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Title: Quantitative Analysis Of Regulatory Discourses On Agricultural Genetic Engineering: An Exploration And Empirical Application Of Critical Theory

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## ABSTRACT

This dissertation takes a multidisciplinary approach to examining public policy. On one level, the dissertation is of case study of the use of methodological triangulation to understanding the values and believes of people within a regulatory system associated with a complex social issue: modern biotechnology/genetic engineering. On another level it is a deep exploration and a practical application of Habermas' Theory of Communicative Action.

Q methodology was used in combination with semi-structured interviews and a traditional survey to characterize the values, attitudes, and beliefs of individuals from U.S federal regulatory agencies that oversee agricultural and food biotechnology: the U.S. Environmental Protection Agency, Food and Drug Administration and the U.S. Department of Agriculture. For comparative purposes, the study also included two individuals from consumer advocacy organizations and environmental science and policy students from George Mason University, who participated in a pilot study that was included in the final analyses.

Q method identified 6 distinct discourses within the 31 participants. The dominant discourse, which accounted for 19 of the 31 participants, is characterized by strong support for biotechnology, the existing regulatory system, statements asserting purposive-rational validity claims, and a rejection of normative validity claims. The results of the survey found considerable consistency among participants from regulatory agencies in their attitude and beliefs as measured by items from the New Ecological Paradigm, Normative Belief, and Schwart'z value cluster scales. Support for unrestricted science and general optimism toward technologies was identified as a significant predictors of support for biotechnology.