

Is liberal society a parasite on tradition?

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I. INTRODUCTION

The parasitic liberalism thesis, advanced in many variants over the past two centuries, holds that the proper functioning of markets and other institutions endorsed by liberals depends on family-based, religious and other traditional social norms that are endangered by these very institutions. Liberal society thus fails Rawls' test of stability: it does not "generate its own supportive moral attitudes." (Rawls, (1971):399).

Consistent with the thesis, market-like incentives are sometimes counter-productive, apparently because they displace pre-existing ethical commitments in favor a self-interested strategic mode of reasoning, as Richard Titmuss claimed was the case when monetary incentives are deployed to encourage blood donations (Titmuss, (1971)). Until recently, skeptics of the parasitic liberalism thesis could point to the paucity of hard evidence that market-like incentives compromise ethical motives. However, recent experimental studies suggest that while the "moral sentiments" underpinning the workings of markets and other institutions are common in most human populations (Camerer and Fehr, (2004), Henrich, (2010)), incentives that appeal to self-interest tend to compromise individual preferences for reciprocity, fairness and public generosity (Bowles, (2008), Bowles and Polanía Reyes, (2010).)

It is often countered that the corrosive effect of explicit economic incentives on these values is of little import because, by comparison to other allocation mechanisms, markets

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function tolerably well in their absence. Thus it is sometimes said that markets economize on virtue, meaning that “market-like arrangements reduce the need for compassion, patriotism, brotherly love, and cultural solidarity” (Schultze, (1977):18). But because enforceable contracts do not cover all that matters in economic exchanges, the proper functioning of markets depends critically on social and moral preferences (Arrow, (1971)). For example, in the absence of a strong work ethic and feelings of reciprocity among employers and employees, an adequately functioning labor market would be impossible. If trust, truth-telling and other ethical behaviors were absent among borrowers and lenders, credit markets, likewise would collapse. The same is true with even greater force of other institutions, so that: “no social system can work ...in which everyone is ...guided by nothing except his own ...utilitarian ends” (Schumpeter, (1950):448).

But if the self-interest based incentives that are intrinsic to markets also degrade the other regarding and ethical motives on which the functioning of markets and other institutions depend, does this moral crowding out then lead eventually to economic dysfunction, instability and collapse of liberal society? An affirmative response – for example that “liberalism depends on virtues that it does not readily summon and which it may even stunt or stifle” (Berkowitz, (1999):xiii) – was advanced most famously by Daniel Bell, (1976) in his *Cultural Contradictions of Capitalism* and earlier works (Bell, (1973):48) “The historic justifications of bourgeois society -- in the realms of religion and character – are gone. ... The lack of a rooted moral belief system is the cultural contradiction of the society ...” Prominent exponents of related themes include Edmund Burke, Alexis de Tocqueville, Joseph Schumpeter, Frederick Hayek, and Jurgen Habermas.²

Surprisingly, as we will see, the “markets economize on virtue” response to the parasitic liberalism thesis not only fails to allay the concerns raised by these authors, it contributes to the instability of liberal institutions. The reason is that in tandem with moral crowding out, the comparative advantage of markets over other institutions in governing interactions among self-

² Burke, (1791):64; Burke, (1890[1790]):4-86; Tocqueville, (1945):I 12; II 208, 334-337, 339; Hayek, (1948); Polanyi, (1957):76-77, 177; Habermas, (1975):77, 79; Hirsch, (1976):117-18; Schumpeter, (1950) Some of the relevant passages appear in an appendix to be posted on the author's webpage..

interested actors may set in motion a spiral of market-induced erosion of other regarding and ethical values, which in turn prompts greater reliance on markets, which in turn further erodes values, and so on. The parasitic liberalism thesis is thus a claim about the mutual dependence of society-level institutions and individual preferences and their joint dynamics in the very long run, one which ideally would be studied historically. To do this one would track over the centuries the scope and functioning of markets and other institutions along with various measures of the civic culture and individual values. Data, however, do not permit such a study. But we are able to clarify the causal structure of the thesis using evolutionary game theory, and test a key causal claim – moral crowding out – using recent experimental results from behavioral economics. That is what I will do in the pages that follow.

In the next section I model the joint dynamics of institutional and cultural change, showing the conditions under which the cultural dynamic of liberal society would confirm the parasitic liberalism thesis. Then (in section III) I present evidence that market-like incentives may crowd out ethical motivations, illustrating the parasitic liberalism thesis and the cultural and institutional processes by which it might work. The cross-cultural behavioral experiments presented in section IV, however, cast doubt on the thesis: liberal societies are distinctive in their civic cultures, exhibiting levels of generosity, fairmindedness, and civic involvement that distinguish them from non-liberal societies.

My interpretation of these seemingly conflicting experimental results (section V) is that the idealized view of tradition embodied in the parasitic liberalism thesis overlooks aspects of non-liberal social orders that are antithetical to a liberal civic culture. Thus while markets and other liberal institutions may indeed undermine traditional institutions as claimed, by attenuating familistic and other parochial norms and identities, this may enhance rather than erode the values necessary for a well functioning liberal order. And even if market incentives do crowd out values essential to the functioning of liberal institutions, these effects may be more than compensated by the cultural influence of non-market aspects of the liberal society such as the rule of law and social mobility, thereby sustaining the vibrant civic cultures observed in many liberal societies (section VI). A schematic depiction of the parasitic liberalism thesis, and my alternative explanation of the self-sustaining nature of liberal civic culture is in Figure 5.

When I refer to civic virtues I mean those social norms, ethical commitments and other-regarding preferences that facilitate the workings of the institutions advocated by liberals. Proponents of the parasitic liberalism thesis of course differ on which values are essential in this regard, but the following are commonly held to be among the cultural foundations of a well functioning liberal order: willingness to help others at a cost to oneself (voluntarily paying taxes and contributing to public goods for example) and upholding social norms such as respect for private property, honesty, fair treatment, and political participation even when these do not enhance one's material benefits (Mill, (1998):chapter 3; Rawls, (1971):chapter 8).

By liberal society I mean one characterized by extensive reliance on markets to allocate economic goods and services, formal equality of political rights, the rule of law, public tolerance, and attenuated ascriptive barriers to mobility (in contrast to societies loosely termed “traditional” or more broadly “non-liberal”). In the empirical studies below, examples of liberal societies are Switzerland, Denmark, Australia, the U.S. and the U.K., while examples of non-liberal societies (lacking at least one of the above attributes of liberal societies) are Saudi Arabia, Russia, Ukraine, and Oman as well as the small scale societies of hunter-gatherers, herders and low technology farmers to be considered presently.

II. PARASITIC LIBERALISM

Hume’s often-cited “constitution for knaves” and Kant’s “universal laws” for a “nation of devils” notwithstanding, liberal political theorists have never suggested that virtue is dispensable for the institutions that they endorsed (Kant, (1970) :112-113 Hume, (1898):116-117). For J. S. Mill, among the “causes and conditions of good government,” the “principal of them ... is the qualities the human beings composing the society over which the government is exercised” (Mill, (1919):11). The parasitic liberalism thesis thus does not hold that liberals have ignored the moral underpinnings of their favored social order, but rather that they have provided insufficient reason to think that these necessary virtues will flourish in a liberal environment.

Careful study of the works often said to provide such an account – those of Locke, Mill, and Rawls, for example – does not allay this concern. The great merit of these three authors is that they addressed the problem of the cultural dynamics that might underpin the institutions they advocated. But neither Locke’s appeal to a gentlemanly home schooling (Locke, (1968)), nor

Mill's confidence that citizens in a liberal society will "spontaneously" adopt other-regarding preferences (Mill, (1998):77), nor Rawls' belief that members of just associations will develop "bonds of friendship and trust" and through these "an attachment to the principles of justice" (Rawls, (1971):461,470) provide reasons or evidence to think that these mechanisms entrusted with the perpetuation of liberal values would accomplish that end.

The main conceptual challenge in investigating the claim that the liberal social order is not self-reproducing, but rather depends on the vanishing cultural vestiges of a pre-liberal tradition, is that this requires a model of the joint dynamics of individual preferences and population-level institutions, one in which both institutions and individual preferences are endogenous, each providing conditions that influence the dynamics of the other. Modeling the evolution of institutions or of culture separately is difficult, and capturing the essentials of their joint evolution – the coevolution of institutions and culture – is more than doubly so.

The two foundations of such a model must be a representation of the way that institutions affect the evolution of culture and the way cultures affect the evolution of institutions. With respect to the first, the idea that institutions affect culture is commonly illustrated by the role of families and religious and educational organizations in the socialization process; but it extends to institutions less transparently associated with the evolution of norms, tastes and the like (Bowles, (1998)). Supporting evidence comes from studies of parents' child-rearing values (they value obedience more and independence less if at work they take rather than give orders (Kohn, Naoi, Schoenbach, *et al.*, (1990)). We have also documented the influence of cooperative production (hunting large animals, for example, or the cooperative provision of local public goods) on values supporting cooperating in other settings (Gintis, Bowles, Boyd, *et al.*, (2005).) Guido Tabellini, (2008) provides evidence of a quite different sort: generalized (rather than familial) trust appears to thrive in countries with a long history of liberal political institutions

Tabellini also shows that the reverse relationship also holds: the quality of public institutions is associated statistically with more generalized trust. The effect of culture on institutions arises because the kinds of preferences that are prevalent in a population will influence the comparative advantage of particular institutions. By institutions I mean formal and informal formal rules governing social interactions, from the organization of families and firms to

the structure of government. For example, where values such as reciprocity and fairness are prevalent, organizations based on partnerships may thrive, while in highly self-interested populations production may be carried out in organizations with close and punitive supervision.

Recently developed models of the coevolution of cultures and institutions (Bowles, 2004 #256}, {Belloc, 2010 #13550}) allow a precise formalization of the parasitic liberalism thesis. I simplify by representing institutions by a measure of the extent to which markets (as opposed to other institutions) allocate resources (m), while representing preferences by a single-valued measure of civic virtue (v), where the latter represents the prevalence of norms that contribute in essential ways to the functioning of liberal institutions. The objective of the model is to represent the mutual determination of m and v so as to characterize the pair or pairs $\{m, v\}$, such that both are stationary, that is subject to change only due to exogenous events. These stationary pairs are termed cultural-institutional equilibria. While obviously not representing the thinking of any particular variant of the parasitic liberalism thesis, the structure of the model captures two key ideas. (The following model is represented mathematically in the appendix).

The first is that virtue is crowded out by markets and sustained by traditional institutions, which are in turn diminished by the long-term effects of markets. The parasitic liberalism thesis holds that the kinds of social interactions typical of a society in which market institutions play a major role and traditional institutions do not favors a cultural learning process that is unfavorable to individuals acquiring and retaining the values needed for liberal institutions to function well. Proponents of the thesis have not specified the causal mechanisms by which this process might work, but it is not difficult to suggest a number of plausible candidates (Ben-Porath, (1980)). One is that traditional institutions such as the patriarchal family and religious organizations are the main locus of socialization in the values necessary for the liberal social order. The other is that markets themselves (as well as market-like incentives used by public bodies) reward self-interest and penalize those with other-regarding or ethical values (Bowles, (2004).Hwang and Bowles, (2010)).

For the parasitic liberalism thesis to have force, three relationships must hold. First, crowding out of virtue occurs in markets to a greater extent than in plausible alternative non-market allocation mechanisms. Second traditional (non-liberal) institutions contribute to

sustaining high levels of virtue. Finally, market institutions (or liberal institutions generally) undermine traditional institutions. (These are the three relationships illustrated by the arrows in the top panel of Figure 5.)

The first relationship is illustrated by the downward sloping line in Panel A of Figure 1. Each point on it is a cultural-institutional state characterized by the indicated level of market extent (institutions) and virtue (culture) all for some given extent of traditional institutions. This “markets crowd out virtue” function gives the equilibrium level of values conditional on each of the values of market extent for some given extent of traditional institutions (the arrows indicate that from points above the line values tend to decline and conversely). For example the culture of a society with market extent m' (for the given level of tradition) would be v' . We label this function $v = v(m; \tau(m))$ which says that virtue depends on both the extent of markets and of traditional institutions, where $\tau(m)$ represents the inverse relationship of the current extent of traditional institutions and markets in the past. The second and third relationships key to the parasitic liberalism thesis are illustrated in Panel D; but first we need to introduce the dependence of market extent on the level of values that are prevalent in the population.

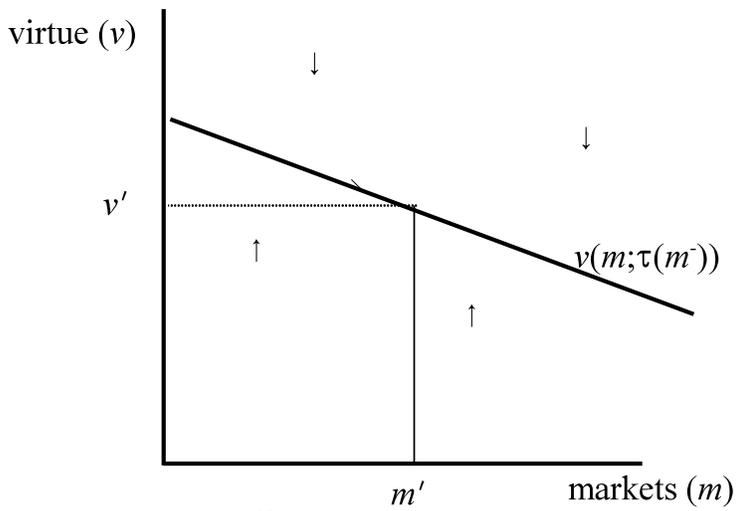
The second key idea – that markets economize on virtue – is not part of the parasitic liberalism thesis *per se* but is necessary to capture the downward cultural-institutional spiral that some of its proponents suggest. This occurs because the extent of the market in allocating resources is determined in a decentralized way by the choices of countless economic agents and it will vary with the cost advantages of markets relative to other institutions that may accomplish the same ends. Thus whether firms produce or purchase a particular component of the product they produce, for example, depends on the supervision and other costs of the direct command relations that distinguish firms from markets and that are entailed by production of the component, relative to the costs of search, bargaining over prices and other costs of using the market (Coase, (1937).) These costs will depend on the ethical, self-interested and other motives of those involved.

As a result, the level of values will influence the extent of the market; and because of the comparative advantage in governing interactions among entirely self-interested individuals enjoyed by markets (relative to bureaucracies, families and other institutions), the relationship is

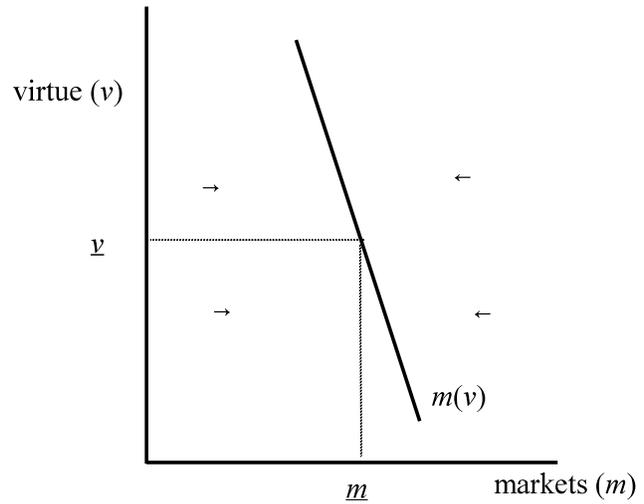
inverse: higher levels of values being associated with a reduced extent of the market. This “markets economize on virtue” relationship is illustrated by the downward sloping line in Panel B of Figure 1. We label this function $m(v)$. Thus for any given level of virtue (say, \underline{v}) there is an equilibrium extent of the market (\underline{m}) that is stationary, in the sense that no actor with the capacity to alter the extent of the market may benefit from doing so. As in Panel A the arrows indicate the direction of change out of equilibrium, the extent of markets shrinking when they exceed the level indicated by the function and expanding when the reverse is true.

Because we want to know the conditions under which both culture and institutions will be stationary, we are interested in a state that is common to both functions, namely the intersection of the two lines representing relationships labeled “markets crowd out virtue” and “markets economize on virtue.” The joint influence of these two relationships shown in Panel C of Figure 1 gives us the equilibrium values of the level of virtue and extent of the market the pair $\{v^*, m^*\}$ where these represent what is termed a temporary equilibrium, that is one defined for a given value of traditional institutions.

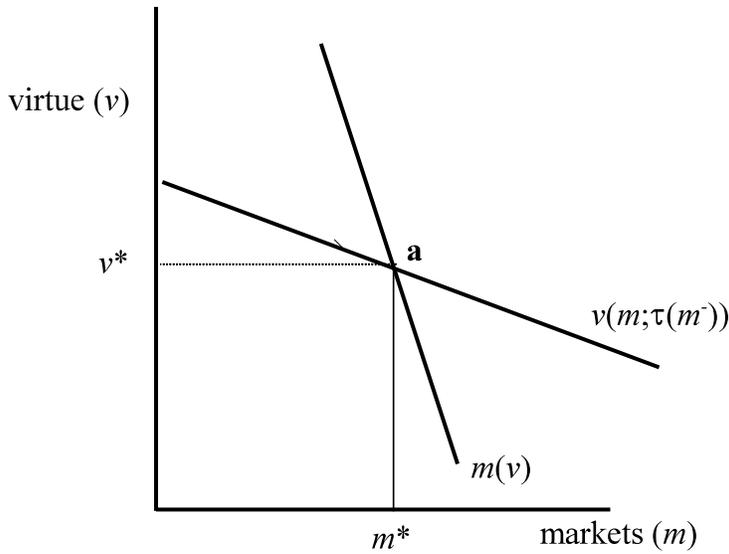
The long-term effects of markets on tradition and thereby on virtue are shown by the dashed lines in the final panel of Figure 1. Recall that the line $v = v(m; \tau(m^-))$ – the crowding out function – says that the level of virtue in any period depends inversely on the current extent of the market as well as on traditional institutions, which in turn depend (also inversely) on the extent of the market in the past. This captures the parasitic liberalism thesis: the cumulated effects of markets undermine traditional institutions, and as a result the temporary equilibrium level of virtue for any given extent of the market deteriorates over time, leading to a downward drift in the crowding out function. The result (in temporary equilibrium) is to increase the dependence on the market and diminish virtue, compromising institutional functioning and leading over time to the gradual displacement of the initial cultural-institutional temporary equilibrium (a) under the influence of the deleterious long term effects of markets on tradition. Note that a downward shift in the function of a given magnitude results in an even larger downward displacement of the cultural-institutional equilibrium due to the reciprocal effects of the markets economize on virtue and the resulting downward spiral. In the case illustrated, the spiral converges to a particular value (for a given level of tradition), but it need not.



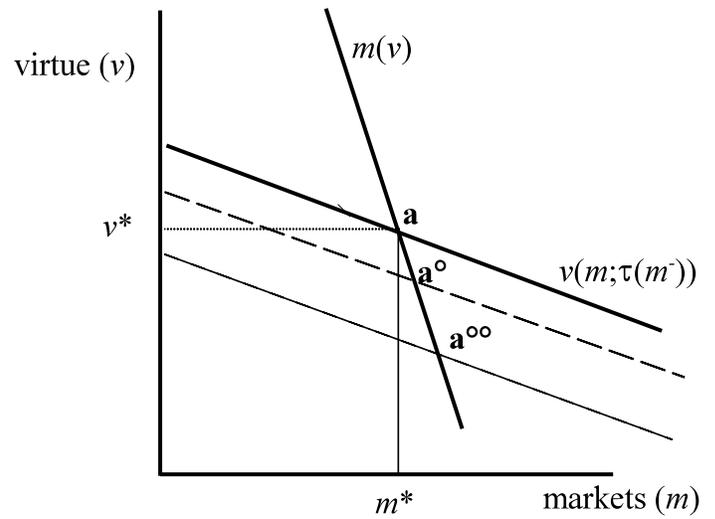
A: Crowding out



B: Markets economize on virtue



C: A temporary cultural-institutional equilibrium



D: The Long-run Erosion of tradition

Figure 1: Parasitic liberalism: A temporary cultural-institutional equilibrium and the long-term effects of market-induced erosion of tradition. Arrows indicate the direction of adjustment. Panel A: the effect of the extent of markets on virtue. Panel B. The effect of virtue on the extent of markets. Panel C: A temporary cultural-institutional equilibrium (for a given extent of traditional institutions). The state $\{v^*, m^*\}$ indicated by point **a** is a cultural-institutional equilibrium that is also stable (a chance displacement away from **a** is self-correcting, as the arrows show). Panel D. The long run effect of the induced demise of tradition; institutions on the equilibrium levels of both virtue and market extent. Dashed lines indicate the effect of the current extent of the market in subsequent periods operating via the effect of markets on traditional institutions, displacing the cultural-institutional equilibrium to points a° , $a^{\circ\circ}$ and so on.

The dynamic illustrated by Panel D (and an alternative formulation in Appendix 2) is a mathematical representation of the parasitic liberalism thesis, namely the existence of a configuration of values and market extent that erodes tradition leading to a displacement of the cultural-institutional equilibrium to one with a lesser levels of civic virtue and greater reliance on markets and characterized by a reduced level of economic output. There is some evidence in its favor.

III. EXPERIMENTAL EVIDENCE: MARKET-LIKE INCENTIVES MAY CROWD OUT MORAL MOTIVES

Measuring values is a notoriously difficult task, and the cross-cultural empirical study of civic virtues presents additional challenges. Differences across cultures in responses to wide-used survey self-reports confound differences in the responders' preferences with differences in self-presentation concerns or in the objective situation of the respondent, and moreover are sensitive to subtle differences in wording (which are unavoidable in cross cultural research due to language differences). Consider, for example, the standard survey question said to measure an individual's level of trust: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" An individual – one with some given amount of underlying trust of others -- would answer this question quite differently depending on where the individual lived. However, one may infer values indirectly from behavior in experiments involving real material stakes and in which the decision structure facing individuals is identical across cultures. The fact that experimental subjects play anonymously is also valuable, as the civic virtues in question are not confined to behavior towards family members and friends, but must extend to unknown fellow citizens.

Here I survey evidence from both natural and laboratory experiments consistent with the claim – integral to the parasitic liberalism thesis – that markets undermine ethical motivations. The experimental games referred to are listed in Figure 2 along with the values they measure.

In Haifa, at six randomly chosen day care centers, a fine was imposed on parents who were in picking up their children at the end of the day (in a control group of centers no fine was imposed). Parents responded to the fine by significantly greater tardiness: the fraction picking up their kids late more than doubled. When after 16 weeks the fine was revoked, their enhanced

tardiness persisted, showing no tendency to return to the *status quo ante*. Over the entire 20 weeks of the experiment, there were no changes in the degree of lateness at the day care centers in the control group. The counter-productive imposition of the fines illustrates crowding out: using a market mechanism (the fine) appears to have undermined the parents' sense of ethical obligation to avoid inconveniencing the teachers (Gneezy, (2003)). A total of forty-three further experiments to date illustrate the crowding out of ethical motives (Bowles and Polanía Reyes, (2010).)

<i>Game</i>	<i>pp.</i>	<i>Values measured</i>
One-shot Prisoner's dilemma		Player's reciprocity conditional on their beliefs about the actions to be taken by the other; effect of market framing on values
Gift exchange		Reciprocity and expectations of reciprocity
Trust (with and without fines)		Investor: generosity or expectations of reciprocity. Trustee: reciprocity
Dictator		Unconditional generosity
Third-party Punishment		Third party: willingness to pay to punish violations of fairness in the treatment of others
Ultimatum		Proposer: unconditional generosity or belief in the fairmindedness of the Respondent. Respondent: fairness, reciprocity
Repeated Public Goods		Altruism, reciprocity conditioned on the past actions of others
Public Goods with Punishment		Contributor: unconditional generosity or belief in the willingness of others to punish unfairness, shame when violating a social norm, . Punisher: fairness, reciprocity

Figure 2. Values indirectly measured in experimental games. The indicated values provide plausible explanations of experimental behavior when this differs from what behavior expected of an individual seeking to maximize game payoffs (and believing others to be doing the same). The second column gives the page numbers on which the structure of each game is explained.

While these experiments are consistent with the parasitic liberalism thesis, better evidence would include a causal account of ethical crowding out that would indicate if it occurs

because market-like incentives reduce the motivational salience of traditional values sustained by institutions said to be endangered by liberalism. A laboratory experiment with a version of the Trust Game provides some clues. German students in the role of "investor" chose a costly action benefitting the other player, called the "trustee," who, knowing the investor's choice, could in turn provide a personally costly "back-transfer," returning a benefit to the investor (Fehr and Rockenbach, (2003)). When the investor transferred money to the trustee, he or she also specified a desired level of the back-transfer. The experimenters implemented an incentive condition in which the investor had the option of declaring that he would impose a fine if the trustee's back-transfer were less than some declared amount. The investor could also decline the use of the fine, the choice of using or declining the fine option being taken prior to the trustee's decision. There was also a "trust" condition in which no such incentives were available to the investor. In the experiment, trustees reciprocated generous initial transfers by investors with greater back transfers. But the use of the fine reduced return transfers conditional on the investor's transfer, while renouncing the use of the fine when it was available to the investor increased back transfers. Only one-third of the investors renounced the fine; their payoffs were 50 percent greater than the investors who threatened use of the fines.

The proximate causes of the negative impact of incentives in this case are suggested by evidence on the neural responses of the trustees in a Trust Game (Li, Xiao, Houser, *et al.*, (2008)). As in the experiment of Fehr and Rockenbach, (2003) the investor's threat of sanctions negatively affected back transfers by trustees. To identify the proximate causes of this result, Li and his co-authors used functional magnetic resonance imaging (fMRI) to compare the activation of distinct brain regions of trustees when faced with an investor who had threatened to sanction the trustee for insufficient back transfers and an investor who had not threatened a sanction. Threatened sanctions de-activated the Ventromedial Prefrontal Cortex (a brain area correlated with higher back transfers in this experiment) as well as other areas relating to the processing of social rewards. The threat activated the parietal cortex, an area thought to be associated with cost-benefit analysis and other self-interested optimizing. The interpretation by Li and his co-authors is that the sanctions induced a "perception shift" favoring a more self-interested response.

More direct evidence on the causes of crowding out is provided by a large team of anthropologists and economists who implemented both Dictator and Third Party Punishment Games in 15 societies ranging from Amazonian, Arctic and African hunter gatherers to manufacturing workers in Accra, Ghana and U.S. undergraduates (Barr, Wallace, Ensminger, *et al.*, (2009) , Henrich, Ensminger, McElreath, *et al.*, (2009) .) In the Dictator Game an experimental subject (the dictator) is assigned an “endowment” of money by the experimenter and asked to allocate some, all, or none of it to a passive recipient. Then the game ends (the recipient taking home the dictator's offer and the dictator taking home the rest). The Third Party Punishment Game is a Dictator Game with an active onlooker (the third party) who observes the dictator's allocation. If the third party deems the dictator's allocation worthy of punishment he or she may then pay (also from an endowment provided by the experimenter) to impose a monetary fine on the dictator. The game then ends: the dictator keeps the part of the endowment that was not allocated to the respondent minus the fine imposed by the third party(if any), while the respondent keeps the amount allocated by the dictator. The third party “onlooker” keeps the initial endowment minus any amount spent fining the dictator.

Because of the monetary incentive to be generous, one would expect more generosity in the Third Party Punishment Game. The presence of a third party should induce dictators to adjust their allocations upwards (compared to the Dictator Game), the desire to avoid the material cost of the fine supplementing whatever generosity or fairmindedness motivated the dictator to share with the recipient in the absence of this incentive. Surprisingly, in only two of the 15 populations were the dictators' offers significantly higher in the Third Party Punishment Game than in the Dictator Game, and in four of the populations the allocations were significantly (and in some cases substantially) lower. In Accra, for example, where 41 percent of the dictator's allocations resulted in fines by the third party, the allocations were 30 per cent *lower* ($t = -6.8$) in the Third Party Punishment Game than in the Dictator Game. The incentives provided by the fine did not induce higher allocations, but rather had the opposite effect.

Experimental design typically does not provide sufficient information to allow investigation of the reasons why explicit incentives had the unintended effect. But in this case we can say something about the underlying causal mechanisms. Crowding out of specifically ethical

motives is suggested by the following comparison. Pooling the 15 subject populations, in the standard Dictator Game, the dictator's adherence to one of the world religions (Islam or Christianity, including Russian Orthodoxy) raised allocations by 23 percent ($t = 3.5$), compared to those unaffiliated with a world religion. But in the Third Party Punishment Game with the very same individuals, this estimated "religion effect" was one tenth as large and was not significantly different from zero. In the Accra sample, the dictator's allocation in the Dictator Game was strongly correlated with his or her frequency of attendance at church or mosque; but this "religion effect" vanished in the Third Party Punishment Game. The presence of the incentive based on the fine appears to have defined the setting as one in which the moral teachings of these religions were not relevant. Tellingly, the self-reported economic circumstances of the dictator (reflecting his or her own need for income) did not predict offers in the standard Dictator Game, but were very salient (and statistically significant) in the Third Party Punishment Game: needy dictators gave less. The presence of the economic incentive (the fine) apparently substituted economic interest for religious values.

While far from adequate, there is thus some empirical evidence consistent with the main causal claim of the parasitic liberalism thesis that market-like incentives may crowd out ethical motivations.

IV INDIVIDUALISM AND CIVIC VIRTUE

But the parasitic liberalism thesis does less well in a direct test: by most measures liberal societies appear to have more flourishing civic cultures. As the result of three large cross-cultural behavioral experiments we now have behavioral measures across a broad range of economic and political systems concerning individuals' cooperativeness, fair-mindedness and other predispositions commonly considered to among the civic virtues. In addition to the Third Party Punishment Game, Dictator Game, and Trust Game mentioned above, the Ultimatum Game, and the Public Goods with Punishment Game (described below) also provide behavioral measures of generosity, willingness to sacrifice personal benefits to uphold fairness and other social norms and to contribute to a public good. These three studies provide no evidence that liberal institutions endanger civic virtue; indeed they present evidence that these values flourish

in liberal societies, though to varying degrees. The idea that pre-liberal tradition underpins the civic virtue essential to the functioning of liberal institutions finds little support in these data.

The most surprising evidence comes from the experimental Ultimatum Game played by subject pools in 15 isolated small-scale societies (Henrich, Boyd, Bowles, *et al.*, (2005), not the same 15 as in the study just described). In this game subjects are anonymously paired for a single interaction. One is the “responder,” the other the “proposer.” The proposer is provisionally awarded an amount (‘the pie’), known to the responder, to be divided between proposer and responder. The proposer then offers a certain portion of the pie to the responder. If the responder accepts, the responder gets the proposed portion, the proposer keeps the rest, and the game is over. If the responder rejects the offer both get nothing and the game is over. Entirely self-regarding proposers who believe that respondents are also self-regarding will anticipate that no positive offer will be rejected and so will offer the least possible amount. This rarely has been observed in literally hundreds of experiments in dozens of countries.

In our study of hunter-gatherers, herders, and low technology farmers (horticulturalists), the groups with greater exposure to markets on average both made more generous offers as proposers in the Ultimatum Game and were more willing as respondents to reject low offers and as a result receive nothing rather than accept a highly unequal division of the pie. The two least market-exposed groups – the Tanzanian Hadza hunter gatherers and Amazonian Quichua horticulturalists – offered a quarter and a third of the pie (respectively) in contrast to the highly market-integrated Indonesian Lamalera whale hunters, who offered on average more than half of the pie to the respondent. Considering all of the groups, a standard deviation difference in market exposure was associated with about half a standard deviation increase in the mean Ultimatum Game offer.

A second phase of this project studied primarily rural peoples in Africa, Oceania, and South America (Henrich, McElreath, Barr, *et al.*, (2006), Henrich, (2010)) . (This is the project that produced the evidence about the crowding out of religion in the Third Party Punishment Game in Accra). The correlation of Ultimatum Game offers and the extent of market exposure found in the first phase was reproduced in the second phase (of approximately the same

magnitude), and a similar positive market correlation was found for offers in the Dictator Game and the Third Party Punishment Game.

These results might surprise a proponent of the parasitic liberalism thesis because it appears here that markets induce a kind of generosity by the proposer or anticipation of fairmindedness on the part of the respondent. But they are not inconsistent with the experimental evidence that I presented in the previous section in its support. The same Accra workers for whom monetary incentives apparently reduced the salience of religion and resulted in less generous behavior were among the most market exposed in this study (they acquired all of their food by purchase) and also among the most generous, offering well above the average of the 15 subject pools in the Dictator and Ultimatum game.

Unlike the first phase, the second included one market-based liberal society: a rural population in Missouri (USA). We can gauge the Missourians' fairmindedness in the Ultimatum Game by the minimum offer (fraction of the pie) that they reported (at the outset of the game) that would accept (this is also the amount the subject is willing to forgo in order not to accept an unfair offer.) This so called minimum acceptable offer (MAO) thus captures at once the subject's "willingness to pay" for fairness and the least advantageous division of the pie that the subject considers to be fair enough to not reject. The Missourians' MAO was the third highest among the 15 subject pools. Controlling for subjects' age, sex, schooling, and the average income, the Missourians minimum acceptable offer was 2.6 times the average of the other groups, and 2.4 times the MAO of the famously egalitarian Hadza hunter-gatherers (Woodburn, (1982).) In the Dictator Game, virtually all of the Missourians offered half the pie, making them the most generous of the populations (the Hadza subjects offered a quarter, on average).

More comprehensive evidence and (as we will see in the next section) an idea that may explain the empirical challenges to the parasitic liberalism thesis come from experiments with an usually diverse set of (also coincidentally 15) subject pools including some from quintessentially liberal societies (U.S., U.K., Switzerland, Germany, Denmark, Australia) and others (Turkey, Russia, Saudi Arabia, China, Oman, South Korea). Cultural differences among these subject pools may be somewhat attenuated, however, because (unlike the previously-mentioned field experiment studies) the subjects are university students (Herrmann, Thoni, and Gaechter,

(2008a)). The common experiment implemented (by the same experimenter) in these sites is a Public Goods with Punishment Game.

This is a modification of the Public Goods Game, an n-player prisoners' dilemma thought to capture the structure of many so called social dilemmas – payment of taxes, participating in political activities, reducing one's environmental impact – in which individual and group interests conflict. The n players are each given an “endowment” and given the opportunity anonymously to contribute some, all or none of this to a common pot (the public good), the amount in which (after all the contributions are made) is doubled or tripled and then distributed in equal parts to the players irrespective of the amounts they contributed. This describes a public goods game if the group size and the multiplication factor is such that the individual would maximize payoffs by contributing nothing irrespective of what the others do, and yet that total payoffs (summing over the group) are maximized if everyone contributes the entire endowment. (For example if there are 5 members of the group and the multiplication factor is two, then by contributing 1 to the public pot one would receive $2/5$ which clearly does not justify foregoing the 1; yet if everyone contributed 1, then each would receive 2).

The punishment modification of this game is that after all players have made the allocation to the common pot, each is provided with information about the contributions of each other player (the identities are not given, just an ID number known only to the experimenter) and given the opportunity to pay (reduce one's own payoff) in order to reduce that of any other member in the group. This procedure is followed on each of the rounds of the game (often ten)

This game provides information on three behavioral dispositions that may be considered to be civic virtues: willingness to contribute to a public good (public generosity) and to penalize those who do not (upholding social norms) both at a cost to oneself, and the degree of positive response to punishment by others (shame at one's violation of a social norm). Where all three of these dispositions are present, contributions to the public good will be substantial.

As expected, cultural differences among the subject pools were significant, but in all of them (as is common with other experiments (Fehr and Gaechter, (2000)) subjects contributed substantial amounts in the first period. But in the absence of the punishment option, in subsequent periods cooperation unraveled. However (also as expected from other experiments)

when the punishment option was available it was widely used, especially in the early periods, and as a result the unraveling of contributions did not occur in any of the 15 subject pools. In the experiment with punishment, the subject pools with the highest average contributions were (in order) Boston, Copenhagen, St. Gallen (Switzerland), Zurich, and Nottingham; the lowest average contributions were in Athens, Riyadh, Muscat (Oman), Dnipropetrovs'k (Ukraine) , and Samara (Russia).

Average contribution levels in the subject pools correlated positively with measures (for the populations from which the subjects were drawn) of the rule of law ($r = 0.53$), democracy ($r = 0.54$), individualism($r = 0.58$), and social equality ($r = 0.65$). Positive correlations were also found, as expected, with survey measures of trust ($r = 0.38$). These and the statistics reported below are calculated from data in Herrmann, Thoni, and Gaechter, (2008b). (Definitions of the measures and a table of their values are in appendix 3.)

Individually costly voluntary contribution to a public good to be shared with strangers is surely a measure of the civic virtues upon which a liberal social order is said to depend. That these contributions are greater in nations characterized by individualism, rule of law, social equality and democracy is puzzling, but whatever its explanation, it is not consistent with the parasitic liberalism thesis. Understanding why these correlations occur will cast further doubt on the thesis.

V. ORDER IN LIBERAL AND LINEAGE-SEGMENTED SOCIETIES

The difference between the cooperating and free-riding subject pools in the cross cultural study just described is due to the use of punishment and the response to being punished. In the experiment without the punishment option, subjects in Samara, Dnipropetrovs'k and Muscat contributed more than those in Boston, Nottingham and Zurich. In many societies a significant amount of punishment was directed not only at shirkers but also at high contributors. The latter may have occurred as a vendetta-like retaliation against punishment received in earlier rounds by subjects who believed that it was the high contributor who were doing most of the punishment (Figure 3.) The authors termed punishment of those contributing the same or more than the subject "anti-social punishment." Other experiments have found the same patterns.

The extent of anti-social punishment was significantly and inversely correlated with the previously mentioned societal measures of the rule of law ($r = -0.53$), democracy ($r = -0.59$) individualism ($r = -0.63$), social equality ($r = -0.72$). In the five high-contributing subject pools mentioned above, shirkers who were punished responded by significantly increasing their contributions in subsequent periods. In only one of the 5 low contributing subject pools did shirkers respond positively to punishment (in four the response was not significantly different from zero.)

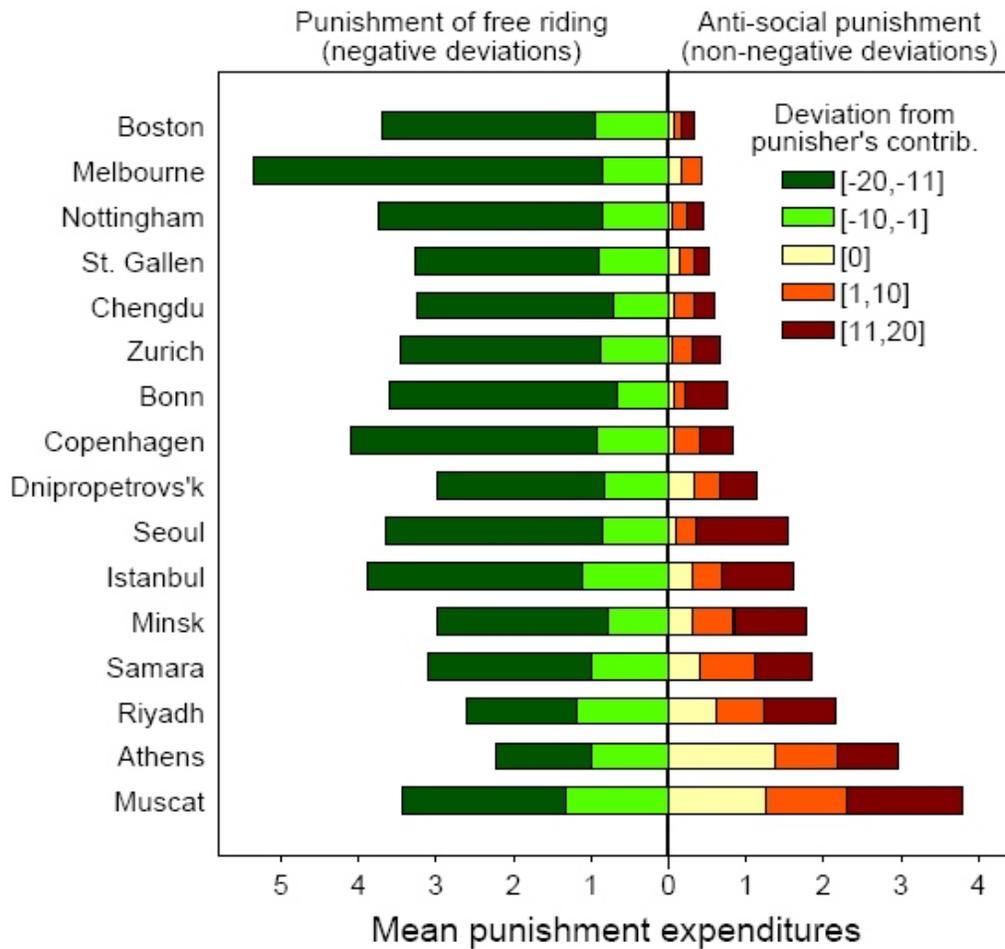


Figure 3. Anti-social punishment in a public goods game. Bars to the left of 0 indicate the extent of punishment of those who contributed less than the punisher. To the right are punishments targeted on those who contributed the same (light grey) or more (darker shades) than the punisher. The very high level of anti-social punishment in Athens (Figure 2) is remarkable,

but not surprising in view of these correlations: by these measures Athens is very different from the top-contributing liberal locations and most similar to Seoul.

A plausible explanation of the differing uses of punishment and reactions of its targets is that punishment works only if it is regarded as legitimate, conveying the signal that the target has violated widely held norms. It appears that punishment of free riders – even by complete strangers – is legitimate and evokes shame, not anger, in Boston and Copenhagen but it not in Muscat and Samara. The experimental exploration of the effect of legitimacy on the efficacy of punishment by Ertan, Page, and Putterman is consistent with this interpretation. Prior to playing the public goods game, each group of experimental subjects in Providence (USA) was invited to deliberate and vote on whether punishment should be allowed and if it should be restricted in any manner. Here is what they found: “no group ever allowed punishment of high contributors, most groups eventually voted to allow punishment of low contributors, and the result was both high contributions and high efficiency levels” (Ertan, Page, and Putterman, (2009).) Apparently the determination of the punishment system by majority rule made the punishment of shirkers not only an incentive but also a signal of group norms.

This result suggests the following hypothesis to explain the contrasting levels of cooperation sustained by peer punishment in experiments with subject pools from liberal and other societies. Consider the structure of what anthropologists call a lineage-segmented society. Lineages are the fundamental social unit, composed of families sharing a (perhaps quite distant) common ancestor and performing essential functions of risk pooling and redistribution. These segments are also responsible for the moral instruction and behavior of their members, and for the appropriate rectification of any transgressions towards members and non-members alike, including punishment and compensation where appropriate (Mahdi, (1986), Boehm, (1984).) Punishment by a non-member for a member’s misbehavior may itself be considered a transgression, requiring rectification or inviting retaliation. Ernst Gellner’s description of pastoralists as “a system of mutually trusting kinsmen” is an example. These are “strong, self-policing, self-defending, politically participating groups...They defend themselves by means of indiscriminate retaliation against the group of any aggressor. Hence they also police themselves and their own members, for they do not wish to provoke retaliation.” (Gellner, (1988):144-145)

By contrast, in liberal societies the tasks of moral instruction and the maintenance of order are routinely entrusted to individuals who are unrelated and at least initially unknown to those who they teach, police, and judge. Inverting the moral code of lineage segmented societies, the legitimacy of these teachers and police and court officers is based on their anonymity and lack of relationship to those with whom they interact, enhanced by their uniforms, degrees, and official titles acquired (at least ideally) through a process of fair competition. Perhaps this explains why when Boston subjects who contributed less than the average in the public goods game were punished, they substantially increased their contributions, while under the same conditions subjects in Dnipropetrovs'k actually reduced theirs (though not by a significant amount). While the incentive to contribute more was no doubt salient in both cases, the signal differed. Boston subjects may have read the fine as disapproval by fellow citizens, while for those in Dnipropetrovs'k it was an insult.

This hypothesis has yet to be tested empirically; but if it were found to have merit, it would direct attention not to the cultural consequences of markets, but rather to liberal political and judicial institutions as the key to liberal civic culture.

VI. A LIBERAL CIVIC CULTURE.

Liberal states have neither the information nor the coercive reach to eliminate opportunism and malfeasance, but they can protect citizens from worst-case outcomes, whether these be personal injury, loss of property or other calamities. The result, writes Norbert Elias, (2000) is a "civilizing process" based on the fact that "the threat which one person represents for another is subject to stricter control...everyday life is freer of sudden reversals of fortune [and] physical violence is confined to the barracks..." This attenuation of calamity is accomplished through the rule of law, occupational and other forms of mobility, and (in the past half century or so) by social insurance.

A result is to reduce the value of those familial and parochial ties on which lineage-segments and other traditional identities are based, thereby creating a cultural environment favorable to the evolution of more universal norms that apply to strangers as well as family and clan, and may favor a greater interest in participating in democratic political activities, such as

signing petitions or participating in demonstrations or boycotts. The strong inverse association between these indicators of democratic practice and measures of the extent of one's obligation to respect and care for one's children and parents in a large sample of immigrants to Europe is consistent with this view (Alesina and Giuliano, (2009).)

Not surprisingly the emergence of the rule of law appears to be associated with a parallel shift from trust in kin and other particular individuals to generalized trust, consistent with Toshio Yamagishi's "emancipation theory of trust" (Yamagishi, Cook, and Watabe, (1998), Yamagishi and Yamagishi, (1994), Gambetta, (2008), Tabellini, (2008).) An example is the 11th century Mediterranean trading system, which witnessed the eclipse of familial, communal and other parochial systems of so-called "collectivist" contract enforcement by more universalistic state-based "individualist" systems (Greif, (1994).) Because markets also flourish under these conditions (especially the protection of individual property under the rule of law), market-based societies may exhibit high levels of civic culture.

The relationship of markets to liberal civic culture may not be not entirely accidental, however, as a case can be made that the spread of markets did contribute to the emergence of representative states with limited executive powers (which if the above argument is correct, favored the evolution of generalized trust), and to national systems of schooling-by-strangers, what Gellner termed exo-socialization (Gellner, (1983)). Indeed Gellner argues convincingly that markets could regulate a division of labor at the national level only if the multiplicity of parochial traditional cultures were replaced by more universal values consistent with the extensive interaction with strangers in market environments. The national standardization of language and culture facilitated occupational and geographical mobility, rendering individuals' income-earning assets less specific to place and craft and thereby complementing the other literal and defacto forms of insurance provided by liberal institutions (D'Antoni and Pagano, (2002).)

The rule of law and other aspects of liberal society that insure against worst-case outcomes not only undermine the value of familial and parochial loyalties; they may also free people to act on their social preferences by assuring them that those who conform to moral norms will not be exploited by their self-interested fellow citizens. This is most probably the motivational mechanism underlying the few experiments in which material incentives and moral motives were

complements rather than substitutes, the former enhancing the salience of the latter. This crowding in effect of the rule of law is evident among the Hokkaido University subjects who cooperated more in a public goods experiment when assured that others (but not themselves) would be punished if they did not contribute sufficiently, despite the fact that this had no effect on the subjects' own material incentives (Shinada and Yamagishi, (2007)). Similar synergies occur in natural settings: social norms support observance of traffic regulations, but these may unravel in the absence of state-imposed sanctions on flagrant violations.

While this risk-reduction aspect of the liberal state effects the entire panoply of social interactions, I will illustrate it by the case of market exchange. Consider a population composed of a large number of people who interact in pairs to engage in an exchange in which they may either behave opportunistically (e.g. steal the other's goods) or exchange goods to their mutual benefit. Call these strategies "defect" and "cooperate," with payoffs describing an assurance game, as in the top payoff matrix in Figure 4. Expected payoffs for cooperators and defectors are π_C and π_D and they are both increasing in the probability (p) that one's partner is a cooperator as shown in the right panel of Figure 4

The important feature of the payoff matrix is that a defector takes the goods of the cooperator, but at some cost, so that cooperating is a best response to being paired with a known cooperator. Defecting is always the best response to a defector. Though mutual cooperation (and exchange) maximizes total payoffs (and, due to the symmetry of the game, also the individual payoffs for both individuals), a trader paired with a unknown stranger would defect in the absence of a reasonable assurance that the stranger is a cooperator. What is the smallest value of p (the probability that one's partner is a cooperator) such that the payoff to cooperating exceeds that to defecting? We can see from Figure 4 that one would have to believe that this is the case with a probability not less than p^* (which given the payoffs in the top matrix and in the figure the solid lines is two thirds) in order for cooperating to be the payoff-maximizing strategy. Where p^* is substantial and information about one's trading partner minimal, mutual defection would result, replicating the common condition in most of human history, namely that strangers represent dangers, not opportunities for mutual benefit. The rule of law reduces the critical value of p to \bar{p} (equal to one-third) so that a trader thinking that the partner is equally likely to be a cooperator

or a defector would cooperate.³ Thus the rule of law could promote the spread of trusting expectations and hence of trusting behavior in a population.

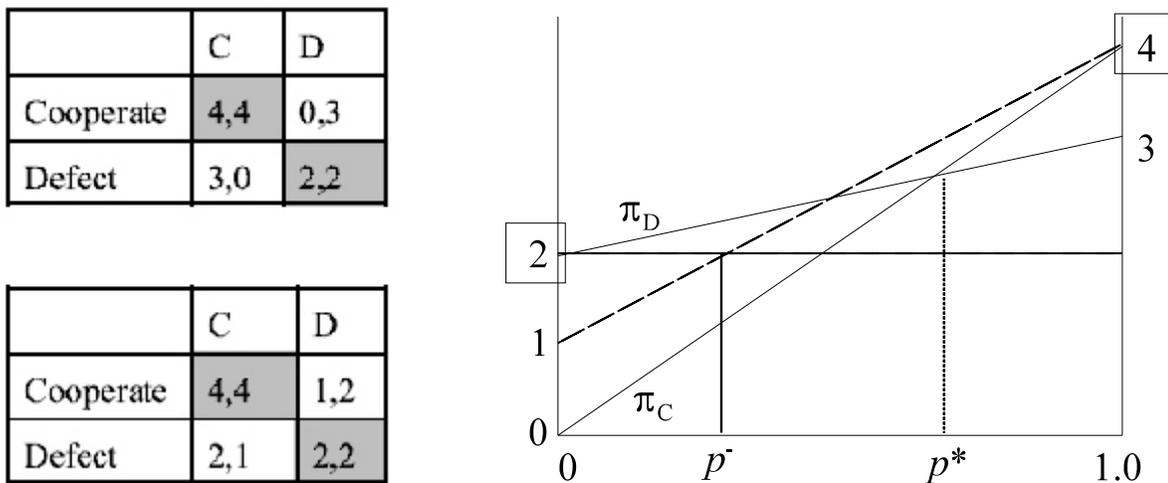


Figure 4. The rule of law and cooperative norms. Left panel: payoffs in the exchange game (upper without, lower with rule of law); right panel expected payoffs based on the type of one’s partner (solid lines without, dashed lines with rule of law). The two Nash equilibria are mutual defect and mutual cooperate (shaded cells in the payoff table, boxed payoffs in the right panel). Because in the absence of the rule of law, the critical value, p^* , exceeds one half, defection maximizes the expected payoffs of an individual who believes that his or her partner is equally likely to cooperate or defect (this called the risk dominant strategy.) In a large randomly paired population, p^* is termed the risk factor of the cooperative equilibrium, the robustness to instability of which is measured by $1-p^*$. The rule of law (dashed lines) makes cooperating the risk dominant equilibrium, meaning the outcome in which each individual plays the risk dominant strategy.

³ Rawls, (1971) provides a different mechanism: “when it is dangerous to stick to the rules when others are not” (p. 336) “public institutions” may penalize defectors, thereby reducing their numbers, lowering the probability that a cooperator will be exploited by a defector, and so minimizing appeal to the would-be cooperator of pre-emptive defection as a risk minimizing strategy. But if public institutions are sufficient to deter defection directly, the result would be the same whatever the frequency of cooperative individuals in the population.

VII. CONCLUSION

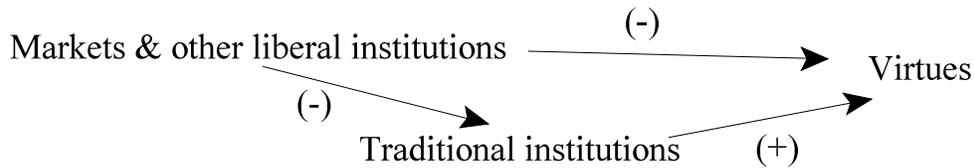
If the interpretation offered here can be sustained by more adequate empirical investigation, the parasitic liberalism thesis fails not because it misunderstands the cultural consequences of markets or the tendency of liberal institutions to erode traditional institutions and cultures, but rather because it overrates the benign contribution of tradition to the moral underpinnings of liberal institutions, and underrates the contribution of the liberal state and other non-market aspects of liberal societies to the flourishing of these values.

If this reasoning and that of the previous sections is correct then we need to revise the model of parasitic liberalism in Figure 1. Instead of tradition being essential to liberal institutions yet endangered by their functioning, we need to account for the cultural and institutional effects of the non-market aspects of the liberal social order. By defining and enforcing property rights, the rule of law may increase the scope of markets at a given level of virtue (shifting the “markets economize on virtue” function to the right). But if my interpretation of the evidence is correct, there are two compensating cultural effects. First, the rule of law, exo-socialization, cultural standardization and mobility enhance the level of virtue for any level of markets (shifting the “markets crowd out virtue” function upwards.) Second, the fact that traditional institutions are undermined may, on balance, contribute to rather than undermine the values on which the functioning of liberal institutions depend. The result is to increase either or both the equilibrium level of virtue and the extent of markets. A schematic summary of both the parasitic liberalism thesis and the alternative theory of the liberal civic culture appears in Figure 5.

This model, suitably extended, might account for the flourishing of civic culture found in some market-based societies. If true, on these grounds one would also expect that among liberal societies, the more market oriented (meaning those with greater values of m for any given v) will support lesser levels of civic virtue. While not an adequate test, this hypothesis finds some support in the decline in measures of trust and civic engagement in the U.S. and the opposite in continental Europe (Bartolini, (2009) Sarracino, (2009)). Indirect evidence consistent with the predicted inverse relationship between virtue and the extent of markets is found in the fact that the U.S., perhaps the most market-based of the advanced economies, also excels in the fraction of its labor force devoted to what Jayadev and I call guard labor, namely, that devoted to (or the

consequence of) maintaining order (Jayadev and Bowles, (2005) and Bowles and Jayadev, (2007)).

A. Parasitic liberalism



B. A liberal civic culture

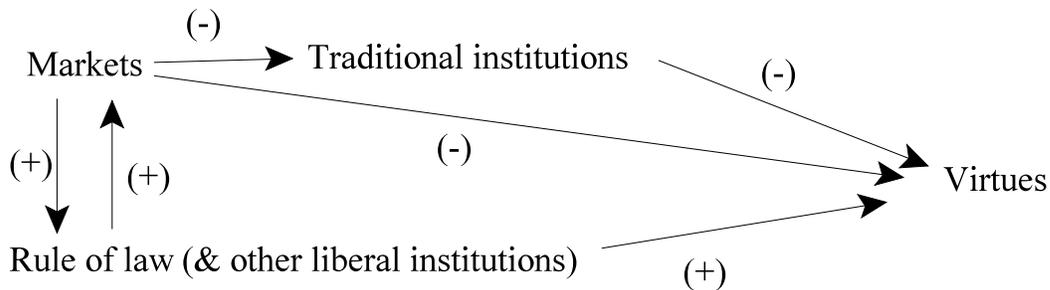


Figure 5. The causal structure of the parasitic liberalism thesis and an alternative. “Virtues” represent the individual social norms and ethical commitments that are necessary for the proper functioning of markets and other liberal institutions. Arrows labeled (+) indicate a positive causal impact (variations in the source of the arrow result in variations in the same direction in the target of the arrow). Arrows labeled (-) are negative causal effects.

While the parasitic liberalism thesis is thus not supported, the result is hardly an endorsement of laissez faire, even under the idealized assumptions usually sufficient to vindicate unregulated markets. The interaction of culture and institutions modeled here implies that once the joint dynamics of culture and institutions is taken into account, the idealized conditions – perfect competition and complete markets in all economic goods and services (meaning the absence of such things as pollution and other environmental spillovers) – under which the

Arrow-Debreu “invisible hand theorem” holds are insufficient to support the claim that all competitive equilibria are efficient (in the Pareto sense). Remarkably, this is true even if the decentralized decisions that result in the extent of the market (described in section II above) perfectly reflect the relevant trade offs of using the market rather than alternative institutions so as to minimize the costs of doing business given the prevailing values in the society, in the manner described by Coase, (1960) and Coase, (1937). The reason is that in devising institutional solutions for the governance of economic transactions and other social interactions, individuals do not take account of the influence of their choices on society-wide long term cultural evolution. When markets crowd out values that underpin effective governance they thus generate a cultural analogue to environmental spillovers. As a result, given a status quo of idealized “surplus maximizing” Coasean institutional choice, there will exist some restriction of the scope of markets that will increase economic output (as conventionally measured). (A proof of this proposition is in the appendix). Note that this “cultural market failure” places no normative weight whatsoever on values per se; the market failure occurs because markets under-provide values that contribute to economic output, much as the private economy under-provides public goods such as basic scientific knowledge and environmental amenities.

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Appendices for Is liberal society a parasite on tradition?

Samuel Bowles
9 September, 2010

Note: these appendices are not for publication but will be available (with other background material related to this paper) to referees and others on a web page

- 1. Parasitic Liberalism: Texts**
- 2. The Model**
- 3. Measures of Institutional and Cultural Differences**

Appendix: 1 Parasitic liberalism: Texts

Smith (1776)

The division of labor is limited by the extent of the market.

In the progress of the division of labor, the employment of the far greater part of those who live by labor, that is, of the great body of the people, comes to be confined to a few very simple operations, frequently to one or two. But the understandings of the greater part of men are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects are perhaps always the same, or very nearly the same, has no occasion to exert his understanding or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble, or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life. Of the great and extensive interests of his country he is altogether incapable of judging. (Smith, (1937), *Wealth...*) Book Five, Chapter I, Part 3, Article II.

Burke (1790, 1791)

Men are qualified for civil liberty, in exact proportion to their disposition to put moral chains upon their appetites, in proportion as their love of justice is above their rapacity; in proportion as their soundness and sobriety is above their vanity and presumption..”
(Burke, (1791):64, *Letter...*)

When I see the spirit of liberty in action, I see a strong principle at work; ... I should therefore suspend my congratulations on the new liberty of France, until I was informed how it had been combined with government; with public force; with the discipline and obedience of armies; with the collection of an effective and well-distributed revenue; with the solidity for property; with peace in order; with civil and social manners... without them, liberty is not a benefit while it lasts, and is not likely to continue long. ...the age of chivalry is gone. That of Sophisters, economists, and calculators has succeeded ...Nothing is left which engages the affection on the part of the commonwealth... so as to create in us love, veneration, admiration or attachment.(Burke, (1890[1790]): 84-86 *Reflections...*)

Tocqueville (1834, 1840)

...religion has been entangled with those institutions which democracy destroys...Liberty cannot be established without morality, nor morality without faith. ... No free communities ever existed without morals. (Tocqueville, (1945):I,12;II 208, *Democracy...*)

A democratic state of society, similar to that of the Americans, might offer singular facilities for the establishment of despotism; ...an innumerable multitude of men, all equal and alike, incessantly endeavoring to procure the petty and paltry pleasures with which they glut their lives Each of them, living apart, is a stranger to the fate of all the rest...his children and his private friends constitute to him the whole of mankind; as for the rest of his fellow citizens, he is close to them but he sees them not...he touches them but he feels them not; he exists but in himself and for himself alone...Above this race of men stands an immense and tutelary power, which takes upon itself alone to secure their gratifications and to watch over their fate. ...what remains, but to spare them all the care of thinking and all the trouble of living? Such a power does not tyrannize, but compresses, enervates, extinguishes and stupefies a people, till each nation is reduced to nothing better than a flock of timid and industrious animals, of which the government is the shepherd. ...servitude of the regular, quite and gentle kind I have just described might be combined more easily than is commonly believed with some of the outward forms of freedom.(II, 334-337)

...the manufacturing aristocracy which is growing up under our eyes is one of the harshest that ever existed in the world. (II,170-71.

... it is difficult indeed to conceive how men who have entirely given up the habit of self government should succeed in making a proper choice of those by whom they are to be governed; and no one will ever believe that a liberal, wise and energetic government can spring from the suffrages of a subservient people. (II, 339).

Marx and Engels (1847-8)

Finally there came a time when everything that men had considered as inalienable became an object of exchange, of traffic and could be alienated. This is the time when the very things which till then had been communicated, but never exchanged, given but never sold, acquired but never bought: virtue, love, conviction, knowledge, conscience— when everything passed into commerce. It is the time of general corruption of universal venality. Marx Marx, (1956):32 (*Poverty..*)

The bourgeoisie, wherever it has got the upper hand, has put an end to all feudal, patriarchal, idyllic relations ...and left no other nexus between man and man than naked self-interest than callous “cash payment.” It has drowned the most heavenly ecstasies of religious fervor...in the icy waters of egotistical calculation. Marx and Engels Marx and Engels, (1972) (*...Manifesto*)

Polanyi (1944)

Our thesis is that the idea of a self-adjusting market implied a stark utopia. Such an institution could not exist for any length of time without annihilating the human and natural substance of society p. 3 ... [The] market for labor implied no less than the wholesale destruction of the traditional fabric of society p. 77 Social history in the 19th century was thus the result of a double movement: the extension of the market organization in respect to genuine commodities was accompanied by its restriction in respect to the fictitious ones. p. 76. [T]he labor market was allowed to retain its main function only on... conditions] that ...would safeguard the human character of the alleged commodity, labor. p. 177 Polanyi, (1957) (*...Transformation*)

Bell (1973, 1976)

The historic justifications of bourgeois society -- in the realms of religion and character -- are gone... The lack of a rooted moral belief system is the cultural contradiction of the society ... (Bell, (1973)48, *...Post-industrial society*)

.the problem of virtue arose because of the dual and necessarily contradictory role of the individual as *citoyen* and *bourgeois*. As the first, he had the obligation to the polity of which he was a part; as the second he had private concerns which he pursued for his own self-interest. (Bell, (1976)21, *Cultural contradictions of capitalism*)

In historical retrospect, bourgeois society had a double source and a double fate. The one current was a Puritan, Whig capitalism in which the emphasis was not just on economic activity but on the formation of character (sobriety, probity, work as a calling). The other was a secular Hobbesianism, a radical individualism which saw man as unlimited in his appetite, which was restrained in politics by a sovereign but ran fully free in economics and culture. (Bell, (1976):80)

American capitalism...has lost its traditional legitimacy, which was based on a moral system or reward rooted in the Protestant sanctification of work. (Bell, (1976):84)

The major consequence of this crisis .. is the loss of *civitas*, that spontaneous willingness to obey the law, to respect the rights of others, to forgo the temptations of private enrichment at the expense of the public weal (Bell, (1976):245)

Habermas (1975)

The “Protestant ethic” with its emphasis on self-discipline, secularized vocational ethos, and renunciation of immediate gratification, is no less based on tradition than its traditionalist counterpart of uncoerced obedience, fatalism and orientation to immediate gratification. These traditions cannot be renewed on the basis of bourgeois society alone.

Bourgeois culture as a whole was never able to reproduce itself from itself. It was always dependent on motivationally effective supplementation by traditional world-views. 77

...the remains of pre-bourgeois traditions, in which civil and familial-vocational privatism are embedded, are being non-renewably dismantled ..[they are] softened and increasingly dissolved in the course of capitalist development. (Habermas, (1975):79, *Legitimation..*)

Hirsch (1976)

This legacy [of pre-capitalist moral codes] has diminished with time and with the corrosive contact of the active capitalist values. As individual behavior has been increasingly directed to individual advantage, habits and instincts based on communal attitudes and objectives have lost out (Hirsch, (1976):117-18, *Social limits..*)

Appendix 2. The Model

A. Multiple cultural-institutional equilibria and cultural collapse

The model in the text is an extension of work in Belloc and Bowles, (2010), Bowles, (2004) and Bowles, (2009).

There is a stationary level of virtue expressed by the function $v = v(m; \tau(m^-))$, where m^- represents past values of m and τ represents the extent of traditional institutions with $v_m < 0$ and $v_\tau > 0$ (v_x is the derivative of v with respect the variable x .) Thus when $v = v(m; \tau(m^-))$ the process of cultural updating is such that the level of virtue in the population does not change (i.e. is stationary, unless τ or m change). The $v(m; \tau(m^-))$ function is based on a process of cultural transmission in which an individual's values are periodically updated taking account of the relative payoffs of bearers of different values and the frequency of types in the population.

Likewise, the function $m(v)$ gives the stationary values of m for given values of v based on individuals structuring their interactions with others (choosing among, say, contractual or friendship, or familial ways of interacting in some particular activity) based on the relative payoffs of these various structures.

The intersections of these two functions are temporary equilibria (Grandmont, (2007).)

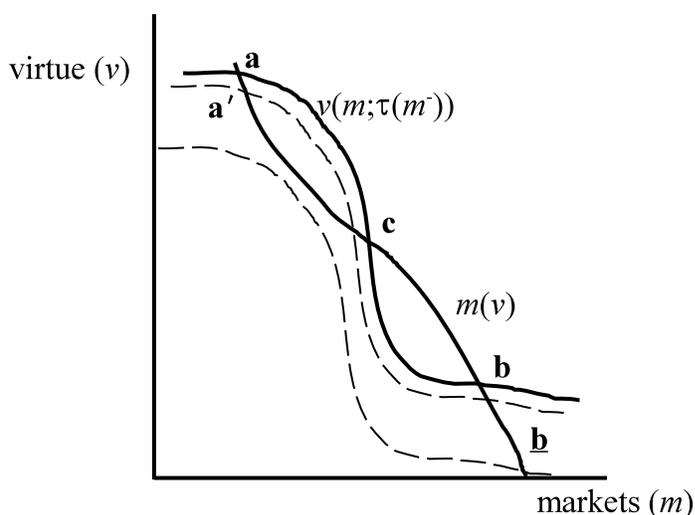


Figure A1. Multiple cultural-institutional equilibria with punctuated-equilibrium dynamics. This figure is similar to Panel D of Figure 1 in the text except that the functions are non-linear. States **a** and **b** are asymptotically stable (self correcting), while **c** is unstable. The erosion of traditional institutions given by the lower dashed line eliminates the upper stable equilibrium (as well as the unstable equilibrium) so that the only temporary equilibrium is b

Figure A.1 illustrates a case in which two stable equilibria may exist, a result of the negative effect of markets on virtue being attenuated at both low and high levels of the extent of the market (so that the $v(m)$ function is non linear and is flatter for high or low m .) In this case, for a society initially at the high virtue and limited market extent equilibrium (**a**) the effect of a modest downward shift in the values function resulting from the decay of tradition is to displace the cultural-institutional equilibrium to a nearby equilibrium (**a'**) with less virtue and more markets. A further decline in tradition however, may eliminate the upper equilibrium entirely (the lower of the two dashed lines), inducing a precipitous collapse of virtue and increased market dependence

B. The Markets Economize on Virtue Function & Cultural-Institutional Market Failures

In Figure A2 (Panel B of Figure 1 with additional information) the loci labeled y and y^+ are isoquants, namely loci of pairs of m and v that yield a total income (of the society in question) of y and y^+ respectively with $y < y^+$. The position of the isoquants indicates that virtue contributes to the productivity of the society (its total income). Suppose, for illustration, that (as Ronald Coase hypothesized) the extent of the market is determined by an implicit transaction-cost minimizing process that maximizes income net of these costs for a given level of values. Then the $m(v)$ function is as shown, namely the locus of all points such that the isoquant is tangent to the horizontal dotted line indicating the given level of v . (See appendix 3). This gives the effect of values on the equilibrium extent of markets. If the extent of the market exceeded (or fell short of) that which maximized income for a given v , then the $m(v)$ function would be to the right (or the left) of that shown and aggregate income would be lower than that shown (for any given level of v). The idea that entirely decentralized contracting and other interactions would implement an efficient set of institutions in the Coasean sense is of course unrealistic; the key point is that markets will be used more were virtue is less. I adopt the Coasean framework simply because it makes clear that the parasitical liberalism thesis does not require any departures from conventional liberal economic models other than the fact that markets have cultural consequences.

The cultural-institutional equilibrium described in the text is not efficient because the process by which market extent is determined, whether in the spirit of Coase, that is efficiently, or (except accidentally) by any other decentralized means, does not take account of the cultural consequences of markets. Suppose that the extent of markets $m(v)$ is that which maximizes aggregate income $y(v,m)$ for each value of v . Figure A2 shows the isoquants based on $y(v,m)$ with slope $-y_m/y_v$. Because $y_v > 0$ (all institutions work better at higher levels of v) higher isoquants are associated with greater income (namely $y^+ > y$). The locus of points for which $y_m = 0$ (the isoquant is horizontal) give the $m(v)$ function.

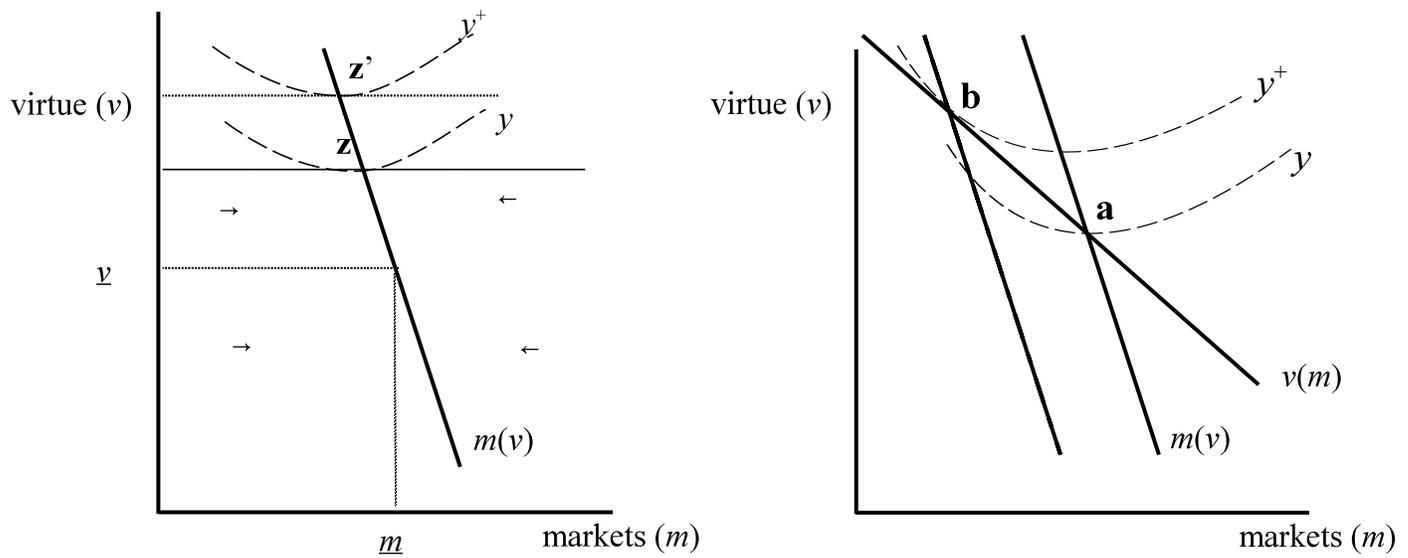


Figure A2. Derivation of the $m(v)$ function. A3. Cultural-institutional market failure

A2. The cultural-institutional equilibrium is a state such that both market extent and the level of virtue are stationary or $dm/dt = 0 = dv/dt$, namely point **a**. There exists an exogenous restriction of market extent (given by the dashed line) by a social planner that would displace the cultural institutional equilibrium to point **b**, resulting in a larger aggregate income. The social planner varies m to maximize y subject to the constraint that culture adjusts to the extent of the market according to $v = v(m)$. This income-maximizing level of market use balances the losses entailed by the use of non-market institutions (in cases for which, conditional on a given v , markets would do better) against the cultural benefits made possible by attenuating the deleterious market effects on culture.

A3. Described in text.

Appendix 3. Measures of Institutional and Cultural Differences

Definitions and Sources of Measures used in Sections IV and V

Rule of Law: measures the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence. It is measured on a scale of -2.5 (being the weakest) to 2.5 (being the strongest). The data used is from the year 2002-2006. From the World Bank Worldwide Governance Indicators.

<http://info.worldbank.org/governance/wgi/index.asp>
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=999979

Democracy: the concept has been defined to measure: state of public corruption; current practice in human rights; political rights; free speech; and the overall state of the rule of law in 150 nations. The research was conducted by the World Audit, surveys 150 countries, and the measurements are updated each year (this article used the measures from the year 2008). The lower numbers signify a higher level of democracy and the high numbers a lower level of democracy as the world audit defines it according to the above-stated measures. The reported correlations in the text are for the negative of the measure, so that ‘democracy’ varies positively with the democratic traits above.

<http://www.worldaudit.org/publisher.htm>

Social inequality This is the “power distance” measure that the Hofstede defines it as [a] “dimension of national cultures It reflects the range of answers found in various countries to the basic question of how to handle the fact that people are unequal. It derives its name from research by a Dutch experimental social psychologist, Mauk Mulder, into the emotional distance that separates subordinates from their bosses. Scores for 50 countries have been calculated” The indicator increases with the score.(Hofstede and Hofstede, (2005):41-42)

Individualism: Also from Hofstede, countries with low scores are considered collectivist countries, and high scores correspond with individualist societies: “Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetimes continue to protect them in exchange for unquestioning loyalty”(Hofstede and Hofstede, (2005):75-76.)

Site	Trust	Law	Dem	Ineq	Indiv	Anti-soc P	Cont.
Boston	0.36	1.54	13	40	91	-8.117	18
Nottingham	0.29	1.72	10	35	89	-6.87	15
Copenhagen	0.67	1.94	2	18	74	-8.927	17.7
Bonn	0.38	1.73	11	35	67	-6.349	14.5
Zurich	0.37	1.96	5	26	69		16.2
St. Gallen	0.37	1.96	5	26	69	-5.876	16.7
Minsk	0.42	-1.23	137			-3.606	12.9
Dnipropetrovs'k	0.27	-0.74	129			-4.302	10.9
Samara	0.24	-0.88	119	93	39	-3.055	11.9
Athens	0.24	0.71	34	60	35	-2.38	5.7
Istanbul	0.16	0.02	69	66	37	-4.682	7.1
Riyadh	0.53	0.22	129	80	38	-3.273	6.9
Muscat		0.75	99			-0.486	9.9
Seoul	0.27	0.73	33	60	18	-4.634	14.7
Chengdu	0.55	-0.41	129	80	20	-6.004	13.9
Melbourne	0.4	1.79	8	36	90	-5.161	14.1

Table A1. Cultural-institutional measures. Anti-social punishment is the estimated dummy variable for the site in question (measuring the estimated difference between that subject pool's behavior and a predicted amount. Contribution (Cont.) is the average in the public goods with punishment experiment for the site indicated. Empty cells indicate absence of data (data on the controls in the estimating equation for Zurich were absent).

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