

RATIONAL CHOICE AND CULTURE

“Why did the dinosaurs disappear?” I asked my three year old son reading from a book. 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.

Let me use an example: Why people vote? Several decades ago, this was not a question in the minds of political scientists. At that time, empirical studies were concluding that people with higher income or higher education are more likely to vote than people of lower socioeconomic status, but all of these studies were taking voting (as well as non-voting) for granted. It was only after the seminal work of Olson that political scientists (particularly the ones subscribing in the rational choice research program) asked themselves the question “why people vote?” It would be fair to say that there is no shortage of rational choice “explanations” of voting. I want to focus on one in particular, which claimed that people vote because they derive satisfaction from the act of voting. There are several variants of this “psychic income” approach. It can be called “consumption value,” it can be called “D term” or it can come with other names. One thing is for certain: at the end of such an explanation, the inquisitive mind does not know anything more than before. Let me make the argument clearer: 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 null, or very little.

ADDED VALUE AS AN EVALUATIVE CRITERION.

I submit that the major factor that we evaluate scientific work is not whether it is theoretical, it is not whether it is valid empirically, it is not whether it is consistent with what we know already or it is iconoclastic. These are also important criteria, but they are subordinate. The major criterion of evaluation is whether and by how much a piece of work affects our prior beliefs. Whether our beliefs are falsified (like with all the paradoxes of social choice, starting with Arrow’s Theorem), or are corroborated (like finding evidence that the composition of committees in Congress affects policy outcomes), important pieces of work are the ones that significantly affect our priors: make us understand something we did not understand before, inform us about something we did not know, change our minds about how the world works, or reinforce beliefs that are otherwise diffused and/or unjustified.

This is the major point I am making in this article, and this is the yardstick I will apply in the remainder of my argument, so the reader should try to evaluate the criterion at this point. Is it the case that what the reader considers important works provide her with significant added value, and unimportant ones with very little? Is it that when we hear fascinating presentations we can summarize the main points while in trivial ones we leave the room saying “so what?” If this is the case, then added value is the major evaluative criterion, and we are in safe grounds when we apply it on any field of work, including the variants of rational choice analysis that deal with political culture.

The purpose of any “analysis” including a rational choice one is not to provide information as to what happens, but to explain why known events or empirical regularities

happen. For example, we know that plurality electoral systems are usually associated with two party systems (Riker has traced statements of this association back to some 150 years ago), but an analysis (known as “Duverger’s law”) explained that this association was not accidental, but due to two different effects, the mechanical (that plurality electoral systems favor big parties), and the psychological (that voters understanding the mechanical effect will avoid “wasting” their vote in favor of small parties). Duverger did not use rational choice terminology, but the essence of his argument is that voters perform expected utility calculations, and they do not vote for parties with infinitesimal probability of winning. Duverger’s account is a very strong example of an analysis with significant added value, because he organizes our beliefs about the world in such a way as to expect plurality electoral systems to lead to two party systems, and 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 this violation of Duverger’s law occurred.

CULTURE, RATIONAL CHOICE AND ADDED VALUE

What is the role of culture in a rational choice analysis? I will argue that there are three significantly different ways that culture can be introduced in a rational choice argument: The first (and most frequent) way is to use culture as a constraint along the equilibrium path; the second way 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, and that the first in the best case provides insignificant added value, the second adds significantly in our understanding of the world, and the third is the best combination of 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 the existing constraints. A consequence of the above definition is that the basic concept for a rational choice analysis is the one of “equilibrium.” Equilibrium is a situation from which no rational actor has an incentive to deviate (if a rational actor had an incentive to deviate we would not have selected that option, and we would not have observed that 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 existing institutions define that 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 etc. etc. Focusing on institutions as the independent variables that explain human action is the goal of institutional approaches to politics (of rational choice or other variety). Other constraints may be imposed by the actions of other individuals: for example, the government may not admit a parliamentary amendment, or a witness may be treated as hostile (meaning that different rules will apply to her), or you may not be able to arrive on time for your appointment because of a traffic jam. Finally, constraints may be imposed by some person’s beliefs, or ideology, or culture: I may be prohibited to bear arms by my religion,

or I may believe (like Christians did long ago) that asking to be paid for interest is immoral because it is equivalent to charging for time which is a gift from god. I want to stress that such restrictions (for the people that believe them) are not less real than the ones of the previous two categories. I may not be violating the law because the police are present, or because I believe that compliance has an inherent moral or transcendental value. My beliefs may be as good predictors of my behavior as institutions; in some cases they may even be better.

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

a. Culture as constraint along the equilibrium path.

Let us use a very wide family of examples. Suppose that the prediction of a model is some (maximizing) set of actions, and that some actors do not follow the prescribed behavior. The explanation that they did not think of it, they did not have the cognitive capacities, or they were prohibited by their ideology or culture to act this way, or "reacted spontaneously" is ad hoc. In the best of cases (even if true) it is non-explanatory, and in the worse it is invented just to save the model. We do not account for behavior by pointing out the subjects of this behavior (whether our categories are ethnic groups, genders, races, or even ideologies). Arguing that "Italians" have "subject" or any other form of culture, even if accurate, does not constitute an explanation of their behavior.

I am afraid that this is too often the pattern of scholarly articles, not only the ones that belong to the rational choice tradition. For example, explanations of voting on the basis of "party id" have an unpleasant tautological ring around them (people with democratic id vote democratic). Similarly, genetic explanations (Germans behave different than Italians because they always did so) are certainly not pushing the limits of one's imagination. So, tautologies are not an exclusive characteristic of rational choice articles. What is an exclusive characteristic of some rational choice articles is that they sometimes dress tautological arguments with a rational choice vocabulary. But just because the vocabulary becomes more familiar (to some) does mean we understand the phenomenon better like the initial example of voting indicates.

This is the use of culture in rational choice analysis that I have tried to distance myself from in Nested Games. And I believe this is the kind of analysis that gives rational choice approaches a bad name among scholars that study culture, because they justifiably believe that after reading a tautological "explanation" they did not learn anything new. However, this is not the only possible intersection of culture and rational choice.

b. Culture as an equilibrium selection mechanism.

Andre Malraux was General de Gaulle's minister of culture, and had an important contribution 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 selection as to maximize the cultural connotations of the speech. Today media consultants give advice to

candidates of how to package themselves in order to have the maximum impact, given the preferences, biases, stereotypes, beliefs, ideology, culture, of the public. The scholarly work of Tarrow and Popkin describes how revolutionary leaders study and incorporate in their strategy the culture of their followers. In all these examples, the beliefs about the culture of other people affect the optimal strategies of some actors. So, culture comes up as part of the answer to the question: why did this actor select this course of action as optimal?

I want to underline here that cultural reasons may be the explanation not only for the selection of some particular strategy, but also for its avoidance. Let me use a specific example: One of the procedures used by the European Union for legislative decisions is the cooperation procedure. One of the important features 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 by qualified majority, while it can be modified only by unanimity.

INSERT FIGURE 1 HERE

Consider the following picture where the status quo is outside the area defined by the ideal points of the members of the Council, while the Parliament and the Commission that make the proposal are located on the other side of the Council. Consider also that the required qualified majority in the Council is 5/7. What proposal will the Parliament and the Commission (from now on P+C) make knowing that the Council cannot modify their proposal except by unanimity?

The argument can be made that P+C will try to 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 over the status quo, and so will all the members that are to his right (4,5,6,7). Note that in this example we did not use the power of the Council to modify the proposal by unanimity.

Suppose now that we learn from the empirical literature on the European Union that the Council is a very consensus oriented body, it tries to reach decisions by unanimity whenever possible, and most of the time there are not even formal votes. (By the way, this information is readily available in the EU literature). Does this information about the culture of the Council affect the proposal of P+C? The answer is affirmative, because unless they do not 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 make that proposal, and given the consensus culture of the Council this proposal will be voted unanimously.

Let us follow this reasoning on Figure 1. The Council can by unanimity vote anything in the area (SQ, SQ') where SQ' is symmetric to the status quo with respect to the ideal point of the pivotal for unanimity voter (1). The P+C proposal Y has to make the qualified majority pivotal member of the Council (3) almost indifferent between it and SQ' (that he can get by unanimity). So, the restriction of the off-equilibrium beliefs of P+C led us to the selection of the equilibrium Y instead of X.

Note that had the empirical literature on the Council made the point that one country was always the minority and the others came to the conclusion that they cannot deal with it, and never tried to incorporate it into their bargains (same institutional rules but different culture) would have led back to X as the predicted equilibrium.

The reason that this use of culture produces added value is that the explanation for the selection of the strategy is non-obvious. It is not that the actor selected this course of action because of some constraint on his own beliefs or capacities, but because of the information he disposed about the other actors' culture, and therefore, their likely course of action.

2. Culture as dependent variable.

Another 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 rule in politics), or in the case that games are repeated over time (a quite frequent occurrence) the number of equilibria is infinite, and the real question is how can we select among all the possible ones. For example, while the outcome of a confrontation under complete information is never a war (a point raised as an argument against rational choice analyses by uninformed critics) under incomplete information war becomes a possible equilibrium.

One way of understanding "cultures" is as different such equilibria. In this conceptualization, it is possible that different equilibria will be explained through different antecedent conditions. For example, if one wants to explain why certain rural cultures practice female infanticide she can point out to the fact that children are considered as assets or liabilities of their parents, and if physical strength is an important requirement for survival, parents will be more inclined to keep male babies.

Let me use another example which will make my point more clearly. Suppose two people are trying to divide a dollar. Any division of the dollar that leaves no residual is an equilibrium. We know that if the amount to be divided is significant, disputes among individuals can last for ever. Up to the 1970's this problem of bargaining over a dollar was a branch of cooperative game theory, where criteria of "fairness," of symmetry, or of mathematical elegance were introduced and different solutions were produced. Ariel Rubinstein had the brilliant idea to produce a game which simulated real bargaining among people: Player 1 makes an offer for one particular division of the dollar to player two. If player two accepts, the game ends; if not he can make a counter offer to player one. If one accepts the game ends; if not The game can continue without end until the two players agree. Rubinstein endowed his players with "impatience" that is, preference for the game to end sooner rather than later, and then calculated a unique perfect equilibrium, which was a function of who makes the first offer, and the level of impatience of the two players. If we call the level of impatience (time discount factor) of each player d , the final division of the dollar gives to the first player:

$$x = (1 - d_1) / (1 - d_1 d_2).$$

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 in Western societies result of splitting the difference in the middle, can be derived as the equilibrium outcome of a game if both players are infinitely patient. One could derive the same outcome if the players were not infinitely patient, but perfectly symmetric (i.e. have the same d and flip a coin to determine who moves first in the game). Similarly, if in a different society men (as opposed to women) make 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 certain cultures men and women do not split dollars (or other currencies) equally.

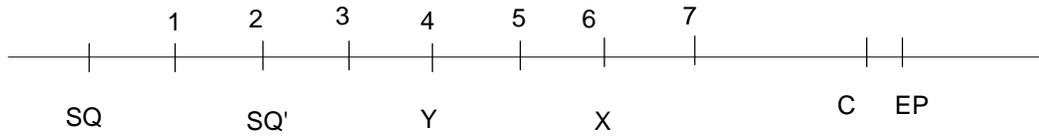
This is an example where “culture” is derived as the equilibrium corresponding to a series of exogenous conditions (sequence of moves, impatience). Rubinstein selects among the infinite possible equilibria the unique perfect equilibrium, and this is what gives power to his result. It may be the case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

CONCLUSIONS

Cultural studies produce a wealth of information about how different people (from the jungles of Africa, to Capitol Hill) think and behave. Assuming that they report beliefs, behaviors, rituals we did not know about they produce added value, and 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 does not help neither tradition. Where rational choice can produce a contribution, is by incorporating these cultural findings into the rational calculations of actors, or, even better, if it enables researchers to understand the reasons why these cultural patterns were selected as equilibria out of a wide variety of possible behaviors.

FIGURE 1

EQUILIBRIUM SELECTION ON THE BASIS OF DIFFERENT OFF EQUILIBRIUM BELIEFS



$$SQ_1 = 1SQ', SQ'_3 = 3Y, SQ_3 = 3X$$

RESTRICTING OFF-EQUILIBRIUM BELIEFS TO A CONSENSUS COUNCIL LEADS TO THE SELECTION OF Y AS EQUILIBRIUM;
RESTRICTING OFF-EQUILIBRIUM BELIEFS TO A DIVIDED COUNCIL LEADS TO THE SELECTION OF X AS EQUILIBRIUM (SEE TEXT).