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Dear Marianne

Thank you for the opportunity to revise and resubmit our article 33410 entitled Punctuated Equilibrium In Comparative Perspective.

We have revised the manuscript substantially from beginning to end in response to the numerous and helpful comments of the reviewers. We hope you and they will agree with us that these revisions have indeed substantially improved the contribution of the paper. As you wrote in your cover memo dated May 19, 2008, the comments can be grouped in three general sections, so I organize our response around these themes as well.

One wants greater theoretical development and precise conceptual definition, particularly as these refer to what punctuated equilibrium theory is, why the Central Limit Theorem may be assumed to capture correctly the distributional form of government outputs, and what “efficiency” and “friction” mean in the context of the investigation under way.

We have revised our introductory materials substantially. Most importantly, we have explained that unmonitored “social processes” consist of a great variety of events “out there” and the reasons why such a grand diversity of trends, events, and conditions that may become of concern to government would be expected to conform to the CLT. This discussion is substantially cleaner and clearer than in the earlier version. Further, we have noted that we have multiple series for each country but each of the institutional series we discuss is comprehensive in that it deals with all potential political issues in the system, and therefore has identical social inputs. Differences in institutional outputs cannot be ascribed to different inputs, therefore.

We have substantially expanded our theoretical discussion of the friction model rather than referring only to previously published work that lays this out. In particular, we have discussed the development of the friction model by Gutenberg and Richter in geology. See our new section on ‘stick-slip’ processes. Our theoretical motivations and the background for our work are much better explained in this version.

A second improvement focuses on analysis, particularly on estimates of kurtosis, on the potential for time series dependencies in the data, and on inferences to be made based on the analysis about efficiency, friction, and punctuated equilibrium.

In this area we have done a number of robustness tests suggested by the reviewers and these have reassured us. The most important robustness tests we have done involve sensitivity analysis of all our results, and here we have systematically re-tested every one of our series in two ways: first by taking 1000 samples of one-half the data and recalculating the K and LK scores for each of our 32 series. The average difference between K and the sampled K is 6. LK scores are essentially identical between the observed and the sampled series. K is more sensitive to single outliers than is LK so we consistently find LK to be an extremely robust measure.

Second, we did a similar bootstrap test of 1000 samples. Again, the K value is on average slightly higher in the bootstrapped samples (7 points higher) but the LK scores are virtually identical.

One reviewer suggested that we consider differences between early and late periods in the data. We have looked at this and find no clear patterns in the findings, though there are differences we think due to low N's in some of the series when calculated on shorter time series. (E.g., the Belgian data have only 11 annual observations.) In the US and Danish cases, where there are more years available for robust tests, the difference in LK scores between series calculated only for the first half of the years available, only for the second half of the years, and the full series never reaches an absolute value of 0.10 and is typically well below 0.05, so there are minimal differences. Further, we see no systematic pattern of higher LK scores in the early or late period, as the reviewer had suggested.

The reviewer suggested some interesting ways in which different underlying distributions could combine to produce findings with high kurtosis. We recognize this to be the case. However, we do not see any clear time-variability in our data that would support such a possible explanation of the patterns we observe. Further, having analyzed 32 different processes in three different countries, we consider the results to be demonstrably robust. If there are not trends, which we have tested for, it is hard to imagine other processes that would similarly affect all 32 series.

A third improvement involves presentation and writing, that is, some of the text is simple, some is complex, and much is not straightforward. Thus, a better effort to link theory, models, and hypotheses, as well as a stronger justification of the countries used for analysis, and a stronger conclusion that gets at the innovation and importance of the research question asked and the research answer developed would help considerably to improve the organization and the reading of the manuscript.

We have shorted the manuscript, simplified the presentation, and improved our discussion of the most important theoretical concepts. We have paid particular attention, especially in the conclusion, to emphasizing the future research avenues that we believe our analysis opens. We have stressed throughout that this is closer to the first word, not the last, on these topics, and that our analysis may raise as many questions as it answers. We believe that our paper does answer the most important questions that we raised, namely our two hypotheses about generalized punctuations and progressive friction, both of which were strongly confirmed. However, we have paid much closer attention in this version to linking these questions to established questions from the comparative politics literature concerning institutional design, constitutional structure, and comparative analysis. This is perhaps the most important set of revisions we have made,

along with those addressing the first set of concerns, explaining more clearly the theoretical expectations.

Other comments are made as well.

We have reviewed the manuscript with respect to the smaller comments by each of the reviewers and addressed each one where possible.

We have also added one additional data series to the analysis as another dataset has become available for the Danish case (weekly radio news reports (twice daily) from 1983 to 2004 (over 60,000 observations, aggregated to 437 annual change observations).

In sum, our revised paper is substantially improved, addressing the main points raised by the reviewers and in your own cover memo. We hope that you will agree that these revisions have improved the quality of the manuscript to article level and we look forward to hearing from you.