

The Importance of Culture:

Terrorism as an Organizationally Rational Strategy

Michael C. Munger

munger@duke.edu

Duke University

Department of Political Science

May 20, 2005

Paper prepared for the Conference on the Political Economy of Terrorism, George Mason University, May 24-25, 2005. The author acknowledges the helpful suggestions of Charles Rowley, John Aldrich, Scott de Marchi, and Peter McNamara. Errors are my own responsibility.

The Importance of Culture:
Terrorism as an Organizationally Rational Strategy
Michael Munger

The motives for suicide terrorism do not appear to differ significantly from the general motives for terrorism, which include revenge, retaliation, and provocation of government over-reaction. These objectives may be tactical goals in the end of disrupting peace processes or acquiring political recognition and status. Although terrorism is often described in terms of pure emotionalism or "fanaticism," its instrumental or strategic dimensions should not be overlooked. Furthermore, an opposition movement is often compelled to avenge perceived injustices in order to maintain internal loyalty and cohesion as well as popular support.

The most distinctive characteristic of suicide terrorism, however, appears to be the motive of individual self-sacrifice and martyrdom. It is this willingness to die that makes it appear irrational to many observers. The phenomenon cannot be explained exclusively as the most efficient way of eluding the government's defenses in order to gain access to desirable targets, although this practical consideration is a factor. The individual terrorist's willingness to face not just high risk but certain death requires a psycho-cultural explanation. (Anti-Defamation League, http://www.adl.org/israel/israel_motives.asp)

I. Introduction

The kind of "psycho-cultural" explanations alluded to in the quote above have long been in rather bad odor for economists and rational choice social scientists. The reason is that literally any behavior can be justified by invoking "a taste" for it, after the fact, as a kind of *deus ex machina*.

In this paper, I will argue that it is not necessary to think of psycho-cultural explanations as *ex post* taste invocations. Culture is where preferences come from; in fact, culture is metapreference, telling us which preferences are good and which are bad. In making this argument, I rely on two lines of published research: (1) claims that culture is a commitment device in cooperation settings, and (2) culture and adherence to religious tenets are means of controlling access to club goods valued by citizens.

These two explanations are analytically distinct, but not mutually exclusive as a practical matter. In the last portion of the paper, I make some observations on North's

distinction between institutions and organizations, and draw implications for the idea of the rationality of terrorism.

II. Meaning and Origins of Culture

2.1 Meaning

The meaning of culture is difficult to sort out. The dictionary meanings include these:

(a) The totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought. (b) These patterns, traits, and products considered as the expression of a particular period, class, community, or population:

Edwardian culture; Japanese culture; the culture of poverty. (c) These patterns, traits,

and products considered with respect to a particular category, such as a field, subject, or mode of expression: *religious culture in the Middle Ages; musical culture; oral culture.*

(d) The predominating attitudes and behavior that characterize the functioning of a group or organization. (Source: Random House, College Dictionary, 1975).

Consider a common, nearly trite, application of the concept of culture: the word “shibboleth.” It is even often combined with the word “cultural;” its meaning has three parts. Here are the first two: (a) a peculiarity of pronunciation, behavior, mode of dress, etc., which distinguishes a particular class or set of persons; and (b) a test word or pet phrase of a party, sect, etc. (Source: Random House, College Dictionary, 1975). I would define it this way: *a shared understanding of something that identifies insiders, and excludes outsiders because they do not share this understanding.*

The third meaning is historical, though surprisingly few know it. It comes from *Judges 12*, verse 6, of what many Christians call the Old Testament. A “shibboleth” was

a word meaning an ear of corn, or a flooding stream, but the definition is actually irrelevant. The reason we remember the word is the difficulties in its pronunciation. In the story, the Gileadites could pronounce shibboleth correctly, with the “sh” sound. But the Ephraimites, lacking the “sh” sound (how did they get people to be quiet in libraries?) pronounced the word “sibboleth.” This distinction mattered, because:

Judges 12, 5-7, King James 21st Ed. Bible

⁵ *And the Gileadites seized the passages of the Jordan before the Ephraimites; and it was so, that when those Ephraimites who had escaped said, "Let me go over," that the men of Gilead said unto him, "Art thou an Ephraimite?" If he said, "Nay,"*

⁶ *then said they unto him, "Say now Shibboleth." And he said "Sibboleth," for he could not frame to pronounce it right. Then they took him and slew him at the passages of the Jordan; and there fell at that time of the Ephraimites forty and two thousand.*

In war, the idea of the “other” is stark. But even in peacetime, know who “we” are may require knowing who “they” are. And the very existence of a “we” may depend on there being a “they.” The “we” and the “they” are more likely to precede war than to be caused by it, though the sense of “the enemy” is heightened in wartime.

I will argue, following several recent theoretical contributions in economics and political science, that culture is a much broader and more fundamental idea than identity in wartime. Culture is a commitment device, a way of solving the problem of high transactions costs in a setting where problems of ex post opportunism would otherwise eliminate ex ante chances at cooperation. To make it clearer what I am on about, let me define my own concept of culture, for the purposes of this paper:

Culture: *The set of “inherited” beliefs, attitudes, and moral strictures that a people use to distinguish outsiders, to understand themselves and to communicate with each other.*

I have put quotations around the word inherited above, not because I am quoting anyone, but because the sense of the word is strained. Hair texture, eye color, general build...those sorts of things are inherited. Culture is obviously not inherited in the same sense. We teach culture to our children, or they learn it by tacit and perhaps unconscious exposure over time. But it makes sense to think of culture as an inheritance, or legacy from the past.

Imagine that twin, normal (i.e., no congenital speech impediments) Ephraemites had been separated at birth, with one being raised by an Ephraemite family and the other raised by a family of Gileadites. The child raised by the Gileadites would be able to pass the “shibboleth” test easily, because she would have learned to pronounce the “sh” sound. The child raised by the Ephraemite family, by contrast, would be unable to pronounce “shibboleth” correctly.

In other words, humans inherit culture from the people they grow up with, not necessarily from their genetic forebears. Culture, then, lies entirely on the “nurture” side of the ledger, as against “nature,” or truly inherited traits or hard-wired instincts selected for over millennia by natural selection and shared by all phenotypes of the human genome.

2.2 Origins of Culture: Account I

The literature contains two strikingly different accounts of the origins of culture, based on two very different conceptions of its function. One account is based on

transactions cost and commitment, while the other rests on the problem of excludability and “club” goods. The two accounts are not mutually exclusive, but they do have strikingly different implications for our understanding of culture.

Let me begin with the first account, focusing on the basic problem of commitment and transactions cost. The simplest setting, one we are all familiar with, is the Prisoner’s Dilemma, depicted in Game 1 below.

Game 1: Prisoner’s Dilemma

	Cooperate	Defect
Cooperate	(2,2)	(4,1)
Defect	(1,4)	(3,3)

(note: Payoffs are of the form (Row, Column), and rankings are ordinal, with 1 best and 4 least preferred)

The problem is that the Nash Equilibrium (Defect, Defect) is not Pareto Optimal. If the two could somehow commit to acting together, the (Cooperate, Cooperate) outcome is superior for both. Since self-interest and collective interest conflict, there is a (possible) constructive role for social institutions. As I have argued elsewhere (Munger 2000b), there are two solutions in terms of institutions—the Madisonian approach (take self-interest as given, and design institutions to control and direct their conflict) and the Rousseauvian approach (transform self-interest to self-interest “properly understood,” which in this case means cooperate). More simply, to “solve” the problem posed by the prisoner’s dilemma, one must *change the payoffs* in the game through threats and inducements, or else change the way that people *value the payoffs* in the game through transforming their preferences.

It is easy to misunderstand the importance of this point, because there is no mathematical difference. But consider the difference highlighted by using the metaphor

of the prisoner's dilemma itself: A prisoner is being interrogated. He is told that his partner, likewise being interrogated, but separated in a different soundproof room, is about to confess. The prisoner knows that if the partner does confess, the prisoner will be executed and the partner will have a much reduced sentence. Presumably, some promises were exchanged between the two partners, but these become cheap talk once the partners are separated.

An example of the "threats and inducements" solution is something like the Sicilian institution of *Omerta*, or "vow of silence."¹ This institutional commitment has all the characteristics of Kreps' (1988) "culture" principle: a simple, possibly measurable, commitment not to defect, even in circumstances where it might be to the short term advantage of the player to defect. Of course, the external inducements for obeying *Omerta* are powerful—a snitch is punished by being tortured to death, and his family killed. In many respects, then, the credible threat of an outside organization (the Mafia, in this case) to expend resources to hunt down and punish transgressors makes the promise to cooperate credible. Consequently, the Prisoner's Dilemma game is transformed:

Game 1': Prisoner's Dilemma with External Enforcement: Defectors are Tortured

	Cooperate	Defect
Cooperate	(1,1)	(2,4)
Defect	(4,2)	(3,3)

In the new game, there is no Prisoner's Dilemma. In fact, "Cooperate" is a dominant strategy for both players, and (Cooperate, Cooperate) is both a Nash Equilibrium and a Pareto Optimum.

¹ Hofstadter (1996) elaborates on the role of something like *Omerta* in solving the iterated prisoner's dilemma.

But this is all rather heavy-handed. External enforcement, if credibly threatened, simply changes the payoffs of the game, even for a narrowly rational, self-interested prisoner. Omerta has another aspect, one that should not be ignored. The actual claim of the code of silence is that it is not honorable to snitch. Thus, honorable men will not snitch because to do so would besmirch their honor. Imagine that we could separate the external enforcement, make it go away. What would be the effect of making the prisoner value honor, genuinely value it at the level of preference primitives? The answer is that it would look like this:

Game 1'': Prisoner's Dilemma with External Enforcement: Defectors are Tortured

	Cooperate	Defect
Cooperate	(1,1)	(2,4)
Defect	(4,2)	(3,3)

No, you don't need to check back; Game 1' = Game 1'', in terms of math. But the reasons are completely different: for Game 1', external enforcement changed the payoffs. In Game 1'', the payoffs are the same as in Game 1, but the participants value them differently.

This raises an important possibility: cooperation problems could, in principle, be solved without resort to external enforcement. All that is necessary is that participants have a preference for cooperation, or a distaste for defection. As a generic solution to the PD game, this is entirely unsatisfactory, of course, since all it really does is *change the game*, not solve the problem.

On the other hand, if there were some means of creating this kind of preference for cooperation, on a grand scale, it would reduce transactions costs enormously. If I believe that my fellow citizens would feel ashamed, or guilty, if they stole from me, then

I don't need to put locks on my doors, and we don't need nearly as many police.²

Ideologies, or shared belief systems that invoke moral values of right and wrong, may have this effect on a broad scale. There is a question we can't answer, but which is relevant to much of what follows: Are "good" moral systems (whatever that means) designed as a way of reducing transactions costs in this way? Or are those societies that happen by chance to create and conventionalize certain moral values prosper more, outgrowing other societies in a purely evolutionary sense?³

The clearest use of this kind of argument is Kreps (1990), who focuses on the problem of the firm trying to make commitments in conditions where there is both hierarchy and uncertainty are so high that transactions cost and commitment problems might preclude otherwise mutually beneficial transactions. He uses the analogy of a "trust" game, much like the one adapted here.

[Figure 1 about here]

There are two players or participants, A and B. A moves first, and must decide whether to "trust" B, in the specific sense that A makes an implied offer to cooperate, or to withhold trust. If A withholds trust, then B has no opportunity for action and the payoffs are (\$0,\$0).

If A does offer trust to B, then B has a choice to make: B can honor the trust, in which case both A and B get \$20, or B can violate A's trust, and receive \$30 while A loses \$10. The problem is that B "should" always violate trust, and so A "should" never offer trust, and our expectation is that the participants will find themselves at the Nash

² Denzau and North, 1994.

³ The analogy I am making is to Alchian's (1950) argument about firms *maximizing profits*, except that I am talking about societies *minimizing transactions costs*.

Equilibrium of the game, (\$0,\$0), even though a Pareto-superior alternative (\$20,\$20) is feasible.

It is B's behavior that is in question; somehow B must persuade A that there is at least a high probability that B will honor A's trust if A offers it. And there are real gains to be made here, so there are significant pressures at work to overcome this commitment problem. There are two apparently different but (again) mathematically indistinguishable ways of solving the problem: (1) B could post a bond, or submit to some kind of binding third party enforcement that would punish him if he violates trust, or (2) B could persuade A that cares so much for A, or that B cares so much for his own honor, that he will not violate the trust, because it would not be in his interest to do so, given B's self interest properly understood.⁴

It is common for game theorists to dismiss this difference, but in fact the distinction may be the very heart of the matter for the society. The size of the "transactions cost sector" of the society is how much it spends on its police, judiciary, locksmiths, and barbed wire fence builders. If we combine this deadweight loss to the society (in terms of foregone investment in more productive activities) with the quantity of transactions precluded by an inability to reduce transactions costs to the point where those otherwise profitable transactions can take place, the total loss can be enormous. And this loss is a direct function of the society's set of moral beliefs that condition interactions. It will surprise no one at this point that I want to call this whole set of moral beliefs and conditioning factors for economic and social exchange by the vague name I mentioned earlier: *culture*.

⁴ The reference is to Rousseau, with the distinction being between self-interest properly understood and the more selfish *amour propre*.

Kreps (1990) makes a number points relevant for this discussion. As I said earlier, the key factor for Kreps is that some reputational hostage, or depreciable capital asset, be created that can serve as a commitment device. Where a potential employee might not trust an employer enough to pay for specialized training in a pure “trust game” setting, the employer can solve this problem by creating a brand name for (for example) keeping employees at work for their entire career. Since *all the commitments* of all the employees are secured by this promise of lifetime employment, it is easy for the employees to determine if the company is violating its promise.

The value of maintaining the promised principle, a culture of lifetime employment by the firm and devotion by the employees, means that the firm must remain obedient to principle even when (*especially* when) it is not in its short term interest to do so. Signals have more information content if they are costly, and so if a firm retains employees even during a downturn, or at worst lays them off with clear promise to rehire them first when the economy recovers, then employees are more willing to invest in firm-specific training, even at their own expense.

Hinich and Munger (1994) argue that the Kreps argument applies with equal or greater force to political settings. Remember, the twin problems that Kreps claimed give rise to corporate culture as a commitment device are hierarchy and uncertainty. But the hierarchical relation in politics is unique. Hinich and Munger compare the idea of hierarchy to the Hobbesian state of nature, pointing out that:

There is a paucity of alternatives, except in temporal sequence, to the current government. The only alternatives, even in a democratic system, are immediate revolution or to toss the malefactors out in the next election...The only recourse, then, is to rely on the threat of replacement of the current government by an alternative whose commitment to its organizing ideology is largely unknown. (p. 71)

Hinich and Munger claim that culture, in this sense, is quite possibly even more important in social settings than in economic settings. Lifetime employment affects your economic status, but being able to pronounce “shibboleth” may affect the length of your lifetime.

2.3 Origins of Culture: Account II

As I mentioned above, there is a second view that is important for understanding problems of commitment and cultural “belonging.” This is the club goods view.⁵ My purposes are a bit different from some of the common applications of the club goods approach in the past, so I need to give some definitions first.

A standard set-up for the club goods approach is Berman’s (2003):

Imagine a community for which neither government nor markets function well. Local public goods usually provided by government such as public safety, law and order and welfare services are poorly provided or absent, while neither public nor private sectors efficiently deliver education, health services, or insurance. It would not be surprising for individuals in such a place to band together into communities which provide public safety, education, welfare services, and other local public goods through mutual insurance. (Berman, 2003, p. 2)

Now, we might tend to think of such a setting as an anomaly, a breakdown of government, but in fact it makes sense to think of such an anarchic local situation as the accurate “state of nature.” Before government, before property rights, there were situations where the problem of “providing” the most basic public goods was the key to survival. And many (perhaps most) bands of humans did not solve the problem, and therefore did not survive.

⁵ For background on the theory of clubs, see Cornes and Sandler (1986), and of course Buchanan (1965).

Several authors (Iannaccone, 1992; Greif, 1994) have argued that the idea of clubs should be extended to religious or other belief-centered communities provide “local” public goods, but have control over access in terms of religious practice. This kind of control of access amounts to excludability, meaning that the public goods problem can be at least partially internalized.

Let’s make the example more specific, as I did in my earlier book (Munger, 2000a). Suppose you are a member of a hunter-gatherer tribe, and the clan has hunted (and gathered) all of the food in the area that you know is safe to eat. Now, everyone is hungry, and everyone is starting to look at other plants, strange animals, and maybe even Roger Congleton, in a whole new way. These are all things that the tribe does not normally consider to be food, but hunger has made them define potential food sources more broadly. What “policy” should the tribe adopt about eating?

This begs the question of the “we,” as in “we need a policy.” But it makes sense to think of clans or groups making group decisions this way. For one thing, there is a good chance that members of the tribe will eat something poisonous, and then die. This is a waste of effort, because more people are exposed to risk than is necessary to find out if the food is safe. This is a problem of too much risk: our enemies could likely find out about widespread food poisoning, and use our weakness as an opportunity to attack.

Second, there is a “free rider” problem: someone found an oyster, opened it up, and then looked at his companion: “This looks like food. Um...why don’t *you* try it?” Free riding creates a problem of too little risk: some foods would not be sampled, because everyone is waiting for someone else to try it first.

The two problems (too much risk from uncontrolled experimentation, and too little risk from free-riding) are not likely to cancel out. Instead, the two problems are both going to hurt the effort to find new foods that will relieve the impending famine. The tribe has two choices: (1) it can try to use theory, or (2) it can use empirical experimentation to determine what is safe. The sort of “theory” they might use is not based on knowledge of germs and poisons, of course. Rather, for primitive peoples theory is more likely to be religious law, applied by the use of analogy.

Suppose someone finds a beaver, and brings it back to camp. The shaman, the tribe’s chief religious official, makes a policy pronouncement based on theory:

Our laws say that pigs are unclean, and you may not eat them. Beavers look like pigs, albeit with large teeth and funny, flat tails. Therefore, beavers (like pigs) are unclean.

The alternative might be an experiment, based on empirical investigation. The guy who caught the beaver is hungry, and so he says:

Let’s roast the beaver, and see how he tastes. I’ll take the first bite.

If the person who takes the first bite says it tastes good, and shows no ill effects in the next day or so, then the policy is decided: Beavers can be added to the “acceptable foods” list for the tribe. In fact, the shaman may even update his theory, using the newly acquired empirical knowledge:

Animals that look a lot like pigs are okay to eat, provided that (unlike pigs) those animals have big teeth and funny flat tails.

Theory and analogy can play an important role in learning, even when cause and effect relationships are poorly understood. In fact, it may be precisely in those instances

that little is known about the mechanics of cause and effect that people are likely to use culturally-based “theories.” In my book, I presented a comparison of rules for handling meat in a “kosher” butcher shop, and the 1998 version of USDA procedures for doing the same tasks. (Munger, 2000a, p. 43).

The similarities are striking, yet the approach to creating the “policy” in each case was dramatically different. Kosher rules were “designed,” but not by scientists. Kosher rules are a set of religious practices; “keeping kosher” is a moral imperative, not a health concern. Yet it seems obvious that the kosher rules have a strong basis in science, or at least in health. In many ways, the “religious” kosher food handling rules approximate the “scientific” USDA guidelines. The USDA requirements (presumably) are based on science; their sole goal is to promote health. The USDA has the benefit of significant experience, and a well-developed germ-based theory of contamination of food products.

In a primitive society, adopting a policy like orthodox Jewish rules for keeping kosher has important health benefits. You could imagine how the policy might be adopted: people notice that if one eats chicken prepared according to the rules, one is less likely to get sick. Without a germ theory of disease, or an understanding of food parasites, the people may misattribute this sickness to the anger of spirits or deities that control our health. Consequently, “policies” about food might start out as religious rules. If the rules adapt over time to record safe, and outlaw unsafe, foods and practices, the power of the shamans will increase, because they really do appear to speak for the gods.

For example, suppose the shamans say,

Don't eat pork, as it is unclean. If you eat pork, you will die; demons will possess your stomach.

You flout the policy, and eat pork in a hot environment where cleanliness and cooking procedures are (at best) inconsistent. Before long, parasitic trichinae from an undercooked piece of pork enter your intestines. Untreated, the trichinosis becomes acute, affecting your viscera and then even some of your voluntary muscle groups. You die, screaming. The shamans, shaken by the power of God to punish the wicked, redouble their efforts to ensure that God's will is both universally known and obeyed.⁶

This leads us to a problem: how are we to evaluate the opinions of experts, or (alternatively) the democratic decision processes that use majority rule? Our Hun-gats don't *know* what foods are safe to eat; they are very uncertain, and afraid. Their votes would be meaningless on this question, because they have no basis for making good choices. The shamans only have laws based on accumulated experience, codified as religious dietary restrictions. These rules do not apply to new foods, because it is not clear where new comestibles fit into the existing system of safe and unsafe foods. Without a scientific understanding of what causes disease, or of what foods are safe, we have no other means of making a decision. And so people are judged, and included or excluded from access to club goods, based on their commitment and obedience to *all* the precepts of religious doctrine, not just those that are practically good or useful.

Berman (2003) brings this argument around to the point where it is useful for understanding "extreme acts," even terrorism.

Why do radical religious groups so often create militias and why are those militias so effective? Define militia activity as co-ordinated capture of rents involving

⁶ I certainly don't mean to claim that the Jewish religious dietary rules, or any other religious practices, are without basis in spiritual fact. They may well be the revealed will of God. All the discussion of Jewish dietary laws is intended to convey is the similarities between what many believe is God's will and scientific rules of hygiene based on a germ theory of infection. If this is God's will, he certainly got it right.

violence. Attacking an occupying army, providing law and order, organizing and carrying out clandestine activity (such as terrorism) are examples. This activity often involves personal risk. A key aspect of militia activity is its sensitivity to defection. ...Religious sects have an advantage in militia activity because the signaling mechanisms adopted for the provision of other public goods allow them to select members unlikely to defect in a militia. (Berman, 2003, p. 16).

2.4 *Origins of Culture: Tying the Strands Together Around Beliefs*

The thing that we haven't really nailed down yet is the status, and plasticity, of *belief*. The Kreps idea of costly signals as a way of supporting a reputation, which in turn stands in as a commitment device, requires *instrumental* actions. I act *as if* I believe that the organizing principle is intrinsically good. The club goods model again gives me clear instrumental reasons why I should act *as if* I believe fervently: access to public goods I value will be withheld if I do not present a pious face to the world.

In either case, cultural principle as commitment device or as access key to public goods, there is a kind of spontaneous order. It is by no means clear that successful organizations are those that are formed with a fully conscious long range plan for solving commitment problems or public goods problems. Alchian (1950) made this observation long ago, with regard to the plans of firms: firms may not strive primarily to make correct *ex ante* forecasts of profit-maximizing actions. But only those firms that approximate such choices, *ex post*, regardless of their intentions, survive.

We need to recognize that this same invisible selection has been at work for hundreds, and perhaps thousands, of years in human beings beliefs about morality, religion, and cultural iconography. In the next section, this is the problem I take up.

3. Belief Systems as Durable Spontaneous Orders

Moral systems and conventions constitute a kind of social spontaneous order. The requirement of such an order is that individuals, acting of their own volition, will do things that (1) accomplish the ends of those individuals, and (2) do not violate the expectations of other people in the society.

It is tempting to think that spontaneous orders also have good normative properties, but this is by no means obvious. The canonical example of spontaneous order, a well-functioning market, does have good normative properties, in the sense that individual self-interest is consistent with the public good. But such consistency between individual choices and aggregate consequences is not assured. The reason is that “volition” above is not well-defined. One can say that people act on their self-interest. But where does self-interest come from? What is the origin of preferences?

“Order” requires only regularity and consistency. Human beings choose actions based on their conceptions of the moral world and their place in it, but they also consider incentives and calculate gains that accrue to one action rather than another. This impulse, or purpose, on its own, is neither ethically good nor bad. It just is. From what, then, arise our judgments about whether an action is morally laudable, or detestable, or perhaps neutral? The answer given by Hume (for example, in Treatise of Human Nature, bk III) was that these labels are entirely conventional: what is moral in one society might be appalling in another. Manners differ broadly, showing internal consistency (that is, people in a society all recognize good manners, though they may violate them), but may be sharply inconsistent across nations (a person acting according to what his society considers acceptable manners may profoundly offend someone from another society.)

My claim is that an emergent process, or spontaneous order of a rather different kind, is likewise observable in the previous step: the formation of preferences. The key difference is the absence of any feedback mechanism by which the merits of the emergent order might be judged, or subjected to modification. Douglass North makes this point quite forcefully:

...Efficient markets are created in the real world when competition is strong enough via arbitrage and efficient information feedback to approximate the Coase zero transaction cost conditions and the parties can realize the gains from trade inherent in the neo-classical argument.

But the informational and institutional requirements necessary to achieve such efficient markets are stringent. Players must not only have objectives but know the correct way to achieve them. But how do the players know the correct way to achieve their objectives? The instrumental rationality answer is that even though the actors may initially have diverse and erroneous models, the informational feedback process and arbitraging actors will correct initially incorrect models, punish deviant behavior and lead surviving players to correct models. (North, 1993).

In his well-known book, Institutions, Institutional Change, and Economic Performance (1990), North made it clear why the absence of coherent feedback is important, and why societies might have difficulty changing their level of economic performance. He distinguishes two levels of analysis: *institutions* and *organizations*. Institutions are the humanly devised rules of the game, formal (constitutions and laws) or informal (norms, moral systems, manners), but they tend to be long-lived and not easily evaluated, because there is no specific feedback metric for comparison. Organizations are the optimizing responses to the set of incentives and constraints created by institutions.

The reason the distinction is important for North is that organizations are always optimal, in the sense that they maximize the advantage of those who own or control the organization. But transactions cost, both of writing complete contracts and of making

changes in institutions, even Pareto-superior changes, may lock organizations into institutional settings that are in some larger some sense Pareto inferior. More simply, there may exist alternative rule arrangements that have the potential, through feasible compensation arrangements, to make literally all the citizens in the society better off. Yet these rules are not selected and the existing, inferior rule set is maintained.

To come back towards the topic at hand, at least for a moment, the institutions/organizations distinction is very important for understanding militias and terrorist organizations. For the outsider, it is common simply to shake our heads, and say that suicide bombers or fanatical militias are irrational. But we are making that judgment at an institutional level: given our world view and moral beliefs, yes, terrorists are irrational, and even evil. But within the given, and fixed, institutional setting in which they operate, terrorist militias are rational, optimizing responses to the incentives, expectations, and constraints created by those institutions.

Islamic societies, not exclusively but perhaps to a greater extent than most other nations, are committed to an idea of the perfectability of humans in societies, through moral education and imposition and enforcement of moral law based on the Quran. Education in madrassas and other forums is based on the idea that “self-interest” (properly understood) may be malleable, especially in the young. Moral perfectability means that law and morals *cannot* be external constraints, or not just external constraints. The project of Islamic fundamentalism is to inscribe the laws on mens’ hearts. It is belief that is important, as much as behavior. In such a setting, cooperation with an enemy, even if it results in mutual material benefit, may be nearly unthinkable. Consider Game 2, which I have called “Culture War.”

Game 2: Culture War

	Cooperate	Defect
Cooperate	(3,3)	(4,1)
Defect	(1,4)	(2,2)

Game 2 is identical to the prisoner's dilemma games presented earlier, except that the positions of the 2nd best and 3rd best alternatives are reversed. What this means is that cheating or attacking your enemy when he is trying to cooperate is first best, simple combat (defection from cooperation with the other group) is second best, third best is mutually beneficial cooperation (because trading with the enemy is so distasteful), and worst is offering to cooperate only to be cheated and rebuffed.

As before, both Row and Column have dominant strategies: defect. The difference is that the Nash Equilibrium is also Pareto optimal. Western intervention in a culture war will always result in failure, because there is no incentive for either side to start to cooperate, even if they realistically expect the other side to do so. Culturally mandated hatreds require defection from cooperative agreements, even at enormous costs of material well-being.

Similarly, we find it terribly difficult to make in-roads in spying on terrorist organizations, or obtaining usable intelligence from militant prisoners. The problem is that we think prisoners, at Abu Ghraib or Guantanamo or elsewhere, are "playing" prisoner's dilemma, but they perceive themselves as playing a different game entirely. In that case, prisoners might unexpectedly (for us) behave in the purely cooperative manner, even in a one-shot prisoner's dilemma setting. They will fail to defect in the interrogation room, on the battlefield, or in the driver's seat of car-bomb at a checkpoint.

They can be counted on to norms of cooperation, even though to Western eyes it appears that they are being taken advantage of.

In short, the U.S. and its allies are playing one game, and the people we label “terrorists” are playing another. If our strategic choices are designed to influence rational people, and manipulate outcomes by creating incentives for cooperation with us, yet we continually are surprised by the intransigence of the opposition, we may just be playing different games.

Consider this example, which I think describes the U.S. perception of the situation in Iraq in 1992. The “players” here are the U.S. military (row player) and the Iraqi insurgency, opposed to Saddam (column player). The payoffs are presented in Game 3, below.

Game 3: U.S. in Iraq—1992

		Anti-Saddam Insurgents	
		Cooperate	Defect
U.S.	Cooperate	(2,1)	(3,3)
	Defect	(1,4)	(4,2)

The U.S. was in the position of wanting Saddam overthrown. The insurgents would cooperate by revolting, if the U.S. would cooperate by offering support and invading at least the southern parts of Iraq to prevent reprisals. But the U.S. would always want to defect, and stop at the border, hoping that a home-grown insurgency would erupt and overthrow Saddam internally. Of course, if the insurgents knew the U.S. was going to defect, they would stay home to avoid reprisals. But if the U.S. knew the insurgents would stay home, the U.S. would attack, because it wanted Saddam out of power. That would mean that the insurgents would want to revolt, leading the U.S. to pull out, and so on.

The game has no equilibrium, so there is no basis for predicting an outcome. What actually happened (simplifying dramatically) was that U.S. stopped at the border, there was a significant Iraqi insurgency against Saddam, but that insurgency was ruthlessly crushed. The U.S. had grossly overestimated the ability of the insurgents to take power. Why? The U.S. underestimated the cohesiveness of the Iraqi security forces, but even more important the U.S. had overestimated the attractiveness of the “cooperate with the U.S.” as a strategy for militant Islamic groups, even those opposed to Saddam in every material sense.⁷

Consider now the strategic situation in which the U.S. finds itself in 2005 in Iraq. I have depicted one possible scenario in Game 4. The U.S. is still the row player. But now the column player is the anti-U.S. insurgents who often use terror tactics.

Game 4: U.S. in Iraq—2005

		Anti-U.S. Insurgents	
		Cooperate	Defect
U.S.	Cooperate	(1,3)	(2,1)
	Defect	(4,4)	(3,2)

Clearly, the U.S. is in a very difficult situation. Both sides in this game have dominant strategies, but they are different. The insurgents defect no matter what, because they are happy to give up material gains for the sake of access to the club goods of religious piety and Arab solidarity against the occupying power. The U.S. must try to recoup some part of its reputation, rent to tatters by the abandonment of the 1992 anti-Saddam insurgency. So the U.S. simply cannot leave, and the current insurgents do not consider material trade-offs as compensation for cooperation.

⁷ This is emphatically not to say that any Islamic nation would find itself in exactly this same stable trap of expectations. Rowley (2004) outlines a very different situation in the evolving political culture of Turkey.

In the west generally, and in the U.S. in particular, this whole strategic setting looks irrational. But in fact the outcome (Cooperate, Defect) for the U.S. and insurgents, respectively is stable and Pareto optimal, *given the preferences of the participants*. It is outside the scope of the tools of economics to label preferences as irrational, and given the preferences represented above the actions of insurgent terrorists are entirely rational.

4. Conclusion

Culture is a kind of metapreference, in the sense it tells us what we should want to want. Cultures are also examples of durable, persistent spontaneous orders, once they are established.. Cultural shibboleths are means by which we communicate, and implicitly make commitments to cooperate, because we are transmitting not just information, but also preferences, intentions and character. But adherence to cultural dictates is the means by which the faithful gain access to otherwise exclusive club goods.

People from another cultural contexts, who do not understand the commitment value, or who do not value the access rights, afforded by cultural obedience, are likely to mischaracterize the strategic situation they face, and systematically misunderstand the likely actions of opponents, or even potential allies.

In this paper, I have surveyed a variety of recent work that identifies and elaborates culture as a major conditioning force on behavior generally, and an explanation for “irrational” terrorist acts in particular.

References

- Alchian, Armen. "Uncertainty, Evolution and Economic Theory." Journal of Political Economy 58 (June 1950):211-21.
- Becker Gary S. "Crime and Punishment: An Economic Approach," Journal of Political Economy, 76(2) 169-217, (March 1968).
- Becker Gary S. and Kevin M. Murphy, "Social Forces, Preferences and Complementarity," in Social Markets and the Social Economy, (Cambridge: Harvard University Press, 2000).
- Berman, Eli. "Hamas, Taliban and the Jewish Underground: An Economist's View of Radical Religious Militias," NBER WP 10004, (October 2003).
- Buchanan, James. "An Economic Theory of Clubs," Economica, (Feb. 1965) 32: 1-14.
- Cornes, Richard, and Todd Sandler. The Theory of Externalities, Public Goods, and Club Goods. New York: Cambridge University Press.
- Denzau, Arthur T & North, Douglass C, 1994b. "Shared Mental Models: Ideologies and Institutions. Kyklos, vol. 47(1), pages 3-31.
- Elster, Jon (1984) Ulysses and the Sirens: Studies in Rationality and Irrationality. (Cambridge: Cambridge University Press).
- Greif, Avner, "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies," Journal of Political Economy, CII (1994) 912-950.
- Hinich, Melvin, and Michael Munger. Ideology and the Theory of Political Choice. Ann Arbor: University of Michigan Press. 1994.
- Hofstadter, Douglas. Metamagical Themas: Questing for the Essence of Mind and Pattern. New York: Harper Collins, 1996.
- Hume, David. A Treatise of Human Nature: Being an Attempt to Introduce the Experimental Method of Reasoning into Moral Subjects. Oxford: Oxford University Press. (2003 / 1739-40).
- Iannaccone, Laurence R. "Sacrifice and Stigma: Reducing Free-riding in Cults, Communes, and Other Collectives," Journal of Political Economy, C(1992), 271-291.

- Kreps, David. "Corporate Culture and Economic Theory." In *Perspectives on Positive Political Economy*, James Alt and Kenneth Shepsle (eds). New York: Cambridge University Press. (1994): 90-143.
- Munger, Michael. Analyzing Policy: Choices, Conflicts, and Practices. New York: WW Norton and Co. 2000a.
- Munger, Michael. "Five Questions: An Integrated Research Agenda in Public Choice" Public Choice. 103 (2000b): 1-12.
- North, Douglass. Institutions, Institutional Change, and Economic Performance. New York: Cambridge University Press.
- North, Douglass. "Lecture to the memory of Alfred Nobel, December 9, 1993" From Nobel Lectures, Economics 1991-1995, Editor Torsten Persson, World Scientific Publishing Co., Singapore, 1997.
- Pape, Robert A. (2003) "The Strategic Logic of Suicide Terrorism" American Political Science Review 97(3): 343-61.
- Rowley, Charles. "Conservatism and Economics: A Sweet Turkish Delight." Public Choice. 119 (2004): 1-12.
- Townsend, Robert M, "Risk and Insurance in Village India," Econometrica, LXII(1994), 539-91.

Figure 1: Trust Game

