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A gallery of misapprehensions: the importance of survey research in political and social decisions

Thomas Petersen

1. Introduction

1 At the Allensbach Institute, there is a room where visitors are often received and entertained. Upon entering the room, guests are immediately struck by a large oil painting hanging in a prominent position. It is a replica of an early 18th century work that was made in the late 19th century, probably somewhere in South America.

2 The painting depicts a bay, flanked by a beach along which two people are strolling. There is no one else in sight. A lone, magnificent sailing ship is floating in the bay. Perched atop a rocky island jutting out of the water behind the ship are the ruins of a medieval castle. The bay is bordered by lush, seemingly tropical vegetation, with steep, rocky mountains rising high in the background.

3 The painting was sold by a gallery in Buenos Aires under the title: "Hamburg Harbor."

4 I am not sure how much all of you attending this conference today know about the city of Hamburg and its harbor. I myself was born and raised in Hamburg. Even if you are not familiar with the city, I hope you will believe me when I tell you that—no matter how much things may have changed in the meantime—the painting bears *absolutely* no resemblance to the real Hamburg harbor *whatsoever*.

5 On considering the future of social research, various technical aspects are generally what first comes to mind: i.e. advances in analytical methods and the new opportunities offered by telecommunication technologies and the Internet. Nevertheless, discussing the future of social research mainly in view of such aspects seems a little like limiting a discussion on the future of the transportation system to

issues pertaining to advances in motor design. We might just as well spend our time considering the "Hamburg Harbor" with its rocky surroundings.

2. Related papers

6 The 20th century is often hailed as the great century of social research. Undoubtedly, the past hundred years were marked by unprecedented advances in the observational and measurement techniques employed in the social sciences. This period of dynamic development can be traced back to the latter half of the 19th century, as meticulously reconstructed by Anthony Oberschall (1997) in his account of the prehistory of empirical social research in Germany in the 19th century. The majority of great pioneering achievements in social research, however, occurred in the 20th century, starting with the presentation to the Royal Statistical Society in 1906 by Arthur L. Bowley (1915), an English statistician who was the first to describe how to form a representative sample for surveys of the population.

7 Before World War I, researchers such as Gottlieb Schnapper-Arndt (1908), Ferdinand Tönnies[1], Adolf Levenstein (1912) and Max Weber (1924) presented empirical studies that were ground-breaking in terms of both methodology and content, even if they were not based on representative samples. In 1933, Marie Jahoda, Paul Lazarsfeld and Hans Zeisel, Austrian pioneers in the field of social research, published *Die Arbeitslosen von Marienthal* ([1933] 1960). Shortly thereafter, George Gallup, Elmo Roper and Archibald Crossley released their seminal forecasts during the 1936 U.S. presidential election campaign, which represent the great breakthrough for representative surveys. This was followed by *The People's Choice*, the landmark voting study authored by Paul Lazarsfeld, who had recently emigrated to the United States, Bernard Berelson and Hazel Gaudet (1944), along with The American Soldier, particularly the fourth volume: *Measurement and Prediction* (Stouffer, Guttman and Suchwein et al. 1950). A list of all of the pioneering milestones in the field of social research could just go on and on: the inspiration empirical social researchers have gained from the methods and findings in the field of psychology; the methodological advances that accompanied the blossoming of empirical market and media research; the development of other new tools in the field of empirical social research, especially the combination of media content analysis and the survey method; the tremendous advances in computer-aided data analysis—all of these are indisputable accomplishments of the 20th century.

8 Nevertheless, I still firmly believe that when future generations look back on what they call "the century of social research," they will be referring not to the 20th, but to the 21st century, which is now only just beginning. Why? The "Hamburg Harbor" holds the key.

9 Over the past hundred years, a substantial arsenal of methods was developed in the field of empirical social research, and there have been any number of keen thinkers and creative scientists who have put these methods to use. Despite all of these advances, however, empirical social research has yet to establish itself in society or even across broad swaths of the scientific community.

10 The greatest obstacle facing empirical social research today is that empirical thinking is still not commonplace among most social scientists and politicians. According to the psychologist Mihaly Csikszentmihalyi (1996), a scientific discipline cannot flourish based solely on the creativity of individual scientists or the existence of the necessary

technical and organizational infrastructure. Rather, there must also be an intellectual environment that accepts and reflects on the thinking in a particular scientific field and that constantly provides the stimuli needed to promote the field. It is this climate that is missing at present.

11 It seems absurd to us that a painter who obviously has absolutely no idea what the real Hamburg harbor looks like would attempt to paint it based on pure speculation—or perhaps we could say a plausible theory—about what the harbor ought to look like. In the natural sciences, such an approach would be unthinkable. A physicist would never dream of presenting a statement on an element as a certainty without offering proof in the form of observations or, even better, experimental evidence. No zoologist would try to describe a species that had not actually been observed. A doctor would never prescribe a drug if its effect had not first been established in a series of experiments.

12 Of course, this was not always the case. Konrad Lorenz (1992, 43) once summarized the situation succinctly and accurately when he stated that man first learned the art of reflection and only much later the art of *observation*. For hundreds of years, for example, scientists assumed that heavier objects ought to fall to the ground faster than lighter objects because Aristotle claimed they did. It was not until the early 17th century that the Dutch engineer Simon Stevin, and shortly thereafter, Gallileo, came up with the idea of putting Aristotle's claim to the test. Stevin wrote:

> "Let us take two lead spheres, the one ten times heavier than the other, and drop them simultaneously from a height of fifty feet onto a board or something else against which they make an audible impact. It will be found that the lighter sphere will not take ten times longer to reach the board than the heavier one; rather, they will hit the board so simultaneously that they will seem to make one and the same sound" (Dijksterhuis 1955, 511).

13 Copernicus (1978) persisted in his belief that the planets' orbits were perfectly circular since Aristotle had described the circle as the perfect shape. The paths the planets followed were circular because they *had* to be circular. Any observation that contradicted this theory had to be incorrect. Kepler was the first scientist prepared to believe that the planets' orbits were actually elliptical and that Aristotle's theories, although persuasive, were wrong (Kepler 1992, 451-468).

14 The standard collection of medieval zoological descriptions, the so-called Bestiarien, relied predominantly on sources from antiquity and not on the authors' own observations. Right through to early modern times, the collection included detailed descriptions of unicorns and centaurs[2]. For a long time, even medical science preferred the traditions of Hippocrates and Galenos to empirical methods. In the 16th century, for instance, gunshot wounds were cauterized with boiling oil because surgeons believed, based on theory, that the bullets were poisonous. It was not until the French surgeon Ambroise Paré ran out of oil in 1583 that doctors discovered that patients who did not undergo this torturous treatment recovered far better than those who did (Paré 1968, 405-441).

15 Nowadays, people tend to chuckle about the wrong turns science has taken in centuries past, but that would be arrogant. For what seems unthinkable to us today in the natural sciences is still a matter of course in many branches of the social sciences and, of course, even more so in the political debate. Theories about human social behavior are advanced and defended vehemently. Working on the assumption that whoever has the best arguments must be right, theories are often supported by highly

complex intellectual reasoning. All too often, we tend to forget that is not brilliant reasoning, but empirical observation and experimentation that determine whether a particular theory holds true or not. This is why so many assumptions about society and social trends are still in circulation today, some of which are even treated as accepted knowledge: they simply sound so plausible—even though they could be refuted with the help of social research.

16 The current disdain for empirical social research can have serious consequences—for working on false assumptions leads to false decisions.

17 It would be quite conceivable to set up a little gallery of such misapprehensions, an exhibition of all the common assumptions that are generally—but mistakenly—considered to be right. One of the displays in this gallery would, for example, be the theory that "political disenchantment increases during election campaigns." This was in fact once true in Germany—the only country I feel qualified to comment on. In the 1950s and 60s, public opinion toward the political parties and major candidates consistently deteriorated during the months leading up to parliamentary elections. Analysts assumed that this rising disenchantment was caused by the off-putting public strife between the major parties during election campaigns and that this pattern should be observable in all democracies. For at least a decade, however, the opposite situation has been observed, with disenchantment in politics and the political parties regularly peaking one year prior to German federal elections and then declining again as the election campaign unfolds (Noelle-Neumann, Kepplinger and Donsbach 1999, 175). Uncovering the reasons for this phenomenon represents an intriguing task for political researchers. Presumably, the altered structure of election campaign coverage in the media plays a significant role here.

3. Gallery of misapprehensions

18 Unfortunately, however, the fact that political disenchantment does not rise but actually falls during election campaigns has yet to be widely recognized. For example, only a few years ago, Klaus Kinkel, Germany's former secretary of state, published an article in the *Frankfurter Allgemeine Zeitung* calling for an extension the electoral interval, that is, the time period between parliamentary elections. In support of his proposal, Kinkel contended: "Constant election campaigns destroy democratic harmony and lead to electoral fatigue and disenchantment with democracy" (Kinkel 1998, 16). Survey research—and only survey research—can show that such a measure, however well intended, would actually do just the opposite of what it was supposed to. Only survey research could prevent decision-makers from making such a grave error.

19 Another interesting exhibit in our "gallery of misapprehensions" would be the contention that modern mass society leads to the isolation of individuals. This notion was impressively described by the behavioral biologist Irenäus Eibl-Eibesfeld, who maintained that people in the "anonymous metropolis" avoid contact with others; the three-generation family has vanished along with family clans. People, according to Eibl-Eibesfeldt, "complain about having too much interpersonal contact and, at the same time, about their sense of loneliness in the masses ... they feel they have too much contact with strangers and too little contact with friends and acquaintances" (Eibl-Eibesfeldt 1991, 120). Eibl-Eibesfeldt furnishes a number of convincing arguments in support of his theory and it is undoubtedly true that people living in large

metropolitan areas are exposed to stress factors that did not exist in traditional social groups, which were far smaller. Nevertheless, the findings of surveys conducted by the Allensbach Institute show that the share of people who say they are often alone or have no one they can talk to about their problems has not risen, but has actually dropped since the 1950's—i.e. during an era when family ties purportedly played a greater role than they do today. Family size and structure may have changed, but life has not become more anonymous as a result.

20 Another popular misapprehension with grave consequences is the assumption that it makes no difference, on principle, whether children acquire information by reading or watching television. As early as 1967, a survey by the Allensbach Institute on the effects of television arrived at a peculiar and, at the time, baffling finding: i.e. respondents who had just purchased their first television set only increased their knowledge via this new medium if they not only watched television regularly but also continued to read a newspaper on a regular basis (Noelle-Neumann 1997, 21-27). These findings were subsequently verified by several additional studies in the United States (Guo and Moy 1995).

21 At the University of Zurich, a team of communication researchers led by Heinz Bonfadelli and Ulrich Saxer discovered that television viewing does not increase the population's general knowledge about politics, but instead only benefits one segment of the population, i.e. well-educated people who are also regular newspaper readers. Only these people were able to improve their political knowledge by watching television regularly. Conversely, respondents who were not regular newspaper readers did not increase their knowledge at all by watching television. Saxer and Bonfadelli (1986) spoke of a growing knowledge gap between informed and uniformed citizens. Just a few minutes after the end of a television news broadcast, respondents who were not regular newspaper readers were unable to recall what they had just seen or heard.

22 An explanation for these puzzling findings was ultimately provided by neuroscience. To a great extent, people are born with the skills required to watch television: they only have to be able to look, listen and understand the language. In contrast, learning how to read is a far more difficult task, requiring the reader to decode a series of abstract symbols. The brain has to learn to assemble signs into letters, to combine the letters into groups and, finally, to assign meaning to these groups of letters. This learning process activates and reinforces the neuronal structures that are needed if a person is to be able to absorb and process abstract information later on in life. The neuroscientist Ernst Pöppel remarks:

> "It was discovered that a child's brain displays a high degree of neuronal functional plasticity, a fact that is of enormous significance for educators. During sensitive phases of an individual's development, genetically pre- determined structures must be confirmed by use if they are to be available for future information processing. If there is no confirmation by use, this genetically determined neuronal capability is lost" (Maar, Pöppel and Christaller eds., 1996).

23 In short, only people who learn to read and who read regularly in their younger years—current research suggests up to the age of 14 or 15—will be capable of abstract, rational thought later on (Ring 1996, 22-26; Noelle- Neumann 1997, 30-35).

24 In view of this fact, the slow but steady decline in the importance attached to reading by society, especially by the younger generation, is sure to have serious consequences. One indication of this is the drop in the number of young newspaper readers that has

been observed in Germany over the past 20 years or so. In Allensbach surveys conducted in 1977, about three quarters of respondents between the ages of 14 and 29 said they had read a daily newspaper the day prior to the interview. Today, less than fifty percent say they did. Theoretically, of course, we could assume that young people are now reading books more often than they read newspapers. This, however, is not the case. Regular newspaper readers are also more intensive book readers. Publishers of books for children and young people report that sales are dwindling, with similar trends also evident in other European countries and the United States.

25 A society that fails to nurture reading—especially among young people—as one of its greatest cultural skills or that fails to replace reading with some other equivalent activities designed to train and hone people's capacity for abstract thinking can only expect one outcome: sooner or later, intellectual performance will decline among a considerable share of the population. Even now, respondents' performance in the various knowledge and concentration tests that are regularly included in surveys by the Allensbach Institute is deteriorating. At the same time, an increasing tendency to emotionalize the public debate is also evident.

26 This trend is illustrated by two issues investigated by the Allensbach Institute. The following question was posed to a representative cross-section of the German population in 1989: "What do you think, does the earth revolve around the sun or does the sun revolve around the earth?" 82 percent of West German respondents answered correctly. Still, as many as 11 percent believed the sun revolves around the earth, whereas 7 percent were undecided. We interpreted this as an odd indication of how long it takes for scientific knowledge to spread among the population. We asked our colleague, Robert Wybrow, who was then director of the British Gallup Institute, to include the same question in a survey in Great Britain. Once the findings were in, Wybrow informed us that we could rest assured: the Germans were actually quite knowledgeable. After all, in Great Britain, 19 percent of the population thought the sun revolved around the earth (Gallup 1997, 26).

27 When the same question was posed in Germany again in March 1996, however, the share of Western Germans who said the sun revolved around the earth climbed from 11 to 16 percent and the percentage of undecided respondents also rose. Less than three quarters of all respondents knew that the earth revolves around sun.

28 The second example is the so-called "Allensbach emotion test," a question model designed to measure the degree of emotionalism and irrationality in public debate. The question reads as follows: "I would like to tell you about an incident that occurred recently during a panel discussion on ..."—here, any issue can be inserted; in the case at hand, the question continued—"cutting social benefits. A few experts were discussing the situations in which cutting social benefits is necessary and when cutting benefits would be inappropriate. Suddenly, a member of the audience jumped up and shouted something." The interviewer then presents the respondent with an illustration of a person exclaiming: "What do I care about numbers and statistics in this connection? How can you talk so coldly about an issue like this, where people's fates are involved!" The question concludes: "Would you say he's right or isn't he right?" A consistent majority of respondents—in this particular case, 56 percent—say that the person shouting is right (Noelle-Neumann and Köcher 1997, 703). Longitudinal studies also show that the share of respondents who tend to agree with the emotional

or irrational response on a wide array of topics has generally increased—and not decreased—over time.

29 Another exhibit in our "gallery of misapprehensions" would be the assumption that, when in doubt, social equality is more important to the happiness of a population than freedom, in the sense of freedom of choice and the freedom to take on responsibility for oneself and others. In his numerous studies on the subject of happiness, the American psychologist Mihaly Csikszentmihalyi, who was cited previously, found that neither great financial prosperity nor abundant leisure time are prerequisites for a happy life. Rather, the key to happiness is for individuals to search for tasks and activities that are challenging and require them to play an active role. At a panel discussion in Paderborn in June 1998, Csikszentmihalyi maintained:

> "One thing we must realize is that school grades do not provide an accurate measure of whether children have been successfully raised or not. The decisive factor is how children spend their free time. Do young people devote most of their free time to passive consumption and activities such as watching television (...), or do they devote their time to activities that enable them to develop their abilities and learn self-discipline and self-respect, i.e. activities which are based on real achievement?"

30 Now, assuming that one of the goals of politics is to promote happiness, it follows that any basic political, social or economic measures introduced ought to be assessed to determine whether they give the individual more freedom to act and make decisions, since the connection between happiness and freedom, in the sense of freedom of choice and freedom to take on personal responsibility, is hard to ignore.

31 The findings of a question designed by the Allensbach Institute to measure the sense of personal freedom at work were first presented in 1973 (Noelle- Neumann and Strümpel 1984, 66). At the time, respondents were presented with an illustration of a ladder with rungs numbered from 0 to 10. They were then asked to select the rung that reflected how much personal freedom they felt they had at work. To this day, the findings are so clear that you ought to expect that they would have exerted a major influence on how jobs are structured, as well as on the decision-making freedom afforded to workers. A subjective sense of freedom on the job is not just limited to salaried white-collar workers or management staff. About a quarter of all skilled workers felt they had a lot of freedom at work, selecting rungs 8 to 10, whereas 25 percent felt they had absolutely no freedom whatsoever and around 40 percent selected one of the middle rungs on the scale. These three groups differ markedly in terms of their attitude towards life and work, depending on whether they said they had a strong, average or slight sense of freedom make decisions at work.

32 Forty-four percent of workers with a strong sense of freedom at work said they always woke up in the morning feeling bright and cheerful, as compared to only 25 percent of respondents who said they had a slight sense of freedom. It is important to bear in mind that these figures do not derive from an objective job analysis but reflect people's subjective sense of freedom at work.

33 When asked when the last time was that they had really laughed at the top of their lungs, 46 percent of workers with a strong sense of freedom said they had done so the day before the interview. Only 30 percent of respondents with an average sense of decision-making freedom at work and 29 percent of those with a slight sense of freedom said the same. Of respondents with a strong sense of decision-making freedom on the job, 80 percent would not enjoy a life without work. This was true for 73 percent

of workers with an average sense of freedom and only 56 percent of those with a slight sense of freedom. 69 percent of respondents with a strong sense of freedom to decide enjoyed the time spent at work at least as much, if not more, than leisure time, as compared to 56 percent of workers with an average sense of freedom and only 34 percent of those respondents who felt they had little decision-making freedom at work. 70 percent of workers with a strong sense of freedom to decide at work said they were completely satisfied with their jobs, whereas the corresponding figure was 47 percent among those with an average sense of freedom and 28 percent among those with only a slight sense of freedom in their jobs.

34 You would have thought that this evidence of such a clear link between a subjective sense of freedom on the job and attitudes towards life and happiness at work would have been welcomed and acted upon. Yet this has not proven to be the case.

35 In fact, these findings rarely play a role in the public debate. When new legislation is introduced in parliament, it is often justified on the grounds that it will create greater social equality. Giving people more freedom of choice and encouraging them to play a more active role in their own lives are not considered to be particularly important political goals. Instead, it is widely believed that you are doing people a favor by offering them as many state benefits as possible, drastically cutting working hours and allowing them to retire as early as possible. Yet it is precisely such policies that encourage people to be passive, which does not lead to satisfaction, but to unhappiness, a fact shown by the findings of empirical social research on the effects of unemployment.

36 Unemployment that lasts for more than a year is both mentally and physically crippling. It is not a matter of whether or how much support an unemployed person is given. In an investigation by the Allensbach Institute, entire families were included in a so-called cell analysis, thus enabling us to determine the effects of unemployment on the family, how an unemployed person's environment reacts, what is done and not done, and how family life is changed by unemployment. The findings speak for themselves: unemployed people's spectrum of interests becomes narrower and narrower; they stop reading, even though they have the time to do so. They do not put their time to good use and thus become boring to the people around them. Friends distance themselves from the unemployed—not because of any stigma attached to being unemployed, but because the unemployed become uninteresting to talk to and no longer take the initiative (Noelle-Neumann and Gillies 1987, 51-64). In view of these findings, it seems absurd to suggest that unemployment represents an opportunity for those effected because it gives them the time to pursue their interests and get involved in voluntary work. Although theoretically plausible, this assumption is wrong (Beck 1998, 13), because most unemployed people are quickly drained of energy by their enforced passivity. They are unable to motivate themselves to get involved in anything.

4. Conclusions

37 The list of social misapprehensions that could be dispelled by means of empirical social research goes on and on. The 20th century created the tools necessary to study the behavior of people and societies in a way that is replicable and verifiable, arriving at findings that cannot simply be dismissed based on pure conjecture. The 20th century developed the methods needed to transform ideological issues into factual questions.

Although people's thinking has not kept pace with these methodological advances, there is still hope that this will change in the decades to come.

38 History shows that it takes a fledgling science about a century to progress from its initial methodological breakthrough to the stage where it is established in society. Copernicus' book, *On the revolution of the heavenly spheres*, which was the first work since antiquity to claim that the sun and not the earth is at the center of our solar system, was published in 1543 (Copernicus 1978). About 70 years later, Galileo had his breakthrough with this view of the universe. In the early 17th century, Simon Stevin and Galileo (1968) conducted their experiments with falling objects, ultimately refuting Aristotle's theories concerning the connection between the weight and velocity of falling objects[3]. About 80 years later, in 1687, Newton (1729) published his theory of gravity, which became the cornerstone of physics for centuries thereafter. The Sceptical Chymist, written by Englishman Robert Boyle in 1662 is now looked upon as the beginning of modern chemistry (Boyle [1722] 1965). One hundred years later, Frenchman Antonine Laurent Lavoisier finally managed to transform chemistry into a modern experimental science by successfully employing experiments to refute the long-standing theory that matter consisted of phlogistons or "fire particles" (Ströker 1982).

39 The story of how experimental physics established itself at the University of Heidelberg is particularly impressive. In 1986, on the occasion of the university's 600th anniversary, philosopher Hans-Georg Gadamer gave a speech describing how the experimental natural sciences had to overcome the tenacious but ultimately futile resistance of the humanities at a university renowned for philosophy (Gadamer 1986, 8, 10). The first chair for experimental physics was established in Heidelberg in 1770, followed by a second chair twenty years later. Half a century passed before lectures on natural philosophy, dealing with such subjects as the spirit of water and fire, were replaced by courses in the new, exact sciences. At first, according to Gadamer, it was a case of giving observation and experimentation "their proper place, in comparison to mere speculation." Once this was accomplished, "the speculative dreams of natural philosophy were dashed by the sober spirit of experimental research."

40 If the development of the social sciences takes a similar course as the natural sciences did, the coming century ought to witness the breakthrough of empirical social research on a wide scale throughout the sciences, politics and society. If this does come to pass, politicians and social scientists should also finally recognize the fact that you have to travel to Hamburg—or at least ask someone who has been there—if you want to form a reliable image of the city and its harbor. Should this happen, the 21st century will truly be the century of social research.

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NOTES

1. For information on the works of Ferdinand Tönnies and a detailed bibliography, see: Oberschall 1997.
2. The source for most of these descriptions was Physiologus (1979), which was compiled in late antiquity. See pp. 23-24 for a de- scription of centaurs and p. 51 regarding unicorns.
3. See also Dijksterhuis 1955.

ABSTRACTS

The 20th century is often hailed as the great century of social research. A list of all of the pioneering milestones in the field of social research could just go on and on: the inspiration

empirical social researchers have gained from the methods and findings in the field of psychology; the methodological advances that accompanied the blossoming of empirical market and media research; the development of other new tools in the field of empirical social research, especially the combination of media content analysis and the survey method; the tremendous advances in computer-aided data analysis—all of these are indisputable accomplishments of the 20th century. Despite all of these advances, however, empirical social research has yet to establish itself in society or even across broad swaths of the scientific community. The greatest obstacle facing empirical social research today is that empirical thinking is still not commonplace among most social scientists and politicians. This paper was presented at the WAPOR Seminar "Current Perspectives in Polling" at the Escola Superior de Comunicação Social, Lisbon, March 21, 2005.

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