

Genoese non-Jewish merchant class) that employed one-shot contracts, was more accepting of occasional betrayal, and demanded less extensive information about potential partners. Among the many rich (and, to me, Weber-like) implications of Greif's argument is this: that the first, more 'traditional,' culture will have been more stratified and will have offered less opportunity for social mobility.

Whether one finds Greif's particular approach congenial or not, it illustrates the three things that any social-scientific treatment of culture must do:

1. regard all actors as governed by the same fundamental laws of behavior (and not invent one social science for Americans, another for Russians, yet a third for Iranian fundamentalists, etc.);
2. understand culture not as a set of individual propensities but as a coordinator of strategies and expectations among independent but mutually reliant actors, i.e. as a *social* institution akin to language; and
3. offer a coherent explanation of what sustains, and hence also of what can change, culture even among fully socialized adults.

Again, some of the earlier students of culture tried to do exactly this. Gabriel Almond's pioneering 1956 article on political culture in the *Journal of Politics*, or David Laitin's Gramscian attempt of the mid-1980s to explain the absence of religious conflict among the Yoruba of Niger (*Hegemony and Culture* (University of Chicago Press, 1986)), sought true covering-law explanations of cultural variety, survival, and change. It is a thread that too much of mainstream culturalist theory has subsequently ignored and that now must be re-addressed. Currently, the most promising way of doing so is as part of a multiple equilibrium story among rational actors.

Rational Choice and Culture

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"Why did the dinosaurs disappear?" I asked my three year old son. He did not understand that it was a rhetorical question and answered with conviction, "Because they died." There are lots of arguments in political science stated with equal seriousness and with similar tautological qualities.

Consider the answers to the question of why people vote. Several decades ago, this was not a question in the minds of political scientists. At that time, empirical studies concluded that people with higher income or more education were more likely to vote than people of lower socioeconomic status, but all of these studies took voting (as well as non-voting) for granted. Only after the seminal work of Olson did political scientists (particularly those subscribing to the rational choice research program) ask the question, "Why do people vote?" There is no shortage of rational choice 'explanations' of voting. I focus on one in particular, which claims that people vote because they derive satisfaction from the act of voting. There are several variants of this 'psychic income' approach: 'consumption value,' 'D term' and other versions. One thing is certain: having heard such explanations, the enquiring mind knows nothing new. While it may be true that people vote because they like to, this does not constitute an explanation (rational choice or any other kind) of voting. The reason is that the added value introduced by the statement "people vote because they like to" is nil, or very little.

Added Value As An Evaluative Criterion

I submit that the major criterion by which we should evaluate scientific work is not whether it is theoretical, empirically valid, consistent with what we know already or iconoclastic. These are important criteria, but they are subordinate to whether

and how much a piece of work affects our prior beliefs. Whether our beliefs are falsified (as with the paradoxes of social choice, starting with Arrow's Theorem) or corroborated (as with evidence that the composition of committees in Congress affects policy outcomes), important work significantly affects our priors. It makes us understand something that we did not understand before, informs us of something that we did not know, changes our minds about how the world works or reinforces beliefs that are otherwise diffuse and/or unjustified.

This is the yardstick that I will apply in the remainder of my argument, so the reader should try to evaluate the criterion at this point. Does the work that you like provide significant added value, and the work that you dislike little or none? When we hear fascinating presentations, can we not readily summarize the main points while with trivial work we leave the room saying, "So what?" If this is the case, then added value is the most important evaluative criterion, and we are on safe ground when we apply it to any field of work, including the variants of rational choice analysis that deal with political culture.

The purpose of any 'analysis' including rational choice is not to say *what* happens, but to explain *why* known events or empirical regularities happen. For example, we know that plurality electoral systems are associated with two party systems (Riker has traced statements of this association back some 150 years). An analysis (known as 'Duverger's law') explains that this association is not accidental, but due to two effects: the mechanical (that plurality electoral systems favor big parties) and the psychological (that voters who understand the mechanical effect will avoid 'wasting' their votes on small parties). Duverger did not use rational choice terminology, but the essence of his argument is that voters perform expected utility calculations and don't vote for parties which have a low probability of winning. Duverger's account has significant added value, because he persuasively explains the mechanism underlying a long

recognized but little understood association. He organizes our beliefs about the world such that we expect plurality electoral systems to lead to two party systems. This new prior is so strong that when we find countries where the association breaks down (like Canada or India), we need to explain why these violations of Duverger's law occur.

Culture, Rational Choice and Added Value

What is the role of culture in rational choice analysis? There are three significantly different ways that culture appears in rational choice arguments. The first (and most frequent) is to use culture as a *constraint* along the equilibrium path, the second is to use culture as *information* for equilibrium selection (in both these cases, culture is used as an independent variable) and the third is to use culture as a *dependent variable*. I will argue that there is an hierarchy of added value among these three variants. The first approach – even in the best case – provides little added value, the second adds significantly in our understanding of the world and the third best combines rational choice and culture.

1. Culture as independent variable

Rational choice analysis assumes that individuals are goal-oriented and try to maximize the achievement of their goals, given existing constraints. The basic concept for rational choice analysis is 'equilibrium.' Equilibrium is a situation from which no rational actor has an incentive to deviate. If a rational actor had an incentive to deviate, then she would not select that option and we would not observe that outcome as an equilibrium.

From the above discussion, it is obvious that the selected actions depend on the existing constraints. What is the nature of these constraints? Some of them may be imposed by existing *institutions*. For example, in parliamentary systems most of the bills considered by the parliament are introduced by the government. Similar rules may define what kind of amendments (if any) are permitted, who is recognized from the floor, whether discussion will be made on the

basis of the government proposal or of the corresponding committee report, and so on. Institutional approaches to politics (rational choice or not) focus on institutions as the independent variables that explain human action.

Other constraints may be imposed by the *choices of other actors*. For example, the government may not admit a parliamentary amendment, or a witness may be treated as hostile (different rules will apply to her) or you may be late for an appointment because of a traffic jam.

Finally, constraints may be imposed by some person's *beliefs, ideology or culture*. I may be not be allowed to bear arms by my religion. I may believe (as Christians did long ago) that asking for interest on a loan is immoral because it is equivalent to charging for time, which is a gift from God. Such restrictions (for the people who believe in them) are no less real than those in the previous categories. I may not violate the law because the police are present, or I may obey because I believe that compliance has an inherent moral or transcendental value. My beliefs predict my behavior as well as institutional constraints do; in some cases, they may provide more accurate predictions.

While cultural accounts of human action may be true, there is a significant difference in their explanatory value. Explanations by culture or ideology may be trivial. Under what conditions will a cultural explanation be trivial, as opposed to non-obvious? The crucial difference is whether culture is used to define an actor's choice directly (as a constraint on an actor's behavior) or to define an actor's response to the constraints of other actors (in which case culture is used as information for equilibrium selection).

a. Culture as a constraint along the equilibrium path

Suppose that a model predicts some (maximizing) set of actions, but that some actors do not follow the prescribed behavior. The cultural explanations that they did not think of it, did not have the cognitive capacities, were prohibited by their ideology or culture from acting in

this way or 'reacted spontaneously' are *ad hoc*. Even if true, these assertions don't explain anything, and worse yet they often seem invented just to save the model. We do not account for behavior by identifying the categories of actors (whether our categories are ethnic groups, genders, races or even ideologies). Arguing that 'Italians' have 'subject' culture, as Almond and Verba do, even if accurate, does not constitute an explanation of their behavior, merely a relabelling.

I am afraid that this is too often the pattern in scholarly articles, not only those that belong to the rational choice tradition. For example, explanations of voting on the basis of 'party identification' have an unpleasant tautological ring to them (people with Democratic identification vote Democratic). Similarly, genetic explanations (Germans behave differently than Italians because they have always done so) certainly don't push the limits of imagination. So tautologies are not exclusive to rational choice analysis. What is particular to poorly wrought rational choice articles is that they dress up tautological arguments with a rational choice vocabulary. But familiar vocabulary does not mean that we understand the phenomenon better – as the initial example of voting indicates.

I have tried to distance myself from this use of culture in rational choice analysis in *Nested Games*. This kind of analysis gives rational choice approaches a bad name among scholars who study culture. They justifiably believe, after reading a tautological 'explanation,' that they have learned nothing new. Fortunately, this is not the only intersection of culture and rational choice.

b. Culture as an equilibrium selection mechanism

Andre Malraux was General de Gaulle's Minister of Culture. He contributed not only to the content of the General's speeches but also to the selection of the time and place that the General delivered his speeches. He made his selections to maximize the cultural impact of each speech. Today, media consultants advise candidates to package themselves

in order to have maximum impact, given the preferences, biases, stereotypes, beliefs, ideologies and cultures of the public. The scholarly works of Tarrow and Popkin describe how revolutionary leaders study and incorporate the culture of their followers into their strategies. In all of these examples, beliefs about the culture of other people affect the optimal strategies of some actors. Culture helps answer the question of why particular actors select particular courses of action as optimal.

I emphasize that cultural reasons may explain not only the *selection* of strategies, but also their *avoidance*. One of the procedures used by the European Union for legislative decisions is the cooperation procedure. The important feature of this procedure is (I simplify here for the sake of the argument) that a proposal emanating from the Commission and the Parliament can be accepted by the Council with a qualified majority, while it can be modified only with unanimity.

Consider the figure below. The status quo (SQ) is outside the area defined by the ideal points of the members of the Council (the numbers), while the Parliament (EP) and the Commission (C) that make the proposal fall on the other side of the Council. The required qualified majority in the Council is 5 of 7.

What proposal will the Parliament and the Commission (hereafter denoted P+C) make, knowing that the Council cannot modify their proposal except by unanimity? P+C will make the proposal X that makes the pivotal member of the Council (3) almost indifferent between X and the status quo. Indeed, in this case 3 will prefer X to the status quo, and so will all the members to his right (4, 5, 6 and 7). Note that in this example we did not use the power of the Council to modify the proposal.

Suppose now that we learn from the empirical literature on the European Union that the Council is a consensus-oriented body which tries to reach decisions by unanimity whenever possible, and that most of the time there are no formal votes. (This information is readily available in the EU literature.) Does this

information about the culture of the Council affect the proposal of P+C? Yes, because unless they make a proposal that makes every member of a qualified majority better off than *any* possible unanimous decision, some potential member of the qualified majority will successfully make that unanimously favored proposal.

Follow my reasoning in the figure. The Council can unanimously approve anything in the area [SQ, SQ'] where SQ' is symmetric to the status quo with respect to the ideal point of the voter pivotal for unanimity (1). The new P+C proposal Y makes the qualified majority pivotal member of the Council (3) just shy of indifferent between it and SQ' (which he can get by unanimity). So the restriction of the off-equilibrium beliefs of P+C leads us to the selection of equilibrium Y rather than X.

Note that had the empirical literature on the Council found that one country was always in the minority and that the others never tried to incorporate it into their bargains (same institutional rules but different culture), X would emerge again as the predicted equilibrium.

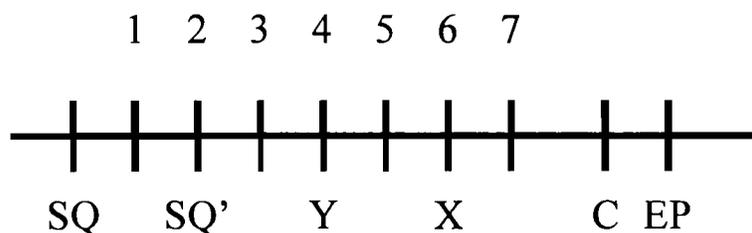
The reason that this use of culture pro-

duces added value is that the selection of strategy is not intuitively obvious. The actor did not select this course of action because of some constraint on his own beliefs or capacities, but because of the information he possessed about the other actors' cultures and, therefore, their likely courses of action.

2. Culture as a dependent variable
An even more interesting way of looking at culture is as a dependent variable. In general, the assumption of rationality and the use of game theory does not restrict the number of equilibria very much. Indeed, under conditions of incomplete information (the norm in politics) or repeated play (also quite frequent), equilibria are infinite and the real question is how to select among them. For example, while the outcome of a confrontation with complete information may never be a war (a point raised as an argument against rational choice analyses by uninformed critics), war becomes a possible equilibrium with incomplete information.

One way of understanding 'cultures' is as such manifold equilibria. In this conceptualization, different equilibria come from different antecedent condi-

Figure. Equilibrium Selection on the Basis of Different Off-Equilibrium Beliefs



$$\overline{SQ1} = \overline{SQ'}, \overline{SQ'3} > \overline{3Y}, \overline{SQ3} > \overline{3X}$$

Restricting off-equilibrium beliefs to a consensus council leads to the selection of Y as the equilibrium. Restricting off-equilibrium beliefs to a divided council leads to the selection of X as the equilibrium. See the text for details.

tions. If one wants to explain why certain rural cultures practice female infanticide, she may assert that parents consider their children to be assets or liabilities; if physical strength leads to survival, parents will keep male babies.

Another example will make my point more clearly. Suppose that two people are to divide a dollar. Any division of the dollar that leaves no residual is an equilibrium. If the amount to be divided is significant, disputes among individuals can last forever.

Up to the 1970s, bargaining was a branch of cooperative game theory in which criteria of 'fairness,' symmetry and mathematical elegance produced different solutions. Ariel Rubinstein brilliantly produced a game which simulated real bargaining: Player One makes an offer for a division of the dollar to Player Two. If Player Two accepts, the game ends; if not, he makes a counter-offer to player one. If Player One accepts the counter-offer, the game ends; if not, the game goes continues until the two players agree. To bring the game to an end, Rubinstein endowed his players with 'impatience' – that is, a preference for the game to end sooner rather than later. He thereby calculated a unique perfect equilibrium as a function of who makes the first offer and the levels of impatience of the players. If we call the level of impatience (the time discount factor) of each player d , the final division of the dollar gives the first player $x = (1-d_1)/(1-d_1d_2)$.

What is interesting in this approach is that if both players are infinitely patient (d_1 and d_2 tend to 1), the final outcome is $x = 1/2$. So the familiar Western habit of splitting the difference evenly can be *derived* as the equilibrium outcome of a game if both players are infinitely patient. The same outcome results if the players are not infinitely patient, but equally patient and equally likely to move first. If in a different society men made the first move, the split of the dollar would not be symmetric but would favor men. I suppose (although I do not know it for a fact) that in some cultures men and women do not split dollars (or other cur-

rencies) equally.

This is an example where 'culture' is the equilibrium corresponding to a series of exogenous conditions (sequence of moves, impatience). Rubinstein selects the unique perfect equilibrium from the infinite possible equilibria, and this is what gives power to his result. It may, however, be the case that the set of perfect equilibria is infinite, in which case analysts will look for some additional refinement that further restricts the predicted outcome.

Conclusions

Cultural studies produce a wealth of information about how different people – from Africa to Capitol Hill – think and behave. If these reports yield beliefs, behaviors and rituals that we did not previously recognize, then they produce added value. Their existence does and should alter the way we analyze these societies. Rational choice does not have anything to offer to such studies, but much to learn from them. Repetition of these studies with a rational choice vocabulary helps neither tradition. Rational choice contributes by incorporating these cultural findings into the rational calculations of actors. Even better, it enables researchers to understand the reasons why particular cultural patterns emerged as equilibria from the wide variety of possible behaviors.

Cultures and Modes of Rationality

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Rational choice theory has made remarkable contributions to two subfields of comparative politics. It has deepened our understanding of political economy issues – especially the politics of economic growth and distribution. And its ability to explain behavior in highly institutionalized settings – as in the rule-governed universe of a Western bureaucracy, legislature and executive – has been strikingly impressive. Politics, how-

ever, is not just political economy, nor are all forms of politics highly institutionalized – especially in the developing world.

Consider how different ethnic conflict is from legislative or bureaucratic battles over economic policy. Ethnic conflicts are a form of mass politics marked by highly risky or costly forms of behavior in which ethnic partisans not only kill but are willing to die. Just as it is hard to explain – given rational calculations of cost and benefit, why people vote – it is also hard to understand – with tools of rational choice – why so many people in the world demonstrate ethnic fervor or embrace nationalism. From an individual perspective, the instrumental benefits of participating in nationalist mobilization are obvious only under two strict conditions: (a) when nationalists are already close to capturing power and much can be gained, or anticipated losses cut, by joining the bandwagon; or (b) when law and order have broken down, ethnic animosities have soured group relations, and even neighbors of longstanding belonging to a different ethnic group can't be trusted, creating a "security dilemma" for individuals (Posen, 1993) and making preemptive violence against neighbors of a different ethnic group an exercise in personal security (Hardin, 1995).

These extreme conditions constitute a rather small proportion of the universe of ethnic conflict. The former Yugoslavia, Rwanda and Burundi are not typical; they are simply the most dramatic and gruesome cases of ethnic conflict. Violence may be common in ethnic conflicts, but a complete disintegration of the state is not. The latter breakdown has seldom marked ethnic conflicts in Asia, Europe and North America. This does not mean that there are no risks or costs associated with participation in ethnic mobilizations in societies where the state has not collapsed. Risks of incarceration, injury and death remain, but in the absence of state disintegration, ethnic conflicts don't produce security dilemmas. By and large, the situation from an individual perspective can be summarized as follows: the benefits of participation – a better job, a political office –