

# **PATHOLOGIES OF RATIONAL CHOICE THEORIES, A MISTAKEN DIAGNOSIS?**

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**Abstract:** Donald Green and Ian Shapiro in their book entitled *Pathology of Rational Choice theory: A Critique of Applications in Political Science* have sought to take stock of the contributions that rational choice theories have made to the field of policy analysis and, more generally, to political science. They claim that the contributions that rational choice theories have thus far made to the field of policy analysis are negligible because these theories often cannot explain why the type of actors that constitute their respective subject of study perform certain actions. In the paper I claim that it is mistaken to assess the contributions that rational choice theories have made to science by using such a test or criterion. I claim that the main contributions that rational choice theories have made to the field of policy analysis consist of the models that they use to represent objects that can possibly be affected by public policies. Political scientists should welcome and take notice of these contributions because, to my knowledge, they have not for their part thus far conducted a lot of researches concerning this question.

Donald Green and Ian Shapiro have published in 1994 a book called *Pathologies of Rational Choice Theories: A Critique of Applications in Political Science*<sup>1</sup>. In this book Green and Shapiro diagnose the main problems that rational choice theories most commonly suffer from and also they suggest certain remedies that rational choice theorists could use to cure some of the problems that, they believe, too often afflict their theories. What Green and Shapiro diagnose as being the most problematic about rational choice theories is their explanatory power.

According to these authors, a given rational choice theory will display some explanatory power if the results that it formulates can be used to explain the observed actions and behavior of the type of actors that constitute its subject of study. And, in this respect, it is quite evident that the results that are formulated by many rational choice theories cannot really be used to explain why the types of actors that constitute their respective subject of study perform certain specific actions.

For example the type of actors that constitute the subject of study of Anthony Downs' theory of voting are of course voters (more precisely: individuals that have the right to vote in a given electoral competition or contest). As it is well known, Downs' theory of voting comes to the conclusion that voting constitutes

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<sup>1</sup> Green, Donald and Ian Shapiro. *Pathologies of Rational Choice Theory: A Critique of Applications in Political Science*. Yale University Press. New Haven. 1994. 239 pages.

an action whose expected benefits are negative<sup>2</sup>. If the main conclusion that is formulated by Downs' theory of voting can explain anything, it is of course why the individuals that are observed to abstain from voting in elections wherein they have the right to vote do so. However it can be observed that whenever an election of some importance is held, a significant proportion of the individuals that have the right to vote in it generally exercise their right to do so. What Green and Shapiro diagnose to be extremely problematic about Downs's theory of voting is therefore the fact that its main result cannot be used to explain why the individuals who exercise their right to vote do so.

I will certainly not attempt here to claim that the main result that is formulated by Down's theory of voting explains why the individuals who vote do so. However I will claim that it is seriously mistaken to diagnose any kind or sort of problem with Down's theory of voting on the basis of the fact that the main result that this theory formulates concerning the expected benefits of voting does not explain why the individuals that exercise their right to vote do so. Probably the best way to illustrate why it is mistaken and, as a matter of fact, absurd to diagnose any kind or sort of problem with Downs' theory on such a basis is by looking at examples of other actions whose expected benefits have also been calculated.

In this respect the expected benefits of buying a ticket to participate to a lottery such as the 6/49 lottery have also been calculated (or, at the very least, they can also be). The expected benefits of buying a 6/49 lottery ticket are of course negative. But just like in the case of voting, it can nevertheless be observed that, each week, many individuals do buy tickets to participate to this lottery despite the fact that the expected benefits of doing so are negative. Clearly the result which holds that the expected benefits of the act of buying a

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<sup>2</sup> All the rational theories that I discuss in this paper are presented and explained in details in the following textbook: Mueller, Dennis. *Public Choice II*. Cambridge University Press. 1989. 518 pages. If the reader wants to know more about any one of the public choice theories that I discuss in the paper and/or make sure that what I say about them is correct and makes sense, he or she can most notably consult this book.

6/49 lottery ticket are negative cannot be used to explain why the individuals who buy these tickets do so. However not even the people who organize this lottery have ever had the temerity of claiming that the fact that a larger number of individuals can be observed each week to buy tickets to participate to their lottery invalidates to any extent the result which holds that the expected benefits of doing so are negative. In my opinion claiming that there is something wrong with the result that the expected benefits of the act of voting are negative on the grounds that it can be observed that many individuals do exercise their right to vote whenever they are given the opportunity to do so is as absurd as claiming that there is something wrong with the results that smoking cigarettes causes cancer on the grounds that it can be observed that many individuals do smoke.

Why do Green and Shapiro believe that, to empirically test some results which highlight the effects of performing some particular action such as voting, buying a lottery ticket or smoking, one must observe what is the proportion of the individuals that are in a position to perform this particular action that actually perform it is frankly beyond me. In their book Green and Shapiro do not at all discuss why they believe that observing how the type of actors that constitute the subject of study of some rational choice theory such as Downs's theory of voting actually act and behave constitutes a possible and acceptable way to proceed to empirically test the results that this theory formulates. They take this for granted and go on to notice that many rational choice theories miserably fail this empirical test, which in turn leads them to conclude that the problems that rational choice theories are suffering from are of a pathological order. It is as a matter of fact quite surprising that, after noticing that so many rational choice theories were failing the empirical test that they were administering them to assess their scientific contribution and validity, Green and Shapiro never ever contemplated the possibility that there was something wrong with the test that they were using to assess this rather than with the theories that they were trying to test with it.

Concerning the kind of empirical tests that is appropriate to use to assess the scientific contribution and validity of some rational choice theory, it seems to me that most people at least intuitively understand that the fact that a large number of individuals can be observed to act and behave in a certain, specific, way does not at all mean that acting and behaving this way is to any extent rational and, more generally, recommendable. It is therefore certainly not by observing whether people generally act and behave in some particular, specific, way or manner that one can empirically test whether acting and behaving in this particular way is rational or not. More precisely it is not by observing what is the proportion of individuals that are in a position to perform some particular action that actually do perform it that one will be able to test some result which highlights the most likely effects or consequences of performing this particular action. To empirically test a result which highlights the most likely effects or consequences of performing some particular action, one must of course rather observe the effects that this particular action causes whenever it is actually performed.

For example empirically testing Downs' theory of voting requires, as far as I can tell, observing the benefits that a representative sample of individuals that have exercised their right to vote in one or some electoral contests have obtained from doing so in order to see whether, on average, these individuals have obtained positive or negative benefits from performing this action; just like empirically testing the result which holds that the expected benefits of buying a ticket to participate to some lottery are negative requires observing the benefits that some representative sample of individuals that have actually bought tickets to participate to this lottery have obtained from doing so in order to see whether, on average, these people have obtained positive or negative benefits from performing this action. So, in my opinion, it is seriously mistaken to empirically test a given rational choice theory by observing how the type of actors that constitute its subject of study generally act and behave and to diagnose anything wrong or problematic with such a rational choice theory if it turns out that the

results that this theory formulates cannot be used to explain why the type of actors that constitute its subject of study perform certain specific actions.

More generally I feel that it is important to stress that it is not the purpose of a rational choice theory to explain -to interpret- why individuals do what they can actually be observed to do. The purpose of a given rational choice theory is rather, as far as I understand it, to either highlight the consequences of performing an action on some particular object and/or to highlight what is the action or actions that can be performed on some particular object that will produce a given, specific, effect on it. If it is in my opinion seriously mistaken to expect from a given rational choice theory such as Downs' theory of voting that it formulates results that can be used to explain why the type of actors that constitutes its subject of study perform certain specific actions, it is of course however not at all mistaken to try to explain why some individuals who can be observed to perform certain specific actions do so.

For example I do not believe that it is mistaken to seek to explain why the individuals who have voted in some electoral contest have done so or to explain why the people who have bought tickets to participate to some lottery have done so. Explaining why people do what they can be observed to do is not at all a futile research question to investigate. It is however not at all a research question that rational choice theories for their part seek to answer.

If I take the time to mention the fact that explaining why certain types of actors act and behave in some particular way or manner is not at all a futile research question to investigate, it is because I know that political science more and more sees and defines itself as being an interpretative science; that is to say as being a science which first and foremost seeks to make sense of the actions that are actually performed by certain individuals or types of actors<sup>3</sup>. I am trained

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<sup>3</sup> A book that in my opinion expresses very well the fact that political scientists more and more consider the type or researches that they perform as being interpretative is: *Épistémologie de la Science Politique*.

in policy analysis and I know for a fact that when political scientists analyze public policies, it is generally because they want to explain why some public policy was made in the first place and/or why it was changed at some given point in time.

For example the main research question that a political scientist will seek to answer by analyzing the free trade agreement that was signed in 1988 by the Canadian and U.S. governments will typically be: why did the Canadian government and/or the U.S. government decide to sign this particular type of agreement at this particular point in time of their history? Why some particular policy has been made by a given government at some specific point in time and/or why did a given government change its policy concerning some particular issue at some given point in time? These are the two main research questions that political scientists generally seek to answer when they analyze a public policy.

Political science is of course not the only discipline of the social sciences wherein policy analysis (i.e., the study of governmental activities) is practiced. Policy analysis is also most notably practiced in economics. And, in my opinion, what the book *Pathologies of Rational Choice Theories: A Critique of Applications in Political Science* really diagnose is not at all like its authors claim the main problems that rational choice theories most commonly suffer from but rather the fact that many political scientists (such as Green and Shapiro) do not really understand why economists for their part analyze public policies.

In this respect reading Green and Shapiro's book and also observing the extent to which this book was well received and acclaimed in political science has lead me to conclude that many political scientists believe that economists study public policies for the exact same reason that they do, which is: to interpret

and make sense of the policies that are actually made by governments. This is a belief that I would like to dispel. Economists do not for their part study and analysis public policies because they want to explain why governments do what they can actually be observed to do. That is why the main purpose of this paper will really be to explain why economists for their part study governmental activities. I hope that, by doing so, I will be able to convince political scientists such as Green and Shapiro to see the rational choice theories that economists have developed concerning governmental activities in a whole new light.

In this respect it seems to me that many political scientists perceive the rational choice theories that economists have developed concerning governmental activities (especially the rational choice theories that are associated with public choice) as being an invasion by economists of the field of policy analysis; a field of research that political scientists of course also occupy and greatly contribute to. I personally feel that the main reason why political scientists such as Green and Shapiro take the time to write books or papers that criticize an approach (i.e., the rational choice approach) that they do not for their part personally use to analyze public policies is that they want to defend their turf so to speak. As a matter of fact I cannot help but to feel that the main reason why Green and Shapiro have written their book about the contributions that rational choice theories have thus far made to political science and, more precisely, to the field of policy analysis is that they want to repel economists from this field of research that they believe has been invaded by them.

One of my goals in this paper will be to refute this idea that economists have invaded the field of policy analysis and, more precisely, that the kind of policy analysis that economists generally practice constitutes a threat to the kind of policy analysis that political scientists for their part generally practice. The kind of policy analysis that economists generally practice is positive in nature. The kind of policy analysis that economists practice more precisely generally seek to highlight the main properties and attributes of objects that can possibly be

affected by public policies (i.e., by governmental activities). On the other hand, the kind of policy analysis that political scientists generally practice is interpretative in nature. The kind of policy analysis that political scientists practice more precisely generally seek to explain why some government has made a policy concerning some particular issue at some given point in time and/or why it has changed it.

The positive kind of policy analysis that economists generally practice is of course not at all a substitute or a rival to the interpretative kind of policy analysis that political scientists for their part generally practice and I for one believe that the interpretative approach that political scientists generally use to analyze public policies is very interesting and has its place in this field of research. The purpose of this paper will therefore be to explain why economists for their part analyze public policies. The purpose of this paper will not at all be to criticize the interpretative approach that political scientists generally use to analyze public policies.

### **1. Why do economists analyze public policies?**

Why do economists care about governmental activities? What has led economists to study governmental activities in the first place? I believe that the sole reason why economists have been led to study governmental activities is that they are convinced that governments have the capacity to affect -by the means of their policies- their object of study.

What is the object of study of economics? The object of study of economics is of course the economy. More precisely the object of study of economics is the resources endowments of certain entities as well as, in the same vein, the way in which resources are allocated among certain entities (i.e., the allocation of resources). Thus I claim that economists study governmental activities because they are convinced that governments have the capacity to

affect –to modify- the resources endowments of certain entities or, which amounts to the same, because they are convinced that governments have the capacity to affect –to modify- the way in which resources are allocated among certain entities.

As a matter of fact I claim that the theories that economists have thus far developed concerning governmental activities all seek to either highlight how certain public policies most likely affect the way in which resources are allocated among certain entities or they seek to highlight what are the policies that a given government can make that will most likely allocate resources among certain entities according to some particular way or manner (usually in an efficient way or manner). If economists use the rational choice approach to study governments' activities, it is therefore because they believe that this approach can help them highlighting how certain public policies most likely affect the way in which resources are allocated among certain entities as well as what particular policy or policies will have the effect of allocating resources among certain entities according to some particular way or manner. It is certainly not because economists want to explain why governments enact the policies that they can be observed to enact that they use the rational choice approach to study governmental activities since this approach is clearly ill-suited to investigate such a research question.

But why are economists so interested in studying the resources endowments of certain entities as well as the way in which resources are allocated among them? Why did economists make of the resources endowments of entities as well as of the way in which resources are allocated among them their principal object of study? The dimension or aspect of objects that usually interest economists the most is the level of welfare -of utility- that they provide to certain entities. As a matter of fact it could be said that the idea that has given birth to modern economics (and especially to micro-economics) as it is known today is that entities (i.e., individuals as well as groups of individuals such as

communities, nations, interest groups, etc.,) derive the level of welfare that they experience from certain, specific, objects.

This idea, this assumption, that entities derive welfare from certain, specific, objects really lies at the heart of modern economics since it is this idea, this assumption, that allows economists to claim that the level of welfare that an entity experiences can be modified. More precisely it is this assumption that allows economists to claim that it is possible to increase, decrease, maximize, minimize, etc., the level of welfare -of utility- that some entity experiences since, by definition, an action can only be performed on some object and, clearly, increasing, decreasing, maximizing, minimizing and, more generally modifying the level of welfare that some entity experiences falls under the category of acting; i.e., of doing something. Since actions can only be performed on objects it therefore follows that in order to be able to claim that the level of welfare that some entity experiences can be modified, it is actually necessary to assume that this entity derives the level of welfare that it experiences from some object or objects and that is precisely what economists do.

But what are the objects that provide welfare to entities? What are the objects that one must act upon in order to modify the level of welfare that some entity or entities experience? Thus far the main object that has been assumed in economics to provide welfare to entities is their resources endowments; i.e., their wealth. Economists therefore generally assume that it is by acting upon the resources endowment of some entity that it is possible to modify the level of welfare that this entity experiences. This explains why the resources endowments of one or some entities constitute the object of study of the vast majority of economic theories; most notably of basically all currently existing public choice theories.

Personally I do not know of any public choice theory that does not at least implicitly assumes that it is by modifying the resources endowments of certain

entities that governments can affect their individual and/or collective level of welfare. For example let's look at the median voter theorem. In the median voter theorem, it is assumed that the probability that a given individual will vote for a politician is function of the level of welfare that this entity will derive from its resource endowment if this politician, once elected, supplies it with a given quantity of some public good that is included in it. The closer is the quantity of some public good that a particular politician is promising to supply to some individual if it is elected to the quantity of this public good that is the one that would have the effect of maximizing the level of welfare that this individual derives from its resources endowment, the higher is the probability that this individual will vote for this particular politician. More precisely when an electoral competition features two rival candidates or parties that run against one another, the median voter theorem assumes that an individual that has the right to vote in this election will vote for the candidate or party that proposes to supply it with the quantity of the public good that is included in its resources endowment that is the closest to the one that would have the effect of maximizing the level of welfare that it can derive from its resources endowment. Thus it is in my opinion undisputable that, in the median voter theorem, it is assumed that it is by modifying the resources endowments of certain entities that governments (and, by ricochet, the politicians that lead them) can affect the level of welfare that entities experience.

Nowhere in their book do Green and Shapiro stress the fact that basically all rational choice theories assume that it is by acting on the resources endowments of entities (i.e., that it is by either supplying entities with some good or service or by redistributing a given good or service among them) that governments affect their welfare. According to me this is, and by far, the most important assumption that the vast majority of rational choice theories make. Actually I believe that the two most important assumptions that basically all rational choice theories make are: (1) that governments have the capacity to affect, by the means of their policies, the level of welfare that certain entities

experience and, (2) that it is from their respective resources endowments that entities derive the level of welfare that they experience and, thus, that it is by affecting –modifying- the resources endowments of entities that governments can affect the level of welfare that they experience.

You are not yet convinced that basically all rational choice theories that currently exist assume that it is by modifying the resources endowments of entities that governments can affect the level of welfare that they experience? Well it is of course impossible to review in this paper one by one each rational choice theory that has ever been developed to see if such is the case or not but it is however possible to briefly take a look at the most well known public choice theories that have thus far been developed concerning each one of the main types of actors that participate in one capacity or another to process by which governments make their policies (which are: politicians, interest groups, bureaucrats and voters) in order to see if such is the case or not.

Concerning public choice theories whose subject of study is politicians, I have already discussed the case of the most famous one: the median voter theorem. More precisely I have already pointed out above that the median voter theorems assumes that it is by taking a stance concerning the quantity of a given public good that its voters will be supplied with it if it is elected that a given politician affects the probability that any one of them will vote for him or her.

Concerning public choice theories whose subject of study is interest groups, two of them are particularly famous and well known: Mancur Olson's logic of collective action and Gary Becker's theory of pressure groups. Both of them assume that it is by modifying the resources endowments of interest groups that governments affect the level of welfare that they experience. More precisely, Olson assumes that interest groups lobby governments in order to get them to implement polities that will provide them a rent. A rent is defined as being a redistribution of resource in one's favor and thus Olson's theory of collective

action clearly assumes that it is by affecting the resources endowments of certain entities (in this particular case: interest groups) that policies affect their welfare.

Gary Becker for its part assumes that all the public policies that governments make are the result of some sort compromise –of some sort of political equilibrium- that has been reached between two types of rival pressure groups that constantly lobby them: the taxed and the subsidized. The way in which Becker identifies the opposite forces that clash against one another within the process by which governments make their policies clearly indicates that he assumes that it is by modifying the resources endowment of entities (by either taxing or subsidizing their respective resources endowments) that governments affect the level of welfare that they experience.

The most famous public choice theory about bureaucrats is of course Niskanen's theory of bureaucracy and, as it is well known, Niskanen assumes that the level of welfare that bureaucrats experience is positively related to the size of their budget; that is to say to the quantity of resources that they are endowed with to implement the policies that their particular bureaus are in charge of implementing.

Finally in the case of public choice theories whose subject of study is voters, the most famous one is of course Downs' theory of voting. Downs' theory of voting does not explicitly assume that it is by modifying the resources endowments of certain entities (of voters) that governments can affect the level of welfare that they experience. Downs of course however assumes that governments can affect the level of welfare that voters experience somehow, somehow, since, as it was explained above, Downs' theory seeks to highlight the expected benefits or utility of voting. The act of voting is therefore clearly studied by Downs from the vantage point of the welfare or utility that an individual can rationally expect to obtain from performing it.

The reason why Downs does not really specify in his theory what object is actually affected by the policies of governments (policies which can in turn potentially be changed by the act of voting) is of course that he anyhow comes to the conclusion that it is highly improbable that an individual will be able to modify the result of an election by exercising its right to vote in it and, thus, that an individual will be able to modify how the policies of some government affect an object that provides it some welfare by exercising its right to vote in the election that will determine who (which party or candidate) will lead this government. Since a voter cannot rationally expect to modify the result of an election which will in turn determine which candidate or party will lead some government that enacts policies that affect an object that provides it some welfare, it is therefore not really necessary to specify the exact nature and properties of this object and that is why most likely Downs in his theory is not very precise concerning this question. Thus, if you ask me, the main thing that fundamentally characterizes the rational choice theories that economists have thus far developed to study governmental activities is that these theories all assume that it is by modifying the resources endowments of certain entities that governments can affect the level of welfare that they experience.

## **2. What distinguishes different rational choice theories**

This short review that I have just made above of the most famous rational choice theories (more precisely: most famous public choice theories) as well reveals that what distinguishes different rational choice theories is usually not their respective object of study since they basically all have the same one: the resources endowments of certain entities. What usually distinguishes two different rational choice theories and, more generally, two different sets or families of rational choice theories is their respective subject of study. In this respect it is very important to understand that the different types of actors that constitute the respective subjects of study of the various rational choice theories that currently exist have not been selected at random. To become the subject of

study of a given rational choice theory, a type of actors must be believed to have the capacity to act on the object of study of this theory.

This last point is very important to stress and to take account of in the context of this paper since, as it was explained in the introduction, what I am really trying to achieve here by explaining what is a rational choice theory is explaining why economists for their part study governmental activities. As I have just explained it here, the condition that a given type of actors must absolutely fulfill in order to become the subject of study of a given rational choice theory is that it must be believed to have the capacity to act on the object of study of this theory. It is therefore the fact that economists have made of the resources endowments of entities their main object of study that explains why they have started to study governmental activities and, more precisely, that explains why they have made of governments (as well as of types of actors that can be said to be involved in the process by which governments make their policies such as politicians, bureaucrats, interest groups and voters) the subjects of study of some of their theories since governments clearly have the capacity to affect, by the means of their policies, the resources endowments of many entities.

That is why I personally consider that this metaphor of the invasion of the field of policy analysis by economists that is often used (sometimes, I must admit, by economists themselves) to explain why economists for their part study governmental activities has being very misleading to say the least. I consider this metaphor to be extremely misleading because it seems to suggest that it was not the natural development of economics as a science that has led economists to make of governments the subject of study of some of the theories that they have developed concerning their main object of study: the resources endowments of certain entities. In my opinion it is totally natural for a science whose object of study is the resources endowments of certain entities as well as the way in which resources are allocated among them to develop theories concerning governmental activities since it is quite evident to me that governments do have

the capacity to modify the resources endowments of entities as well as the way in which resources are allocated among them.

## **2.1 Differences between public choice and welfare economics**

It is interesting to note that even though Green and Shapiro's book is entitled Pathologies of Rational Choice Theory, they only discuss in it rational choice theories that are associated with one particular school of thoughts: public choice. Green and Shapiro most notably do not discuss welfare economics in their book even though the theories that are associated to this other school of thoughts also use a rational -deductive- approach to study governmental activities.

I believe that the reason why Green and Shapiro have decided not to discuss in their book rational choice theories that are associated with welfare economics (such as the first and second theorems of welfare) is that they consider -like many public choice theorists do- that public choice and welfare economics are schools of thoughts that are radically different from one another. In this respect many pioneers of public choice have indeed tended to depict public choice as being the antithesis of welfare economics. As a matter of fact, many pioneers of public choice depict it as constituting a school of thoughts that has broken away from welfare economics.

It is of course true that, chronologically speaking, welfare economics came before public choice. However I personally perceive public choice as being a school of thoughts that is in strong -if not in total- continuity with welfare economics rather than being a school of thoughts that has broken away from it. In this respect it can first of all be noted that, in both welfare economics and public choice, governmental activities are studied from the vantage point of how they can possibly affect the level of welfare that certain entities experience. As a matter of fact, in the vast majority of welfare economics theories and public

choice theories, it is assumed that it is by modifying the resources endowments of certain entities that government can affect the level of welfare that they experience.

I have already provided above plenty of evidence to substantiate this claim that, in most public choice theories, it is assumed that it is by modifying the resources endowments of entities that governments affect the level of welfare that they experience. In the case of welfare economics, finding evidence to substantiate this claim is even more easier. The main theory of welfare economics is known as the first theorem of welfare. As it is well known, the main conclusion of the first theorem of welfare is that market forces allocate resources efficiently among entities. It is this result that usually leads economists to conclude that governments should leave it to the invisible hand –to market forces- the task of allocating resources among the entities over which they preside. The way in which the main conclusion of the first theorem of welfare is formulated clearly indicates that it is assumed in this theorem that it is by modifying the resources endowments of entities that governments can affect the level of welfare that they experience. Thus if public choice theories and welfare economics are different from one another, it is certainly not with respect to their respective object of study since the theories that belong to these two schools of thoughts all have the same object of study: the resources endowments of certain entities.

### **2.3 Why do economists privilege a rational, deductive, approach to analyze public policies?**

The fact that public choice theories and welfare economics theories all have the same object of study as well explains why they all have been developed with the same approach or methodology: the rational -deductive- approach. In this respect the reason why economists usually privilege a deductive approach to study their objects of study is that the main dimension or aspect of objects that is of interest to them is the level of welfare that they provide to certain entities and

this aspect or dimension of objects is very hard to empirically observe and measure.

Since it is impossible to empirically observe how performing an action on some object changes the level of welfare that it provides to some entity or entities, economists use models that specify, by the means of assumptions, the main properties of the causal relationship that exist between certain constitutive elements of objects and the level of welfare that they provide to some entity or entities to deduce such results. For example, in the case of the resource endowment of an entity, the models that are used in economics to represent such an object generally specify, by the means of assumptions, how the level of welfare that this entity derives from its resources endowment changes when the quantities of one or some resources that it is composed of are modified. It is therefore by most notably using the mathematical properties that are assumed to characterize the causal relationship that exists between the quantities of certain resources that the resources endowment of some entity is composed of and the level of welfare that this entity derives from it that economists deduce the action or actions that can be performed on the resource endowment of this entity that will have the effect of maximizing the level of welfare that this entity can possibly derive from it.

Thus all this to say that public choice theories and welfare economics theories all have the same object of study and that they all use the same approach or methodology to study it. The only thing that distinguishes welfare economics from public choice concerns how proponents of each one of these two schools of thoughts respectively conceive states and governments. In welfare economics states or governments are conceived as being types of actors in their own rights that can be considered as having the capacity to act in some purposeful way whereas, in public choice, states or governments are rather considered as being institutions within which act and, to some extent, interact

various types of actors such as politicians, bureaucrats, interest groups and voters.

Since welfare economics considers governments as being actors, governments constitute the subject of study of most welfare economics theories. However since public choice does not for its part consider governments as being actors, governments are never the actual subject of study of any public choice theory. The subject of study of a given public choice theory is always a type of actors that is involved in the process by which governments make their policies. The fact that public choice theorists conceive governments in a different manner than welfare economists is of course very important to note and this indeed constitutes a major difference between these two schools of thoughts.

It is however a difference that, in my opinion, makes these two schools of thoughts complementary rather than rival or substitute since all that changing the way in which they conceived governments has allowed economists to do is expanding the number of questions that can be studied with the help of the models that they have developed to represent objects that provide welfare to entities that can be affected by governmental activities. More precisely whereas welfare economics has used models that represent objects that provide welfare to entities primarily to deduce what are the actions (i.e., the policies) that a given government can perform on them that will have the effect of maximizing the level of welfare that they provide to these entities; public choice has rather used models of objects that provide welfare to entities to deduce what are the actions that a given government could perform on them that would best serve the personal interest of certain types of actors such as politicians, bureaucrats or interest groups that are involved in the process by which policies are made. There is not a lot of overlap between the types of results that welfare economics and public choice theorists have respectively seek to deduce from the models that are used in economics to represent objects that provide welfare to certain entities that can possibly affected by public policies. That is why I do not think

that it is accurate to describe these two schools of thoughts (and, especially, the results that theories associated to each one of these two schools of thoughts produce) as being the antithesis of one another.

### **3. What is the contribution that rational choice theories seek to make to the study of governmental activities and what can be done to improve it?**

Finally I would like to discuss the contributions that rational choice theories seek to make to the study of governmental activities and also what could be done to modify and, ideally, improve these contributions. This is a topic that is also discussed by Green and Shapiro in their book *Pathologies of Rational Choice Theory*. On the one hand, for Green and Shapiro, it is quite clear that they consider that it is the results -the conclusions- that a given rational choice theory formulates that constitutes its main -if not sole- contributions to the study of governmental activities and, more generally, to political science. For them if a given rational choice theory does not formulate results that can be used to explain why the type of actors that constitute its subject of study act and behave in the particular manner that they can be observed to do so, this theory did not make a significant or interesting contribution to political science. That is why improving a given rational choice theory in the minds of Green and Shapiro more precisely means finding a way to make it formulate conclusions that can help explaining why the type of actors that constitute it subject of study perform the actions that they can generally be observed to perform.

For example, as explained above, Green and Shapiro consider Down's theory of voting as being extremely problematic because its main result cannot be used to explain why the people who exercise their right to vote do so. For them, improving Down's theory of voting therefore of course means changing it in such a manner that it will formulate a conclusion that could in part explain why the people who exercise their right to vote do so. For Green and Shapiro explaining why the individuals who vote do so can only be done by abandoning the assumption that individuals act in a rational manner; which more precisely

means abandoning the assumption that individuals act in order to maximize their own personal level of welfare or utility. In this respect, they state that:

«Rational choice theorizing about voter turnout could be improved through several changes in approach. The coherence and explanatory power of these models could be enhanced if the commitment to universalism were discarded in favor of what we have termed partial universalism, or the view that rational maximizing is but one of several factors at work in the turnout decision and that the influence of strategic considerations is likely to vary across people and decision context.»<sup>4</sup>

This idea that the results that are produced by a given rational choice theory are primarily deduced from the assumption that the type of actors that constitutes its subject of study are rational and, more precisely, welfare or utility maximizers is quite widespread among the ranks of political scientists. Many political scientists such as Green and Shapiro seem to be under the impression that all that one really needs to do in order to develop a rational choice theory concerning some particular type of actors is assuming that actors of this particular type act solely with the intent of improving and, ideally, maximizing the level of welfare or utility that they personally experience. Since many political scientists believe that the results that are formulated by rational choice theories are primarily deduced from assumptions that are made in these theories concerning human nature and, more precisely, concerning the motives that drive the type of actors that constitute their respective subject of study to act, they of course generally advise rational choice theorists to change the assumptions that they make concerning this matter in order to improve their theories.

As I have explained above, I personally believe that the main assumptions that rational choice theories make and from which are derived the results that they formulate do not concern human nature and more precisely the motivations that drive some particular type of actors to act but rather they concern the objects

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<sup>4</sup> *Pathology*. Page 69.

that provide welfare to entities. For me if one wants to modify and, ideally, improve a given rational choice theory, one should try to modify the assumptions that this theory makes concerning the object that it assumes provides welfare to certain, specific, entities. I will discuss in more details in the next subsection what different assumptions rational choice theories have made about certain specific objects that governments can affect by the means of their policies and also could consider making in the future concerning this objects in order to deduce different results concerning governmental activities. However, before discussing this, I would like to dispel the notion -the idea- put forward most notably by Green and Shapiro that making a different assumption concerning human nature would change in any way the results that are formulated by certain rational choice theories such as Downs's theory of voting.

In this respect the fundamental and, in my personal opinion, very reassuring conclusion of Downs' theory of voting is that it is highly unlikely, improbable, that a single individual can decide or, for that matter, change the result of an election by exercising its right to vote in it. Downs in this respect does assume that if a given individual could single-handedly decide or change the outcome of a given election by the means of his or her vote, he would use his capacity to do so in order to favor the election of the candidate or party that proposes to implement policies that will personally benefit him or her the most. Downs therefore does indeed assume that it is to serve and satisfy their own personal interest that individuals would like, by the means of their vote, to have the capacity to determine and/or change the outcome of a given election.

As far as I can tell, the main result of Downs's theory of voting would however not at all be changed if he had instead assumed that the reason why some individual would like his vote to determine or change the result of a given election is because he wants to favor the election of a party or candidate that will implement policies that are the most beneficial to certain individuals other than himself. Making this assumption would have led Downs to deduce the exact

same conclusion concerning the expected benefits of voting since the probability that the vote of a given individual will change the result of an election is not at all function of what the individual who cast his or her vote ultimately wants to achieve by doing so. So in the particular case of Downs' theory of voting, I have to admit that I do not really see how changing the assumption that this theory supposedly makes about human nature would change the main result that it formulates concerning the expected benefits of voting.

### **3.1 What is the contribution that rational choice theories seek to make to science?**

I personally feel that it is a great mistake to assess the contribution that a given theory makes solely by looking at the results that it formulates. In this respect the results that a given theory formulates of course always seek to answer some specific research question. And, in order to answer some specific research question, one usually needs to dispose of some information. I personally believe that the information that one has found out and gathered in order to answer some specific research question constitutes as much a contribution to science as the particular results or conclusions that has been derived from this information and that constitute the answer to this particular research question. That is why I believe that political scientists such as Green and Shapiro should consider has being valid and interesting contributions to political science not only the results that rational choice theories formulate but as well the information that these theories use in order to formulate (to deduce) these results. But what is the information that one must dispose of –what is the intellectual work that one has to perform- in order to be in a position to deduce some results concerning how a given type of actors should rationally act and behave?

As I have explained above, rational choice theories deduce results concerning policymaking and governmental activities from models that represent objects that, they assume, can possibly be affected by governmental activities. In

my opinion the most concrete and tangible contribution that any rational choice theory makes to the study of governmental activities and, more generally, to political science is the model that it uses to represent an object that can possibly be affected by governmental activities. In my opinion, it is the models that economists have thus far developed (and continue to develop) to represent objects that can be affected by the policies of governments that political scientists should view as being the main contributions that their theories make to the study of governmental activities and, more generally, to political science.

Not only do I believe that the models of objects that can be affected by governmental activities that are used in the vast majority of rational choice theories constitute the main contributions that these theories make to the study of governmental activities, I furthermore believe that it is by modifying these models and, more precisely, I believe that it is by modifying the assumptions that these theories make about the objects that they represent that one can modify the results that are formulated by these theories as well as, ultimately, that one can improve -expand- the results that these theories formulate. Looking at the different rational choice theories that exist about politicians in my opinion totally vindicates the point of view that I have just expressed here that it is by modifying the assumptions that are made in a given rational choice theory concerning the object that is assumed to be affected by the policies of some government that it is possible to modify the results that are produced by this theory concerning the way in which the type of actors that constitute its subject of study should rationally act and behave.

In this respect, the median voter theorem constitutes one of the first rational choice theories that has been developed by economists concerning politicians. As it was explained above, the median voter theorem assumes that the probability that given individual will vote for some politician solely depends on the quantity of some public good that this politician is promising to supply him with if it is elected. In order to win a given election in which he runs, the median

voter theorem therefore assumes that a politician must take a stance (a politician must elaborate a policy platform) concerning the quantity of some particular public good that its voters will be supplied with if it is elected to lead the government that supplies them with this particular public good.

One of the main research questions that has been investigated with the help of the median voter theorem is of course: is there a quantity of the public good that a given politician can promise its voters to supply them with if it is elected that will insure this politician to obtain at least as much votes as any one of its rivals that run against him in this election regardless of the quantity of this same public good that its rivals are for their part promising to supply the voters with if they are instead elected? The median voter theorem shows that if a given electoral contest only opposes two rival candidates or parties, then there exists one quantity of the public good that any one of these candidates or parties can promise the voters to supply them with if it is elected that will insure the candidate or party that makes such a promise that it will obtain at least as much votes as its rival.

The quantity of the public good that a given candidate or party can promise to supply to the voters that are part of its electorate that will insure it to obtain at least as much votes as its rival regardless of the quantity of this public good that its rival is for its part promising to supply them with if it is elected is of course the quantity of this public good that is the median of all the quantities of this public good that are preferred the most by each one of the voters that are part of the electorate. This result therefore suggests that if the main and, as a matter of fact, the sole issue that is at stake in a given electorate contest that opposes two rival candidates or parties is the quantity of some public good that should be supplied to the voters that are part of their electorate, then these two rival candidates or parties should rationally end up promising to supply to their voters a quantity of this public good that is quite similar to one another in order to get elected since there actually exists one quantity of this public good that any

one of them can promise to supply the voters with that will insure it to obtain at least as much votes as its rival.

As Charles Plott has however demonstrated it, this most interesting result of the median voter theorem which states that a given candidate or party that is running in an electoral contest against some other candidate or party can adopt a policy platform that will insure it to obtain at least as much votes as its rival regardless of the policy platform that its rival has for its part adopted and is campaigning on only stands so long as it is assumed that the electoral contest is about a single issue: which is the quantity of some public good that the voters should be supplied with. More precisely Plott has showed that if to obtain the support of majority of voters that are part of give electorate two rival candidates or parties that run against one another in a given electoral contest must take a stance on the quantities of not one but two different public goods or more that they will supply them with if they are elected, then there will most likely be no policy platform that any one of these two rival candidates or parties can adopt that will insure it to obtain at least as much votes as its rival regardless of the policy platform that its rival has for its part adopted and is campaigning on.

As one can see, it is therefore by modifying the assumptions that the median voter theorem makes concerning the object that is affected by the policies of the government that some rival politicians are trying to get elected to lead that Plott has been able to change, to modify, the main result that the median voter theorem formulates. More precisely Plott has been able to modify the main result that is formulated by the median voter theorem by assuming that the resources endowments of voters contain two public goods that are supplied by the government that the rival parties or candidates in given electoral contest are trying to get elected to lead rather than just one.

This example in my opinion illustrates quite vividly the importance of the assumptions that are made in rational choice theories concerning the objects that

are affected by the policies of governments. I personally believe that the models that are used in rational choice theories to represent the objects of public policies are the main contributions that these theories make to the study of governmental activities and, more generally, to political science. That is why, in order to modify and eventually improve a given rational choice theory, I would suggest (like Plott actually did) to modify the model that this theory uses to represent the object that is affected by public policies rather than making different assumptions about human nature. For example it could be assumed that governments can affect the level of welfare that entities experience by acting on objects other than their respective resources endowments. Finally I think that political scientists should welcome and value the contributions that economists are making to the study of governmental activities because, as I have just explained it here, it is the models that economists use to represent the objects that can possibly be affected by the public policies of governments that constitute their main contributions to the study of governmental activities and, as far as I can tell, political scientists for their part have thus far not develop any model to represent these objects.

## **Conclusions**

I have argued in this paper that I do not believe that it is a good idea to diagnose something wrong with a given rational choice theory because it formulates conclusions that cannot be used to explain why the types of actors that constitute its subject of study perform certain specific actions. I am not trying to say or suggest here that explaining why people perform certain specific actions is an un-interesting or futile research question to investigate. I know that, in political science, many researches that are conducted seek to explain the actions that certain types of actors actually perform; most notably the actions (i.e., the public policies) of governments. There is obviously nothing wrong with trying to explain why certain types of actors do what they can actually be observed to do. There is however in my opinion something wrong in believing that it is what rational choice theories are for their part trying to do.

In this respect, at the risk of repeating myself, I am very surprised that it has never crossed the mind of Green and Shapiro that the fact that so many rational choice theories were failing the empirical test that they were using to assess their empirical successes and, more generally, scientific contribution and validity indicates that there is something wrong not so much with these theories but rather with the particular test that they were using to make such an assessment. It seems to me that once their research started to indicate that an overwhelming numbers of rational choice theories were failing the test that they were administering them, this should have tipped them off to at the very least question the test that they were using to take stock of these theories. But, apparently, such was not the case. Green and Shapiro seemed to have been quite content to report that the vast majority of rational choice theories were failing the test that they were using to assess their empirical successes as well as, more generally, their scientific contribution and validity.

As I have stated it at the beginning of the paper, I suspect that the reason why Green and Shapiro have not questioned the method that they were using to test rational choice theories is that they perceive economists as some sort of hostile group that have invaded the field of political analysis with the main intent of pushing political scientists out of it. For me political scientists have no reason to fear or suspect that economists are trying to push them out of the field of policy analysis because the kind of policy analysis that economists generally practice (which is positive in nature) is quite different from the kind of policy analysis that political scientists for their part generally practice (which is rather interpretative in nature).

Political scientists should see the presence of economists in the field of policy analysis no differently than they for instance see the presence of forest engineers in it. I am referring to the example of forest engineers because I know that many political scientists have studied the policies of various Canadian

provincial governments concerning the exploitation/conservation of forests<sup>5</sup>. When political scientists study a policy such as the policy of a given government concerning the exploitation/conservation of forests that exist on its territory, they generally do so because they most notably want to explain the various changes that have been made to this policy during the course of time. A political scientist will not study the policy of a given government concerning the exploitation/conservation of forests in order to develop and propose its own model to represent this object that is a forest and, more precisely, to highlight the main factors that affect the conservation and regeneration of forests. It is generally forest engineers that propose models of forests to highlight the main factors that determine how forests of various kinds re-grow if they are cut and also how long it will take for forest of various kinds that have been cut to re-grow.

Economists are to the economy and, more precisely, to the allocation of resources and wealth in a given society what forest engineers are to forests. The economy is the object of study of an economist just like the forest is the object of study of a forest engineer. Economists have an expertise on the matter of the economy that stems from the fact that they have develop models to represent this object. I am not saying here that political scientists should never ever dispute any word that economists say about the economy because they have not, unlike economists, develop models to represent this particular object. All that I am saying here is that what economists say about certain objects does not seek to explain why certain actions are actually performed on them but rather the likely effects and consequences of performing certain specific actions on these objects. Many political scientists in my opinion do not decode and interpret correctly what economists are saying about governments and public policies. For example John Dryzek in an article whose content and main argument is quite similar to the

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<sup>5</sup> See for example: Lertzman, Ken. Jeremy Rayner and Jeremy Wilson. *Learning and Change in the British Columbia Forest Policy Sector: A Consideration of Sabatier's Advocacy Coalition Framework*. Canadian Journal of Political Science. XXIX:1. 1995. pp. 111-134.

content and main argument of Green and Shapiro's book claims that public choice is hostile to democracy<sup>6</sup>.

I hope that the reader, following all that I have just said here in this paper concerning why economists analyze public policies, can measure the extent to which this statement made by Dryzek is excessive and frankly erroneous. Economists are not hostile to democracy. They just happen to generally believe that market forces do a better job than governments (whether they are democratic or not) at allocating resources. Nuance. Just like a forest engineer may be led to criticize the policies of a given government concerning forests that exist on its territory because his model of this particular object leads it to conclude that such policies impact forests negatively; an economist may be led to criticize the policies of a given government concerning the economy of the community over which it presides because his model of this particular object leads him to believe that such policies impact economies negatively. The fact that what economists say about governments generally only concern how their activities most likely affect the way in which resources are allocated among certain entities constitutes an important nuance that many political scientists such as Dryzek or Green and Shapiro either do not see or do not care to make when they talk about the theories that economists have developed to analyze public policies. As long as political scientists will not realize this, they will not really understand why economists develop rational choice theories to analyze public policies nor will they be able to assess or, for that matter, appreciate the contributions that these theories have made to the study of governmental activities.

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<sup>6</sup> Dryzek, John S. *How Far is it from Virginia and Rochester to Frankfurt? Public Choice as Critical Theory?* British Journal of Political Science. 22. 1992. page 398.