snow from ten yards of sidewalk. How do I repay him? The most satisfactory repayment would be to clear his snow another time. Or, I might repay him by making sure to invite him to my next dinner party. Or, I might give him some of my first home-grown tomatoes of the season. That these are not monetary repayments is irrelevant to the argument made earlier.

Note, however, that my argument has not been about reciprocal altruism. "Reciprocal altruism" refers to the practice of helping someone now because I think he will help me later. Economists have studied this at length and it can explain many instances of apparent genuine altruism. [13] In the context of the neighbor–or the favor bank– reciprocal altruism might well be at work, because both parties expect the relationship to be continued indefinitely and the favor debt never is allowed to become so big that the debtor might unilaterally call an end to the exchange. But if asked to explain the moral rule being followed, the man on the street would not say it was "Do favors for your neighbor if you think he will repay you and you will end up gaining, but stop if you don't think you'll need anything from him." That would imply, for example, that I would not owe my neighbor anything if he shovelled my walk but I knew he was moving to a different house soon. Rather, the man on the street would say that I owe my neighbor something

[13] See Eric Rasmusen, *Games and Information*, 3rd edition, 2001 for an overview and references.

even if paying my debt would not be in my self interest. It is that kind of moral rule whose usefulness I have shown in this article.

Have I shown that such moral rule is anything more than useful? No. I have not tried to bridge the "is"/"ought" gap here. All I have done is show that if you value human happiness, the Repayment Rule is a good moral rule. And I can speculate that since the rule is so useful and most of us seem to feel something like it within us, biological evolution, social evolution, parental care, or divine providence may well have programmed it, albeit imperfectly, into human beings.

Finally, note that the objective here is not to match our moral intuitions. For that, what might be best is an experimental approach. Berg, Dickhaut & McCabe (1995) did experiments on what is variously called "The Investment Game" or "The Trust Game".

> *The Trust Game.* There are two subjects, a Sender and a Responder. Each is given $10.
>
> The Sender can keep his entire $10 or send X to the Responder. If he sends X, then it is tripled for the Responder, who receives 3X.
>
> The Responder then can keep his entire pile of money, or send Y back to the Sender.
>
> The game is played only once. The Sender and Responder do not meet face to face, and it is best if the experiment is done double-blind, meaning that the researcher does not find out who sent what (and possibly shame them). All the rules are common information for all the subjects.

If people follow the simplest "homo economicus" behavior, the Sender sends nothing to the Responder. A pure altruist or a utilitarian Sender would send his entire $10, since it would turn into $30 for the Responder.

In practice, some Senders send nothing, and most send a few dollars, and a few send all $10. Most Responders respond with a fraction (often half) of the value they received, but some respond with nothing. On average, Senders don't get back as much as they send, but they are close to breaking even.

Experiments such as these are a good way of testing moral intuitions, both by introspection and by observing actual behavior. Not only can the actions of subjects be observed, but they can be asked either before or after the experiment (it would make a difference!) what they believe is the moral thing to do. The experiment can be varied to test whether the motivation of the Responder is gratitude (termed "positive reciprocity" in this literature) or simple altruism, as James Cox (2004) has done.

11. Conclusions

It may indeed be proper for the recipient to pay for involuntary benefits, by utilitarian principles, if not by liberal or libertarian ones. To argue otherwise is to violate the Pareto Principle.

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