Machiavelli’s Mistake: Why policies designed for “wicked men” fail
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Based on papers in

Aspects of good government
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Siena Town Hall 1338
Earlier, on this program

• We are a uniquely cooperative species, joining with large numbers including non-kin in the pursuit of projects for mutual benefit

• Important aspects of cooperation cannot be explained by self interest with a long time horizon or other extensions of the ‘somebody may be looking paradigm.”

• Part of the explanation is that many of us are altruistic much of the time.

• Improbably, we became this way through a coevolutionary process in which both levelling and warfare played an essential part.

• Today: how can this knowledge improve the way we govern our local, national and global interactions to provide a flourishing and sustainable life for all humans.
• In some of the Haifa day care centers at the beginning of week 5, a fine was imposed for parents arriving late to pick up their kids.

**Figure I**
Average Number of Late-Arriving Parents Each Week, by Group Type
Background: Good government and good citizens

- Lawgivers make the citizen good by inculcating habits in them, and this is the aim of every lawgiver. If he does not succeed in doing that, his legislation is a failure. It is in this that a good constitution differs from a bad one.

Aristotle *Nicomachean ethics* (350bc)
A revolution in political philosophy (16th – 18th century)

- Nicolò Machiavelli: *e' necessaria a chi dispone una repubblica e ordina leggi in quella, presupporre tutti gli uomini rei ... la fame e la povertà fa gli uomini industriosi, e le leggi gli fanno buoni*

- *All men [are] wicked...hunger and poverty make them industrious and laws make them good.*] Discorsi sopra la prema deca di Tito Livio (1513-1517)

- NB the laws do not make the citizens good, rather they make bad citizens behave *as if* they were good.

- Marsiglio of Padua, Hobbes, Hume, Smith, Bentham
Bernard Mandeville (1705): motives and consequences

• Thus every Part was full of Vice, Yet the whole Mass a Paradise; Such were the blessings of that State; Their Crimes conspir’d to make them Great

The worst of all the Multitude Did something for the Common Good

• human frailties may be turn’d to the advantage of civil society and made to supply the place of moral virtue
Hume and Bentham: constitutions for knaves

- *...in contriving any system of government... every man ought to be supposed to be a knave* David Hume, *Essays* (1742)
- Bentham’s (1789)*“Duty and Interest junction principle: Make it each man’s interest to observe ... that conduct which it is his duty to observe.”*
Adam Smith’s invisible hand showed how self interest, not the benevolence of the butcher put meat on the table.

- Smith’s idea is that prices would do the work of morals
- Arrow-Debreu Invisible Hand Theorem 1951
- The secret? Everything that matters in an interaction among people is owned, and property rights are well defined,
- As a result prices induce me to act as if I care about the costs I inflict and the benefits in confer on you so that one pays for the liabilities one imposes on others, and reaps the benefits.
• Mandeville’s conjecture: the right institutions (= incentives for the self interested) are capable of implementing socially desirable outcomes irrespective of preferences.

• I do not know the fruit salesman personally, and I have no particular interest in his well-being. He reciprocates this attitude. I do not know, and have no need to know, whether he is in the direst poverty, extremely wealthy, or somewhere in between... Yet the two of us are able to... transact exchanges efficiently because both parties agree on the property rights relevant to them. James Buchanan (1975)
A helping hand for the invisible hand

- 20th and 21st century economics recognizes that many economic and social interactions take the form of prisoners dilemmas or public goods games: the best for each is the worst for all.

- In these so called market failure situations Adam Smith’s competition for profits is not sufficient because doing well and doing good are not the same thing:
  - Environmental pollution
  - Financial instability
  - Product safety

- The invisible hand needs a helping hand

- But are incentives -- green taxes, subsidies for training workers, fines for faulty product -- sufficient?
Kenneth Arrow: *In the absence of trust ...opportunities for mutually beneficial cooperation would have to be forgone...norms of social behavior, including ethical and moral codes (may be)...reactions of society to compensate for market failures.*

But what if trust and social norms are undermined by the incentives and other self-interest based policies to avoid market failures (e.g. the “optimal” incentives advocated by economists)?
The separability assumption: Machiavelli’s mistake

• The classical writers did not imagine that citizens are amoral or that preferences are exogenous (quite the opposite: Hume’s second afterthought, Smith’s *Moral Sentiments*).
• But they did assume that the moral sentiments and the material interests could be pursued independently…
• …and that policies to shape behavior according to the latter would not compromise the former (the two are *separable*).
• These propositions form the foundation of modern economic theories of mechanism design and welfare economics, optimal deterrence policies, etc.

Hurwicz, Meyerson, Maskin. Nobel Laureates
The word

• The material interests and the moral sentiments may not be separable; when they are complements (i.e. synergistic), explicit incentives may crowd in other regarding preferences such as civic virtue (e.g. voluntarily obeying traffic regulations might break down if flagrant violators were not punished.)

• and when they are substitutes (negative synergy) crowding out may occur (e.g. as has been claimed for blood donations)
The question: can prices do the work of morals

• Does there exist a set of policies, laws, property rights such that entirely self-regarding citizens facing a social dilemma (public goods, common property resource, PD) will be motivated to act in socially desirable ways? (i.e to take appropriate account of the effect of their actions on others.)

• Or on the contrary, must those concerned about global warming, epidemic spread, the erosion of social norms and other market failures also be concerned about the preferences of the citizens and the possibility that economic incentives may reduce ethical behavior?

• If the material interests and moral sentiments are non-separable, what are the implications for the use of explicit incentives, and mechanism design in general?
Dynamic crowding out by explicit incentives, I

- In some of the Haifa day care centers at the beginning of week 5, a fine was imposed for parents arriving late; it was discontinued following the 17th week.

**Figure I**
Average Number of Late-Arriving Parents Each Week, by Group Type
Crowding out in a public goods game (Cardenas et al)

- Subjects: rural Colombians
- Public goods game with either (red) communication or (blue)fines, stage II
- Top panel: deviation from selfish actions
- Bottom panel: payoff sacrificed to protect the ‘forest.’
Fines are signals as well as incentives: Distrust (fines) by principals crowds out reciprocity by agents

Investor (principal) transfers a sum to the trustee (agent). This amount is doubled (by the experimenter). The trustee may then return (back-transfer) some to the Investor.

(Fehr Rockenbach Nature 2003)
Dynamic crowding out by an incentive mechanism: rewards and penalties for contributions above or below the mean (Falkinger, Fehr, Gäechter, AER 2000)

- Incentive mechanism implements the selfish outcome
- Without the mechanism subjects deviate from self interest
- The deviation is larger if they have not previously experienced the incentive.
- Take home message: incentives as teachers.
Dynamic crowding out

- A gift exchange (trust) game with a fine or a bonus treatment.
- Reciprocity-based ‘effort’ is reduced and its responsiveness to the ‘wage’ is reduced following an incentive treatment.
- Effect is stronger for fines (B) than for bonus (C).

Why separability fails: being and becoming

- Framing
- Information about intent, task or type
- Self determination
- Endogenous preferences
- Exploitation aversion
- These studies are surveyed in “Policies designed for self interested citizens may compromise the ‘moral sentiments’” Bowles, Science, 2008.
- A unifying thread: Economic activity is not only about getting and having things; it is also about becoming and being a particular kind of person in ones own eyes and the eyes of others.
Incentives and intentions

- Why does punishment by peers in the public goods game increase contributions (Fehr-Gaechter), but punishment by “investors” in a principal agent game decrease contributions?
- In the first case the punishment is altruistic, in the second it is an attempt to divert the surplus to the employer.
- In the trust game (Fehr and Rochenbach) the negative effect of incentives (-38%) occurred when investors demanded a back transfer that would give them most of the surplus and much less (-8%) otherwise.
Another second best (Lipsey-Lancaster) theorem

- Social preferences are a fragile resource for the policy maker. Another ‘second best’ result: Where contracts are incomplete (and hence norms may be important in attenuating market failures), public policies and legal practices that more closely approximate idealized complete contracting may exacerbate the underlying market failure (by undermining socially valuable norms such as trust or reciprocity) and may result in a less efficient equilibrium allocation.
Machiavelli’s mistake will matter more as we move from the economy of grain and steel to the weightless economy

• Grain and steel can be owned and exchanged using complete contracts.
• This does not vindicate the invisible hand.
• ..but it contrasts with the weightless economy in which information is the main good
The weightless economy: contracts

• Because copying costs are low (or zero) enforcing ownership of goods is difficult.
• When successful, enforcement prevents goods being made available to users at their (low or zero) marginal cost.
The news about the global village

- Commonplace: the world is more connected
- News: what connects us not just the contracts that once governed global exchange of grain and steel.
- The sinews of the connected world today include also climatic effects, epidemic spread, songs, computer applications, affection, hatred, information
- None of these is subject to contract
- The axioms of the invisible hand apply to none of these.
- Prices cannot do the work of morals in these cases.
- Even the helping hand of mechanism design is likely to fail given that governments do not have (and should not have) the information and power to intervene in the necessary ways.
- In some cases cooperation based on both self interest and other regarding motives succeeds (wikipedia, open source)
Utopian speculation?

the culture’s ‘big men’ and tribal elders are required to talk softly and humorously deprecate themselves at every turn in order to maintain their status ... it consciously distrusts and despises egotism and ego-based motivations; self-promotion tends to be mercilessly criticized...

The meat-sharing Ache? .. The whale hunting Lamalera? Guess again: it’s the gift exchange culture of the open source software community as described by Raymond, *The Cathedral and the Bazaar.*

Back to the future: virtually costless decentralized transfer of information among thousands of participants allows for effective mutual monitoring, reputation building, ostracism and other methods common to foraging bands but on global scale.
Conclusion

• The bad news: The constitution for knaves in either its invisible hand or helping hand version will not provide a system of incentives to promote a flourishing and sustainable future in today’s weightless economy and global village.

• The good: we are not knaves or at least not all of us all of the time.

• Social order has never relied solely on self interest, and would breakdown if we were indeed knaves.

• Incentives and sanctions remain essential, but..

• Our altruistic and cooperative dispositions – the legacy of 100,000 years of evolution – provide an essential resource to be recognized, mobilized, and empowered.
Coda: Back to Aristotle?

• The basic problem of institutional design, then is not to find a way to induce a homogeneous population of self-regarding individuals to implement a socially desirable outcome.

• Hume, updated: *The task of the policy maker is to devise rules such that in cases where cooperation is socially desirable, other regarding preferences will be sustainable in a cultural equilibrium and individuals with other-regarding preferences will have opportunities to express their prosociality in ways that induce all or most to cooperate, as in the public goods with punishment experiments.*

• *Contra* the philosophical foundations of philosophical liberalism, and in agreement with Aristotle, the policy maker – like the parent or the teacher -- must be concerned with ‘inculcating habits.’
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