This thesis focuses on experiments with people, more specifically on the methods that are widely used in the social sciences for such experiments. In the first decades after the Second World War, American social scientists in particular developed a large set of methods which they dubbed ‘experimental and quasi-experimental designs’ for ‘social experimentation.’ Soon this methodological paradigm became the international armamentarium for testing the effectiveness of ameliorative policies. Well-known early examples of social experiments that affected the lives of many people are large-scale projects such as ‘Head Start’ that tried to improve the education of disadvantaged preschool children, ‘Sesame Street,’ testing the effects of the educational television program, or the ‘New Jersey Negative Income Tax Experiments’ that had to establish whether or not guaranteeing an income to poor working families reduced their willingness to work.

This thesis offers new perspectives on experimental and quasi-experimental methods and the claims they incorporate. Looking behind the conventional façade that presents research methods as simply a technical set of rules, I investigated their origins and development. Doing so, I arrived at the conclusion that they do not just discover reality but also reshape reality into their image.

The methods for social experimentation that became most famous were mainly provided by the American psychologist Donald T. Campbell (1916-1996). Together with a number of associates, Campbell developed a new array of ‘true’ and ‘quasi-experimental’ research designs to be followed by social scientists. The first publication on such designs was a 1963 book chapter entitled ‘Experimental and Quasi-Experimental Designs for Research on Teaching’ that Campbell wrote with the statistician Julian Stanley.
Campbell and Stanley used the label of ‘true experimental designs’ for experiments comparing randomly composed groups of subjects, and that of ‘quasi-experimental designs’ for the alternatives used when random allocation of people to groups was impracticable. These designs with corresponding concepts such as ‘internal’ and ‘external validity’ became highly influential and established Campbell’s reputation as an eminent methodologist of the social sciences. I wondered how these methods could become as successful as they did. Trying to find an answer, I studied the people who accepted, applied, and applauded these methods, as well as people who resisted them.

The first, introductory chapter embeds my question into theoretical viewpoints developed in the field of Science and Technology Studies (STS) that has also focused on scientific experimentation. Since the explanations for the success of quasi-experimental methods in the social sciences propounded in this thesis bear on and elaborate some of the theoretical notions of STS scholars, I discussed some of their current conceptions of experimentation in the natural and subsequently the social sciences. Together, these studies have toppled experimentation from its privileged position as a self-evident practice that straightforwardly confirms or refutes scientific theories. Yet at the same time, STS studies ‘emancipated’ experimentation as an interesting scientific practice in itself. By investigating how experimentation reflected and shaped prevailing societal values, these studies showed that science and society are inextricably entwined. Experimentation is not an isolated practice, it is not exempt from societal demands and influences and cannot simply impose its outcomes and answers on society. Of the discussed theories, Bruno Latour’s ‘translation’ concept in particular plays an important role in the following chapters, as well as Theodore Porter’s theory about the advance of quantification in science and society alike.

The following chapters analyze the experimental and quasi-experimental methods developed for social scientific research. Every chapter
investigates implicit or explicit claims that the proponents of these methods make. Combined, these chapters aim to explain the overwhelming success of this methodology in the 1960s and 1970s as well as give a critical appraisal of that success.

The second chapter starts with a short biographical overview of Campbell’s social and particularly academic background, which illustrates the development of psychology from an academic into an applied discipline. Yet, apart from Campbell, the subject of chapter two is the methodological paradigm of quasi-experimentation. It describes the sizable set of strict research rules that Campbell and his associates grouped under the heading of ‘experimental and quasi-experimental designs for scientific field experimentation.’ The chapter goes into a range of articles and volumes that in the course of four decades distinguished ever more ‘threats to validity’ – factors that could disturb the outcomes of experiments – and steadily extended the list of methodological remedies to counteract their detrimental force. My quite extensive discussion of these fears of subjectivity and countering firewalls serves to illustrate the strong urge to substitute personal judgments by judgments based on standardized procedures.

In order to explore how quasi-experimental methods could expand, this chapter also goes deeper into the much used rhetoric of ‘the laboratory being exchanged for the field.’ Campbell and his associates regarded their quasi-experimental research designs as the only way to move psychological research beyond the confined laboratory, right into the ‘field’ and to preserve scientific rigor in real life. Moreover, they suggested that ‘natural’ research settings – as opposed to the ‘artificial’ lab – would produce real, working knowledge. I investigated the key role of this ‘lab-to-field’ metaphor in the success of quasi-experimentation by analyzing it in analogy to Bruno Latour’s (1988) study of Pasteur’s famous experiments with anthrax vaccine. In doing so, I reversed the traditional image of social research transferring its sphere of
action into real life. Social experimentation, I argued, is not so much a matter of leaving the laboratory as of extending it, that is of turning society into a lab. In order to allow experimentation, society has to meet many demands and problems have to be recasted to fit the experimental mould. Whereas the format of true, randomized experiments mostoften demands too much in this respect, quasi-experiments can be seen as the result of negotiations about how much to retain of laboratory methods and how much to adjust them. Quasi-experimental methods thus not only transformed the field into a laboratory, but also underwent a transformation themselves in crossing from lab to field.

Chapter three investigates the rise of a new research field in the 1960s, that of evaluation research, in which quasi-experimental methods obtained a prominent role. The success of quasi-experimentation in this field is analyzed by using the ‘translation’ concept of Bruno Latour. Translation presupposes that findings can only be turned into facts if they manage to interest and attract others that seize upon them for their own reasons. Moreover, facts can only move to other audiences and contexts if they undergo transformations that grant them a new or wider relevance. The translations explored in this chapter exemplify how the meaning of existing methodological concepts was changed in order to tailor them to the explicit interests of a new clientele of policymakers.

For instance, the term quasi-experimentation is generally thought to be coined by Campbell. Yet, this chapter shows that it was used long before as a catchall for all kinds of experimentation that could not live up to ‘true’ experimentation. Campbell changed its meaning into a clearly defined set of research designs with particular characteristics. Moreover, the brief history of the term quasi-experimentation can be read as a tale of standardization in itself. Campbell chose the name quasi-experimental from many names that circulated for experimental designs departing from the laboratory-based ideal. The chapter also explores older methodological concepts and ideas that
Campbell chose to incorporate in his methodology and how he reassembled them into a new methodological framework. He relabeled already existing experimental designs and developed a new set of categories - 'internal' and 'external validity' - in order to classify the designs in a novel way. This transformation granted the experimental designs a new meaning and usefulness.

The chapter's second part analyzes which new demands incited Campbell to remodel methods in the way that he did. At the time he developed his methods for quasi-experimental research, the American government was expanding rapidly and social scientists offered their services to growing groups of administrative officials. Theodore Porter (1995) in particular explained why administrative officials appealed to the knowledge and skills of social scientists. He analyzed the growing importance of standardization, quantification and 'mechanical objectivity' in societies distrusting administrative officials. 'Mechanical' objectivity gave administrators as well as scientists an aura of trustworthiness based on the promise to exclude personal whims and arbitrariness. In various important practical domains, trust in numbers substituted trust in persons. After all, decisions based on numbers appeared to be fair and impersonal. In this chapter, I argue that social scientists were not just forced to turn to standardized, quantitative forms of knowledge-production, but also took great advantage of changed demands. By producing knowledge in the format that policymakers asked for, social scientists capitalized on changes in administrative practices.

Campbell too chose to seize the opportunities that this new type of government offered. He translated the distrust that policymakers experienced into the methodological solutions that he had to offer. Apparently, he succeeded in reaching this new clientele, since his methods are considered to set the tone in the new field of evaluation research that arose in the Kennedy-Johnson era in the 1960s. The newly established field of evaluation research
attracted people from disciplines as diverse as psychology, economics, sociology, education, and political science. Campbell himself, however, did not become involved in any actual evaluations of social programs. He remained the methodologist who stood by the sideline commenting on what was to be done. This position in particular enabled him to write a programmatic statement for evaluation researchers in which he framed his utopian 'Experimenting Society.' In this ideal society, scientific experimentation was strongly linked with American democracy. In Campbell’s view policymakers had to be educated in the prerequisites of proper experimental evaluations in order to realize such a democratic ‘Experimenting Society.’ Consequently, Campbell not only was one of many scientists who standardized social scientific research to meet changing administrative demands, but also forced his standardized research protocols upon decision-makers.

Campbell’s translation attempts, however, were not always successful. The fourth chapter discusses the most clear counter example. It studies Campbell’s strong efforts to combine the benefits of cultural anthropology and psychology. Whereas psychology could only become a truly universal discipline by testing its theories across many different cultures, Campbell argued, anthropology could only become ‘scientific’ by turning into a much more quantitative and standardized discipline.

To this aim, Campbell engaged himself in a cross-cultural study of perception comparing the susceptibility to visual illusions among both Americans and Africans, as well as a research project that investigated ethnocentrism that was executed in various countries all over the world. In these cases he also tried to turn societies into labs. Detailed research manuals ensured uniform research conditions, thus regulating the behavior of researchers and participants alike. Again, Campbell had ample attention for possible sources of bias. The methods employed in these projects were set as an example to anthropologists. The lists of ‘threats to validity’ and their
accompanying quasi-experimental research designs were translated into a set of methodological considerations to be used by anthropologists; a strategy that was supposed to grant them a wider relevancy.

In order to market his methods to anthropologists, Campbell proposed a sort of trade to them. In exchange for the cross-cultural comparisons that interested psychologists, anthropologists could be imparted in better research methods. Some anthropologists enthusiastically welcomed the standardized methods that Campbell presented. Others, however, were more reluctant. In the course of time, a more quantitative and standardized methodology remained controversial within cultural anthropology, which largely remained a qualitative discipline. The strategy of translation thus failed to gear cross-cultural research methods to the specific interests of anthropologists. The methodological improvements that Campbell and his co-workers presented to anthropologists as vital for their research were dismissed as completely irrelevant. Most anthropologists argued that they had their own, specific research themes, which they investigated with their own methods.

On the other hand, psychology in general did not become a cross-cultural science. Only a small number of psychologists followed Campbell’s example. Honoring him as a ‘founding father,’ they established a separate sub-discipline of psychology which they named ‘cross-cultural psychology.’ Yet, in spite of their endeavors to retrospectively turn Campbell’s cross-cultural adventures into a success story, even nowadays their field is full of controversy, with methods at the root of the ongoing debate. The epilogue to chapter four briefly sketches the endless polemic between ‘cross-cultural psychologists’ and so-called ‘intercultural psychologists’ which is the unintentional legacy of resistance to standardization by anthropologists in the past. The decisions made by Campbell and his allies still set the agenda for the issues heavily debated today.
Finally, the concluding chapterfive expands on the main issues in the previous chapters. It further discusses the argument that methods not only help to lay bare reality but also profoundly reshape it. Even though experimental and quasi-experimental methods claim only to show ‘reality as it is,’ they impose certain standards on the societal situations they study and thus remake society to their own image. In sum, these social scientific research methods simultaneously are shaped by and shape reality. This complexity, however, does not render research methods invalid and certainly not redundant. Rather, it makes them into much more powerful devices than simple sets of technical procedures and rules.