

Research Statement

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I am an Applied Microeconomist working primarily at the intersection of political economy, economic history, and health economics. My primary research agenda focuses on the political impacts of the media and information technologies, especially with regards to their impacts on political preferences, participation, and inequality. Beyond this strand of research, I am also interested in studying how technologies affect health and labor market outcomes. A recurring theme of my work is to draw on important historical events to provide new insights into economics and social sciences. Much of my work also involves text analysis as well as identifying and digitizing primary sources to assemble novel datasets.

Media, Technology, and Political Change

My job market paper, “Media, Pulpit, and Populist Persuasion: Evidence from Father Coughlin” (revision requested by the *American Economic Review*), shows that charismatic leaders, as individuals, can influence important political outcomes. Specifically, I study the political impact of the first populist radio personality in American history. Father Charles Coughlin blended populist demagoguery, anti-Semitism, and fascist sympathies to create a hugely popular radio program that attracted 30 million weekly listeners during the 1930s. Using unique data on Father Coughlin’s radio network, I calculated the radio signal strength across counties to measure exposure to Coughlin’s broadcasts. Exploiting plausibly exogenous variation in the signal strength resulting from topography as well as another difference-in-differences strategy, I find that exposure to Coughlin's anti-Roosevelt broadcast reduced the support for FDR in presidential elections. Effects were larger in counties with more Catholics and persisted after Coughlin left the air. Moreover, I find that places more exposed to Coughlin’s broadcasts in the late 1930s were more likely to form a local branch of the pro-Nazi German-American Bund, sell fewer war bonds during WWII, and harbor more negative feelings towards Jews even in the long run.

While media can be manipulated by charismatic individuals to influence politics and potentially harm minority groups, another paper of mine, “Waves of Empowerment: Black Radio and the Civil Rights Movement,” shows that media can also empower minorities in their fight for greater equality and justice. Specifically, I examine the impacts of black radio stations during the civil rights movement. My empirical work employs novel data on black radio stations and topographic factors to generate plausibly exogenous variation in exposure to black radio. I find that black radio increased black political participation and activism in the South during the early 1960s, as measured by black voter registration and the presence of a local chapter of the NAACP. For mechanisms, I provide evidence that black radio increased the support for civil rights groups such as the NAACP and crowded out blacks’ TV consumption, which has been shown to reduce electoral participation. Moreover, I explore the consequences of black radio exposure and find that more exposed places with higher shares of black residents saw greater state aid as well as stronger legislative support for civil rights bills after the passage of the Voting Rights Act.

In a related paper, “The Electric Telegraph, News Coverage and Political Participation” (revision requested by the *Journal of Economic History*), I examine the impacts of another revolutionary technology, the electric telegraph, which enabled telecommunication for the first time in history and vastly accelerated the dissemination of information. Assembling a unique dataset on the growth of the U.S. telegraph network in the mid-19th century and using a generalized difference-in-difference strategy, I find that access to Washington news with less delay through the telegraph increased presidential election turnout. For potential mechanisms, I conduct text analysis on historical newspapers and find that the improved access to Washington news through the telegraph led local newspapers to cover more national

political news, including coverage of Congress, the presidency, and sectional divisions involving slavery. The results suggest that the telegraph made newspapers less parochial, facilitated a national conversation and increased political participation.

Technology, Health, and Labor

Apart from studying media and information technologies, I am also interested in how technologies affect health and labor market outcomes. In a paper (forthcoming at the *Explorations in Economic History*) joint with Mark Anderson and Daniel Rees, we study the effects of water purification technologies, namely filtration and chlorination, on child diarrheal mortality in early-20th century American cities. In a closely related paper (revision requested by the *Journal of Urban Economics*) joint with Mark Anderson, Kerwin Charles, and Daniel Rees, we show that filtration and chlorination reduced the black-white infant mortality gap in the same era. Our work provides new insights into the relationship between public health interventions and mortality.

While we can learn important lessons from the past, the world is also experiencing disruptive technical changes today, such as automation, whose impacts scholars still know relatively little about. In a paper joint with Rania Gihleb, Osea Giuntella, and Luca Stella, we study the impacts of industrial robots on workplace injuries in the U.S. and Germany. We find strong evidence that exposure to industrial robots reduce workplace injuries in both countries, although more exposed U.S. workers also experience greater mental health problems, consistent with the larger and more negative effects of robots on the U.S. labor market. In another ongoing project with Osea Giuntella and Yi Lu, we examine the effects of industrial robots on the Chinese labor market. We show that robots had negative effects on employment and wages of Chinese workers, with effects concentrated in the state-owned sector. Moreover, our results suggest that cities more exposed to robots also experienced higher intensity of worker strikes and protests.

Future Work

Going forward, I hope to continue to move my existing projects to top quality journals and to begin new projects to advance my research agenda. In particular, I am interested in studying the impacts of a variety of other media types, such as televangelism, black news network, and protest songs, all of which are considered influential by social scientists but have received little empirical investigation. I have already been collecting data on some of these media and plan to consider both their economic and political impacts. In addition, together with Mark Anderson and Daniel Rees, we also have a pipeline of other projects on public health and mortality in history. For example, we have been collecting data to study the effects of another major disruptive technology, refrigeration, on health and mortality. Moreover, Osea Giuntella and I also plan to further our work on automation to study the effects of robots on educational decisions as well as the impacts of medical robots on health provision and outcomes. I look forward to deepening my existing research partnerships and to creating new ones. I am open to a variety of joint projects where my interests and experience overlap with potential coauthors.