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Encouraging a Productive Research Agenda: Peter Boettke and the Devil's Test

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Abstract
Peter Boettke is the single most effective graduate mentor in the Austrian economics tradition today. One of the many teaching tools Boettke uses is the devil's test. The test is an effective teaching tool because it clarifies what the goals of the political economist as critic can be. Boettke teaches his students that much can be done to clarify the logic of incentives, which in turn clarifies the debate in political advocacy. We argue that the devil's test is a good example of how Boettke enables students to become not only effective teachers but also productive scholars. The analytical framework of the heuristic enables students to analyze complex policy questions in a rigorous way. Many of Boettke's students have successfully used the distinction between motivational assumptions and causal processes, which is implicit in the devil's test, in their research.

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I. Introduction

Academics are often measured by their ability to produce academic offspring in the form of students that go on to become successful teachers and researchers. To be successful in this regard, graduate advisors have to develop the ability to turn students, who are mainly consumers of knowledge, into active contributors to the academic literature (Beaulier and Hall, 2009, p.15). Graduate advising in political economics furthermore requires the ability to convey a

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framework of analysis that allows the student to distinguish clearly between normative and positive analysis. Because the field lies at the intersection of positive economic science and normative political discourse, successful academics and teachers in political economy have to be able to analyze arguments that contain positive economic principles as well as normative political claims. In this paper, we discuss a teaching tool that fulfills this goal in an effective manner and, furthermore, allows students of political economics to develop productive research agendas: the devil's test.[1]

The economist as policy analyst can use the devil's test to distinguish between fundamental means-ends relationships and the underlying ideological vision of the planner. Analysis that uses the devil's test asks the following questions: First, what part of the proposal is a claim about the underlying causal process, i.e., the positive means-ends relationship; second, what part is a claim about how the world should be, i.e., a normative claim? Following these steps allows the economist to separate economic knowledge from normative concerns or preferences. We argue that the devil's test heuristic is a very powerful mentoring tool not only because students can use it as a tool of critical appraisal, but also because it can be a catalyst for a productive research agenda. Once the student has successfully separated normative claims from positive arguments, he can then produce scholarship that improves on the positive economic arguments in question.

This article discusses the application of the devil's test heuristic by a professor who has come to be one of the most successful graduate mentors in the Austrian economics tradition (Beaulier and Hall, 2009). Peter Boettke is responsible for producing one of the largest generations of scholars and teachers in the Austrian tradition. He exemplifies what is required of a successful graduate advisor, and the success of his many students, who have become high-quality scholars with impressive citation records, speaks for itself. Beaulier and Hall suggest that Peter Boettke is so successful at growing the intellectual influence of the Austrian program because of his ability to train students to be productive scholars as well as passionate teachers (Beaulier and Hall, 2009, p.15). In this paper, we argue that one of the reasons for Boettke's success is his adoption of the devil's test as

[1] See use of "the 'devil's test'" credited to Fr. James Sadowsky in Boettke (1988, p.15 fn. 11) .

teaching tool. As a framework for analysis, the test allows Boettke's students to assess ideas critically and to move to the production of new scholarship that improves on the logic of incentives in the existing literature. As Pete often points out, the first step in any type of academic inquiry is the recognition that all of the existing research is flawed.

We proceed as follows: Section II describes Pete Boettke's vision of political economy scholarship and defines the role the devil's test plays in this vision. Section III explains the usefulness of the devil's test as a teaching tool. Section IV outlines why the devil's test is a catalyst for a productive research agenda and presents some evidence for this claim. Section V concludes.

II. The Devil's Test Defined

Boettke's vision of political economics as a discipline combines history, politics, culture, and morality with a firm basis of logic and evidence; it "weaves together both the technical and the philosophical aspects of these disciplines" without losing the advantages that positive economic analysis provides (Boettke, 1998, p.218). In his advocacy for rich methods of analysis, Boettke sees himself firmly within the tradition of what he calls the main line of economic thinking beginning with Adam Smith and including such thinkers as Jean-Baptiste Say, David Hume, and F.A. Hayek.[2] In line with these thinkers, positive economics is, for Boettke, the "analysis of the effectiveness of selected means to achieve given ends, [which] places parameters around people's utopias" (Boettke, 1998, pp.214–215).

Boettke furthermore advocates detailed historical analysis to get at the motivation of actors.[3] Where other economists simply assume that people are acting one way or the other, he advocates for detailed case studies to adjudicate between the benevolence assumption and the assumption of motivational symmetry in politics and the market. Although he always starts out with a charitable interpretation of error in policy analysis, he is willing to entertain the idea that people advocate policy for venal or self-interested reasons. Pete's Austrian

[2] In a December 18, 2006, podcast with Russel Roberts at www.econtalk.org, Boettke explains his distinction between the main line and the main stream of economics (http://www.econtalk.org/archives/2006/12/boettke_on_katr.html#).

[3] See Boettke (2000) for his evaluation of the analytic narrative as a research method.

roots lead him to understand that even if politicians are benevolent planners, error in policy will be due to the knowledge problem. His Public Choice training makes him question the benevolence assumption and look for the selfish motives behind seemingly unintended policy outcomes.

Scholarship and teaching based on this vision of economics require the academic to walk the fine line between the normative analysis of individual motivation and the positive analysis of economics as an engineering science. Boettke uses the concept of the devil's test to teach normative political economy from the perspective of the economist. The test is one of the many ways in which Boettke keeps a clear distinction between normative political economy and positive economic science.

The economist as analyst takes preferences as given; he does not seek to ask why someone prefers guns to butter, instead he is interested in the marginal rate of substitution between the two goods and in the values that individuals place on different combinations of the goods. The economist cannot state that guns are inherently bad, but he can predict the outcome of a policy that aims to reduce the number of guns in a society. Pete often said in class, "I cannot tell you which decision is the right one to make, but I can tell you the result of your answer to that question."[4]

The devil's test helps us to isolate the epistemic concerns or the knowledge problem from other, ethical concerns; it allows us to develop an understanding of how incentives work to coordinate human action in society. This knowledge of incentives and coordination is required in designing incentive-compatible policy and it is entirely divorced from the normative implications of the same policy proposal. Pete sometimes uses his personal experience with price controls and rationing of gasoline during the 1970s as an example of policy that ignores incentives: As an undergraduate student, Pete worked with a construction crew over the summer. When gas price controls and rations were instituted, Pete was instructed to orally siphon gas from each of the worker's cars each morning, in order to pool enough gas for the crew for one day's worth of driving. This often left him with a bitter taste (literally and figuratively) as well as the understanding that the price mechanism

[4] paraphrased

was are more efficient way of allocating resources and better at overcoming the knowledge problem than politics.

The devil's test is furthermore a check on whether or not the means-ends analysis is independent of the ideological vision of the analyst: If both an angel and the devil could agree with the means-ends analysis, then the analysis itself provides a positive or "objective ground upon which to debate" (Boettke, 1998, p.216). In other words, the devil and the angel will both agree about the incentive consequences of the policy, and it does not matter that they have different motivational ends.

Boettke often uses the example of the minimum wage to illustrate the devil's test:[5] the angel's goal might be to make low-skilled workers better off by requiring employers to pay a "living wage." However, a minimum wage law will not achieve this goal. The devil's goal might be either to harm the least well off or to benefit organized labor. Establishing a legal minimum wage would be an efficient way to do so (Williams, 1977, pp.6–7; 1920). Both the angel and the devil, after some instruction in economic principles, will be able to agree on the means-ends relationship at work and the incentives a minimum wage law provides. Nevertheless, they still have different normative ends in mind when discussing the application of the law.

The economist who studies policy imports the policy makers' motivation by taking statements about intentions as given and judging the accuracy of the underlying means-ends framework by analyzing the results of the policy proposal. Assuming agreement about the nature of the incentives, the only explanation for the existence of policy that does not achieve its stated aims, but instead results in significant unintended consequences or significant wealth redistribution, is that the real intentions are not as stated. This type of analysis, as exemplified by the devil's test heuristic, is firmly rooted within the history of economics. Frederic Bastiat practiced policy analysis like this, which starts out with a rigorous analysis of the positive means-ends relationship and then moves to a critique of the underlying motivation of policy, as early as 1840.

Pete's use of the devil's test brings the normative argument to the forefront with a degree of clarity that is often lost in arguments about the normative implications of public policy. The devil's test reveals

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[5] He has used this example both in class as well as in his response to Richard Crespo on "Is Economics a Moral Science."

that the policies such as the minimum wage are not Pareto improving. Any normative position that claims a contradictory causal relationship can be critiqued on positive grounds. The devil's test therefore shows the political economist an alternative representation of the normative ends. The conversation begins when there is disagreement over the causal process; discussions over normative arguments cannot continue until the positive evidence is considered. An incoherent statement of cause and effect reveals that further debate is required to decide what the actual ends of a policy are.

Table 1 illustrates an alternative way to describe the mechanics of the devil's test and its usefulness for policy analysis: When the angel and the devil agree in their understanding of the underlying causal processes and when both take the same normative stance, there is no disagreement as to the effect of the policy proposal in question. The upper left cell represents a situation in which there is neither normative nor positive disagreement. If the angel and the devil agree about the nature of the causal process, but have conflicting preferences over the policy outcome, some compromise might be possible, even if the outcome is simply to agree to disagree (lower left cell). If there is disagreement over the underlying causal process but agreement on the normative ends, the disagreement is resolvable, because economics can adjudicate between conflicting positive means-ends relationships (upper right cell). It is only in the case where both the ends and the understanding of the means differ, that resolution is difficult (lower right cell). In this position, neither compromise nor clarification can do the job of reconciling the two parties.

Table 1: Normative vs. Positive Assumptions Underlying Policy

		Understanding of the Causal Process (Positive)	
		Symmetric	Asymmetric
Motivational Assumption (Normative)	Symmetric	No disagreement	Resolvable disagreement
	Asymmetric	Different preferences over outcome (irresolvable, but negotiable)	Irresolvable, nonnegotiable

Direct movements from the lower right-hand cell to the upper left cell are impossible: Economists can only hope to provide evidence that can adjudicate between the different perceptions of the

causal process and move the dispute from the lower right cell to the lower left cell. If misunderstanding about the causal process can be mitigated in such a way, remaining negotiations are on the level of preferences. A solution to this type of conflict over preferences could be majority voting or a complete removal of the decision from the social choice set.[6] If we add to the disagreement over the desired ends a further disagreement over the underlying causal process, however, any hope for negotiation is lost until such time when a better understanding about the causal process is achieved.

The lower left cell represents a point at which positive social science has little to offer in order to resolve a dispute. It would be a shame, however, if the social scientist could not move two parties from the upper right cell to the upper left cell. This requires a distinction like the one developed by the devil's test. Social science can also be judged by how well it resolves disagreement among people with similar motivation. Boettke teaches that good social science helps clarify the means most likely to achieve certain ends.

III. The Devil's Test as a Teaching Approach: Dichotomies Everywhere

Pete's use of the devil's test is an effective teaching tool because it clarifies the goals of the political economist as critic. It teaches his students that much can be done to clarify the logic of incentives, which in turn clarifies the debate in political advocacy. There is a role for students of political economics to eliminate disagreement over the causal process in normative debates, criticizing the actions of political agents without advocating ends derived from the scholars' own normative framework. Viewed in light of the devil's test, the political economist can structure his participation in normative debates in a way as to be solely non-normative.

In the minimum wage example, the devil's test reduces the analysis to positive economic principles. By reducing this example of the failures of intervention to a simple theoretical argument, Boettke also teaches his students to be skeptical of the increase in the domain of social choice to include things like minimum wages. As discussed in Boettke and Leeson (2002), the increase in the social choice domain outside of high levels of unanimity makes social choice less

[6] See Buchanan and Tullock (1962) for a discussion of the cost and benefits associated with different collective action regimes.

robust. This is the main lesson taught by the Virginia Public Choice tradition and its founder, James Buchanan, who was one of Boettke's teachers in graduate school. It is also a lesson that has its roots in the Austrian tradition of Mises and Hayek.

As many authors have discovered when writing popular books, the approach that best sits with students of economics is to use a rather shocking example. When Steve Levitt compares Klan members with real estate agents (Levitt and Dubner, 2005), he is juxtaposing something that is mundane with something that is exciting. The devil's test strips the analytical problem of its normative content and imposes a discipline on the analyst that allows him to evaluate even the most sensitive issues critically. For students of economics, it posits that society can be evaluated for consistency and coherence. Economics framed in this way forces utopian idealists to concede to the economic-disciplining device of opportunity costs. It confronts post-scarcity reasoning by ignoring the sensitivities of the issue and getting to the heart of the matter.

The ultimate lesson that Boettke teaches is that the world can be analyzed through various lenses and that opposing arguments often have more in common than it might initially appear. Pete's use of the devil's test makes it into a tool that reveals the different shapes, tints, and sizes of such lenses. He uses the devil's test explicitly as an illustration of the dichotomy between normative and positive arguments in political economy, but he also uses it implicitly in the way he structures his classes. By using complex dichotomies, Boettke illustrates the differences between lower right cell disagreement, i.e., disagreement over normative ends and positive causal mechanisms, and upper right cell disagreement, i.e., disagreement over positive causal mechanisms only.

In one of his undergraduate classes, he juxtaposes Ayn Rand's *Atlas Shrugged* with John Steinbeck's *The Grapes of Wrath* to illustrate the difference between economic systems, i.e., capitalism and communism. In this example there is disagreement over ends that starts out as lower right cell disagreement. This method of comparing dichotomous systems is designed to highlight the positive principles of economics that underlie the normative debate in political economy. It clarifies, as much as possible, which ends the two perspectives have in common. For example, if the two authors agree that their systems can be judged based on how well of they make the

least well members of society,[7] the dispute is reconcilable. However, if Rand's goal is to dramatize the captain of industry, and Steinbeck's goal is to champion the working man, their preferences over ends cannot be resolved. The social scientist's critique can only be focused on the movement from the upper right cell to the upper left cell, or from the lower right cell to the lower left cell, i.e., resolution of conflict over the causal mechanism.

Similarly, in his graduate class in Constitutional Political Economy, Boettke contrasts Ludwig von Mises' *Liberalism* and Scott Gordon's *Controlling the State* with Acemoglu and Robinson's *Economic Origins of Dictatorship and Democracy* to bring out normative difference and distill the shared positive economic principles. All these books seek to understand the causal process that underlies the robustness of modern democracy and the expanding access to it. Boettke frames their discussion as a disagreement over the causal process, which can be reconciled, i.e., movement from the upper right cell to the upper left cell. Just like with the devil's test, these dichotomies are designed to develop his students' critical thinking skills and their ability to abstract from normative debates. The goal is to train students in their ability to clarify the causal process and to leave disagreement about ends to other disciplines. The juxtaposition of different normative arguments allows the student of political economy to isolate positive arguments and to find potential positive errors, while at the same time developing an understanding for different normative arguments, as well as for tensions between positive analysis and normative argument.

IV. The Devil's Test as Catalyst for a Productive Research Agenda

Beaulier and Hall (2009, p.14) suggest that one of the reasons why Peter Boettke is such a successful mentor is that "since coming to GMU, Boettke encouraged students to begin thinking of themselves as scholars from day one of their graduate training." We argue that teaching the devil's test is a good example of how Pete enables students to become productive scholars. The analytical framework of the heuristic enables students to analyze complex policy questions in a rigorous way and, as discussed above, it suggests that much can be done to improve the logic of incentives in policy

[7] Rawlsian maxi-min criteria.

discussions. After all, Pete is always quick to point out: no research is possible without the recognition that there is something wrong with the existing literature.

Many of Pete's students have successfully used the distinction between motivational assumptions and causal processes, which is implicit in the devil's test, in their research. Examples of this research include Ben Powell and David Skarbek's work on sweatshops (Powell and Skarbek, 2006), which successfully distinguishes between the means-ends relationship in the analysis of sweatshop and the normative portrait of sweatshops painted in the western media. Ed Stringham's work (Stringham, 2009) on alcohol restrictions suggests that drunk driving is a greater problem where alcohol restrictions are more stringent. If the goal is to reduce fatalities from alcohol-related accidents (agreement over ends), the policy proposal is different than it would be if the goal were simply to penalize drinking. Chris Coyne's work on military invasions and rebuilding efforts shows that occupation and rebuilding have rarely been successful historically; he reveals that efforts to convince voters of the opposite ignore the underlying means-ends relationship (Coyne, 2007, 2008). Coyne's analysis requires the acceptance of a failure of stated ends and a re-articulation of the ends being sought. Peter Leeson's work on foreign aid (Leeson, 2008) suggests that there is no positive relationship between aid and development and that policy efforts that suggest the opposite must have different normative ends. His work challenges advocates of development aid to articulate such alternative ends clearly. Dan D'Amico's work on tattoo prohibition in prisons shows that the unintended effect of tattoo prohibition in prisons is increased violence because of the inability of inmates to signal strength using tattoos rather than physical force (D'Amico, 2008). Adam Martin and Diana Thomas's work on the brain drain suggests that one of the unintended consequences of public education in developing countries is an increased outmigration of high-skilled labor (Martin and Thomas, 2010). They show that the stated ends of development policy contradict the results. Diana Thomas's work on the Cologne Brewer's Guild identifies the conflict between stated ends and policy outcomes in the case of the German purity law for beer: Despite its stated ends, purity regulation for beer effectively monopolized medieval beer markets at the expense of consumers (Thomas, 2009). Michael Thomas's work on repugnance suggests that public sentiments are often stirred at the expense of a clear

understanding of means-ends relationships in policy debates (Thomas, 2009). This suggests that lower right cell complexity is used to mask disagreement about ends in order for one group to benefit at the expense of others. David Skarbek's work on occupational licensing shows that the positive effect of occupational licensing restrictions on prices is well understood even by policy makers, who in times of crisis, remove existing licensing restrictions to increase the availability of construction services. The same policy makers had originally used arguments based on false causal relationships to impose licensing restrictions that most likely achieved non-articulated normative reasons (Skarbek, 2008). Emily Schaeffer's work on mixed-income housing developments shows that well-intentioned, mixed-income housing developments in New Orleans were unable to achieve their stated ends of integrating middle and low-income families in one neighborhood to achieve desired positive externalities (Schaffer, 2009).

The devil's test as a heuristic is a powerful framework for scholarly research. Although none of the research cited above explicitly cites the devil's test, it is obvious that the test, or an analytical framework very similar to it, is at work in the minds of Peter Boettke's students. All of the papers cited above rely on the insight that intentions and outcomes often conflict in the policy arena, and all of them use this insight to clarify the causal process underlying the respective policies and laws that the scholars analyze critically. This evidence suggests that Pete's teaching heuristic of the devil's test has left an irreversible impression in his student's minds and for each of them has sparked a productive research agenda.

V. Conclusion

Peter Boettke is currently the most successful graduate advisor in the Austrian economics tradition. He has placed his students in outstanding graduate and undergraduate institutions around the country, and they have a very successful publishing record. We have argued here that one of Pete's teaching heuristics, which is part of what makes him such an effective mentor, is the devil's test. The analytical framework of the devil's test is an effective tool of critical appraisal for anyone who applies it to the policy arena. It allows the analyst to distinguish clearly between positive means and normative ends. As a teaching device, the devil's test helps to clarify and analyze debates from a value-neutral perspective. In addition, it has come to

be catalyst for a productive research agenda as well as a successful teaching tool for many of Pete's students. We have argued that Pete's use of the devil's test is so effective because it teaches his students to recognize quickly any disagreements over desired ends and to focus their time on resolving any remaining disagreements about the causal process instead. In only one of these cases is the student of economics any help in commenting on the debate. Recognizing these limits helps Pete's students simplify the world into a series of problems that can be addressed through economic reasoning.

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