Did Duke Frederick III of Saxony realize that he was engaged on an experiment in economics? Could Landgraf Philip I. of Hessen imagine that his policies would be studied by economists four-and-a-half centuries after his death? The two 16th-century potentates had one thing in common: Both actively contributed to an epoch-making social transformation. Frederick owes his place in the history books (and the epithet ‘the Wise’) to his role as the foremost political supporter of Martin Luther and the Reformation. Philipp, dubbed ‘the Generous’, is regarded as one of the most influential pioneers of Protestantism in the 16th century. Their actions thus helped to set up what Davide Cantoni, Professor of Economics in the Department of Economic History at LMU, calls “a highly significant natural experiment”.

“I am an economist through and through,” he says, while acknowledging that the logical connection between this assertion and his primary research interests might not be immediately obvious. For Cantoni explores economic models by studying history. He has traced the course of urban growth, the fate of monasteries and the changes in universities in German-speaking territories following Luther’s break with the Roman Catholic Church. But he has also probed the forces behind changing attitudes of contemporary Chinese students to market economics, and the factors that have molded attempts to defend democracy in Hong Kong.

At first sight, these topics appear to have little in common: Both actively contributed to an epoch-making social transformation. Frederick owed his place in the history books (and the epithet ‘the Wise’) to his role as the foremost political supporter of Martin Luther and the Reformation. Philipp, dubbed ‘the Generous’, is regarded as one of the most influential pioneers of Protestantism in the 16th century. Their actions thus helped to set up what Davide Cantoni, Professor of Economics in the Department of Economic History at LMU, calls “a highly significant natural experiment”.

The results of the project surprised him, says Cantoni, for he was among the scholars who had found Max Weber’s century-old thesis – that the ‘Protestant work ethic’ had stimulated economic growth in regions in which the Reformation had triumphed – quite plausible. But the analysis of his own data on population growth rates in the leading German cities during the 16th century revealed that “denominational affiliations had no significant impact on this parameter,” he says.

Perhaps even more surprising are the inferences Cantoni has drawn in his latest study into the economic repercussions of the Reformation on society today.
of the Reformation. In this study, he analyzed data on the changes that took place in monasteries and universities, and in the level of building activity in different parts of Germany in the aftermath of the Reformation. The results show that there was a significant decrease in the numbers of monasteries in the regions dominated by adherents of the Protestant persuasion, while universities were fundamentally transformed. Prior to the Reformation, some 80% of university students enrolled in the Faculty of Theology. The remainder chose to study either the so-called liberal arts, jurisprudence or medicine.

With the consolidation of the Reformation, Theology rapidly lost its leading position to Law, particularly at universities in Protestant territories. According to Cantoni, this reflects the fact that, in Protestant regions, the Roman Church rapidly lost much of its economic and administrative influence. As a result, secular institutions came to dominate these areas of public life. “The State needed trained personnel to keep its administrative machinery going, and preferred to entrust these tasks to those with legal training rather than to theologians.” This interpretation is supported by statistics relating to building activities after the Reformation. In Protestant areas, the level of investment devoted to ecclesiastical structures fell significantly, and far more secular buildings were constructed. “The basic motto was ‘fewer monastic buildings, more resources for administrative and commercial purposes.’”

Does all this mean that Weber’s thesis that the Reformation acted as a major stimulus of economic growth in Protestant has finally been validated? Cantoni hesitates before responding. It is certainly plausible, he says, that an economy should grow at a higher rate if the numbers of administrators rise, more port facilities, bridges and merchant houses are built, and less money goes into churches. Nevertheless, he hesitates to assert categorically that the Reformation conferred economic advantages on the regions in which Protestantism became the majority denomination. The problem lies in the lack of reliable long-term figures that would allow one to track the actual course of economic development. Moreover, in Catholic areas, other factors stimulated economic activity, such as the church-building projects undertaken during the Counter-Reformation and the impact of the Jesuits on education.

Reform is now writ small in China

Cantoni also points out that, even when reliable research data are available, their implications may not be clear-cut. However, secure conclusions can certainly be drawn when justified by the evidence, as in the case of a study that he carried out in collaboration with colleagues in China. It showed that university curricula and textbooks definitely have an effect on their readers’ preferences for particular economic systems.

Some 500 years ago, the personal commitment of local princes to the goals of the Reformation abruptly changed one of the major parameters in the lives of their subjects. A single decision made by the Chinese Government in 2004 transformed the educational system in a comparable manner by decreeing the introduction of school curricula and textbooks that differed drastically from those in use up to that time. This provided Cantoni with another informative natural experiment.

In the 1990s, Chinese textbooks generally depicted the impact of the liberal market economy on productivity in a positive light. The new textbooks, on
the other hand, focused primarily on socialist economic principles and are distinctly nationalist in tone. The differences between the two generations of textbooks can be quantified by digital content analysis. The terms ‘capitalism’ and ‘reform’ turn up far less often in the new volumes, while the frequency of the words ‘fatherland’ and ‘national’ has increased tenfold, Cantoni found. However, these statistics alone cannot tell us whether or not these alterations in emphasis have also changed the mindset of the students.

But one aspect of the government’s decree turned its introduction of the new educational policy into a natural experiment. For the new curriculum was phased in, being put into practice initially in only four of the country’s provinces, and extended to others only later. As a result, each of several annual cohorts of Chinese students can be divided into two classes – those who were exposed to the new books and those who were taught on the basis of the older texts.

Cantoni and his colleagues had the opportunity to survey the effects of the different high-school curricula on some 2000 students of an elite university in Peking, without interference from state institutions. “The university follows the principle that nothing said on campus ever goes beyond the campus boundary,” Cantoni explains. In this way, China’s rulers hope to foster a productive climate of liberal debate and discussion, while ensuring that no subversive ideas can diffuse into the wider society. Cantoni’s team of researchers used test questions to ensure that the students’ real attitudes were truly reflected in their responses.

“When asked to rate the level of their confidence in the independence of the police or the judiciary on a scale of 0 to 5, people who practice self-censorship are highly unlikely to come up with a mean value of 2.3” he says – “but that’s what we actually measured.”

**Widespread political impotence**

The study demonstrated that the manipulation of the textbooks had had a very definite effect. Students who had been taught from the new standard economics texts took a much more skeptical view of the market economy than their contemporaries who had used the earlier books, which presented free market economies in a more positive light. Cantoni describes the degree of this difference as follows: “On average, students who had been exposed to the new curriculum now cleave as closely to the Party line as do the offspring of political cadres who learned the basics of economics from the previous textbook.

In China, Cantoni and his team also found a rich new setting in which to pursue their work on the interrelationship between political and economic conditions: Hong Kong. Returned to China by the British in 1999, the former Crown Colony still enjoys a broad measure of civil rights. However, opportunities for active democratic participation in the political process have been drastically curtailed. “In this respect, Hong Kong has sunk to a level comparable to that in Zimbabwe,” says Cantoni. Such a contrast between civil liberties and political impotence has no parallel elsewhere. In 2014, the first protest movement against the emasculation of political rights was formed, and Cantoni and his coworkers took advantage of the freedoms available to survey the attitudes of around 1500 students to political developments in the territory and study how these attitudes correlated with the social milieus represented in the studied sample.

Many of the findings – such as the correlation between political activism and an above-average interest in political issues – were no surprise. But some of the responses to Cantoni’s questionnaire were more unexpected. For example, students were asked whether or not they planned to take part in an upcoming...
demonstration. On the day before the demonstration, the Munich researchers told the study participants what fraction of those polled had declared their intention to attend it. Political scientists generally assume that, in such situations, individuals make their decision on the basis of 'complementarity': A person who feels that a protest is justified is more likely to actually demonstrate if (s)he is assured that many others share this view, as strength of numbers should reduce the risk involved. Conversely, if only a small, highly committed minority of the like-minded is willing to take the risk, the lukewarm supporter is usually less willing to put his head on the line make up the numbers. The study in Hong Kong, on the other hand, produced the opposite result. Students were more likely to take part in the demonstration if the number of declared demonstrators was lower than they had expected.

His research in China has shown Davide Cantoni how closely political and economic questions can impinge on the everyday lives of individuals. But he also worries that the results of such studies may be instrumentalized and misused. Data that reveal how effective school curricula can be in molding the views of their consumers in authoritarian states may be exploited by the powers that be to refine their methods of indoctrination. The results of the Hong Kong study could be utilized to manipulate information in such a way as to weaken the pro-democracy movement. In light of these dangers, Cantoni is happy to submit his study designs to scrutiny by Ethics Committees, such as those used in the case of medical research. But he does not intend to let this hurdle constrain his curiosity or creativity. He continues to seek natural experiments that provide insights into political and economic transformations, whether the relevant data are slumbering in the archives or are obtained by means of cleverly designed questionnaires administered to students in contemporary China.

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Born in 1981, Cantoni studied Economics at Mannheim University and obtained his PhD at Harvard. He later served as an Assistant Professor at the Universitat Pompeu Fabra in Barcelona and Affiliate Professor at the Barcelona Graduate School of Economics. He was appointed to his present position at LMU in 2011. In 2016, he received one of the highly endowed Starting Grants awarded by the European Research Council (ERC).