## "Afterword for 'The Most Liberal Senator'?: Analyzing and Interpreting Congressional Roll Calls" by Joshua D. Clinton.

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Measurement is central to the endeavor of political science. It concerns the documenting of empirical regularities within the political environment and collecting evidence to investigate generalized explanations. As such, quantifying political concepts is an extremely useful and informative endeavor; it can make precise the meaning of many concepts and provide the means for comparing different conditions and situations. Quantitative descriptions of politics are prevalent in academic discourse and becoming increasingly used by journalists, politicians and pundits. However, quantification by itself is not necessarily informative and the implied exactness can be profoundly misleading even when performed by impartial sources.

The importance of careful measurement motivates the "The Most Liberal Senator." Interpreting measures of political concepts requires: understanding the process that generates the "numbers," expressing how much uncertainty the "numbers" contain, and defining how the measured actions correspond to the interpretation given to the measure. Answers to these questions identify the ability of the measure to describe what users intend the measure to capture. This discussion is unfortunately often overlooked.

Discussing the appropriateness and limits of measures is critical for questions relevant to political science and politics because of the difficulty of the task. In contrast to the natural sciences where the units of measurement are established and agreed upon - in fact, government organizations such as the U.S.'s National Institute for Standards and Technology partially exist to study measurement issues - objective, agreed-upon measures of political concepts are rare. For example, what defines a "liberal" (or "conservative")? Even assuming an agreed upon definition, the trait of interest (e.g., "liberalness") is frequently unobservable. As such, we often use an observable characteristic or action plausibly related to the trait (e.g., roll call voting behavior).

If agreement is reached on the question of which observable measure is "best" - for example, the use of roll call voting behavior by scholars, interest groups and the media to summarize political preferences – there is no guarantee that the units are objective. Unlike the task of measuring an individual's height, where the units of measurement are unaffected by the task of measurement, this distinction is sometimes problematic for political concepts. For example, the "units" of roll

call analysis result from conscious (and strategic?) choices on the part of the politicians and the vote scorers. Politicians decide: which policies come to a vote, whether they will take a position on the vote, and the position they will take. Scholars, journalists and organizations decide which roll call votes should count. Whereas it is meaningful to speak of the meaning of an inch external to a particular measurement task, the analogous conversation regarding roll call behavior seems difficult. As roll call votes result from conscious choices and are a function of the political environment, the behavior being measured may be affected (distorted?) by multiple considerations.

Despite the difficulty of ascertaining the relationship to underlying unobserved characteristics, such does not imply that roll call votes are unhelpful or necessarily misleading. Instead, the point is that because the measurement task is difficult, careful work is required to define precisely what is measured and what must be assumed for the measure to be valid. The ability to associate a number to a political concept does not necessarily imply either precision or clarity. Without being explicit about how the item being counted relates to the political concept, it is possible to produce extremely misleading results. Although the point is not new – it is equally important to consider how well responses to a particular survey question measure a respondent's trait of interest – it is critical nonetheless. The difficulty of addressing measurement concerns clearly and concisely results in even impartial sources suggesting potentially unwarranted conclusions.