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Computational Social Science: Exciting Progress and Future Challenges

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The past 15 years have witnessed a remarkable increase in both the scale and scope of social and behavioral data available to researchers, leading some to herald the emergence of a new field: computational social science. Against these exciting developments stands a stubborn fact: that in spite of many thousands of published papers, there has been surprisingly little progress on the big questions that motivated the field in the first place: questions concerning systemic risk in financial systems, problem solving in complex organizations, and the dynamics of epidemics or social movements, among others. In this talk I highlight some examples of research that would not have been possible just a handful of years ago and that illustrate the promise of CSS. At the same time, they illustrate its limitations. I then conclude with some thoughts on how CSS can bridge the gap between its current state and its potential.