

From Prediction to Explanation:

A Defense of Popper's Situational Analysis and a Critique of Rational Choice Theory as a Subset of Economic Theory

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Abstract

This thesis argues that Karl Popper's situational analysis is a more suitable model for studying social phenomena than utility maximization theory because of the difference in the two model's rationality principle. Utility maximization theory as a subset of rational choice theory claims that agents attempt to maximize some end that they esteem valuable. Although the structure of the rational choice theory allows for the possibility of predictions in addition to a clear distinction between normative and rational behavior, it lacks real explanatory power because of its goal-directed requirement that it imposes upon social phenomena. Arguing that social phenomenon is ontologically such that it ought to be addressed from subject to subject perspective, I show how rational choice theory fails in addressing social phenomena adequately by imposing its own end-directed rationality principle. I show how Popper's rationality principle, in being left ambiguous, allows its rationality principle to emerge through its situations of interest without any pre-specified ends. I argue that social phenomena can never be predictive, and our inquiries should suffice in the pursuit of understanding alone. Additionally, this thesis argues that normativity constitutes the building blocks of rationality—following Gadamer's positive sense of prejudice in entering processes of understanding. Furthermore, Popper's rationality principle functions as a prejudice that allows for understanding social situations.

Introduction

Although the topic of this inquiry—understanding social phenomena—may pose it as empirical in nature, the entirety of this study is philosophical. I am interested in a critique of economics that is heavily invested in rational choice theory. In pursuing this end, I investigate the ontological nature of social phenomena—as it differs from that of natural phenomena—in order to determine how it hinders or makes possible understanding and prediction in economics. I claim that rational choice theory’s aim to make economics a *predictive* science is bound to fail because social phenomena can only be adequately understood by being contextualized, and any universal claim that seeks to explain and predict social phenomena will be falsified. As a result, I advocate for an economics that sees itself as an extension of sociology by only claiming to provide explanations through particular situations. It is an important goal of this paper to emphasize the importance of particularity and contextuality in developing adequate explanations in social sciences or any area of knowledge that seeks to understand social phenomena. I will show why Popper’s situational analysis, as a method for understanding social phenomena, appropriately addresses social phenomena by leaving ambiguous a rationality principle that does not specify and impose any claims about human behavior. I argue that this ambiguity is beneficial and appropriate because social phenomena can never be adequately understood by models that objectify social phenomena. In other words, the independent-dependent or subject-object relation that accounts for causal relationship in conceiving of natural phenomena cannot be similarly applied to social phenomena. This is because subjects/objects relation in social phenomena is reciprocally informing, and the two cannot be individuated or separated from one another. This reality about social phenomena in limiting social sciences, accounts for why explanation and not prediction should be the aim of all social sciences—including economics.

Having this end in mind, I compare and contrast rational choice theory from Popper's own particular version, which is known as Popper's rationality principle; I examine what it means for a model to be predictive and why only Popper's rationality principle can help us understand situations, while the rational choice theory aims at making predictions; I provide an ontological argument as to why social phenomena can only be understood from a subject to object of the subject perspective, and its implications for the study of social sciences;¹ finally, I present a critique of Popper's rationality principle by arguing that it confuses normativity with rationality. This confusion arises because we explain behavior of an actor according to our normatively constituted expectations that we have come to label as rationality or the rational decision. Accepting and applying Gadamer's notion of positive prejudice—as a necessity in entering the process of understanding, I claim rationality or the prescriptive act is constituted by normativity, and that it is only through understanding norms and values that we can even begin to form expectations about how we should behave in different situations. In the end, I conclude that a rational act is one that can be explained given a particular situation. In short, I argue that Popper's rationality principle, as it is more pertinent to social phenomena, provides us with a more sensible and appropriate understanding of social situations. By conceiving of the rationality principle in terms of the adequacy of an actor instead of imposing egotistical self-interest upon the actors—though shifting the activity of economics from prediction to explanation—the discipline of economics will adhere more appropriately to the ontological nature of social phenomena.

¹ I have referred to this subject to object of subject perspective as also 'subject-to-subject' perspective. They are identical in this thesis.

Situational Analysis

In this section, I provide an explication of Popper's situational analysis. In order to explain, understand and engage in social sciences, Popper proposes "that we construct our models by means of situational analysis, which provides us with models (rough and ready models to be sure) of typical social situations" (PS 358).² Situational analysis can be broken down into the following four steps: (1) there is some type of description of a situation (for instance, agent A is in situation S); (2) we affirm that given that situation how someone should behave (it is appropriate to do X in situation S); (3) we assume that agents act rationally in the given situation (here we have the rationality principle); and (4) we conclude by providing or narrating an explanation (Knepper 32).³ It is important to note that the rationality principle is the distinguishing factor between social and natural sciences: while social sciences deal with social phenomena that exhibit rational behavior, natural sciences do not. Popper considers this difference to be an *advantage* for social sciences because human behavior is purposeful (28). For example, if a criminologist aims to reduce crime, he/she should think like a criminal. Popper would argue that the rationality exhibited by human behavior is an advantage to social sciences because we can treat and explain behavior of our subjects by appealing to ourselves. We can ask: what would I do if I were in that situation, and given our pre-understandings of the situation as exhibited by our interest in the situation, we determine a starting point in understanding the situation and the behavior of actors engaged in it. This capacity to look into ourselves for understanding behavior of other people—as our subjects to be studied—is absent in, and in fact detrimental to the study of natural phenomena.

² Popper, Karl R., and David Miller. *Popper Selections*. Princeton, NJ: Princeton UP, 1984. Print.

³ Knepper, Paul. "Situational Logic in Social Science Inquiry: Form Economics to Criminology." *Springer Science* (n.d.): 25-41. Print.

Although Popper acknowledges the problem with assuming human behavior as rational, he argues that we should keep the rationality principle and act *as if* we are rational. Popper does not aim to advocate or promote the thesis that the rationality principle is true *a priori*. The rationality principle must certainly be false insofar as it is not universally true. For instance, when attempting to cross a street, the most rational choice is the one that guides me to arrive to the other side of the street as quickly and as safely as possible. However, many times I have crossed a street in a motion similar to a zigzag because of the cars or people on my way. Thus, the rationality principle does not hold true universally.⁴ Moreover, just because I cannot act rationally, it does not follow that I cannot act *as if* I am rational or others are guided by the principle to pursue their interests (28). If I do not act according to an expected or rational behavior, the very realization of this deviation in my behavior implies that what is expected is normatively shared between an observer or social scientist and an actor in a situation. Acting as if I am rational leaves open the possibility for making intelligible my actions, as one comes to realize and understand my behavior, as opposed to dismissing it as irrational. For Popper, the principle is a necessary and integral part of every model or theory. Following this consideration, we should critique models or theories for their ability in helping us understand a situation or an actor's behavior adequately. Although the rationality principle is not true *a priori*, it is a better methodologically move to criticize our models than to claim that human behavior is non-rational

⁴ Someone could point out that walking in a zigzag fashion is the rational decision when there are pedestrians and vehicles on my way. This objection explains my seemingly irrational decision of crossing the street in the light of new facts that were provided by the situation. Had there been no other pedestrians or cars or that we were simply ignorant of their presence and had known that crossing streets is dangerous and one should try to cross to the other side as soon as possible, walking in a zigzag fashion would be irrational. Nevertheless, we can explain my behavior given the situation. This is precisely why Popper argues for a vague rationality principle. He wants to explain seemingly irrational behaviors by their contextualizing situations. This way, we can learn more about a situation.

and pursue another possible explanation.⁵ The rationality principle is more constructive and instructive (than psychologism, for example) because we can learn more from our imperfect models and seek to construct better ones that address and explain *seemingly* irrational or unexpected behavior.

Popper animates his situation analysis by claiming that “...there is only one animating law involved—the principle of acting appropriately to the situation, which is clearly *an almost empty* principle. It is known in the literature under the name ‘rationality principle’” (MF 169).⁶ The rationality principle states that we act *adequately* and appropriately according to a given situation. This principle is the animating component of the situational logic—and as such, is integral to “every testable social theory” (177). Popper’s emphasis on ‘acting appropriately to the situation’ is both important and interesting. This is because his rationality principle is vague and with no pre-specified claims or goals (Gorton, 8-9).⁷ Actors within Popper’s rationality principle do not have to prioritize self-interest or act egotistical; additionally, no specific end or goal—such as maximization of happiness or wealth—is required either. In other words, the rationality principle is stripped away from any external claim or pre-specified goals: All that can be used in order to explain a situation must be collected from the particular situations themselves.

The vagueness of Popper’s rationality principle is intentional. I argue that this vagueness is more appropriate and suitable for studying social phenomena. First, it is possible that Popper left his rationality principle vague because he argues it must certainly be false—though a kind of falseness that is instrumental. Popper believes that the rationality principle must be clearly false

⁵ Popper dismissed psychologism or any theory that aimed to discover psychological laws that animate and motivate human behavior. He believed accepting psychologism as a sound methodological model will render the model construction and explanation arbitrary because psychological motives are not tangible (PS 359).

⁶ Popper, Karl R., and Mark Amadeus. Notturmo. *The Myth of the Framework: In Defence of Science and Rationality*. London: Routledge, 1994. Print.

⁷ Gorton, William A. *Karl Popper and the Social Sciences*. Albany: State University of New York, 2006. Print.

since it is not exhibited universally, and “a principle that is not universally true is false” (MF, 172). The principle functions as a methodological guide in determining “what will and will not count as a rational explanation” (Notturmo 405).⁸ Thus, in order to explain a social event rationally, we must assume that the people involved *act as if* they are rational—either by acting appropriately, or at the very least—by acting as appropriately as they saw fit.⁹

The rationality principle is integral to situational analysis as it allows us to differentiate our expectations from our observations (Gorton 9). Even in a situation where someone acted seemingly irrational, the rationality principle will allow us to understand and learn more about the different dimensions of a situation that otherwise would have been left obscure if solely labelled as ‘irrational.’ If actors in a given situation should do X, but they act irrationally and choose to do Y, the deviation from X to Y provides us with an understanding that further explains the situation. Often, “...new facts about the situation will be discovered that show the actor’s behavior” was rational (9). What is meant by ‘rational’ is whether or not an act can be *explained* by enacting the same situation. In this sense, a rational act is not necessarily the prescriptive one, but the act that allows us to empathize with an actor in the particular situation. For example, if a stressed student decides to plagiarize on his/her essay, the decision can be explained. Explaining it, however, does not equal justifying it. The two are very different. Nonetheless, one may explain plagiarism by appealing to the stressed situation of the student. Thus, the rationality principle provides a space for the possibility of interpretive activity within the situational analysis.

⁸ Notturmo, Mark A. "Truth, Rationality, and the Situation." *Philosophy of the Social Sciences* 28.400 (1998): 400-21. Print.

⁹ What is really meant by acting rationally is whether or not the act is explainable given our expectations. Seemingly irrational behavior can be rational when we learn more about why someone acted that way.

Rational Choice Theory

In this section I explicate rational choice theory. Rational choice theory conceives of and assumes that an individual human behavior is both intentional and instrumental to achieve and gain a calculated end or goal (64). Gorton provides an instrumentalist formula by citing Jon Elster's claim that for an instrumentalist, "if you want to achieve Y, do X" (64).¹⁰ In this picture, the social world is conceived of as the aggregate of individual instrumental intentions.

Additionally, standard rational choice theory has three other integral parts. First, it requires that individual's intentional and instrumental behavior to be rational. Rationality can be conceived of as choosing the course of action—assuming that an actor is presented with a range of options—that minimizes his or her costs while simultaneously maximizing the possibility of attaining his or her goal (65). In other words, the rational choice is the least costly and most effective choice given a situation where perfect information is not possible.

Second, rational choice theory assumes that individuals can rank their preferences. Third, and related to the second feature, the theory assumes that these preferences are transitive to one another (65). Accordingly, if a person has the choice of A, B or C, and she prefers C first, B second and A third, then it must also be the case that she would prefer C to A. These assumptions enable social scientists to add a numerical value to different preferences for comparison studies across individual preferences. Consequently, we can summarize the main features of standard rational choice theory as including (1) individual actions are instrumental and intentional, (2) actions are rational in the sense of optimizing the effectiveness or likeliness of reaching a goal while minimizing the costs, (3) preferences can be ranked, and (4) these preferences are transitively linked to one another. Some economists also require agents to act

¹⁰ Elster, Jon. *The Cement of Society: A Study of Social Order*. Cambridge: Cambridge UP, 1989. Print.

egotistically—that is to maximize self-interest. Gorton writes “Rational choice theory need not specify that agents seek to maximize a *particular* end; the theory merely requires that agents seek to maximize *some* end” (64). For example, let us assume that there is a choice of selecting three similar items: A, B or C. According to rational choice theory, agents pick items with the most utility at the lowest comparative cost. If, the three items are priced at $A=5h$, $B=10h$, and $C=15h$, where h stands for our happiness, the decision of a rational person would be expressed as $u(C)>u(B)>u(A)$, choosing item C first because it maximizes our *happiness*. This example assumes that we have perfect information about the three items before we even purchase and use them. Of course, the lack of this perfect information in contexts and situations that are not yet foreseeable provides a serious challenge to rational choice theory.

Rational choice theory’s maximization of some end or goal is what differentiates it from that of Popper’s rationality principle, and as I will argue, this difference will play a substantial part in transforming the activity of economics from prediction to explanation. It can be said that, given their conception of human action as intentional and instrumental, they both draw their explanations from studying human behavior. Additionally, both models animate themselves by sharing the assumption that actors are rational. These two shared features are so essential that they can make the two approaches appear identical. Nevertheless, rational choice theory and situational analysis differ substantially.

Rational choice theory and situational analysis differ in their understanding of the functions of their respective rationality principle. The rational choice theory’s rationality principle requires the agents to act to maximize their self-interest—whether it is power, wealth, votes, etc. (65). On the other hand, Popper’s rationality principle does not necessarily require maximization of some end. Again, Popper demands that agents act adequately in and to their

particular situations without placing any requirements—imposing it with content—of the rationality principle itself (65). In other words, what it means to be rational differs between the two accounts of rationality. While in the rational choice theory the rational choice is always the one that emphasizes the interest of the agent, it does not necessarily need to be the same for Popper's situational analysis. In this way, norms, traditions and values that are not instrumental in maximizing the self-interest of an agent, can be appropriately incorporated in Popper's analysis. Thus, Popper's situational analysis provides for the possibility of values and explanatory contents other than self-interest. Here, we are not just acting instrumentally—that is, we are not merely “doing X, if we want Y,” but rather we do X because doing X is appropriate to the given situation (68).

In order to capture the difference of the two rationality principles, let us borrow an example that Gorton cites and analyzes (72-76). Let us suppose that we are interested in explaining voter turnout during elections. Explaining voter turnout is problematic for the rational choice theory. This is because if voters were rational, they would not vote during elections given how insignificant their vote is for turnout of an election. Voting is rational if personal marginal gains that come from voting outweigh its costs. The cost of traveling to an election office, let alone the time spent on reading about and following candidates, outweighs their gain of having their choice of candidate elected. Thus, voting is irrational. But someone could object that voting *seems* to be irrational because of the lack of sophistication in our model; if we can construct a model that allows for nuances, we can show that voting is rational.

To be sure, there is no shortage of creative models that aim to explain voter turnout through the lens of rational choice theory. For example, Anthony Downs argues that the benefits

that one gains through the voting process should be viewed as a public good.¹¹ Even if I did not vote, I can benefit from having a candidate in office that pursues changes that improve my well-being. In other words, democracy continues without any of my positive inputs in electing a candidate. Thus, Downs asks us to conceive of voting as a public good with free-riders as the only people who do not participate in the process. Nevertheless, it is important to note how dubbing the activity of voting as a public good does not explain why people still show up to vote when they can just let others save the democracy. In other words, conceiving of voting as a public good does not explain why not all potential voters decide to 'free-ride.'

Other rational choice theorists have attempted to explain voting-turnout by claiming that duty and civic pride outweigh the accrued costs of voting or that the fear of having my favorite candidate lose because of my failure to vote. Both of these explanations are problematic for rational choice theory. The first one makes arbitrary what is meant by rational behavior because if gratification from having conformed to one's civic duties can be accounted for as rational, then the theory loses its grip on having any real explanatory power since any arbitrary claim can be rational (73). Although the second explanation is not insignificant, it is extremely unlikely and must certainly be false. It would be ludicrous to claim that most voters imagine their vote to break ties during an election, and that is the incentive for the turnout. Moreover, this explanation rests on the normative value that each citizen needs to contribute his/her equal share in democratic events. As Gorton notes, a rational person would realize that the potential guilt of not having one's candidate elected should be shared by all the voters, which makes the potential guilt insignificant (divide up the guilt by all voters). Rational choice theory's attempt to explain voting

¹¹ Downs, Anthony. *An Economic Theory of Democracy*. New York: Harper, 1957. Print.

turnout can be summarized as a failure of the theory to account for the phenomena. As Green and Shapiro write,

Many rational choice scholars plainly regard this theory-saving maneuver as an embarrassment, because tastes for doing one's civic duty are exogenous appendages to the rational choice theory. Aside from being a post hoc explanation (and an empirically slippery conjecture in any event), the notion that civic duty shapes voter participation raises more empirical problems than it solves. For one, it is unclear why civic duty should fluctuate from one sort of election to another within the same region, producing sharply different turnouts for Presidential elections, national off-year elections, statewide elections, and local elections. (Green and Shapiro 53)¹²

Rational choice theory has not been able to adequately explain the paradox of voting turnout.

Half a century of failed attempts has led the rational choice theorists to believe that explaining the turnout should be treated as “unrepresentative of the empirical success rational choice theory has enjoyed elsewhere” (71). Nevertheless, I argue that rational choice theory's failure in addressing voting turnout is not surprising given its mistaken treatment of human behavior as objectifiable—that is, rational choice theory objectifies human behavior and action by imposing its universalizing claims that in every situation we aim to maximize our marginal utility. I explain later that this objectification makes sense in natural phenomena (and this is how rational choice theory attempts to construct an economics that resembles natural sciences) given its ontological independence. However, any theory that objectifies social phenomena is bound to be falsified because there are no ontologically independent objects—there are only what we can call objects for other subjects. In other words, objects exist and are conceptualized only through another subject. For example, my conception of a subject's object and the subject's conception of his/her object of the *same* object can be different.

¹² Green, Donald P., and Ian Shapiro. *Pathologies of Rational Choice Theory: A Critique of Applications in Political Science*. New Haven: Yale UP, 1994. Print.

Consider another explanation, in which people vote because of the sense of gratification that they feel for accomplishing what they esteem to be their duty. Although this is plausible, it has no real explanatory content because “forcing such norm-driven behavior [such as feelings of duty] into the rational choice paradigm drains the theory of any real explanatory power” (Gorton 75). If the sense of duty can be appropriated as rational, then it would be hard to argue what else cannot be thought of as rational. Again, norms and values cannot be a part of the explanation insofar as they tell us to do something without necessarily maximizing our self-interests. If the standard rational choice theory is to succeed here, it has to show us how the egotistical behavior of voters can provide a rationale for their voting. Relying on norms opens up the theory to arbitrary generalizations that will abate a model of any real explanatory power.

Having demonstrated the deficiencies of rational choice theory, let us now assess the effectiveness of Popper’s situational analysis in explaining voting turnout. Popper only requires that actors act adequately to a given situation. As such, he does not require having any end or goal in mind. Since we can incorporate both self-interested as well as other reasons that stem from values and norms in our explanations, Popper’s situational analysis is better equipped for providing us with explanations for social situations. A person could vote because of having a sense of duty and/or because of wanting to contribute to the success of his/her favorite candidate. There could be more than one adequate explanation for understanding a situation, which is precisely why Popper’s rationality principle is more suitable for studying social phenomena. It allows for flexibility and comprehensiveness, which correspond to the variation and complexity of social phenomena. Of course, the real explanatory reasons will have to emerge through analysis of norms and empirical investigations. The explanation itself is secondary. Nevertheless, his rationality principle provides us with a range of tools to explain particular situations. The

content of these explanations may be as varied as there are situations in this world, but the ability and validity to recognize different reasons as explanations give this theory its parsimony and explanatory power.¹³

Rational choice theory fails to address the turnout because of its commitment to viewing rational maximization as *the* factor in explaining people's behavior. Had the theory allowed for the possibility of other factors, it would have been able to explain norms that govern and motivate voters to participate in the elections even when voting may seem irrational based on a strict conceptualization of rationality as maximizing self-interest. What rationality choice theory naively fails to address is that norms and values do play an important explanatory role in voting turnout. But its dogmatic persistence on attributing all of human behavior on grounds of rational maximization of marginal utility fails to adequately incorporate these norms and values that actually explain the turnout. It is through this narrow theoretical construct that rational choice theory is inadequate. In fact, taking a step further, I argue that whenever we are interested in studying social phenomena, we have to allow our explanations to emerge locally from their particular contexts, or else we risk having a rigorous understanding. Accordingly, prediction is not possible with social phenomena.

Predictability and Understanding in Situational Analysis

As has been explained thus far, Popper's rationality principle is vague and the explanatory power of his situational analysis emerges from situation itself. In this section I explain how Popper's rationality principle—in being vague—cannot help make situational

¹³ Here, it may be objected that Popper's situational analysis is not falsifiable—that is, it is not a theory but a method. Given that perception is theory-laden, I wonder whether it would be a bad philosophical move to dismiss the objection on the grounds that a method is strictly speaking still a theory. This is so because we construct a method in order to address our particular interests and problems, which suggests that perception is really interpretation.

analysis predictive—as for example, marginal utility models can. As I will argue in the latter sections, insofar as we are interested in the study of social phenomena, Popper’s situational analysis is best equipped for providing us with understanding. Currently, we are interested in what makes something predictive and how marginal utility theory can be predictive, while Popper’s version cannot be (and in fact does not even aim to be).

A model can be predictive if it has an external goal or aim that it prescribes to be the case universally. An external goal, rule or claim is one that can be applied to any situation before one even knows of the situation. For example in the case of physics, the law of gravity states that any two bodies attract each other with a force that is directly proportional to the product of their masses and inversely proportional to the square of the distance between them. Note how imposing and strict this law is: insofar as there are two bodies, they are attracted to one another. The law of gravity can be predictive insofar as it universalizes the behavior of all bodies in the universe. To further clarify this claim, imagine a model that is only locally true, that is, in order for its claims to be true, its predictions correspond to observations in a particular situation (as opposed to in all situations). The law of Gravity is universalizing because it holds true in all situations. It would be absurd that only apples fall whereas oranges float, or that, apples do not follow according to gravity on Saturdays! For a model or claim to be predictive, its object’s behavior must correspond necessarily and without exception to the model. Furthermore, the law of gravity is external to any model that studies two massive bodies and is imposed on any model that it considers. Although, it could be objected that insofar as there may be other laws, gravity is not the only force acting on bodies, and as such our predictions on the movements of bodies may be slightly off when compared to our observations. Nevertheless, the important point to bear in mind is that for a model to be predictive, it has to universalize its claim on its objects. In the case

of gravity, its objects are any bodies, and its aforementioned claim applies to all. If it does not, it would be falsified and no longer hold as a law of nature.

As explained earlier, the standard rational choice theory has four parts: (1) human behavior is intentional and instrumental for an end; (2) rational action is the one that maximizes reaching one's goals or increases the likeliness of achieving them; (3) preferences can be ranked; and (4) preferences are transitive. Similarly to the law of gravity, these requirements are externally discrete, fixed and imposing: insofar as you are a human being, you seek to maximize your self-interests. This is the claim of the standard rational choice theory. The objects of rational choice theory are humans and their behavior. Thus, given any situation, we can predict what the outcome would be if we accept the assumption that humans seek to maximize their self-interests instrumentally. For example, if we know that Richard prefers X to Y and Y to Z, in any given situation, we can predict that he will act such that he maximizes the likelihood of having X over Y or Z. As a general rule, therefore, a model can be predictive if it has an external claim or rule that can be universalized.

Popper's rationality principle—in being vague—does not have an externally imposed claim on any given situations. Given a particular situation, we are only told that Richard should act adequately to his given situation, but what 'adequately' means depends on his particular situation. As such, there are no pre-specific goals or ends that externally direct us to situate and understand Richard's behavior. The explanation emerges through and from the particular situations themselves. Thus, we cannot predict human behavior using his model; rather, we can increase our *understanding* of situations that we study using situational analysis.

In fact, situational analysis, as Popper understands it, only explains. On Popper's account of the purpose of social science, Notturmo notes that,

Popper not only thought that the purpose of models and situational analysis and the rationality principle is to help us to explain and understand events in terms of human actions and social situations; he also explicitly denied that the task of social science is to make predictions or prophecies about the future. He also sharply criticized those social scientists who thought that it is. (Notturmo 416)

Our aim should be to *explain* an event that has already happened by employing the situation analysis. Prediction, at least in the case of social science, is not a possibility insofar as human behavior does not follow universal laws. There are generalities that we can draw by observing people's behavior. These generalities and trends are useful statistical indicators, but they are not and cannot be treated as universally true and applicable. These generalities become a possible source of error when they are universalized. This is the case with rational choice theory. Social science addresses—or at least should only address—events that we do not understand in “terms of human actions and social situations, so that we can understand their unintended consequences as the consequences of intended human actions” (416). For example, Richard moving in a zigzag fashion across the street may seem irrational if one does not take into account the fact that there are cars and other pedestrians on his way. Once we consider the additional conditions of a situation, the seemingly irrational behavior starts to make sense and we can see how it was a *rational* decision. Thus, if we explain and allow our explanation of a particular situation to emerge from its contexts and details, we learn more about a situation.

Ontological Examination—an Argument for Popper’s Rationality Principle

Unlike the objects of the law of gravity, where bodies are both ontologically distinct and separable, the objects of social phenomena though ontologically distinct are inseparable.

Rational choice theory conceives of economics as a social science that treats its objects of study in a fashion that I claim is characteristic of natural phenomena. Thus, I argue that rational choice theory is flawed in applying a model that is only appropriate for natural phenomena, to social phenomena. As a consequence of this mistaken application, the discipline of economics presumes the ability to predict social phenomena. This pursuit of predictability is inappropriate in a social discipline.

Prediction is possible within natural sciences because its objects of study exist independently of the theory that seeks to explain them. For example, we can explain the behavior of a falling apple by Newton’s law of gravity. We inquire to know why an apple falls to the ground, and we answer that the apple was pulled to the center of the earth because both bodies attracted each other. Although in this particular case gravity was our answer or theory to explain why the apple fell to the ground, we could have chosen other competing explanations. For instance, we could have explained the movement of the apple toward earth by arguing that its configuration is such that it seeks to reach down to the earth; or that God has made it such that it acts the way that it does. *No matter what theory we put forward in order to explain the behavior of the falling apple, the behavior of the apple does not change.* In other words, the behavior of observed natural phenomena and our theories are not mutually and reflexively informing, and that they are ontologically separate and independent from our explanations of their behavior. It may be objected that, following the likes of Kant, perception is really interpretation, and that we

are always already immersed in a theory or a way of seeing the world as something. This objection claims that natural phenomena—just like social phenomena—is not ontologically distinct from a knower—and that, for example we conceive of the earth *as a* planet given our sensory perception of the world. We never see the world as it is in itself, but as we are in relation to it. This objection suggests that epistemology should *precede* ontology, and my claim to an ontological divide between natural and social phenomena begs the question.

I accept the objection but I do not see how it is relevant. Even if ontology is not of primary importance, we still conceive of social and natural beings separately. Even if we can conceive them as we are, we still conceive of them as something. My ontological distinction between the social and natural phenomena already takes into account the role of my sensibility in distorting the world as I see it. Thus, the objection is so general that it can be dismissed as irrelevant.

Natural phenomena exists independently of human mind and functions according to universal laws given their ontological independence. This is why in natural sciences we can have models that take the structure of subject-object. The relationship between the two entities is distinct, as they are ontologically independent. We cannot claim the same for social phenomena because its ontological conception depends on the relation that it shares with a subject that conceives it.¹⁴ For example, when I ask what the value of a particular car is, or how does patriarchy subjugate us, the theory that I provisionally formulate does have a mutually informing relationship with the social phenomena under investigation. For instance, let us assume that we hypothesize that patriarchy subjugates us through our societal values and norms. Thus, we

¹⁴ Some philosophers agree with this claim that social phenomena is human constructed, but they would like to argue that once there is a constructed phenomenon, it no longer depends on human mind in order to exist and that it has a life of its own and can be examined as an object of inquiry. Roy Bhaskar is a proponent of this view.

identify our subjugation by patriarchy as the social phenomenon and our norms and values as the theory that addresses and explains the social phenomenon—in this case, patriarchy. Moreover, note that patriarchy is itself a value—a value that is explained to have influenced, affected—*caused*—us into subjugation through our other norms and values.

To take this example one step further, consider a feminist or psychoanalytic explanation of how patriarchy subjugates us. In *The Sexual Contract*, Pateman writes, “The patriarchal construction of the difference between masculinity and femininity is the political difference between freedom and subjection” (Pateman 207).¹⁵ Here, patriarchy is an oppressive force that unjustly oppresses women (by men’s constructions as to what masculinity and femininity should be). Equally interesting for our purposes, a psychoanalytic account of how patriarchy subjugates us points to the rule of the father, where subjugation is not exerted through a binary of man over woman but by a more complex power relations that takes into account age and gender in defining patriarchy.¹⁶ Thus, feminism tells us that patriarchy subjugates us (women), through an unjust system that is constructed by men to oppress women, whereas psychoanalysis tells us that patriarchy subjugates us by pointing to the rule of the father as male domination. Note how patriarchy’s subjugation changes not only according to feminism and psychoanalysis (the explanation) but also how each theory changes our notion of patriarchy. Here, social phenomena and our explanations are reciprocally and mutually informing, which poses a problem insofar as the cause and effect relationship identified in this example are not fixed. They reflexively reinforce and determine one another. Recall that in the case of natural phenomena, attributing and explaining the fall of an apple by gravity, God, or its configuration, did not change the

¹⁵ Pateman, Carole. *The Sexual Contract*. Stanford, CA: Stanford UP, 1988. Print.

¹⁶ Smith, J. C. *The Neurotic Foundations of Social Order: Psychoanalytic Roots of Patriarchy*. New York: New York UP, 1990. Print.

apple's falling behavior. In contrast, explaining a social phenomenon changes it, however nuanced that change may be. This reflexive relationship is further explained by the passage from Roy Bhaskar's *The Possibility of Naturalism*,¹⁷

The social sciences deal with a pre-interpreted reality, a reality already brought under concepts by social actors, that is a reality *already brought under the same kind of material in terms of which it is to be grasped* (which is the only possible medium of its intelligibility). So that, to put it crudely, the human sciences stand, at least in part, to their subject matter in a subject-subject (or concept-concept) relationship, rather than simply a subject-object (or concept-thing) one. (Bhaskar 27)

Here, Bhaskar refers to the Hermeneutics tradition, where one enters the circle of understanding with pre-understandings and partialities that make the subject of a study intelligible.¹⁸ As explained by Hermeneutics, this process of understanding is dialectic in structure as the subject and object are not ontologically separable from one another. Rather the object—let's say something about the society—requires the existence of human mind—the subject—in order to exist by being conceived. Thus, we have a subject to object of the subject relationship, as opposed to a subject that studies an ontologically separate and independent object (as is the case in the natural sciences).

Therefore, we have an ontological structure that can explain why “Society is both the ever-present *condition* (material cause) and the continually reproduced *outcome* of human agency” (43). Without human action there would be no society, while human action can only be understood in the context of a society. In this mutually informing structure, social phenomena and structures cannot exist apart from the activities and practices that they regulate (48).

Furthermore, social phenomena exist only in the act of conceptualizing one's activities. In other

¹⁷ Bhaskar, Roy. *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*. Atlantic Highlands, NJ: Humanities, 1979. Print.

¹⁸ Hermeneutics will be discussed further in more details later in the paper especially in terms of how it contributes in differentiating normativity from rationality.

words, we can have sociology of sociology but not physics of physics. Social phenomena—unlike natural phenomena—both exists “independently of the activities they govern” and “*do not exist* independently of the agents’ conceptions of what they are doing in their activity” (48-49 emphasis added).

Thus far, I have argued that social phenomena have an ontological structure that is mutually informing in structure, that is, it is subject to object of the subject (and not subject to object). Earlier, I cited Gorton telling us that Popper’s rationality principle differs from rational choice theory in several key ways. While rational choice theory requires its agents to act such that they maximize their self-interest (in whatever it may be, power, wealth, number of votes), Popper’s rationality principle includes no pre-specified general goals and ends in mind (Gorton 8-9). Additionally—and as a consequence of this vagueness in his account of his rationality principle—norms and traditions can be understood and interpreted as rational. The rationality principle does not provide content of its own; rather, the explanatory power of his situational analysis comes from the situation itself. Norms and traditions can be incorporated in our situational analysis as a legitimate explanation, which is only possible because Popper’s rationality principle does not impose a goal and end on its situational analysis. Instead, the rationality principle merely assumes that an agent would act “*adequate to his situation as he saw it*” (OK 179).¹⁹ In this way, Popper’s rationality principle conceives of social phenomena from a subject to object of a subjective perspective, while rational choice theory treats social phenomena from a subject to object perspective. In other words, situational analysis treats an agent as *one of*

¹⁹ Popper, Karl Raimund. *Objective Knowledge: An Evolutionary Approach*. Oxf.: n.p., 1973. Print.

us, complex being, while rational choice theory conceives of an agent as an object, a constant, permanent, and simplified being.²⁰

Given the subject to object of the subject ontological nature of social phenomena, understanding a situation by its particular situational composition is more methodologically sound than imposing and assuming a universal end for human behavior. Rational choice theory errs in universalizing its assumption that humans act instrumentally to maximize egoistical ends. This assumption becomes problematic as only maximizing self-interested behavior would count as rational behavior in this model. As mentioned earlier, this limited and prescriptive conceptualization of rationality would only yield deficient explanations: for example, in explaining why people vote while realizing that the time and money spent on voting (the costs) outweigh the marginal utility of their one vote (the gains) in determining who will win an election. As such, a strict and well-defined rationality principle that aims to explain everything will result in explaining very little. I have argued that this can be explained by the subject to object of the subject nature of social phenomena, where objectifying a concrete goal or end is contrary to the ontological nature and structure of a subject-dependent social phenomena. Maximizing self-interest might be the right situational aim in a particular situation, but not in every single conceivable one. Conceiving of situations through a subject to object of the subject perspective allows for the possibility of variability and particularity in any situation.

A Critique of Popper's Rationality Principle

Popper provides a philosophically better account of rationality principle than the one used in conventional economic theory of marginal utility. In order to justify this claim, we need to

²⁰ I thank Professor Macbeth for this insight.

differentiate and demarcate social and natural phenomena. While mainstream rationality principle treats social phenomena as a given—as a self-interested and maximizer of self-utility—Popper’s situational analysis allows for the phenomena to emerge by and through its contextual situation.

One may object that although Popper’s rationality principle does not impose and fixate as that of mainstream accounts of marginal utility, it still confuses normativity with rational (prescriptive) claims. In other words, what constitutes and makes a particular action a rational one is dependent and originates from the rest of the society itself. As such, the rational decision collapses into the normative one—the one accepted and conducted by majority of people in a society. As such, the rationality principle easily loses its prescriptive authority. This poses a problem, since it is only through the rationality principle that we can understand an agent’s situational aim. If rationality is what I consider it to be in a particular situation as a social scientist, I will not be able to explain agent’s behavior whose situational aim I do not understand.

In response, one may entertain the idea that some normative claims are rational, and it could be said that although the content of rationality principle may be found upon normativity of a society, *insofar as conforming to the norms is the rational behavior*, the rationality principle retains its authoritative prescriptive claims and can be relied on as a dependable compass. This reply focuses on the purpose of rationality principle instead of its content, and as such it cannot adequately address the problem of demarcation between rationality and normativity. In Popper’s situational analysis, the rationality principle plays the role of a judge by implicitly telling us what should have been the appropriate act or behavior and what has been the case to be found in a situation. Thus, it provides something of a starting point, and as such, imposes on its situation whatever the person doing the analysis may think to be the appropriate behavior. Popper’s

rationality principle is not without its own content—perhaps an imposition on a situation. Thus, although Popper’s rationality principle is more flexible than mainstream rationality principle, it still imposes its own normative claims and sells them as (under the disguise of) the rational act or choice.

As such, the above answer does not adequately reply to the objection. Perhaps we should consider the objection more closely. Another way of asking the same question (and objection) is to ask: Can we ever understand anything independently from our own pre-understandings? In other words, can we ever thoroughly eliminate our prejudices in coming to grasp and understand an object of study? If this question could be answered in affirmative—that is, ‘yes, we can rid of our prejudices in the process of understanding,’ then Popper’s rationality principle is in fact as inadequate due to the same impositions as that of the mainstream economic rationality principle.

In order to examine whether or not it is possible to rid of prejudices and yet understand anything, I have consulted Gadamer’s *Truth and Method*.²¹ There he argues that with the coming of Enlightenment, there emerged a prejudice²² against prejudice itself (Gadamer 277). Gadamer identifies two kinds or senses in which since the Enlightenment, prejudice has come to be understood. The more intuitive sense of prejudice is “prejudice from overhastiness [which] is to be understood as [how] Descartes understood it—i.e., as the source of all error in the use of reason” (278). Here prejudice is understood as being partial, which can lead to misunderstandings and describing something incorrectly. It was this realization that championed education as the way to reduce our partiality in order to better grasp and understand our objects of study. This first sense of prejudice— which is discernible independent from our conscious

²¹ Gadamer, Hans-Georg. *Truth and Method*. New York: Continuum, 1993. Print.

²² From here on, ‘prejudice,’ ‘norms,’ and ‘tradition’ are synonyms, with functionally the same definition: as something internal to a knowledge seeker that blurs or makes the activity of knowing partial.

awareness—can be identified and reduced in effect. For example, if I am inclined to choose X over Y, upon realizing that inclination, I can see why in the past I have chosen X over Y, and my decision between them would be more neutral given the identification of this partiality. As such, prejudice in this first sense presents itself as a negativity to be rid of in order to attain clarity in our understanding. Gadamer highlights that the aim for this pure understanding was the mistake that Enlightenment thinkers such as Descartes made—believing that understanding *ahistorically* is possible, independent from all contexts that necessarily ground us within partialities and interests.

Next, the second sense of prejudice is not only positive but also functions as the condition for making understanding itself intelligible. On this second sense, Gadamer writes,

Our usual relationship to the past is not characterized by distancing and freeing ourselves from tradition. Rather, we are always situated within traditions, and this is no objectifying process—i.e., we do not conceive of what tradition says as something other, something alien. It is always part of us, a model or exemplar, a kind of cognizance that our later historical judgment would hardly regard as a kind of knowledge but as the most ingenious affinity with tradition. (Gadamer 282)

Gadamer claims it is not possible to be rid of tradition in our methods for understanding. Here, he suggests that our post Enlightenment notion of prejudice as something negative has misled our understanding of prejudice itself. Emphasizing our contingency and historicity as pre-conditions for knowing anything, Gadamer makes a strong case for norms as something intrinsic—and not as something that could be categorized as other, or independent. Further, he adds that, “In any case, understanding in the human sciences shares one fundamental condition with the life of tradition: it lets itself be *addressed* by tradition (282). Understanding society demands from us to first address tradition, which constitutes and grounds the society. In this relationship, tradition functions as a positive and necessary condition for knowing—and not as

something independent from us and negative that can be reduced in effect—as was thought to be the case by the likes of Descartes.

Gadamer’s claim that tradition and norms play an integral role in understanding implies two important points. (1) Norms function as pre-understanding in coming to comprehend and appreciate an object of inquiry (2) and that object of inquiry is understandable. In other words, pre-judgments—our particular dispositions to think and act—not only direct our interest in our process for understanding but also direct us at an object or subject of inquiry that is graspable by the prejudice itself. In this sense, we strive to know what can only be knowable to us. This claim is in accordance with situational analysis’ treatment of an agent as ‘one of us’ insofar as in both cases we strive to know and understand something (new) through what we already know. Gadamer notes that, “In the human sciences the particular research questions concerning tradition that we are interested in pursuing are motivated in a special way by the present and its interests. The theme and object of research are actually constituted by the motivation of the inquiry” (285). Our particular present interests constitute how we judge and interpret the past—even one that may not have been viewed differently. In this way, we only enter in understanding by our prejudicial interests, an activity that interprets past interpretations through our own particular present motivations.

There is a connection between Gadamer’s positive sense of prejudice and Popper’s ambiguous rationality principle: Popper’s rationality principle advocates positive prejudice as it prescribes understanding social phenomena through understanding the context and norms in all situations. In Gadamer’s account, one enters the circle of inquiry through one’s prejudices—which cannot be eliminated since they function as the condition for understanding in the first place. Similarly, in Popper’s rationality principle, one starts to understand an actor’s behavior in

a situation by considering one's own norms and values. Here, a positive sense of prejudice provides the condition for entering into understanding social situations. Therefore, understanding in Popper's sense is a function of Gadamer's positive prejudice: understanding emerges from within a situation.

In what has been said thus far, I have argued that norms constitute and condition how we come to understand something. In this picture, understanding is not an activity that begins and ends once the object of inquiry has been understood, but that the whole of what can be called understanding is a process with no discrete beginning or ending. Just as it is impossible to perform and do anything without a body, it is impossible to enter understanding without pre-understandings and norms. It is also through this shift of our understanding that we can see how normativity can be constituted as building blocks of rationality—or the rational act. Rationality or rational act cannot be understood as pure and objective—independent and disembodied from all contextuality and contingency—but as the appropriate act given a historical setting and/or context. Thus, the objection that Popper's rationality principle confuses rationality with normativity can be addressed by realizing that the rational act is never devoid of any normative prejudices, and that the rational act is bound to emerge from a context and situation.

In fact, Popper's rationality principle—in allowing situations to provide explanatory content of a behavior—functions as a prejudice that allows for entering the process of understanding. The same cannot be said of rational choice theory because its rationality principle (which captures the situational aim of agents) is both fixed and universalizing.²³ For Gadamer it is our prejudices that play a positive role in allowing for us to enter process of understanding.

²³ It can be said that rationality choice theory is an actualized version of the situational analysis. Nevertheless, I intend to show that Popper left his rationality principle vague intentionally and for a beneficial reason. In doing so, situational analysis can be applied appropriate to a given situation; here, context matters.

Thus, prejudice is where we start to learn about something that given our prejudice can be or is knowable to us. Popper's rationality principle functions in the same way as Gadamer's positive sense of prejudice because without it—positive sense of prejudice or what a social scientist considers as expected behavior in a given situation—coming to understand a situation or an actor's behavior would be inaccessible. Once we have contextualized information of a situation, we can explain or justify how seemingly irrational behavior is actually rational. Similarly, once our pre-understandings and dispositions allow us to enter understanding, we can explain and justify our views and interpretations.

Conclusion

Popper's situational analysis is better equipped for studying the social sciences. I chose to examine economics theory (a subset of rational choice theory) because (1) Popper admired its success and aimed to construct a general model for all of the social sciences, and (2) because unlike in other social sciences, prediction is one of the goals of economics (as it is practiced by the rationality choice theory). I argued that if a claim is imposed externally to a model of typical event that can be universalized, it essentially can be used for prediction. Again, prediction is possible because the rational act is one-directional: aimed at maximizing self-interest. Next, I demonstrated that rational choice theory's conception of rationality and rational agents—as social agents—is incorrect due to the ontological nature of social phenomena as subject-to-subject. As such, if we are to retain the rationality principle in order to explain social situations, it must not have externally imposed criteria or pre-specified goals or ends. I argued that Popper's rationality principle meets this requirement, and thus, is best suited for helping social scientists understand social phenomena. Additionally, it was shown how Popper's situational analysis can only illuminate or help us understand a situation, but does not provide any predictions.

I have demonstrated that, in contrast to the field of natural sciences, there are no universal laws in social sciences. This is due to the ontological nature of social phenomena's reflexive relationship between historically and contextually contingent subjects. Therefore, prediction cannot stand at the forefront of social sciences. Yet although prediction is impossible, one should not simply throw the towel and admit defeat in the pursuit of understanding future social phenomena. After all, people have always looked to the past and through the present, in order to make the future more familiar. Although predicting the future is impossible due to the variability and complexity of social phenomena, employing a more context-oriented methodology with respect to studying social phenomena would enable us to have a more nuanced and comprehensive understanding of the various social forces and norms that affect them. Therefore, even though we cannot predict that actor X will do Y in situation W, we can explain that actor X is more likely to act according to norms A,B,C when confronted with situation W. Although familiarity is not prediction, it is a positive contribution in a more constructive way of seeing a social phenomenon. Here, we are not discovering the phenomenon and how it actually is, but rather, we are tilting our perspectives, and in doing so, improving our perception and understanding of the world around us.

Having summarized the key points of this essay, it is important to discuss what it means for Popper's rational principle to be constituted on normative grounds. I discussed this problem in the last section of the paper, arguing that rational act is never devoid of any normative composition insofar as understanding implies a pre-understanding—a particular interest or partiality toward something that engages our curiosity. If the rational act is normative in disguise, then why should we even bother to call it the rationality principle?

For many philosophers the rational act is the only ethical or prescriptive act in any situation. It is because of this prescriptive, authoritative, and strict formula that one can discern rational against irrational behavior. For example, Kant's Categorical Imperative has a strict formula that—irrespective of context and historicity—prescribes what the rational (ethical) decision must be. Nevertheless, this conception of rationality as ahistorical and universal—in attempting to explain and dictate all actions in all situations leads to explaining very little. We always need a context to make sense of our situations. Thus,—and as I have argued in this paper—Popper's rationality principle is better suited to studying social phenomena as it emerges through and from a situation itself. Again, Popper only demands that an actor within a situation to act 'adequately' to the situation given his/her beliefs, conditions and circumstances. Thus, it is within particular situations that rational behavior is determined. Rational behavior is one that can be explained given an actor's beliefs and a situation's specific features. Rationality is what can be explained insofar as normativity is a necessary composition of any rational act. If we can never rid of our contexts and prejudices, it must be the case that explaining actions and processes of understanding that allow us to provide such explanations becomes the goal of the rationality principle.

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