## Problem Set #7

MACS 30000, Dr. Evans Keertana V. Chidambaram (UCID: 12211266)

## Problem 3: Watts (2014)

In this paper, Watts argues that contrary to preconceived notions, common sense is very pervasive in sociology and that this can detrimentally affect the scientific validity of a model.

He starts by stating that common sense logic influences even the fundamental theories of action in sociology. He gives the rational choice theory as an example to make his case. Quoting the author, the underlying premise of the rational choice theory is that "individual or collective action can be explained in terms of the intentions, beliefs, circumstances, and opportunities of the actors involved." The earliest applications of rational choice theory were strongly scientific, the models were precise and the predictions were sharp. However, they drew a lot of criticism for impracticability: the underlying assumptions were too strong and unrealistic and the predictions were demonstrably incorrect in many cases.

Rational choice theory gradually evolved. It started accommodating weaker assumptions like prosocial ideas, limitations on reasoning powers, bounded knowledge about the future, and less consistent preferences. It also became more accommodating of less precise models that merely acted as an approach, and also approved of backward looking models. These modifications drew criticism that questioned its contribution towards enhancing empirical relevance. They were also attacked because the framework could now accommodate almost any sensible explanation of a phenomena regardless of its validity. The criticism that the author constructs in this scholarly article is that rational choice theory, although initially had scientific aspirations, eventually moved from prediction and deduction to understandability and sense making. He is implying that the theory moved from making strictly scientific explanations to forming a predominantly empathetic explanation. Thus, the author shows how common sense has a widespread influence in sociology.

Next, Watts proceed to explain why common-sense theories dangerous and often times unscientific. The author argues that our perception about the validity of common sense theories are amplified as we see multiple examples of the same in our daily life. Therefore, we tend to make the mistake of assuming the theory to be true universally when it might not be. An explanation about a phenomenon, however meaningful and common sensical it is, cannot always be used for generalization and need not be the actual concealed cause behind an event. Thus, forming common sense theories via mental simulation may erroneously take understandability for causality.

The author gives three solutions for the shortfalls in rational choice modeling and causal explanations are: experimental methods, causal inference, and out-of-sample testing. Various types of experiments including field, natural, quasi, and laboratory experiments can be carried out to validate if the model would work in a generalized setting. But not always can researchers run experiments (because of budget constraints, practical restrictions etc.). A natural alternate for experiments is to run causal inference test on large observational datasets. But, there are problems associated with this method that can not be solved with larger dataset. For example, some datasets are not suited for performing statistical tests. Finally, the last method that can be used in model validation is to use the model for future predictions. The author also points out that prediction is only a necessary but not sufficient condition in validating a model. These three methods can help researchers contrast between causal and empathetic explanations, aiding in the production of scientifically more rigorous although less satisfying results.

The author makes a compelling argument for sociology researchers give more focus to empirical results and predictive power over just theory. However, theoretical framework is also very important for good research. First, it is impossible to accurately build a model to predict outcomes of real-world events. There are too many factors that can not be measured and the models would be too complex to build. Theory helps us in simplifying the model to only its most essential parts. Second, theory helps us in forming concepts and only when they are formed can we move to empirically test them out in the world. Hence, theory provides a framework for conducting research in a streamlined fashion.